Women in Natural Disasters:

Indicative Findings in Unraveling
Gender in Institutional Responses

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An ASEAN Intergovernmental Commission on Human Rights (AICHR) Thematic Study

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Acronyms

AADMER	ASEAN Agreement on Disaster Management and Emergency Response
ACDM	ASEAN Committee on Disaster Management
ADPC	Asian Disaster Preparedness Center
ADRC	Asian Disaster Reduction Center
AFP	Armed Forces of the Philippines
AHA	ASEAN Coordinating Center for Humanitarian Assistance on Disaster Management
AICHR	ASEAN Intergovernmental Commission on Human Rights
AMMW	ASEAN Ministerial Meeting on Women
AMS	ASEAN Member State
APEC	Asia-Pacific Economic Cooperation
ARDEX	ASEAN Regional Disaster Emergency Response Simulation Exercise
ASEAN	Association of Southeast Asian Nations
ASEAN-SASOP	Standard Operating Procedures for Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response Operations
BNPB/ADM	*Badan Nasional Penanggulangan Bencana* National Disaster Management Authority (Indonesia)
BPBD/LDMB	*Badan Penanggulangan Bencana Daerah* Local Disaster Management Boards (Indonesia)
BMA	Bangkok Metropolitan Administration (Thailand)
C2E	Community Emergency and Engagement Committee
CARE	Caring Action in Response to an Emergency
CAW	Sub-Commissions for the Advancement of Women (Lao PDR)
CBDRM	Community-Based Disaster Risk Management
CCA	Climate Change Adaptation
CCCSP	Cambodia Climate Change Strategic Plan
CCDM	Commune Committee for Disaster Management (Cambodia)
CCGC	Climate Change and Gender Committees (Cambodia)
CD	Civil Defence
CDC	Community Development Council (Singapore)
CEDAW	Convention for the Elimination of All Forms of Discrimination
CEPP	Community Emergency Preparedness Programme (Singapore)

CFE-DMHA	Center for Excellence in Disaster Management and Humanitarian Assistance
CFSC	Committee for Flood and Storm Control (Viet Nam)
CGEO	Chief Gender Equality Officer (Thailand)
CHR	Commission on Human Rights (Thailand)
CKK	Chamroeun Cheat Khmer (Cambodia)
CMG	Crisis Management Group (Singapore)
CNCW	Cambodian National Council for Women
CRED	Centre for Research on the Epidemology of Disasters
CRI	Change Readiness Index
CSCNDPC	Central Steering Committee for Natural Disaster Prevention and Control (Viet Nam)
CSO	Civil Society Organization
CSW	Commission on the Status of Women
DAW	Division for the Advancement of Women
DCAW	District Commission for the Advancement of Women (Lao PDR)
DCDM	District Committee for Disaster Management (Cambodia)
DDMC	Department of Disaster Management and Climate Change (Lao PDR)
DDMRC	District Disaster Management and Relief Committee (Malaysia)
DDPM	Department of Disaster Prevention and Mitigation (Thailand)
DepEd	Department of Education (Philippines)
DFA	Department of Foreign Affairs (Philippines)
DFRP	Disaster Risk and Financing Program
DG ECHO	European Commission Directorate General for Humanitarian Aid and Civil Protection
DIBI	*Data Dan Informasi Bencana Indonesia* Indonesian Disaster Data and Information Management Database
DILG	Department of the Interior and Local Government (Philippines)
DM	Disaster Management
DMWG	Disaster Management Working Group (Cambodia)
DND	Department of National Defense (Philippines)
DOH	Department of Health (Philippines)
DOoWA	District Office of Women's Affairs (Cambodia)
DOST	Department of Science and Technology (Philippines)
DOT	Department of Tourism (Philippines)
DREAM	Disaster Response and Assistance Management (Philippines)

DRFP	Disaster Risk and Financing Program
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DSWD	Department of Social Welfare and Development (Philippines)
EM-DAT	Emergency Events Database
EPP	Emergency Preparedness and Prevention
EU	European Union
EV	Economic Vulnerability
EVFTA	EU-Viet Nam Free Trade Agreement
FAO	Food and Agricultural Organizations of the United Nations
FGD	Focus Group Discussion
GAM	Gerakan Aceh Merdaka - Free Aceh Movement (Indonesia)
GCCC	Gender and Climate Change Committee (Cambodia)
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GFP	Gender Focal Point
GGG	Global Gender Gap
GGGR	Global Gender Gap Report
GII	Gender Inequality Index
GMAG	Gender Mainstreaming Action Groups (Cambodia)
HADR	Humanitarian Assistance and Disaster Relief
HCEG	Homefront Crisis Executive Group (Singapore)
HCMC	Homefront Crisis Ministerial Committee (Singapore)
HCMS	Homefront Crisis Management System (Singapore)
HDI	Human Development Index
HEMB	Health Emergency Management Bureau (Philippines)
HFA	Hyogo Framework Agreement
HFMD	Hand, Foot, and Mouth Disease
IASC	Inter-Agency Standing Committee
ICRC	International Committee of the Red Cross
IDP	Internally Displaced Person
IDRMP	Integrated Natural Disaster Mitigation Investment Plans (Viet Nam)
IFRC	International Federation of Red Cross and Red Crescent Societies

ILSSA	Institute of Labor Science and Social Affairs (Viet Nam)
IM	Incident Manager
IOM	International Organization for Migration
IRM	Integrated Risk Management (Singapore)
IUCN	International Union for Conservation of Nature
JAPEM	Jabatan Pembangunan Masyarakat - Community Development Department (Brunei)
JICA	Japan International Cooperation Agency
JTF	Joint Task Force
KANITA	*Pusat Penyelidikan Wanita Dan Gender* Center for Research on Women and Gender (Malaysia)
KII	Key Informant Interview
KIM	Key Informant Meeting
LDRRMC	Local Disaster Risk Reduction and Management Council (Philippines)
LGBT	Lesbian, Gay, Bisexual, and Transgender
LGU	Local Government Unit (Philippines)
LRC	Lao Red Cross Commission
LWU	Lao Women's Union
MAPDRR	Myanmar Action Plan on Disaster Risk Reduction
MCAW	Ministry-Level Commission for the Advancement of Women (Lao PDR)
MCCR	Myanmar Consortium for Community Resilience
MDPA	Myanmar Disaster Preparedness Agency
MFA	Ministry of Foreign Affairs (Singapore)
MHA	Ministry of Home Affairs (Singapore)
MHLW	Ministry of Health, Labor and Welfare (Brunei)
MISP	Minimum Initial Service Package (Philippines)
MLN/NSC	Majlis Keselamatan Negara - National Security Council (Malaysia)
MoE	Ministry of Environment (Cambodia)
MoH	Ministry of Health (Cambodia; Singapore; Myanmar)
MoHA	Ministry of Home Affairs (Myanmar)
MOLISA	Ministry of Labor, Invalids, and Social Affairs (Viet Nam)
MONRE	Ministry of Natural Resources and Environment (Lao PDR; Viet Nam)
MoWA	Ministry of Women's Affairs (Cambodia)
MP-GCC	Master Plan on Gender and Climate Change (Cambodia)

MPI	Ministry of Planning and Investment (Lao PDR)
MSWDO	Municipal Welfare Social Worker and Development Officer (Philippines)
MSWRR	Ministry of Social Welfare, Relief and Resettlement (Myanmar)
NADMA	*Agensi Pengurusan Bencana Negara* National Disaster Management Agency (Malaysia)
NAP	National Action Plan
NAP DRR	National Action Plan for Disaster Risk Reduction (Cambodia)
NCAW	National Commission for Advancement of Women (Lao PDR)
NCDM	National Committee for Disaster Management (Cambodia)
NCMC	National Commission for Mothers and Children (Lao PDR)
NCMS	National Care Management System (Singapore)
NCNDSR	National Committee for Natural Disaster Search and Rescue (Viet Nam)
NDMA	National Disaster Management Agency (Myanmar)
NDCC	National Disaster Coordinating Council (Philippines)
NDMC	National Disaster Management Center (Brunei)
NDMC	National Disaster Management Committee (Lao PDR; Myanmar)
NDMO	National Disaster Management Office (Lao PDR)
NDMO	National Disaster Management Organizations
NDPCC	National Disaster Preparedness Central Committee (Myanmar)
NDPMC	National Disaster Prevention and Mitigation Committee (Thailand)
NDRC	National Disaster Management and Relief Committee (Malaysia)
NDRRMC	National Disaster Risk Reduction and Management Council (Philippines)
NNDMC	National Natural Disaster Management Committee (Myanmar)
NEA	National Environment Agency
NEDA	National Economic and Development Agency (Philippines)
NFP	National Focal Person
NGO	Non-Government Organization
NS	National Strategy
NSD	National Security Division (Malaysia)
NSD	National Strategy Development Plan (Cambodia)
NTP-RCC	National Target Program on Responding to Climate Change (Viet Nam)
OCCC	Office of Climate Change Coordination (Thailand)
OCD	Office of Civil Defense (Philippines)

ONEP	Office of Natural Resources and Environmental Policy and Planning (Thailand)
OPARR	Office of the Presidential Assistant on Recovery and Rehabilitation (Philippines)
Ops CE	Operations Civil Emergency (Singapore)
PCAW	Provincial Commission for the Advancement of Women (Lao PDR)
PCDM	Provincial Committee for Disaster Management (Cambodia)
PDNA	Post Disaster Need Assessment
PDoWA	Provincial Department of Women's Affairs (Cambodia)
PFLNA	Post Disaster Floods and Landslides Needs Assessment
PNP	Philippine National Police (Philippines)
RCVI	Resource and Climate Vulnerability Index
RPI	Resource Person Interview
RRD	Relief and Resettlement Department (Myanmar)
RSIS	S. Rajaratnam School for International Studies (Singapore)
RTB	Radio Television Brunei
S&R	Search and Rescue
SARS	Severe Acute Respiratory Syndrome
SCCAP	Sectoral Climate Change Action Plans (Cambodia)
SCCSP	Sectoral Climate Change Strategic Plans (Cambodia)
SCDF	Singapore Civil Defence Force
SDG	Sustainable Development Goals
SDMRC	State Disaster Management and Relief Committee (Malaysia)
SEA	Southeast Asia
SGBV	Sexual and Gender-Based Violence
SNAP	Strategic National Action Plan
SOGI	Sexual Orientation and Gender Identity
SPCC	Strategic Plan Climate Change (Cambodia)
SPDRM	Strategic Plan on Disaster Risk Management (Lao PDR)
SRC	Singapore Red Cross
SV	Social Vulnerability
TESDA	Technical Education and Skills Development Authority (Philippines)
ToR	Terms of Reference
TPP	Trans-Pacific Partnership
UN	United Nations

UN ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNDP	United Nations Development Programme
UNFCC	United Framework Convention on Climate Change (Thailand)
UNICEF	United Nations Children's Fund
UNISDR	United Nations International Strategy for Disaster Reduction
UNSCR	United Nations Security Council Resolution
USAID-OFDA	U.S Agency for International Development Office of Foreign Disaster Assistance
UNTAC	United Nations Transitional Authority in Cambodia
VAW	Violence Against Women
VDMG	Village Disaster Management Group (Cambodia)
VRA	Vulnerability Risk Assessment
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization
WRI	World Resources Institute
WTO	World Trade Organization
YTBI	Yayasan Tanggul Bencana Indonesia

Executive Summary

As the ASEAN moves toward efforts at responding to natural disaters as a region, it has yet to fully integrate the gender approach in its regional disaster response. Already in the community-building phase of its institutional evolution, certain issues still remain in the norm-construction stage. In the case of women's human rights in particularly difficult circumstances (e.g. natural disasters situations), there is very faint discursive recognition in institutional agreements. In the case of individual ASEAN Member States (AMS), there are more evident efforts as regards mainstreaming gender in natural disaster institutional infrastructure and mechanisms – although with some countries fairly more advanced than others.

This study was undertaken in order to compile policies and practices on women's protection in situations of natural disasters and to document best practices in gender mainstreaming in natural disaster response and assistance, particularly, those that provide spaces for women's participation. It was guided by an institutionalist perpective that sought to locate gender in laws, policies/plans, institutions, and practices.

Based on the indicative results of the study, the summary observations are the following:

- The natural disaster context of countries in Southeast Asia varies, with some more prone to large-scale disasters than others.

- Framing institutional and governance responses to natural disasters depends on its impact on societal systems. All AMS have existing natural disaster institutional infrastructures and mechanisms. Their respective natural disaster management governance follows both vertical (i.e. national to local) and horizontal (i.e. inter-agency) directions and most entities at the national level are mirrored in the local level.

- Supporting the institutional infrastructure are different mechanisms in the form of national laws, policy directives, and/or actions plans. The natural disaster discourse is usually integrated into the meta-framework of sustainable development, climate change adaptation, or national security.

- Integrating the gender approach into these meta-frames depends on: (a) the maturity of gender mainstreaming in the whole governance architecture; (b) the extent to which gender is recognized as an issue; and (c) the discursive construction of women in these societies.

- There are also varying appreciations for and on women's participation in the different aspects of natural disasters from the strategic, operational, and tactical levels. Nonetheless, integrating the gender approach in the institutional infrastructure of natural disasters can be a substantive entry point to operationalize women's protection and empowerment, primarily because of the care roles they play in their families and communities.

- However, women's specific concerns – such as sexual and gender-based violence, violence against women and girls, women's economic and political empowerment – are difficult to surface, discuss, and make a matter of concern in natural disaster and emergency/crisis institutional infrastructure and mechanisms.

- In terms of identifying the efforts of each AMS on mainstreaming gender in their natural disaster institutional architecture and instruments, the deduced categories are: (a) incipient efforts (i.e. initial recognition but not yet institutionalized at the strategic

level); modest efforts (i.e. early stages of inclusion at the strategic level and/or efforts done more in practice by government or non-government organizations); moderate efforts (i.e. gender-mainstreaming evident at the strategic level); and strong efforts (i.e. gender-mainstreaming evident at both strategic and operational levels).

- From the perspective of community women and non-government actors from different countries, the need to mainstream gender should be reflected not just in the strategic and operational levels but more so in implementation on the ground.

- And lastly, particular patterns at the ground level should also be recognized and considered in the design of natural disaster and emergency/crisis institutional governance. These are women's contribution to early warning and prevention, the intersection of gender and culture in disaster relief and response, gender dimensions of migration, and women's access to resources in post-disaster situations, to name a few.

Introduction

Natural disasters and their impact on women

Natural disasters are characterized by their severe effects on every aspect of human life – the physical (loss of human life or injury), psychological (stress and trauma), and economic (loss of properties, infrastructure, and resources), which are experienced for long periods of time. While academics provide varying points of understanding of what entails a natural disaster,[1] vulnerability emerges as a key concept, and provides an explanation for the negative socioeconomic impacts that natural disasters have on particular groups of people.

In her book on *Gender, Development and Natural Disasters*, Bradshaw notes that vulnerability is a "product of the social, economic, political and cultural characteristics of individuals, communities and nations" (2013, 7). Furthermore, Enarson claims that, "the human impacts of extreme environmental events unfold in varying socioeconomic, political and social contexts and reflect the social structures in which they occur" (2000, 2). It is in particular environmental and social situations that social inequalities are exposed, thus providing insight on how some groups of people's vulnerability increases during natural disasters. For one, poorer countries have less financial capability to properly prepare for and recover from disasters. Moreover, poorer households have limited access to key resources and social powers to cope with and recover from such calamities. This follows True's claim that "vulnerability to death and violence is highly differentiated," where "proximity to disaster and the ability to anticipate, cope with, protect oneself, and recover in a disaster's aftermath… are ultimately socially-determined" (2013, 80). Because pre-existing social structures heighten one's vulnerability, already socioeconomically and physically disadvantaged groups such as the elderly, young children, the physically and mentally disabled, undocumented workers, and women and girls "have fewer resources to enable them to 'bounce back' to some measure of normality" (Mehta 2007, 5).

In their study on the gendered impact of natural disasters, Neumayer and Plümper concluded that disasters tend to claim more lives of women than men, and that particularly, women of lower socioeconomic status are affected (2007). Understanding women's vulnerability in times of natural disasters means reflecting on the pre-existing gendered relations and processes that put them more at risk when disaster strikes. For Bradshaw, it is not the characteristics of gender, age, income, race and migrant status that define vulnerability; rather they are the "outcomes of other processes of discrimination and marginalization," such that women are considered part of a vulnerable group not because they are women, but because "vulnerability lies with the lack of access to the resources that allow people to cope with hazardous events and this access may be gendered" (ibid, 10). It is not the gender differences that put women at risk, but rather, the gender inequalities that are already pre-existing in society (Mehta, 2007). Thus, when disaster strikes, women, who in many situations are already socially and economically disadvantaged, suffer in particular ways that are due to, and further affect their socioeconomic status.

Gendered relationships shape the way men and women are affected by natural events.[2] Aside from the high mortality rate of women during disasters, women and girls tend to suffer more due to cultural constraints on mobility, as well as the use of traditional garments; lack of swimming or climbing skills, as they are traditionally taught to males; and less physical strength in part due to prolonged nutritional deficiencies (IFRC 2010), thereby highlighting the cultural and social factors that increase their vulnerability. Women's stress levels also tend to increase due to multiple responsibilities (Wiest, Mocellin and Motsisi 1994), which are hinged upon the sexual division of labor where women's needs and concerns revolve around their productive role and are confined within the home. Because women are traditionally responsible for caregiving, they must look after themselves, their children, and other vulnerable members of their family/community. Similarly, pregnant and lactating women have special needs that

might not be met when resources are scarce. Women also are not able to receive necessary healthcare, especially with regard to their specific female health and hygiene needs; they may be denied adequate relief aid or compensation for their losses; they experience ongoing economic vulnerability; and they are excluded from a say in rebuilding and reconstruction efforts (Global Fund for Women, 2005).

Bradshaw and Fordham also explore 'secondary' impacts, shifting the focus from the loss of life and possessions, to the "less tangible social impact such as higher levels of violence and poor mental health" (2013, 15), which are themselves also gendered. This 'double' disaster that women and girls experience refers to the natural disaster itself and the events it triggers. Bradshaw and Fordham note that violence against women or the threat of violence increases in post-disaster situations, whether within the home or in evacuation/refugee camps. Women also suffer from deterioration in reproductive and sexual health, where there is a lack of provision of (appropriate) 'hygiene kits,' as well as lack of access to contraception that may address issues of unplanned births. There is also the threat of early and forced marriage as a result of constant food insecurity. Furthermore, girls/ education may be halted, and employment and other economic resources may be limited, increasing the women's risk of being trafficked (2013). While social inequalities that increase the risk of women are gendered and thus affect them differently, it must also be noted that other factors increase different groups of women's vulnerability, such as their class, health, ethnicity, and other social markers.[3]

Human rights protection of women in natural disasters

Given the varying negative effects of natural disasters on particular groups of people, it is recognized that human rights protection must be provided in these contexts. "The core of emergency response policy," as Hurst notes, "is fundamental human rights… [where] human rights and a government's response to uphold those rights will be a natural component… be it as a guiding principle or as an explicit framework" (2010, 7).

The *Gender Handbook in Humanitarian Action of the Inter-Agency Standing Committee* (IASC) notes that the rights-based approach "uses international human rights law to [analyze] inequalities and injustices, and to develop policies, [programs] and activities in all areas of work to redress these obstacles to the enjoyment of human rights," and thus "focuses on both process and outcomes" (2006, 22). Such approach ensures that not only are human rights upheld, but also that these rights-holders are involved, "espousing the principles of participation and empowerment of individuals and communities to promote change and enable them to exercise their rights" (ibid).

In her working paper on the legal analysis of human rights protection in times of natural disaster, Pupsita defines human rights protection as an "action, which is associated with prevention, response, rehabilitation, reconstruction and environmental development in connection with human rights" (2010, 5). In this definition, she links human rights, as the fundamental rights to which all human beings should be entitled, with protection, which encompasses all activities aimed at obtaining full respect for the rights of the individual in accordance to relevant bodies of law.[4]

Works promoting the use of the human rights approach in addressing needs in post-disaster situations note that there are no well-recognized, comprehensive, and legally binding regulations for the protection and assistance of people affected by natural disaster. Similarly, they note that many kinds of human rights violations related to post-disaster environments are addressed in international documents separately, but are not addressed in particularity to disaster contexts (Pupsita, 2010; Hurst, 2010). Authors note that protection mechanisms in the form of laws, agreements, regulations, etc. must be in place to ensure that during times of natural disasters where all aspects of human life are greatly affected, fundamental human rights of all individuals are to be upheld (ibid). This is crucial, as "post-disaster environments are proven battlegrounds for human rights violations" (e.g. inadequate treatment for infectious diseases, trafficking, etc.) (Hurst 2010, 8).

The *Operational Guidelines and Field Manual on Human Rights Protection in Situations of Natural Disaster* (2008) divides the relevant human rights principles into four groups, namely: (i) rights related to physical security and integrity (e.g. protection of the right to life and the right to be free from assault, rape, arbitrary detention, kidnapping, exploitation, and threats concerning the above); (ii) rights related to the basic necessities of life (e.g. the rights to food, drinking water, shelter, adequate clothing, adequate health services, and sanitation); (iii) rights related to other economic, social and cultural needs (e.g. the rights to have access to education and work and other means of livelihood); and (iv) rights related to other civil and political needs (e.g. the rights to religious freedom and freedom of speech, personal documentation, political participation, access to courts, and freedom from discrimination). The guidelines and field manual, in highlighting the particular human rights to be upheld, provide comprehensive operational steps on how to address human rights issues in the event of natural disasters.

Approaching disaster response from a human rights perspective is vital because without the guidance of this framework in providing humanitarian assistance, then "there is a risk that the focus will be too narrow and the basic needs of the victims will not be integrated into a holistic planning process" (ibid, 2). Thus, in applying the human rights approach to disaster risk management, human rights principles, founded on the principles of equality and non-discrimination, must guide the pre-disaster mitigation and preparedness measures, emergency relief and rehabilitation, and reconstruction efforts. Such approach "must be based on international human rights standards, operationally directed to promoting and protecting human rights, seeking to analyze inequalities that lie at the heart of disaster scenarios, and redressing discriminatory practices and unjust distributions of power that impede disaster response and recovery" (Hurst 2010, 9).

Integral to the human rights approach is the analysis of women's concerns. Understanding how natural disasters disproportionately affect women provides insight not only on how women's needs can be further addressed, but also on how women themselves can be part of the

solution. In ensuring that the human rights framework is applied in addressing disaster concerns, Ferris et.al note that "the entire cycle of disaster and climate risk management planning and implementation should incorporate gender- and age-based approaches that take into account the vulnerabilities and capacities of women, men and children" (2013, 79). The authors further claim that "incorporating gender into disaster risk management efforts requires a rights-based approach at all levels of governance" (ibid), trickling down from the international level to the national, local, and community levels.

In using the human rights approach in disaster management, there are at least three phases, creating three distinct needs (derived from Pupsita 2010, 7):

- Readiness: the need to get effective information during the pre-natural disaster phase (e.g. education, training about natural disasters, and preparation for evacuation to a safe location);
- Response: the need to ensure non-discrimination (subject to cultural and religious differences) during the emergency-relief phase in terms of providing assistance; and
- Recovery: the need to monitor during the post-disaster phase (e.g. monitoring assistance distribution, providing rehabilitation, and furthering recovery development). Effective monitoring mechanisms, benchmarks and indicators are vital in ensuring that the protection of the human rights of those affected, including those who are internally displaced, is effectively implemented.

Integrating gender in these phases requires the protection of women's human rights and their proper inclusion in all phases, "so that effectiveness does not come at the cost of reinforcing women's subordinate status, and that practicality or implementability do not override respect for and promotion of women's fundamental human rights" (UN/DAW/ISDR 2001, 3). Addressing women's particular needs and ensuring the protection of their human rights is crucial, as this also ensures that women are able to participate in the design and implementation of protection measures.

As an instrument, the Convention For the Elimination of All Forms of Discrimination Against Women (CEDAW), essentially the bill of rights for women, highlights the "need to improve and facilitate the effectiveness of women's capabilities and resources in environmental management and natural disasters," while equally noting the protection of their human rights (ibid, 7). It can "demand gender balance in all kinds of planning, training and implementation efforts for environmental management and natural disasters, in order to ensure non-discrimination of women and enhance their empowerment" (ibid, 8).

In applying the human rights approach in the pre-natural disaster phase, women must be involved in the preparation and implementation of an early warning system (including utilizing women's knowledge of the environment), and be included in information dissemination, education and training, and preparations for evacuation. As Enarson notes, "emergency communications about hazards and prevention steps need to be gender-specific and utilize different media to reach both women and men" (2000, 26).

In relation to the abovementioned immediate and secondary risks and needs that women face, emergency response and provision of relief and assistance must be non-discriminatory, while at the same time effective in addressing the specific needs of women. Attention must be given to their particular needs such as clothing and hygiene supplies, reproductive health services, childcare centers, and safe and clean spaces for pregnant and lactating women. Given their increased risks to gender-based violence and trafficking, security mechanisms must be in place to ensure that they are protected (ibid). Part of this non-discriminatory principle is the involvement of women in providing relief assistance, as Enarson claims that "women relief workers are important to female survivors," (2000, 28), not only in that they can freely discuss their needs to women, but this also highlights the value of women as service providers, and not just merely victims.

During the post-disaster phase, exclusion from decision-making "can heighten the sense of helplessness and disempowerment... and undermine the effectiveness of humanitarian assistance," notes the

Operational Guidelines and Field Manual on Human Rights Protection (2008, 12). It also emphasizes the need to inform and consult women and ensure their participation in all aspects of disaster response. The IASC *Gender Handbook in Humanitarian Action* also notes entry points for participation, from conducting assessments, setting priorities within households and communities, to carrying out program planning, design, implementation, monitoring, and evaluation activities, to name a few (2006, 34). Furthermore, "to support their long-term economic recovery," Enarson notes that, "women as well as men must have access to reconstruction jobs, investment funds, and income-generating projects" (2000, 33). Ensuring that livelihood program opportunities are equally accessed also affirms women's role as economic agents (IASC Gender Handbook 2006, 84) that can address not only their post-disaster concerns, but also their socioeconomic status in general.

Linking gender and the human rights approach in the natural disaster context simply means not forgetting the women, whether it is about addressing their specific needs or ensuring their participation in all phases of disaster management. Under a human rights-based approach, all plans, policies, and processes must be founded on the principles of human rights as established by international law. This includes mechanisms that are in place to ensure women's protection from discrimination and violence, and participation, given their vulnerability and the risks that they face as a result of their socioeconomic status. The role of women as agents of change is crucial in addressing their needs because it is through their involvement from disaster risk reduction to disaster management that they are able to avoid or mitigate risks that put them in harm's way. Whether it is through political leadership, community membership, or being a mother, "women are key to a society's social fabric and hence, its capacity for resilience" (Ferris et.al. 2012, 72).

ASEAN Regional Disaster Profile

The Southeast Asian (SEA) region (Figure 1) covers a land area of 4.5 million square km, and has a population (2015) of 628.9 million.[6] It is composed of 10 independent countries, namely, Brunei Darussalam, Cambodia, Indonesia, Lao People's

Map of Southeast Asia [5]

Democratic Republic (PDR), Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam. The UN Economic and Social Commission for Asia and the Pacific (ESCAP), in its 2015 *Year in Review*, claimed that Asia-Pacific continued to be the world's most disaster prone region, accounting for 47% of the disasters that occurred that year. The region's high vulnerability to natural hazards is due to its unique geographic and climatic conditions, where a major part of the population in the region lives in riverine plains, delta and coastal plains. Similarly, highly congested and populated urban areas such as capital cities are at risk to the adverse impacts of disaster. Every year, the region experiences powerful typhoons, flooding, landslides, and earthquakes, as well as drought, volcanic eruptions, tsunamis, and forest fires (UNISDR/WB, 2010).

As a part of a highly disaster-prone region, the ASEAN countries are at high risk from trans-boundary hazards such as earthquakes and tsunamis. The Indian Ocean tsunami of 2004, for example, caused by the 9.3

magnitude Sumatra-Andaman earthquake, affected 14 countries, including Indonesia and Thailand as some of the hardest hit. The disaster killed about 174,500 people, caused an estimated economic loss of more than $10 billion, and insured losses of about $1.3 billion (UNISDR/WB 2010, 82). In 2009, Typhoon Ketsana caused severe damage in the Philippines, Viet Nam, Cambodia, Lao PDR, and Thailand. From 1997-1998, the Southeast Asian Haze that originated from widespread forest fires in Indonesia affected Malaysia and Singapore, and extended up to Thailand and the Philippines, estimating losses at $9 billion. Furthermore, the recurring flooding of the Mekong River, the longest river of Southeast Asia, affects China, Myanmar, Lao PDR, Thailand, Cambodia, and Viet Nam (ibid, 84-88). Thus, when a disaster strikes in a vulnerable area such as SEA, negative effects and damages tend to increase exponentially.

In 2010, a *Synthesis Report on Ten ASEAN Countries Disaster Risks Assessment* [7] was released, the objective of

which was to present a general disaster risk assessment of the region, as well as to determine the social and economic loss potentials, and the likelihood of occurrence of different hazards at country and regional levels (UNISDR/WB). In its assessment of each country's natural hazards, the report concluded that in ASEAN, the most dominant disaster risk in terms of human casualties are cyclonic storms (typhoons), followed by earthquakes, tsunamis, floods, epidemics, landslides, droughts, volcanic eruptions, and forest fires (ibid, 124). Determining how each of the countries is disaster-prone requires looking at various factors that affect the ways they manage and cope with the effects of natural disasters.

As the report noted, natural disasters occur as a result of vulnerability and severity of the hazard, which thus tend to hit the poorest due to their dependence on the environment for their livelihoods, and their lack of financial or physical resilience to deal with the effects. Table 1 maps out each country's Gross Domestic Product (GDP) per Capita and Human Development Index (HDI) to provide a general overview of the countries' socioeconomic status.

The study also undertook desk research that yielded country rankings for social vulnerability (SV) and economic vulnerability (EV). The SV of a country was estimated based on the average number of people killed per year, and the SV ranking was estimated based on the average number of people killed per year per million (relative social vulnerability) – ranking Myanmar as the highest, followed by Indonesia, Philippines, Thailand, Viet Nam, Lao PDR, Cambodia, and then Malaysia (Table 2). No information was collected for both

Brunei's and Singapore's SV due to paucity of data (ibid, 78-79).

The EV of a country was measured in terms of the likelihood of economic losses resulting from disasters. The percentage of the losses is taken from the country's GDP at Purchasing Power Parity (PPP), and this percentage of GDP PPP for 0.5 per cent of exceedance (200-year return period) has been used as the benchmark. Table 3 shows the economic loss potential of ASEAN countries, ranking Myanmar as the highest, then Lao PDR, Indonesia, Cambodia, Viet Nam, Philippines, Thailand, and Malaysia. No information was collected for both Brunei's and Singapore's EV due to paucity of data (ibid, 79-81).

From these three data sets, it can be inferred that Myanmar's low levels of GDP and HDI (i.e. generally low levels of socioeconomic welfare) support its high SV and EV ranks, positing that when disaster strikes, more people are affected, and the country's economy suffers, thus making Myanmar most vulnerable. On the other hand, Singapore and Brunei are two of ASEAN's richest countries, and the lack of data to compute for their SV and EV illustrate their low level of vulnerability, such that paucity of data reflects their non-experience of disasters.

Looking at gender-based parities is also critical in assessing the vulnerability and ability of countries to adapt and respond to the effects of disasters. This is because "gender parity is equally fundamental to whether and how societies thrive," as "ensuring the healthy development and appropriate use of half of the world's total talent pool has a vast bearing on the growth,

Country	GDP Per Capita in USD (2015)[8]	Human Development Index (Rank out of 188) (2015)[9]
Brunei	30,942.1	0.865 (30)
Cambodia	1,198.5	0.563 (143)
Indonesia	3,357.1	0.689 (113)
Lao PDR	1,831.2	0.586 (138)
Malaysia	9,656.8	0.789 (59)
Myanmar	1,246.1	0.556 (145)
Philippines	2,850.5	0.682 (116)
Singapore	52,743.9	0.925 (5)
Thailand	5,736.9	0.740 (87)
Viet Nam	2,108.8	0.683 (115)

Table 1: ASEAN Countries' GDP and HDI

Country	Population (Millions)	Total Killed (1970–2009)	Combined Disaster Risk from Natural Hazards	
			Killed per year	(Killed per year) per million
Brunei	0.38			
Cambodia	14.49	2,063	52	3.56
Indonesia	240.27	195,824	4,896	20.38
Lao PDR	6.83	1,155	29	4.22
Malaysia	25.71	1,300	33	1.26
Myanmar	48.137	139,317	3,483	72.35
Philippines	97.97	46,761	1,169	11.93
Singapore	4.65			
Thailand	65.99	12,215	305	4.63
Viet Nam	88.57	16,292	407	4.60
ASEAN	593.05	414,927	10,373	17.49

Table 2: Comparative analysis of Social Vulnerability of ASEAN countries [10]

Country	Average Annual Loss (AAL) $ millions	Economic Loss ($ millions) Annual exceedance probability			Percent of GDP PPP Annual exceedance probability		
		0.5%	5%	20%	0.5%	5%	20%
Brunei							
Cambodia	23	299	112	38	1.07	0.40	0.14
Indonesia	926	10,640	3,623	1,315	1.10	0.37	0.14
Lao PDR	30	426	133	44	2.91	0.91	0.30
Malaysia	75	1,032	327	85	0.27	0.09	0.02
Myanmar	169	3,093	873	227	5.48	1.54	0.40
Philippines	284	2,144	1,208	686	0.66	0.37	0.21
Singapore							
Thailand	272	3,220	1,216	422	0.60	0.23	0.08
Viet Nam	205	1,971	907	413	0.77	0.35	0.16
ASEAN	1,985	13,943	6,207	2,889	0.49	0.22	0.10

Table 3: Comparison of economic losses of ASEAN countries[11]

competitiveness and future-readiness of economies and businesses worldwide" (Global Gender Gap Report 2016, 25-26). In examining this particular aspect, we look to the Change Readiness Index (2013, 2015) and the Global Gender Gap Reports (2010-2016).

The Change Readiness Index (CRI) unravels a country's enterprise capability, government capability, and people and civil society capability to determine its readiness and capability "to anticipate, prepare for, manage and respond to a wide range of change drivers, proactively cultivating the resulting opportunities, and mitigating potential negative impacts" (CRI 2015, 8). As the Report notes, the way a country – its government, private and public enterprises, and civil society – "[prepares] for and [responds] to sudden shocks or longer-term trends

has a huge impact on the prosperity and welfare of citizens and institutions" (ibid). On the other hand, the Global Gender Gap Report (GGGR) looks at four dimensions in determining gender disparity: economic participation, education, health and politics. Ensuring equality across these four aspects enables women to actively be part of solutions that contribute to the country's social and economic progress. As the GGGR notes, "making full use of women's capabilities paves the way to optimizing a nation's human capital potential" (2016, 27), which then relates to the ability of countries to thrive and adapt once disaster strikes.

Both CRI and the Global Gender Gap (GGG), in the context of natural disasters, are interlinked in such a way that gender inclusivity and parity across all aspects (education, participation, etc.) develops a robust human

Country	2013 Rank (out of 90)	2015 Rank (out of 127)
Brunei	*Not included*	*Not included*
Cambodia	25	50
Indonesia	38	43
Lao PDR	*Not included*	115
Malaysia	23	24
Myanmar	52	97
Philippines	18	33
Singapore	1	1
Thailand	16	34
Viet Nam	77	98

Table 4: ASEAN Countries' Consolidated Change Readiness Index

NI – Not Included

Country	2010 (Out of 134)	2011 (Out of 135)	2012 (Out of 135)	2013 (Out of 136)	2014 (Out of 142)	2015 (Out of 145)	2016 (Out of 144)
Brunei	77	76	75	88	98	88	103
Cambodia	97	102	103	104	108	109	112
Indonesia	87	90	97	95	97	92	88
Lao PDR	*NI*	*NI*	*NI*	60	60	52	43
Malaysia	98	97	100	102	107	111	106
Myanmar	*NI*	*NI*	*NI*	*NI*	*NI*	*NI*	*NI*
Philippines	9	8	8	5	9	7	7
Singapore	56	57	55	58	59	54	55
Thailand	57	60	65	65	61	60	71
Viet Nam	72	79	66	73	76	83	65

Table 5: ASEAN Countries' Consolidated Global Gender Gap Report Ranking

capital that is able to properly manage and respond to disasters. As the CRI concluded, "low inequality promotes inclusive growth, and inclusive growth promotes change readiness" (CRI 2015, 18). Similarly, a country that is able to address the negative impacts of particular events such as a natural disaster is able to look after the welfare of its people through recovery and provision of services, especially during times of great need. Tables 4 and 5 show the ASEAN countries' ranks in both the CRI and the GGGR.

As seen from Tables 4 and 5, Singapore ranks highest in the world in terms of change readiness. However, as the CRI Report notes, Singapore is one of few countries with strong change readiness yet records relatively low inclusive growth and equality scores. Other than that, ASEAN countries have a general correspondence between their CRI and their gender disparity records, thus supporting the claim that inclusivity and equality play a role in reinforcing the human capital of a country and thus, resulting to high levels of change readiness. However, it must also be noted that in recording both

CRI and GGG, there are several factors to consider, such that despite the overall ranking of countries for both, their individual scores in the sub-categories must also be further analyzed in order get a clearer picture of the country's change readiness and gender gaps.

The data presented above posit Myanmar as the most disaster-prone, given its high ranking in SV and EV, coupled with its low ranks in GDP, HDI and CRI. Laos and Cambodia remain in the higher-middle area, as they are unable to properly cope, given their low GDP and HDI as well. Indonesia and the Philippines are also vulnerable due to their archipelagic geography and location in the Pacific Ring of Fire, thus making them vulnerable to typhoons, earthquakes, and volcanic eruptions. Malaysia, despite scoring relatively low in terms of addressing gender disparity, is the third richest ASEAN country and records high in the CRI, resulting to low levels of SV and EV. Singapore and Brunei are the least vulnerable; the paucity of data in determining their SV and EV point to their absence of a data set, i.e.

no disaster to speak of. Singapore ranks the highest in the CRI, and is the richest country in ASEAN, followed by Brunei. Singapore has the highest population density in ASEAN while Brunei has the second lowest,[12] yet both countries are relatively small in terms of landmass, and are thus considered the least vulnerable to disasters.

Taken together, different factors can be taken into consideration when determining the vulnerability of countries to disasters and their social and economic impacts. Elements of a country's wealth, growth, government and society's capability, density, climate, geography, and the like, must be looked into in order to understand each of the country's risk and vulnerability levels. How a country is affected, and likewise how it responds to disasters are dependent on these factors. It is thus crucial that developing disaster risk reduction and management strategies must cut across all sectors in order to properly address their needs.

Gender and disasters in SEA

It has been established that natural disasters affect countries and groups of people differently, such that given varying levels of vulnerability, disasters "tend to disproportionately affect the poorest and most marginalized groups" (World Bank, 2012). In order to fully understand the social, economic and cultural impacts of disasters, it is important to look into the social, economic and cultural contexts in which they occur, particularly how gender cuts across all these. Various studies have established the disproportionate ways that disasters affect women, and many of them have claimed that this is due to the gendered relationships and social inequalities pre-existing in a society, such that disasters merely tend to highlight or exacerbate women's already subordinate position. As noted, understanding the extent of disasters, and likewise the means in which these can be addressed, requires one to look at how the social, economic, and cultural aspects of a society are gendered. Also important is examining the weak integration of gender in disaster management and post-reconstruction strategies.

There are varying reasons for the high mortality rates of women. World Bank, in its *Social Development Notes on Making Women's Voices Count in Natural Disaster Programs in East Asia and the Pacific*, states that these are due to (i) the physical capacities of women, including the ability to climb trees and/or the inability to swim; (ii) the need to protect other vulnerable family members such as children and elderly, and (iii) the livelihood patters and timing of when disasters have occurred (ibid). Furthermore, Southeast Asia has unique geographic and climatic conditions, where a major part of the population in the region lives in riverine plains, delta and coastal plains. Women, due to their productive role as caregivers, tend to be home when disaster strikes and usually become entrapped.

The World Bank also states four socio-economic risks that are linked to the region's economic development and wider social and cultural changes (2012, 3). These are vulnerability, livelihoods, education and participation, and land titling and inheritance rights.

As earlier noted, women's increased vulnerability during disasters is a reflection of their pre-existing socio-economic status. Lack of education, lack of resources, and their productive work that is rendered invisible, are a few things that define their position in society. As caretakers, they protect other vulnerable members of the family such as children and elderly, and are in-charge of securing the household's assets. Health-related impacts such as diseases and trauma likewise increase their responsibilities (ibid).

Women's low economic status already puts them at a disadvantage. Much of their productive work are unpaid and largely invisible, leaving them with little to nothing left when disasters cause them to lose their assets and other properties. Compensation also tends to focus on men's needs (including their particular means of livelihood), and does not account for women's lost properties. Female-headed households also become more vulnerable. The women have to take on their productive role, "venture into the job market with no prior experience in the labor force and survive an environment where communal networks have been lost."[13] Similarly, women who have lost their source of income or would have to find new jobs are at risk to seeking high-risk means of supporting themselves through sex work (ibid, 69), which may also put them

at risk of trafficking. Similarly, when conflicts arise, women usually suffer from various forms of violence, whether in the home or in evacuation/refugee centers.

Another factor that puts women at a disadvantage is their limited access to education, resulting to their inability to read, and limiting their ability to benefit from information campaigns and early warning systems. This also excludes them from decision-making processes that would enable them to have a voice and represent their particular needs as a result of the disaster. Another issue that women in particularly patriarchal societies with developing economies and traditional cultures is land titling and inheritance rights where women tend to not have access due to patrilineal ownership of land (ibid). Furthermore, provision of compensation only to the men as head of the household excludes women, further limiting them of economic resources that would be crucial in their survival.

All these factors that shape women's experience determine their socioeconomic status, and much of this is attributed to the wider social and cultural context in which they find themselves. The contexts of ASEAN countries are relatively similar – patriarchal and developing societies with deep cultural backgrounds. "Patriarchy is reflected in the strong preference for male children that has encouraged practices of sex selection at birth, female infanticide and neglect of the girl child. It is also less dramatically reflected in the lack of gender-disaggregated data on disasters that serve to keep female mortality, injuries and violence invisible" (UNISDR Background Paper n.d., 2).

Tables 1 and 5, which show ASEAN countries' socioeconomic status and gender disparity situations, provide a snapshot of developing countries and/or relatively wide gaps in gender equality. Women usually lack resources and access to information, and their mostly productive work as defined by the division of labor put women at a clear disadvantage when disaster strikes, not only through difficulty in getting access to information, relief and other services, but also through their limited involvement in decision making processes that are meant to address their needs and benefit them. Women's vulnerabilities exist before disasters; they are brought about by gendered relationships and processes.

Disasters merely reinforce them, making the situation worse for women and other vulnerable groups.

Given all the negative consequences of disasters, there must be efforts to address what places groups of people in more vulnerable situations in the first place. As the UNISDR notes, "it is possible to demonstrate that without adequately addressing gender issues and issues relating to social vulnerabilities, there cannot be effective disaster risk reduction or adequate resilience" (ibid, 3). However, they also note that, "despite their vulnerability, these groups have capacities, and that mitigating vulnerability requires building on these capacities" (ibid, 4). It is thus important, as noted in gender-based disaster risk reduction and management strategies, to involve women in all phases of disaster. Critical as well is understanding the social, economic, and political contexts "that circumscribe [the vulnerable groups'] lives, discourage or actively prevent them from realizing their capacity and continue to disadvantage, discriminate against, exclude and disempower them" (ibid, 5). Included in this are the circumstances that hinder the full inclusion of women.

In examining the "cultural, traditional and other practices that are based on the idea of stereotyped roles for women and men" (ibid, 6), it is thus important to look into how these affect the political institutions, which operationalize and implement disaster management strategies that are meant to benefit vulnerable groups. In a 2009 study conducted on the integration of gender issues and the gender perspective in disaster management in four countries – Indonesia, Japan, Philippines, and Thailand – the researchers concluded that gender is a relatively new concept in the natural disaster discourse and practice. As a result of the absence of knowledge on this, gender mainstreaming in policies and in the operational levels, specifically in the context of natural disasters, are absent or ineffective. More reasons include the lack of political commitment, lack of appreciation for the need to gender mainstream, and lack of knowledge (20). The study also found the unavailability of sex-aggregated data that can provide more accurate data on the effects of the disaster, particularly on the demographics of people affected, the roles men and women have in society, and the other ways women can contribute.

Highlighting the capacities of women does not only pave the way in providing them better services and ensuring they are being given avenues to participate. This also shifts the narrative from women merely being victims, to women being actual agents of change in society. Case studies on women's involvement (APEC 2009; Ferris et.al. 2013) show their capabilities in terms of contributing to relief assistance and reconstruction in various ways. As the APEC study claims, "disaster creates a socially acceptable and legitimate reason for women to get in to public arena… [where] it creates a kind of recognition for women's mobilization to advocate for their needs and also their initiatives" (2009, 47). This can become a "window of opportunity" to engender disaster management (ibid).

International mechanisms and ASEAN Initiatives

The context of natural disasters tends to increase and multiply the risks of vulnerable groups (i.e. women, children, elderly, persons with disabilities, and other marginalized groups such as indigenous peoples, ethnic/religious minorities, etc.), and brings about an extremely difficult circumstance of displacement. Women, particularly those in patriarchal societies, developing economies and traditional cultural contexts, experience a 'double suffering' due to the various social, economic, and cultural forces that shape and define their experiences, including those in natural disasters. Facing different levels of risks, their vulnerability is likewise exacerbated by their limited access to information and knowledge (UNISDR/UNDP/IUCN, 2009). Furthermore, their contributions in disaster response and reconstruction remain overlooked or invisible. Vulnerable groups need immediate and sustained protection as well as the opportunity to participate in deciding on programs that seek to benefit them (UN/DAW/ISDR, 2001).

In order to address such issues, international mechanisms have been established to ensure their protection. The United Nations (UN), through its charter, conventions, declarations and programs, has urged their member states to commit to the protection of vulnerable groups. The Universal Declaration of Human Rights (1948) and CEDAW (1979) are together referred to as the international legal framework for the equal rights of women, binding governments to guarantee equal op-

portunities for both men and women, and ensuring the protection of their economic, social, cultural, civil, and political rights (UNISDR/UNDP/IUCN 2009).

The CEDAW, operating on the assumption that gender inequality exists, has developed into a legally binding document of states' commitment to eradicate this norm. At its core is the promotion and protection of women's human rights on varying contexts, ensuring that women are able to enjoy them fully. As an international instrument, it seeks to identify the problem, formulate policies and implement measures, and is used as a basis to operationalize and standardize women's human rights in varying contexts. In natural disaster situations, for example, CEDAW can promote policies and practices that ensure the protection of women's rights, as well as for women's national and local efforts' involvement in environmental management and natural disaster mitigation (UN/DAW/ISDR, 2001).

During the 56th Session of UN Commission on the Status of Women (CSW), a resolution of gender equality and women's empowerment was adopted that included the call for multi-lateral and multi-stakeholders' collaboration on policy formulation, capacity development, program development, and service delivery to ensure the protection of women and their empowerment during and after crisis situations.[14] In the same vein, the *Nansen Principles* proposed in 2012 by Norway and Switzerland after the Nansen Conference on Climate Change and Displacement,[15] advanced, among others, the need to implement international and national policies inclusive of gender sensitivity.[16] Thereafter, both Norway and Switzerland conceived the Nansen Initiative "as a state-owned consultative process, outside the UN, to build consensus --- in a bottom-up way --- among interested states about how best to address cross-border displacement in the context of sudden and slow-onset disasters."[17] From 2013 to 2015, the Nansen Initiative conducted regional consultations with governments and civil society towards the drafting of a global Protection Agenda as well as build a consensus in addressing disaster-related displacement. In fact, in October 15-17, 2014, it convened the SEA consultation participated in by government representatives from Brunei, Cambodia, Lao PDR, Myanmar, the Philip-

pines, Thailand, Viet Nam, and Timor Leste. Among other issues, participants recognized the "heightened risks for women and children in particular to fall victim to human trafficking and smuggling after disasters."[18]

Indeed, the past several years saw various global-level events focusing on integrating gender in disaster risk reduction (DRR), particularly in advocacy, awareness raising and gender mainstreaming. In 2005, the *Hyogo Framework*, then the blueprint for DRR, noted that "a gender perspective should be integrated into all disaster risk management policies, plans and decision-making processes, including those related to risk assessment, early warning, information management, and education and training."[19] This was further developed in the *Sendai Framework*, noting in particular the crucial role of women and their participation in "effectively managing disaster risk and designing, resourcing and implementing [of] gender-sensitive disaster risk reduction policies, plans and [programs],"[20] as well as the need to capacitate and empower women in securing alternate means of livelihood in post-disaster situations (2015). Additionally, the Sendai Framework, having recognized the disproportionate impact of disasters on women, children, and vulnerable groups, called on governments to "engage with relevant stakeholders, including women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples, volunteers, the community of practitioners and older persons in the design and implementation of policies, plans and standards."[21]

Furthermore, the UN International Strategy for Disaster Reduction (UNISDR) published *Policy and Practical Guidelines* (2009) on making disaster risk reduction gender sensitive. It listed a set of complementary approaches to mainstream gender perspectives in DRR. This included the use of a rights-based approach to uphold the full range of women's and men's human rights; the gender and development approach to re-examine the socioeconomic and political institutions and policies that affect development for women and men; the participatory approach to ensure equal and gender-sensitive participation of women; and the DRR approach to ensure gender mainstreaming cuts across multiple stakeholders and processes (UNISDR/UNDP/IUCN 2009).

Protecting women and ensuring their participation during natural disasters therefore have to be comprehensive. Included in the guidelines is determining the existence and degree of risks, vulnerabilities and exposure to threats, and identifying gender-based capacities and resources for managing risk, such as using women's knowledge and experiences as sources of information. Having an early warning system in place is also crucial, where women must be involved in identifying early signs, be informed of the surroundings and natural resources, and be included in information dissemination and communication, education, and training. Their abilities to respond to disasters must also be strengthened (ibid).

The ASEAN recognizes that SEA is a disaster-prone region, and that regional cooperation and coordination are needed to respond to natural disasters. In 2005, Foreign Ministers of ASEAN signed the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) in Vientiane, Lao PDR. This Agreement is ASEAN's instrument for coordination in all phases of a disaster, which has been ratified by all ten Member States. It entered into force in 2009 and is considered as a regional legally binding agreement among the ASEAN Member States (AMS) to promote regional cooperation and collaboration in reducing disaster losses and intensifying joint emergency responses to disasters in the region (ASEAN Disaster Risk Management Initiative, 2010). In 2011, the ASEAN Coordinating Center for Humanitarian Assistance (AHA Center) was established, a mechanism that aims to implement operation strategies and procedures to enable rapid, joint, and effective response to disasters (ASEAN Vision 2025).

As a means of complying with the *Hyogo Framework Agreement* (2005), there has been a shift from a response-oriented to a mitigation-oriented approach of AMS, thus integrating disaster risk management into development plans, as noted in an *ASEAN Synthesis Report* published in 2010. It was recognized that focus must be on vulnerabilities and risk factors in order to protect societies and economies from the effects of disasters.

The AADMER's Accomplishment Report for 2010-2015 described its progress and achievements with regard to addressing the 21 priority areas that it identified in its previous work plan. In summary, its milestones and results were the (i) establishment of an effective mechanism for joint response to disasters in the region within 24 hours; (ii) creation of broad and far-reaching partnerships to support implementation and realization of the goals of AADMER; and (iii) strengthened National Disaster Management Organizations (NDMO) – ASEAN cooperation in developing regional capacities for joint response.

In 2016, AADMER released a strategic policy document, the *ASEAN Vision 2025 on Disaster Management*, taking off from its *Work Programme for 2016-2020*, which outlines the directions that ASEAN may take as it aims to adapt to the evolution of the humanitarian landscape and nature of disasters, and provide a comprehensive and robust disaster management and emergency response system. It looks at three strategic elements, namely, (i) institutionalization and communications; (ii) partnership and innovation; and (iii) finance and resource mobilization. In the next 10 years, AADMER implementation aims to move towards a people-centered, people-oriented, financially sustainable and networked approach, and one that reaches the national and sub-national (city, provincial, and community) levels. The document notes that as part of their people-centered approach, their "humanitarian initiative will ensure gender equality and empowerment for women, girls, the youth, and children so that they can act as agents of their own response." In ensuring that mechanisms are in place to protect and assist vulnerable groups, ASEAN must shift their focus from managing crises to managing risks, and that building capacities of communities with AMS is important in reducing exposures and vulnerabilities.

One of the strategic elements for AADMER is determining how the ASEAN Member States (AMS), ASEAN Secretariat, and the AHA Center can work with entities in the regional, national and local levels for disaster management and emergency response. In order to effectively provide aid to those most affected, the document notes that ASEAN must engage with

relevant local stakeholders, including community organizations and vulnerable groups (2016).

In its 2016-2020 work plan, AADMER noted eight priorities revolving around risk awareness, building safe infrastructures and essential services, becoming a disaster resilient and climate adaptive community, protecting economic and social gains, building ASEAN's leadership and innovation in disaster management, and enhancing capacities. While ASEAN's approach to disaster management has shifted to be more proactive, comprehensive, and engaging with more stakeholders, nothing specific has been noted on the inclusion of women. While the policy document mentions that ASEAN's efforts towards disaster management must be informed by other frameworks, such as the APEC DRR framework that mentions the inclusion of women and vulnerable sectors in building the resilience framework of ASEAN, and that empowerment of women is vital for a more people-centered approach, there are no strategies that detail the protection of women as a vulnerable group, given the international community's recognition that natural disasters affect men and women differently. Furthermore, there is no recognition of the value of women's participation. Likewise, there are no specific strategies that indicate how women can be involved from the early stages of disaster until post-disaster reconstruction.

As a party to the *Hyogo Framework Agreement*, ASEAN is expected to integrate the gender perspective in all policies and phases of disaster risk reduction and management, including education and training. However, as seen in AADMER's priorities and strategies indicated in their work programme, protection and inclusion of women have not been fully integrated, and in fact remain to be merely part of a vision for the future.

Thus, in light of the natural disaster context in the region as well as the institutional recognition of AMS on the need to promote and protect women's human rights in situations of and/or in preparation for natural disasters, the ASEAN Intergovernmental Commission on Human Rights (AICHR) Thematic Study on Women in Natural Disasters aims to compile/document and analyze protection and empowerment policies and prac-

tices for women under such difficult circumstance.

This initiative, as proposed by the Philippines, is pursuant to the Terms of Reference (ToR) of AICHR, specifically, item 4.1 on developing strategies for the promotion and protection of human rights and fundamental freedoms in the building of the ASEAN Community as well as 4.12 on preparing thematic studies on human rights in the ASEAN. In this regard, the objectives of the study are the following:

1. To compile current <u>policies and practices</u> as regards the protection of women human rights in situations of natural disasters, particularly, those who have been internally displaced under such difficult circumstances;

2. To document <u>best practices in mainstreaming gender</u> in natural disaster responses and assistance as well as in post-disaster reconstruction and rehabilitation, specifically, that of the inclusion and participation of affected women in the planning and design of humanitarian services and programs; and

3. To analyze the <u>results</u> of the study and provide concrete recommendations with regard to the framing of a draft ASEAN Regional Action Plan on Women in Natural Disaster Contexts, which will be drafted with the ASEAN Committee on Disaster Management (ACDM) and other concerned sectoral bodies.

In reflecting the aforementioned objectives of the study, this research report is organized into the following: (a) discussion on the research design; (b) presentation of indicative findings for all 10 AMS as regards their respective natural disaster context, natural disaster institutional infrastructure and mechanism, perspectives and insights from non-government actors and community women, gains and gaps in the integration of gender in institutional infrastructure and mechanisms; (c) a set of recommendations for the

ASEAN on women in natural disasters.

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Endnotes

1 See Sarah Bradshaw, "What is a disaster?" in Gender, Development and Disasters (Edward Elgar Publishing Limited, 2013), where she outlines the varying definitions of natural disasters in literature.

2 For a more detailed list of specific implications for women of particular conditions/situations in the natural disaster context, see UNISDR/UNDP/IUCN, "Making Disaster Risk Reduction Gender-Sensitive, Policy and Practical Guidelines (2009).

3 See Elaine Enarson, "Gender and Natural Disasters," InFocus Programme on Crisis Response and Reconstruction, Working Paper 1 (2000): 6, for a list of highly vulnerable women.

4 See the Inter-Agency Standing Committee's (IASC) Gender Handbook in Humanitarian Action (2006) for the discussion of the International Legal Framework for Protection.

5 Southeast Asian map taken from http://www.geographic-guide.com/pictures/southeast-asia-map.jpg

6 See the ASEAN Statistical Leaflet, Selected Key Indicators 2016 for the ASEAN profile in numbers for 2015. Accessed from http://asean.org/storage/2012/05/ASEAN_Stats_Leaflet2016_web.pdf

7 In 2009, the World Bank, UNISDR and ASEAN Secretariat signed a tripartite Memorandum of Cooperation (MoC) on DRR, which lays a framework for technical support from the World Bank and UNISDR to help the ASEAN Secretariat formulate and implement strategies and action plans for disaster risk reduction and management. A Synthesis Report on Ten ASEAN Countries Disaster Risks Assessment was then published on December 2010, which focused on assessments regarding disaster risks at the country and regional levels, as well as ways forward for ASEAN DRR.

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9 United Nations Development Programme (UNDP). Overview, Human Development Report (2016). Accessed from http://hdr.undp.org/sites/default/files/HDR2016_EN_Overview_Web.pdf-- out of 188 countries

10 Information taken from the area computed from the Multi-Hazard mortality risk map of the GAR preview

data platform and potential population computed from Landscan, sourced from UNISDR/WB, *Synthesis Report on Ten ASEAN Countries Disaster Risks Assessment (*2010): 79.

11   Figure taken from the UNISDR/WB, Synthesis Report on Ten ASEAN Countries Disaster Risks Assessment (2010): 80.

12   See the ASEAN Statistical Leaflet, Selected Key Indicators 2016 for the ASEAN profile in numbers for 2015. Accessed from http://asean.org/storage/2012/05/ASEAN_Stats_Leaflet2016_web.pdf

13   See the UN ESCAP publication, Moving Forward Post-Tsunami: Voices of the Vulnerable (2006) for detailed accounts of the effects of the 2004 Indian Ocean tsunami on Indonesia, Sri Lanka, and Thailand.

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20   UNGA. 2015. Sendai Framework for Disaster Reduction 2015-2030. A/CONF.224/L.2. http://www.wcdrr.org/uploads/Sendai_Framework_for_Disaster_Risk_Reduction_2015-2030.pdf.

21   Ibid.

The Research Design

The research covered all ten ASEAN Member States (AMS). It involved finding data to build the natural disaster context of the countries in the sub-region, looking at their existing institutional infrastructure on disaster/emergency preparedness and response and how gender has been implicated in various instruments and mechanisms, and listening to views of non-government actors and women beneficiaries. From these data sources, the study intended to map out shared institutional practices on responding to women's concerns and needs in natural disaster contexts and identify common areas of concern in order to build a discursive platform to collectively ensure the human rights of women in difficult situations.

Research Method

The study employed the following research strategies:

I.   Desk research

Publicly accessible online country documents and scholarly works were reviewed to build the initial country profile (i.e. natural disaster context, institutional infrastructure, gains and gaps in mainstreaming gender) of each AMS. The resulting literature review was then used to draft the thematic inquiry guide for target research respondents. The result of the desk research entitled "Women in Natural Disasters: An Overview Paper" was submitted to AICHR Philippines on 08 May 2017.

II.   In-country field research

Being an AICHR Thematic Study, the conduct of the research followed AICHR-approved protocols adopted on 14 February 2017. Specific to the conduct of in-country field research visits, the approved guidelines were:[1]

1. "The field visit shall only be conducted with the willingness and prior consent by the related ASEAN Member State. The conduct of such field visits shall be done in coordination with respective nominated National Focal Persons (NFP) and shall be in conformity with national

domestic laws of AMSs as well as with ASEAN Charter and AICHR TOR.

2. National Focal Persons will identify women beneficiaries of their natural disaster response programs to participate in a structured focus group discussion.

3. The NFPs will assist in coordinating communication with target participants and will provide the venue as well as translator (if necessary) for the focus group discussion.

4. The focus group discussion will center on the following topics (refer to Annex 1 for guide questions):

   - Gender dimensions of natural disaster experience;

   - Identification of natural disaster program package received (i.e. humanitarian relief, protection, economic rehabilitation, participation in post-disaster reconstruction programming);

   - Insights into best practices and challenges of natural disaster programs received;

   - Recommendations to relevant ASEAN bodies on 'ways forward.'

5. An optional activity (should schedule of field visits accommodate) would be a conversation with a civil society representative that has partnered with government institutions in the implementation of natural disaster programs. The conduct of such activity, should it be possible, will be done in coordination with the in-country NFPs.

6. All costs for the conduct of field visits, including that for translators, shall be borne by the funds allocated for the Thematic Study. Additional funding, which shall not be tied to additional obligations, can be sought from external partners.

7. Upon completion of the in-country visit and prior to the departure of the Research Team member, a post-activity meeting will be convened between the NFP and Researcher.

8. The result of the field trips shall be subject to AICHR's internal use only. All publications related to the visits as well as the outcomes should be made with AICHR's consensus and with agreement of the host countries.

The research NFPs were officially designated by their respective AICHR Representatives (See Annex 2 for NFP list).

The Research Team started communication with their respective officially-designated country research NFPs in March 2017. They sent the request for the organization and coordination of all in-country research activities, namely: (a) resource person interviews (RPIs) of country experts, non-government organizations, international organization, and other relevant stakeholders; (b) key informant interviews (KIIs) with relevant government officials/personnel implementing natural disaster risk reduction (DRR) and gender; and/or (b) focus group discussions (FGDs) women beneficiaries of natural disaster assistance programs or women from affected communities. They used a thematic inquiry guide developed specifically for the in-country research visit (see Annex). In coordination with the NFPs, some members of the Research Team sent request letters directly to the target respondents, which were followed-up by the in-country NFPs. The in-country field research visits were conducted from April to June 2017 (see Annex 3).

There were variations in terms of target respondents as these were dependent on the organization and coordination by in-country research NFPs.

III.   Online interviews/correspondence
On instances when target respondents were not available during the conduct of in-country research visits, online interviews (via skype) or email correspondences were done as alternative strategies.

In the case of Singapore, Mercy International and the Singapore Committee for UN Women were interviewed via skype while respondents from the Ministry of Home Affairs and Singapore Civil Defence Force responded in writing to questions sent to them by the researcher. Indonesia's National Disaster Management Council also responded in writing.

IV.   Research Validation Workshop
The research validation workshop was conducted in Manila on June 9, 2017 and was attended by all NFPs from the ten AMS. The workshop had the following objectives: (a) to validate the results of the research; (b) to share insights as regards resulting analysis and recommendations; and (c) to discuss strategic 'ways forward' in light of advancing women's human rights in natural disaster situations, specifically in light of the proposed draft text of the RAP on women in natural disasters.

Research Methodology and Analytical Frame
The study takes on an institutionalist perspective, as it primarily looks at institutional instruments and infrastructures that respond to natural disasters/emergencies and infer how they integrate gender in their respective discourses and practices. Mainstreaming gender in the natural disaster/emergency preparedness and response architecture essentially means being conscious of gender-sensitive
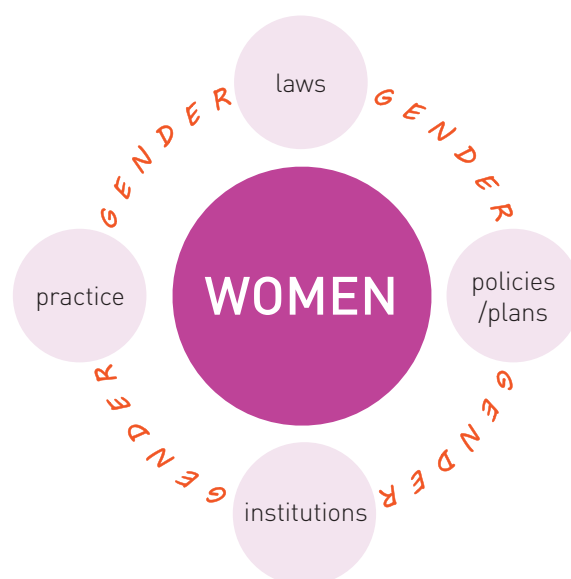
Schematic Diagram of Research Framework

initiatives in the various stages of humanitarian assistance --- early relief, protection, recovery, and rehabilitation. It also means taking stock of gender-specific needs and concerns of the affected population. To maximize appropriate responses also means having to apply the gender lens in vulnerability assessments, emergency preparedness programs, and post-disaster/emergency reconstruction projects.

Most of the countries in the Southeast Asian sub-region have experienced natural disasters. Although many of these disasters – earthquakes, cyclones, floods, and droughts – have affected individual countries within their territories, there were also many trans-boundary disasters that affected them (e.g. haze, volcanic eruption, etc). Except for Brunei Darussalam and Singapore, large scale natural disasters have hit all other AMS, impacting on their economies, the lives of their people, and the capacity of various governments to respond.

Having recognized this, each country has developed their own natural DRR governance structure, instruments, and processes. Most of these are linked with international standards in responding to issues such as climate change (e.g. UN Convention on Climate Change and Nansen Principles on Climate Change and Displacement) and natural disaster management (e.g. World Conference on Disaster Reduction, *Hyogo Declaration and Hyogo Platform for Action 2005-2015 on Building the Resilience of Nations and Communities in Disasters*, and the *Sendai Framework for Disaster Risk Reduction 2015-2030)*. At the regional level, institutional frame was provided by the AADMER. Given these instruments, there was no question about the institutionalization of the discourse and practice of natural preparedness, risk reduction, and response.

Women – along with children, the elderly, and persons with disabilities – are usually identified as part of vulnerable groups in crisis and emergency situations, both natural and human-made disasters. Their vulnerabilities are multiplied as gender roles and relations magnified – especially, as related to gender inequalities and access to resources. This

Group Photo of the Research Team, NFPs, AICHR Philippines, and representative from the Working Group for an ASEAN Human Rights Mechanism

AICHR Chair and Philippine Representative, Mr. Leo Herrera-Lim, giving the opening remarks during the Validation Workshop
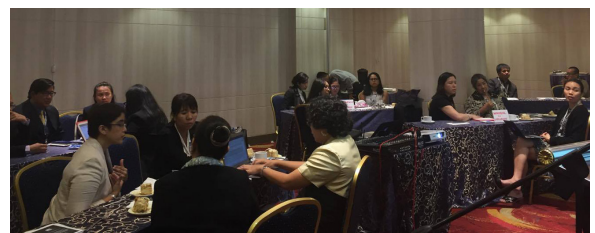
The NFPs participate in a workshop facIlitated by the Research Team

was pointed out by a 2009 study by the Global Focal Point Network where it has been observed that:

"Traditional thinking believes that disaster affects men and women equally, as disaster does not differentiate sex. However in every disaster event the impact to women and men is different. Gender roles in the societies make them affected differently, both physically and socially. Women can be vulnerable due to lower socio-economic conditions and limited access to resources. They frequently lack influence due to gender inequality and disempowerment. In many decision-making processes, particularly those of a high-level public nature, women are not included. Decisions are made regarding disaster preparedness, building processes for rehabilitation and reconstruction with little or no consultation with women as stakeholders. Across the world, women are frequently subjected to violence and have limited

access to aid workers to express their needs. This can hinder their mobility, directly impacting on the availability of food and the health and security of the family.

In post-disaster circumstances, vulnerable groups, particularly women, can also be vulnerable to violence and trafficking. Widows can be forced to become primary income earners and this situation can increase the risk of trafficking, debt bondage and exploitation, through their multiple responsibilities as care giver and protector for their family" (2009:11).

In the same vein, Enarson, in an International Labor Organization (ILO) working paper entitled *Gender and Natural Disasters* concluded that women and men are differentially impacted on by natural disasters:

"First, women's economic insecurity increases, as their productive assets are destroyed, they often become sole earners, their household entitlements may decline, their small-businesses are hard-hit, they lose jobs and work time, and gender stereotypes limit their work opportunities. Second, women's workload increases dramatically. They often take on more waged or other forms of income-generating work; engage in a number of new forms of "disaster work," including emergency response and political organizing; and have expanded responsibilities as caregivers. Third, women's working conditions in the household and paid workplace deteriorate, for example through lack of child-care and increased work and family conflicts. Fourth, women recover more slowly than men from major economic losses, as they are less mobile than male workers, likely to return to paid work later, and often fail to receive equitable financial recovery assistance from the government and/or external donors" (2000: viii)

At the ASEAN level, the discursive institutional interface of gender and natural disasters has yet to take place. Even the AADMER that was signed and entered into force in December 2009 did not reflect the integration of gender in natural disaster. As previously mentioned, to date, the closest would be the *Vientiane Declaration on Enhancing Gender Perspective* and *ASEAN Women's Partnership for Environmental Sustainability* where the commitment to provide for "women's adequate

protection and safety during the time of natural disasters and climate change hazards"[2] was explicitly articulated. This Declaration was signed on October 19, 2012 by Ministers and Heads of Delegations attending the first ASEAN Ministerial Meeting on Women (AMMW) in Lao PDR. However, it must be noted that this Declaration was more anchored on environmental sustainability and not specific to the context of natural disasters.

Given this backdrop, the AICHR Thematic Study on Women in Natural Disasters intends to close in on this discusive institutional gap in order to reflect the necessary interface of gender in the context of situations that heighten risks to the enjoyment of women's human rights.

Endnotes

1 Quoted from the AICHR Thematic Study Guidelines.

2 Alternate Myanmar NFP who took the place of Ms. Phoy Thu Nandar Aung.

3 Alternate Singapore NFP who took the place of Dr. Mely Caballero-Anthony.

4 Available online at http://www.asean.org/wp-content/uploads/images/2012/Social_cultural/ACW/Press_release/First%20draft%20of%20Vientiane_Declaration_of_AMMW_FINAL.pdf

For Key Informants / Resource Persons

1. Institutional capacity

    a.   What are the specific laws, policies, and/or programs on natural disasters?

    b.   What is the main strategy/approach (if any) for incorporating the gender perspective in these laws, policies, and programs?

    c.   How does the different stages of disaster response and assistance ensure the human rights of women?
    - early relief
    - protection
    - recovery
    - rehabilitation

    d.   Based on your own observation, what are the best practices as well as challenges as regards disaster response and assistance in connection with responding to the specific needs of women and girls?

    e.   What are your recommendations in sustaining or improving gender-sensitive natural disaster response and assistance programs?

2. Spaces for women's participation

    a.   Are there spaces / opportunities for women to participate in post-disaster planning and programming?

    - If yes, please describe.

    - If none, please explain why women's participation is relevant.

    b.   What do you think are the traditional and emerging roles of women in natural disasters?

For Community Women

1. Disaster experience (context/surfacing of the gender dimensions of natural disaster experiences)

    a. What was your natural disaster experience? (sharing of general experiences)

    b. As a woman, what do you recall as the main challenge/s that you faced during this disaster situation? (sharing of specific experiences)

    c. How did the disaster affect your community and your family?

    d. How are you now ever since that disaster experience? (personal insights/reflections)

2. Disaster preparedness

    a.   Describe the disaster assistance you received from government and/or other agencies (please name these agencies) during:
    - early relief
    - protection during relief operations
    - recovery
    - rehabilitation

    b. What do you think were the best points of the disaster preparedness assistance that you received?

    c. What do you think were the areas of improvement as regards disaster assistance based on your own experience?

    d. Did you participate in any post-disaster reconstruction programming?

    d.1. If yes, please describe your experience;

    d.2. If no, please explain if you think women's participation is important.

3. What are your specific recommendations with regard to ensuring that women and girls needs and concerns are addressed in natural disaster response and assistance programs?

Annex 2: Officially-Designated Research National Focal Persons

Country	National Focal Person	Position and Institutional Afiliation
Brunei Darussalam	Mr. Mohammad Johardi bin Hamdi	Assistant Community Development Officer Ministry of Culture, Youth and Sports
Royal Government of Cambodia	Ms. Chhy Ratha	Chief of ASEAN and Women Affairs Office Ministry of Women's Affairs
Indonesia	Ms. AA Sagung Dwinta Kuntaladara	Researcher, ASEAN Study Center, Universitas Indonesia
Lao People's Democratic Republic	Ms. Davong Oumavong	Acting Head of Division, Women Development Department Lao Women's Union
Republic of the Union of Myanmar	Ms. Yin Yin Pyone[1]	Deputy Director Department of Social Welfare
Malaysia	Dr. Alicia Izharuddin	Senior Lecturer, University of Malaya
Singapore	Dr. Tamara Nair[2]	Research Fellow, S. Rajaratnam School of International Studies (RSIS)
Republic of the Philippines	Ms. Esther Geraldoy	Disaster Response Assistance and Management Bureau Department of Social Welfare and Development
Kingdom of Thailand	Mrs. Ravadee Prasertcharoensuk	Disaster Response Assistance and Management Bureau Department of Social Welfare and Development
Socialist Republic of Viet Nam	Ms. Nguyen Thi Bich Thuy	Director, Research Center for Female Labour and Gender Institute for Labour Science and Social Affairs

Annex 3: In-Country Field Research Visits

Field Research Dates	Field Research Sites	Institutional Actors	Non-Government and Community Women
7-11 April	**Thailand** • Trang Province • Bangkok	• National Human Rights Commission • National Research Office • International Relations Division of the Department of Disaster Prevention and Mitigation • Office of Women and Family Affairs, Ministry of Social Development and Human Security • Trang Provincial Governor • Trang Provincial Staff from the following departments: Social Development and Human Security, Disaster Prevention and Mitigation, Natural and Environment, Fisheries, Agriculture and Extension, Internal Security of Trang • Tambon (Village) Chief	• Tambon (Village) Chief and women (in agriculture and rubber plantation/fisheries setting)
24-27 April	**Lao PDR** • Meoun District • Feung District • Vientiane	• Lao Women's Union • Lao Red Cross • District Representatives/Village Chiefs of Meoun and Feoung • Ministry of Labour and Social Welfare • Ministry of Natural Resources and Environment • Ministry of Agriculture and Forestry • Ministry of Foreign Affairs	• Lao Red Cross • Women from Meoun and Feung Districts
26-28 April	**Malaysia** • Kelantan • Ptutrijaya	• Ministry of Women, Family and Community Development • Social Welfare Office, Kota Bahru	• Village Chieftain • Women from Kem Kijang Village

Field Research Dates	Field Research Sites	Institutional Actors	Non-Government and Community Women
26 April - 01 May	**Viet Nam** • Hanoi	• Ministry of Labour, Invalids, and Social Affairs • Ministry of Foreign Affairs • Bureau of Social Protection • Ministry of Information and Communication • Center for Natural Disaster Prevention and Mitigation • National Steering Center for Natural Disaster Prevention and Control • Central Steering Committee on Natural Disaster Prevention and Control	• Research Center for Female Labour and Gender of the Institute for Labour Science and Social Affairs • Viet Nam's Women Union • Ho Chi Minh Communist Youth Union • UN Women
01-05 May	**Myanmar** • Naypyidaw	• Department of Social Welfare • Department of Relief and Resettlement • Ministry of Social Welfare and Relief and Resettlement	
15-19 May	**Cambodia** • Phnom Penh • Kampot Province • Kep Province	• Ministry of Women's Affairs • National Council for Disaster Management • Ministry of Health • Ministry of Environment • Provincial Council for Disaster Management (Kompot Province) • Provincial Department of Women's Affairs (Kep Province)	• Women from Kompong Kandal, Aundong Khmer, Poek Koh, Krang Ampel, and Kompong Bay communes, Kompot Province • Kompong Trach commune, Kep Province • Oxfam Cambodia • Independent consultant
16-18 May	**Brunei Darussalam** • Tutong District • Bandar Seri Begawan	• Ministry of Culture, Youth and Sports • National Disaster Management Centre	• Women from Tutong District
25 May	**Singapore** • Singapore	• Disaster Response Assistance and Management Bureau • Department of Social Welfare and Development	• S. Rajaratnam School of International Studies • Singapore Red Cross

Field Research Dates	Field Research Sites	Institutional Actors	Non-Government and Community Women
26 May	**Indonesia** • Depok City, West Java	• Disaster Response Assistance and Management Bureau • Department of Social Welfare and Development	• Komnas Perempuan • Yayasan Tangul Bencan • Kapal Perempuan • Pusat Krisis • Perempuan Mahardhika • UNDP
17 April, 16 May, 5 June	**Philippines** • Metro Manila • Sta Cruz, Laguna	• Department of Social Welfare and Development • Department of Health	• Women from barangay Ugong, Sta Cruz, Laguna

Brunei Darussalam

Natural Disaster Context

Brunei has low risk for natural disasters. There are floods during the rainy season (from October to May), but the country is not located in a typhoon path, and has not suffered from large-scale flood damage. Low-level earthquakes have been recorded, although disasters are not common. While the country lies along a coastline, it is not at risk of tsunamis. There are no active volcanoes in Brunei, although there is one north of the Borneo Island. There is no record of any impact from a volcano eruption (JICA, 2015).

Brunei has a tropical climate and is generally hot and wet throughout the year. It is not on the regular typhoon paths of storms coming from the Western Pacific. Most rainfall occur from September to January, and May to July. Humidity averages between 75 to 85 percent, but may reach 100 at night. Roughly 60 per cent of the land area has forest cover and is considered a biodiversity hotspot. There are four major rivers running throughout the country, namely the Temburong, the Belait, the Tutong and the Brunei rivers. Most of Brunei's land area are low alluvial coastal plains. The areas near the rivers and their tributaries are especially prone to flooding. Other natural hazards include trans-boundary haze, health pandemics and wildfires during the dry season (NDMC, 2012).

Brunei was named one of the 15 most disaster-prone countries in the world by the World Risk Index, although this is questionable given the limited records on the occurrence of major natural disasters in the country (Lassa & Sembiring, 2017). There were no disasters recorded between 1980 and 2011. The country's low-intensity earthquakes are usually within the 4-5 magnitude (JICA, 2012).

Brunei is divided into four administrative districts, namely Brunei-Muara (where the capital is located), Belait, Tutong, and Temburong. It shares a 381-kilometer land boundary with East Malaysia.

Institutional Infrastructure and Mechanisms

The main legislative mechanism for addressing disasters is the Disaster Management Order of 2006. This piece of legislation created the National Disaster Council and the main focal point agency – the National Disaster Management Center (NDMC). The NDMC is housed in the Ministry of Home Affairs. The Council is headed by His Royal Highness Prince Haji Al-Muhtadee Billah, and whose members are appointed by the His Majesty the Sultan. Its main functions are the following:

a) To develop a strategic policy framework for disaster management for Brunei Darussalam;

b) To ensure effective disaster management is developed and implemented for Brunei Darussalam;

c) To ensure that regional and international arrangements concerning matters relating to effective disaster management are established and maintained;

d) To identify resources that may be used for disaster operations;

e) To provide reports and make recommendations to His Majesty the Sultan, and Yang Di-Pertuan about matters relating to disaster management and disaster operations;

f) To prepare the Plan;

g) To exercise or perform any other function conferred or imposed on to the Council under this Order or under any other written law;

h) To decide on the assistance to be provided to any country or territory relating to disaster operations;

i) To decide on the assistance offered by any country or territory, organization or individual;

j) To exercise or perform any function incidental to any function mentioned in paragraphs (a) to (i).

While the Council is tasked with broad policy direction, the NDMC executes plans and coordinates with other agencies such as the fire and rescue department, medical and health services, the police, and the armed forces. The organ charged with post-disaster assistance is the Jabatan Pembangunan Masyarakat or Community Development Department (JAPEM), under the Ministry of Culture, Youth and Sports. The department is mandated with providing shelter and rations to victims. There are also provisions for monetary compensation in the event of property damage or loss (e.g. homes are flooded or burned down). A maximum of B$30,000 can be allocated to build a new house for victims identified as among the marginalized sector (MHLW, 2012). Other kinds of financial assistance depend on the kind and degree of disaster. For example, for fire victims, in cases of the total destruction of homes, a disbursement of B$5,000 is given to the family, and B$200 per household member. Those who are covered by insurance do not get assistance from government.

JAPEM provides food rations and basic necessities for three consecutive days. It also manages two housing estates that serve as temporary shelters in cases of small-scale disasters, for example, fires.

The Sentosa Flat has 42 units of two-bedroom apartments. The Belimbing Subok has 60 units of three-bedroom apartments. JAPEM conducts regular visits, and reports instances of social ills in the community such as drug use and petty theft. Other JAPEM services include targeted financial assistance, counseling, and free health and medical

Temporary shelter managed by the Community Development Department (JAPEM)

treatment, where appropriate. The department also has a hotline, which citizens are able to call to report cases of domestic abuse and the like. There are also referrals from hospitals, the police, and courts. In times of natural disasters, interventions are done if issues are raised. JAPEM also has in-house counselors on call 24/7. They may also go to the site of the disaster depending on its severity. In cases where counselors are needed, two are dispatched at a time. To a large extent, post-disaster relief has also been provided by non-governmental organizations, private companies, and even individuals, who then coordinate with JAPEM.[1]

The Community-Based Disaster Risk Management Program (CBDRM) was implemented from March 2010, with the support of the Asian Disaster Risk Reduction Center (ADRC). It is designed to foster disaster-preparedness, mainly through educational and awareness, and campaigns in communities. One specific project is the 'School-Based Disaster Risk Management,' where students and the school community are taught what to do in case of disasters. Reach-out activities in villages teach basic techniques of first aid and CPR, and how to use fire extinguishers, among others (MHLW, 2015).

Food rations storage room of the JAPEM

The Strategic National Action Plan for Disaster Risk Reduction (SNAP) was developed in 2010 by the NDMC. The 2012-2015 Plan has five priority areas based on the Hyogo Framework for Action. These areas are in governance, risk assessment and early warning, knowledge management, vulnerability reduction, and disaster preparedness. The framework also incorporates the UN Sendai Framework for Disaster Risk Reduction for 2015-2030 (PMO, 2016).

Voices on the Ground: Community and Local Actors in the areas of Protection of Women and Participation in Decision Making

Tutong district is an alluvial plain, and areas along the river have historically been prone to flooding. In the case of Hanifa,[2] the family has ample time to prepare for the flood, as the waters from one of Tutong's tributaries tend to rise slowly. They usually transfer their vehicles on higher ground, at the mosque. Valuable things from the lower ground are brought up to the second level. Hanifa makes sure to secure her children's schoolbooks. There are 16 people in her household from three generations. There is a gendered division of labor; men move the vehicles and women pack valuable possessions in large containers. Apart from the mosque, villagers also park along the road, which is significantly higher than the ground level of houses. The roads were purposely built this way due to regular flooding. Newer houses are also required to be built higher for the same reason. As neighbors are usually also relatives, village cohesion

is a source of strength and security during flooding. The increased stress brought on by the situation does not usually lead to conflict or crime. Hanifa's family will usually not evacuate, and will only do so if the water reaches over six feet. That is, except her father, who is also the head of the village. He takes note of the condition of the village in general and who leaves and stays.

Certain common themes arose from interviews with women interviewed. One is that the community's cohesion can generally act as securing mechanism in cases where households need to evacuate or need help. Neighbors are also often relatives; although technically, any government facility can be turned into a temporary shelter, such as schools, community halls and mosques. Mobility is often the challenge, and everyday life is disrupted by the inability to move from place-to-place, that is, to work or school. Complicating this further are accounts of wildlife, which, in turn, gain greater mobility in the floods. Crocodiles and snakes can cause serious harm to vulnerable groups and children, if not fear and worry to adults. They also pose a challenge to those who would distribute food rations.

Upgrades in the infrastructure of Tutong, notably the increase of the elevation of the national road, have mitigated the mobility problem. Other infrastructure upkeep, such as clearing ditches, may be overlooked. Information dissemination during flooding could also be improved as not everyone has access to TV channels that make such announcements, i.e. the RTB (Radio Television Brunei). Without personal boats, mobility is supplemented by trucks from the armed forces. Communities could also be provided with standby boats, which would solve problems of avoiding wildlife and not having to wade in floodwaters. Among all respondents, there was feedback that food rations did not reach households in time, given that they would often be left in a central location, e.g. the local school, and residents will either have to go to the school to get them, or rely on volunteers for house-to-house distribution. All

respondents share how daily household chores and care for dependents become particularly challenging during floods. The worries include possibility of injury or drowning for little children and the elderly. There are also concerns about enough clean water to drink and to do the laundry. After the flood, cleaning the house is the primary objective. Those who pitch in are people from the Fire & Rescue department, and student-volunteers.

Perhaps unique to Brunei Darussalam is the concern that people do not become over-dependent on government. The observation of the teenage son of respondent Amina[3] best describes this delicate balance: "We're not dependent on government support. We'd rather do things ourselves. If the help came, then thank god. But if they don't, we're not pressuring the government to give it to us. Because those kinds of privileges should not be given, I believe. But if it's really bad and they don't do anything, then I think they should fix that."

Gains and Gaps in Integrating Gender in Institutional Infrastructure and Mechanisms

JAPEM provides other services to protect, counsel and advise women and girls victimized by marital and sexual abuse, drug abuse, and other social problems. It also has other programs to foster self-reliance and entrepreneurship among women and to help them become economically-dependent. This is in line with the country's long-term development goals to have women as full participants in the economy, and to hold higher positions in the public and private sectors.

Under the National Council on Social Issues, the Special Committee on Family Institution and Women Issues is tasked to promote women's rights and the family institution. The Committee's secretariat is housed in JAPEM. Women in Brunei Darussalam enjoy a relatively high standard of living, attested to by indicators such as literacy rates, maternal and infant mortality rates and tertiary-level education. There are more women than men currently in university. The female participation rate in the labor force is also high at 58.3% as of 2015. More and more women are also working in the army, the air force and the fire brigade. As of January 2011, women are entitled to 105 days of maternity leave.[4] All these are indicators of the commitment to improve women's status and representation in society. As such, the relatively modest efforts to mainstream gender in disaster governance may be attributed to the fact that Brunei is a low-risk country.

There are, as of yet, no gender disaggregated vulnerability and capacity assessments. Efforts to incorporate disaster risk reduction in the national plan and to capacitate local communities are at the earliest stages. There are no formal and institutionalized measures taken to address gender-based issues in recovery, contingency plans with gender sensitivities, no post-disaster needs assessment methodologies include guidance on gender aspects (Preventionweb, 2011). The CDBRM program highlights the role of women, primarily for household safety and fire prevention. Women are also taught basic life-saving skills and even fire-fighting.

SNAP does not explicitly incorporate gendered approaches to disaster response. Brunei also has no specified climate policy and adaptation. Disaster risk reduction is not included in Brunei Vision

Researcher with an interview respondent at Tutong District

2035 (Wawasan, 2035), the country's long-term economic development plan.

Recently, Brunei hosted the ASEAN Regional Disaster Emergency Response Simulation Exercise (ARDEX). The ARDEX is meant to evaluate and review the ASEAN-SASO (Standard Operating Procedures for Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response Operations). Those who participated in ARDEX-16 were emergency response forces of Brunei, ASEAN states, response teams from the UN Office for the Coordination of Humanitarian Affairs, and other civil society organizations (Borneo Post, 2016). This exercise is in keeping with the ASEAN Declaration on One ASEAN, One Response: ASEAN Responding to Disasters as One in the Region and Outside the Region, signed in September 2016.

Offering to host this exercise suggests that while Brunei has no domestic imperative to take seriously DRMM because of its low-risk profile, it is willing to play the part of a conscientious and responsible neighbor within the context of a region more prone to natural disasters. Brunei has also hosted two meetings of the Joint Task Force (JTF) for Humanitarian Assistance and Disaster Response. The JTF, which was created by the ASEAN Secretariat in 2014, is meant to harmonize relevant ASEAN bodies for humanitarian assistance. Initiatives for gendered mainstreaming will likely come from these regional mechanisms rather than Brunei's domestic context.

The researcher with officials at the National Disaster Management Center

After this exercise, the NDMC has decided to review the DMO 2006 and SNAP in recognition of some gaps in the policy instruments. One is that Brunei has yet to have protocols for tsunamis. The NDMC conducted a forum entitled, 'Women Roles in Disaster Risk Management' in 2013, although the exercise underscored health and religious obligations. Although there are not many women in leadership positions, due in part to the institutions' security orientation, in practice, there are many women first-responders.

Research Insights

As the NDMC's leadership usually comes from the armed forces, there is emphasis on physical security in times of natural disasters. There could be more understanding that harm to vulnerable groups may come from other people – even members of the family, when social bonds and norms are disrupted by catastrophe. In the informal level, it is understood that cases of domestic abuse may arise, due to increased stress. While the NDMC's external integration to ASEAN-level protocols are a priority, greater downward coordination with line agencies may also be improved.

Charged with relief distribution, JAPEM's central office only has nine staff members. Tutong district has 12. During severe flooding, it is evident that food rations need to be distributed house-to-house, requiring more hands on-deck than are currently available.

In a country that is financially capacitated to respond to the needs of its citizens, Brunei's government apparatus must balance between provision of public services and intervening too much in what may be a 'family issue.' While this tension between the public/private divide is not necessarily unique, especially on women's issues, in Brunei the problem is complicated by an already generous welfare state. As such, the problem is understood by the modern bureaucracy as doing too much rather than doing too little. This is perhaps best illustrated by the fact that some recipients of disaster, notably a family whose house was ravaged by fire, has

been living in the temporary shelter for nearly a decade. The challenge here then is to recognize that gendered approaches to disaster governance do not necessarily contravene the imperative to create more independent citizens. Perhaps one way to do this is to implement programs that capacitate and strengthen women's participation and leadership roles in times of disaster.

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Research Respondents

1. Members of four households in Tutong District affected by flooding and beneficiaries of government assistance

2. Officers of the Community Development Department (JAPEM), Ministry of Culture, Youth and Sports

- Siti, Atiqah, Nazurah, Dewi and Norhayati

3. Officers of the National Disaster Management Center

- Mr. Yahya bin Hai Abdul Rahman (Director)
- Mr. Abdul Rahim Ismail
- Mr. P.S. Hj. Sabli
- Ms. Rina Nurkhafizah

Endnotes

1   Taken from accounts of officials from the department.
2   Not her real name.
3   Not her real name.
4   Data culled from the presentation held on May 17 in JAPEM.

Cambodia

Natural Disaster Context

Cambodia is bordered by Viet Nam, Lao People's Democratic Republic, and Thailand. Politico-administratively, it has 24 provinces, one capital city, 159 districts as well as 8 khans,[1] 26 cities, and 1,621 communes.

Geographically, the Mekong River cuts through a large portion of its lands, including agricultural ones and as such, heavily impacts on agricultural production during natural disaster situations:

> "The Mekong River has large fluctuations of water levels between the dry and wet seasons, causing a cycle of droughts and floods almost every year, damaging agricultural production and livelihoods and constraining Cambodian socio-economic development."[2]

On the average, Cambodia's annual disaster profile comprises of 45% floods, 29% epidemics, 16% drought, and 9% storms. In fact, data from EM-DAT of the Centre for Research on the Epidemology of Disasters (CRED) for the period of 1987 to 2014 lists 36 incidents of natural disaster in the country, consisting of 18 floods, 9 epidemics, 6 droughts, and 3 storms (i.e. tropical cyclones).[3] Of these categories, floods and droughts have been more destructive in light of deaths and affected peoples. The estimated annual cost of agricultural losses has been between USD 100 to 170 million yearly.

From 1991 to 2014, floods affected 11,975,587 people --- the worst having been in year 2000 with almost 3.5 million from 21 provinces were affected. During this period, there were 13 riverine floods, 3 flashfloods, and one coastal flood recorded. Recurrent flooding due to monsoon rains usually occur along the Mekong River and its tributaries, as well as the Tonle Sap Lake. Kandal, Kampong Cham, Kratie, Prey Veng, Stung Treng, Svay Rieng, and Takeo are usually the affected provinces.

Table 1 shows the dataset from EM-DAT on Cambodia's major river-related flood disasters in the past 15 years. The data shown on Table 2 notes the number of provinces affected by various types of flood (riverine, flashfloods, and coastal), as taken from the Asian Disaster Reduction Center (ADRC) Report in 2014.

The most recent floods inundated many provinces from 2009 to 2013. According to the ADRC Report, in 2011, around 350,000 households were affected and some provinces along Tonle Sap Lake and the Mekong River were particularly the worst-hit areas. On the other hand, the 2013 flood affected 377,354 households. Although the 2013 flood was lesser in terms of extensive damage compared to the 2011 one, there were more people who were affected in terms of damage to crops and infrastructures and of evacuated families.

Cambodia, to a large extent, has been a post-conflict country. In the last 40 years, it came from the dark period of the Khmer Rouge era from 1975 to 1979, followed by civil strife with the occupation of Viet Nam from 1979 to 1993. Transition to peace came at the heels of the signing of the Paris Peace Treaty in 1991 and the entry of the United Nations Transitional Authority in Cambodia (UNTAC) in 1992. Elections were held in 1993, as well as the promulgation of the new Constitution.

For decades, therefore, the country has been trying to rebuild their society. But with many of its population in lesser developed provinces that

Year	Affected Provinces	Deaths	Affected
2000	21	347	3,448,053
2001	3	56	1,669,182
2002	13	29	1,470,000
2011	8	247	1,640,023
2013	20	200	1,500,000

Table 1. Major River-Related Flood Disasters [4]

Year	Affected Provinces
2000	21
2001	14
2002	9
2003	2
2004	11
2005	5
2006	11
2007	8
2008	2
2009	14
2010	14
2011	18
2013	20

Table 2: Affected Provinces
In Different Types of Flooding [5]

have been regularly affected by floods and other natural disasters were mainly agricultural ones, the challenge of economic development has been very difficult for the country and its people. In fact, the high economic loss that country suffers from these natural disasters has been implicated to contribute to poverty.

Institutional Infrastructure and Mechanisms

In mid-1994, drought hit Cambodia and affected around 5 million of their population. At this juncture, Cambodia has just entered the phase of institutional rebuilding after coming from its first post-conflict elections and adoption of its new Constitution.

The following year, the National Committee for Disaster Management (NCDM) was established under Sub-decree No. 54 ANKR-BK, and has the specific mandate for the overall coordination disaster management in the country. Headed by the Prime Minister, it is composed of 22 members from various Ministries, the Cambodian Armed Forces, Civil Aviation Authority, and representatives from the Cambodian Red Cross. It is supported by the NCDM Secretariat that is tasked to lead in the management of disasters. Under the NCDM Secretariat are several departments, namely, Administration and Finance, Information and Relations, Emergency Response and Rehabilitation, Preparedness and Training, and Search and Rescue.

Furthermore, the Cabinet is very much part of the disaster management system, which indicates that top level officials are involved in the strategic direction of disaster response. Quite notably, each ministry in Cambodia is likewise involved through the Disaster Management Working Group (DMWG) mechanism to coordinate the various facets of addressing the impact of disasters --- from preparedness to response and rehabilitation.

From the national institutional infrastructure, the committee set-up has been replicated at the various administrative levels in the country. In 2002, through Sub-decree No. 30 on the Organization and Functioning of the National and Sub-national Committees for Disaster Management, provincial and district disaster management mechanisms were set up. Thus, each province had their own Provincial Committee for Disaster Management (PCDM) and Provincial Secretariat; similarly, each district established the District Committee for Disaster Management (DCDM) with their own District Secretariat.

The decentralization as well as localization strategy was likewise employed the at the commune and village levels. Accordingly, through Sub-decree No. 61 ANKR.BK in 2006, Commune Committee for Disaster Management (CCDM) was established with its own Commune Secretariat. Figure 1 illustrates how institutions and mechanisms were established in response to natural disaster events from 1994 to 2009.

Furthermore, in 2010, by virtue of Direction No. 315 of the NCDM, the Village Disaster Management Group (VDMG) was created to implement the Community-Based Disaster Risk Management (CBDRM) at the grassroot level. This move completed the disaster management institutional infrastructure from the national to the subnational levels (refer to Figures 2 and 3).

> "From the most local level, they have the VDMG as the mechanism at the village level. This means that in this level, there is someone to manage and make disaster plans in villages — the one who mobilizes and coordinates with people around the disaster plans and these disaster plans will be submitted to the communes, then the communes to the districts, districts to provinces. This is the line of disaster planning and management. Normally there is some assistance from private organizations or NGOs that are also working on natural disasters. Given
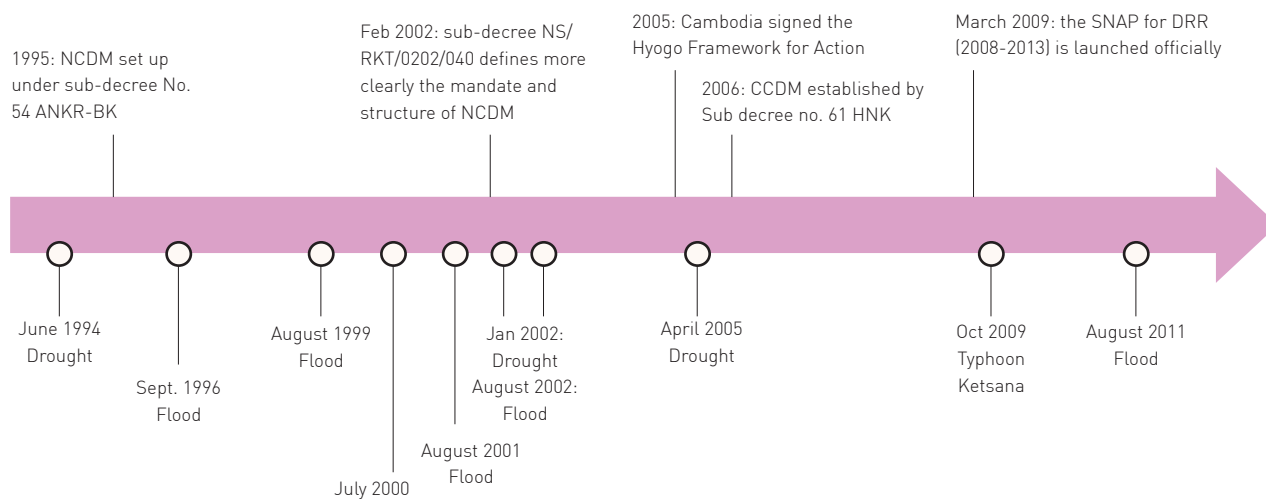
Figure 1: Disasters and Institutions [6]

this line mechanism, the most important thing to recognize is the grassroots level because they are really the ones who mobilize the people to set up the disaster plans." [7]

As the Cambodian Government believes in the notion that disaster preparedness and response is integral to supporting socio-economic development, the CBDRM is a concrete manifestation of involving local actors to participate in the process. According to the Leng Heng An (2014, 13):

"CBDRM is a strategy that builds upon existing capacities and coping mechanisms of communities to collectively design and implement appropriate and doable long-term risk reduction and disaster preparedness plans. The strategy involves the participation of local actors, particularly vulnerable communities, who actively work to identify causes of vulnerability and actions to mitigate the impact of vulnerability from these natural disasters. Additionally, the strategy empowers communities towards long-term capacity to adapt. With recurrent drought and flooding and threats from other natural disasters in Cambodia, CBDRM is seen as the way forward in minimizing enormous loss of life, property and livelihood. In Cambodia, the government considers CBDRM as an integral part of its rural development program to alleviate poverty."

Apart from the institutional architecture, Cambodia's disaster management system is likewise backed by policies, action plans, and most recently, a national law. For example, several National Action Plans have been developed and implemented in the past several years such as the Strategic Plan for Disaster Management 2006-2010, the National

Strategy Development Plan (NSD) 2009-2013, Strategic National Action Plan (SNAP) for Disaster Risk Reduction 2008-2013, and the National Action Plan for Disaster Risk Reduction (NAP DRR) 2014-2018. These Action Plans provide strategic directions and policy and programmatic guidance for Cambodia's inter-agency (horizontal) and sub-national (vertical) implementation of disaster management. Additionally, these initiatives were linked to international initiatives such as the Hyogo Framework for Action as well as the World Conference on Disaster Reduction.

In 2015, Cambodia adopted the Law on Disaster Management that further institutionalized existing institutional infrastructure, system, practices and plans in a legally binding instrument. The law reflects a human rights perspective given that it has a specific chapter on "Rights and Obligations." Furthermore, the use of an 'inclusive' language presupposes that everyone, regardless of sex/gender, class, ethnicity, religion, and age, are guaranteed the following rights:

"Article 35.-
Every individual has the right to the protection of life, dignity, property, and relief aid during a disaster.

Every individual has the right to access information regarding hazards, vulnerabilities, risks, methodologies, and technologies for self-protection, disaster risk reduction, prevention, emergency response, and recovery.

Every Cambodian person has the right to obtain the resource for implementation of the prevention
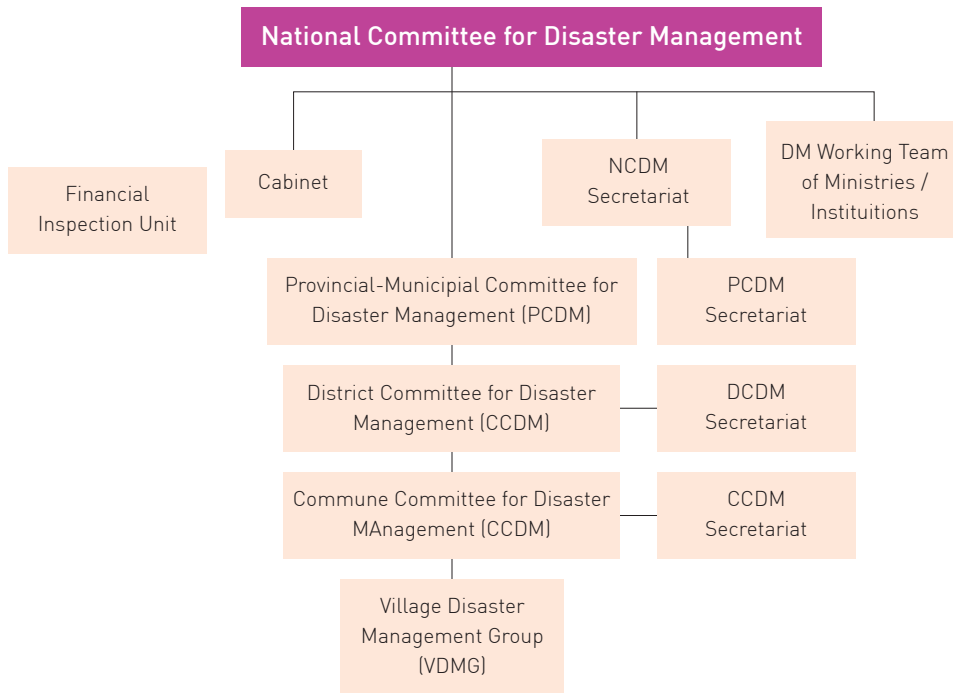
Figure 2: Disaster Management Institutional Infrastructure [8]
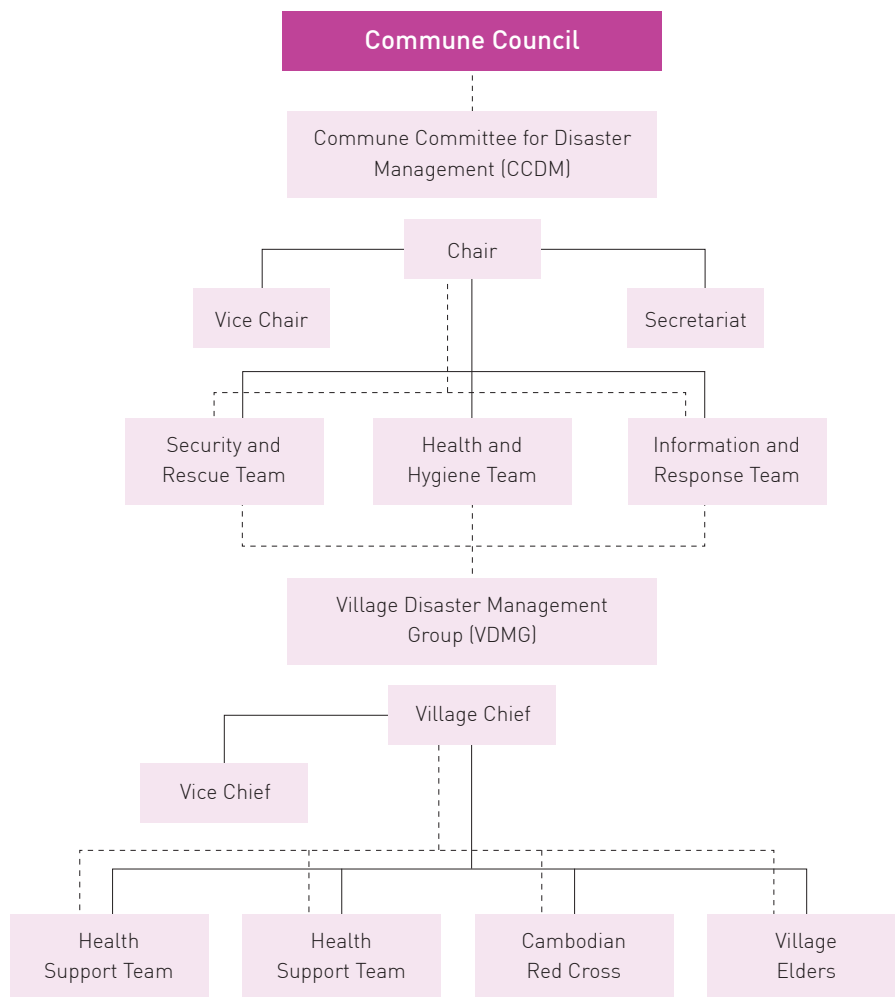
Figure 3: Disaster Management Structure at the Local Level [9]

measures, disaster risk reduction and the post-disaster livelihood restoration.

Article 36.-
Every individual has the right to participate in the disaster management activities and promote self-protection, disaster risk reduction and ensure the sustainable livelihoods with safety and resilience to disasters." [10]

Additionally, the *Cambodia Climate Change Strategic Plan* (CCCSP) serves as the overarching policy frame that guides a 'whole-of-government' approach to achieve sustainable development. According to a key informant from the Ministry of Environment (MOE), the CCCSP is the first comprehensive government document to propose a kind of strategic direction — cross-cutting strategic objectives directed at mitigation, response, adaptation to climate change:

"The Climate Change Strategic Plan is one of the few documents that looks at things more consistently and systematically in terms of the engagement of all line agencies, the common understanding of the need to work better together, deleting boundaries among institutions in creating climate change response. Coordination, resource mobilization, and joint activities are implemented more consistently." [11]

At the strategic level, therefore, the CCCSP provides the mandate for both line ministries and subnational bodies to craft their respective institutional strategic plans in light of sector-specific responses to climate change. As explicitly stated in the CCCSP, "all relevant ministries will develop prioritized actions plans… closely aligned with relevant sector strategies" (National Climate Change Committee 2013:21). These are the *Sectoral Climate Change Strategic Plans* (SCCSP) and *Sectoral Climate Change Action Plans* (SCCAP) developed by the different line ministries. In this regard, within the CCCSP is the recognition of the impacts of natural disasters as a consequence of climate change that contributes to many socio-economic challenges in the country. This was noted as well in the NAP DRR 2014-2018 when it said:

"While people living in the flood and drought prone areas developed their ways to deal with the impact of those hazards, their capacity has a limit. Poverty is a key determinant of root causes of vulnerability of people living in the disaster prone

areas. Disaster also causes poverty. Geographical variations of poverty in Cambodia match with nature and extent to which people are vulnerable to floods and drought."

To date, there are 15 ministries that have developed their respective action plans.[12]

In light of the convergence of climate change, natural disasters, and threats to sustainable development, the NCDM developed its Strategic Plan Climate Change (SPCC) for the Disaster Management Sector 2015-2018. According to H.E. Dr. Nhim Vanda, Senior Minister and 1st Vice President to the NCDM:

"The establishment of the Strategic Plan on Climate Change for Disaster Management Sector is a principle which is enhancing the implementation of disaster risk reduction and being attached with an occurrence of unsecured climate and an upcoming climate change for the field of Disaster Management. It is also included with the clear determination of disaster risk in relevant with climate and any obvious risk reduction measures theme by strengthening the capacity and extended awareness-raising from national until grassroots levels which is in line with an existing mechanism of the National Committee for Disaster Management (NCDM). This could assist the local communities with safety and enough capacity for building the resilience against disasters." [13]

Within the climate change framework, the NCDM SPCC envisions to "build resilient communities to disasters caused by climate hazards" (NCDM 2015, 6).

"Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) are the responsibility of Government at all levels. Hence, it is not able to be addressed by a single institution or agency but collectively… it should be viewed as a cross-cutting issue which is jointly addressed by all stakeholders… it is appropriate to raise this issue at the community level because when hazards happen, people in the communities will directly suffer from that. Addressing this problem should be done at the community level because experience shows that local government and communities are the main actors that immediately respond to disaster events. The first response to emergencies is crucial for saving human lives as external assistance may not immediately come. Furthermore, community-

based disaster risk reduction and climate change adaptation can contribute significantly to the poverty reduction policy of the government" (NCDM 2015, 1).

In the CCCSP, NCDM was identified to be involved in the following strategies:

- Strategy 2 on reducing sectoral, regional, gender vulnerability and health risks to climate change impacts by increasing attention to risks and promoting early warning system;

- Strategy 5 on improving capacities, knowledge and awareness for climate change responses by building disaster resilience and climate change adaptation capacity at all levels through education; and

- Strategy 6 on promoting adaptive social protection and participatory approaches in reducing loss and damage due to climate change by linking climate change adaptation and disaster risk reduction.

Voices on the Ground: Community and Local Actors in the areas of Protection of Women and Participation in Decision Making

On the ground level, at least in so far as how women respondents of the in-country field visits have articulated, DRR initiatives work at the level of preparedness and prevention. Women from Kompong Kandal, Aundong Khmer, Poek Koh, Krang Ampel, and Kompong Bay of Kampot Province as well as those from Kompong Trach commune of Kep Province were of the same opinion that commune and village early warning information dissemination has been effective in letting them know about an incoming cyclone, the possibility of flooding, and the 'safe areas' they need to go to. These women's past experience also taught them on what to prepare (i.e. food, documents, clothing and securing their homes as much as they can). In various stages of disaster preparedness and response, these women know what they are supposed to do. For example, prior to the coming of heavy rains, they receive warnings from local authorities which they share with other women in their communities. They will then start preparing food that they will need to bring should it be necessary for them to go to 'safe areas.' Some

of the women from Kompot Province communes described that during this period, they are aware of their role:

> "We know our needs and the needs of our families and we get to decide on how we take care of each other. If our husbands are there, they actually ask permission from us because we are the ones who know." [14]

Staying in 'safe areas' usually take several days to around two weeks. During this time, women from Kep Province said that they are the ones who inform local authorities on what they and their families need. "We take care of health and hygiene of our families, we ask for medicines, and help in waste management in 'safe areas'."[15] After the disaster and when it is time to go back to their respective communities, the women similarly shared that they are the ones who do inventory of their families needs and report these to the assisting authorities.

Focus Group Discussion with women
from Kampot Province

These experiences reflect the 'normalized' 'care roles' of women in a way that they have to be the main actors in evacuating the children and elderly in their families and communities before the disaster, cooking and providing them food and continuously caring for them while in the temporary 'safe places,' and engaging with disaster responders on what they need when they return to their homes after the disaster. These realities were validated by a resource person who shared:

> "In the case study I did, I looked at the local planning and the integration of gender. In the context of natural disaster, we look at the before,

Focus Group Discussion with women from Kep Province

during, and after and what is the role of gender in these different stages. For example, in annual floods, people know that they are coming and in this stage, women are heavily burdened because [they] spend so much time preparing for so many things — they are busy preparing before floods come, preparing food, water, medicines and taking care of the children. Men during this time are more likely away from the villages because they are working elsewhere. And because the women are the ones who stay home, they are the ones who need to prepare. When the floods come, women mostly take care of the children; the men are usually back during this period to support their families. And after the flood, they become busy again — putting stuff back, reconstructing their homes. In these stages, I have observed that women have been heavily burdened before and after the flood." [16]

In this regard, government actors --- particularly, those at the local levels --- have observed that women play a key role in preparedness, prevention, and response because they are the ones usually left at home and in communities as most of the men have migrated elsewhere for work.

"In the context of rural Cambodia, men seem to be away from the villages looking for job opportunities and that's why they do not stay much at home. This is our rural landscape. If you go to the villages, there are less men." [17]

This was the similar observation of a government respondent from the Ministry of Health (MoH):

"Many women are heads of families here so that is why when we work on disasters in communities, for example, in the conduct of verification processes,

more likely women are the ones there. Even if we go house-to-house, it is also more likely that we will meet women rather than men. Women are largely 'care takers' of the home." [18]

Thus, responding to this context, it is but logical for orientation programs on DRR have women as participants not as a matter of design but as a matter of circumstance. The women focus group discussion (FGD) respondents from both the Kampot and Kep Provinces all shared the view that training programs on DRR should logically focus on women since they are the ones left in their communities. For example, according to the women respondents from Kep Province, they need more training on natural disaster so that they can help and contribute more in the preparedness and prevention stage; they also need training on post-disaster agriculture in order for them to get their livelihood back.[19]

However, even as women's participation is part of the road map of DRR plans and implementation, there is still a slow progress in the involvement of women:

"The most important part are the local people — this is the open space where women can come in and voice their needs in terms of natural disasters. There are projects that train village groups on how to use information, especially from women, in vulnerability assessments. In other words, they trained them on how to collect information to be used as baseline data for disaster planning at the village level. In this process, it is very important for the inputs from women to get in. But there are constraints in terms of women's participation. In Cambodia, participation and engagement of women is still low — it is not yet the norm, it is not yet recognized by society that is still dominated by men. Therefore, in most instances, it is still difficult to ask women what they need pre-, during, and post-disaster, what exactly are their problems, their challenges. In practice, it is good to initiate planning at the local level but we still need to strengthen practices where women can really be part of this process. But there is still reluctance on making women part of the process in village levels, as this reflects the same reluctance of society in general to recognize the importance of women's participation in management and in decision-making. That is why women do not seem to be more engaged in the process." [20]

A similar observation was shared by another resource person when he explained that:

"The understanding of gender is different from one place to another. For example, a commune chief who does not understand gender will also not understand the roles of women and men in disaster situations. If you go to places with NGOs working with commune councils, they have structural and plans to show you; but if you go to places without NGOs, they don't even know what disaster risk reduction is all about and even more so, not aware of the relation of gender to it." [21]

In other words, the observation seems to be that gender, as related to DRR planning and management, to remain at the strategic or policy level:

"In Cambodia, we have a top policy. The government [claims] achieving certain targets on gender participation — in elections, in agriculture, in industry — so they have all these indicators and try to monitor. They work with relevant ministries to see whether they are really mainstreaming gender and they really achieved gender indicators. So at the top level, they have this policy but down there, it is not present because nobody [cares] about gender down there. At the top level, they follow as a matter of policy compliance. At the local level, we encourage local governments to see gender needs, but less at the grassroots level. Gender is really an additional injection. In local planning, of course, they try to practice that; planning also is one line. In Cambodia, there is a parallel approach. The government itself has to reach gender targets; other entities are also driven by international organizations that see gender — equality between women and men — as a priority. By putting the gender lens, you reach the more important groups. The parallel approach therefore is having a national mechanism like MowA that also [has] action plans. Gender is cross-cutting so it has to be included. But it is still a minimal entry point — they ask, so how many women do you want in planning, in training, in workshops just because they are thinking in numbers without really thinking more in terms of empowering women... not only in participation but also moving them into consultations and empowerment. But many people still do not see why this is important. I think it is because of the initial understanding on gender in our society that is still dictated by social norms, a low awareness on the importance of gender." [22]

And herein lies the important roles of international organizations in supporting initiatives of integrating gender in DRR. At the strategic level, the Law on Disaster Management further institutionalized partnerships with various actors as provided for in Chapter 5, Article 29 (International Cooperation and Assistance):

"Article 29.-
Charitable persons, international organizations, development partners, representatives of foreign missions and embassies can support and provide assistances for disaster management activities and humanitarian response in the Kingdom of Cambodia through NCDM."

In light of integrating gender in disaster response instruments, this provision acknowedges and gives further legitimacy to organizations that have been working to advance women's human rights in disaster situations.

For example, Oxfam's experience in promoting gender equality in disaster risk DRR in Cambodia "built up community disaster preparedness structures and aimed to empower women by creating women's leadership roles in the community" (Oxfam, 2012). In the conduct of their Takeo Flood Mitigation Programme, the promotion of women's leadership and participation through the VCDMs were central elements of the project. In Takeo province, five members of the VCDMs are elected --- three are women, including the chair. As observed by the Chamroeun Cheat Khmer (CKK) Director:

"Female VCDM leaders are visible in the eye of community and are able to make decision equally within the family. Whether about small or big things, the women and their husbands always make decisions together. Those women leaders of VCDMs feel that they have more value within their family and community. Community members, especially women, feel comfortable seeking assistance from them when they face a problem" (Oxfam 2012, 8).

On the other hand, the NCDM, with support from the European Commission Directorate General for Humanitarian Aid and Civil Protection (DG ECHO) and in collaboration with Plan Internationa Cambodia and World Vision Cambodia, implemented a project on "Strengthening National and Subnational Capacity

to Implement Disaster Management towards Increased Community Resilience" from 2012 to 2013. Integral to the project was "to increase resilience of vulnerable people including children and women living in the most disaster-affected areas in Cambodia" (Leng Heng An, 2014). Similar to the Oxfam project, both vulnerability and agency discourse on women's human rights were project frameworks.

In these examples, the work of international assistance agencies focus on the community levels. Integral to their work is that of integrating gender and ensuring the women's participation and in this regard, the practice of women's participation seem to be more assured because of the presence of international organizations projects in communities. This is because all these projects are done in cooperation with local authorities and NGOs. In the absence of international organizations, the same is not assured: "When acting on their own, even with a mandate of gender mainstreaming, local authorities will not immediately take on women's participation."[23] In the case of Oxfam, they believe that women should be the center of their activities --- every action at every level, whether national or subnational, take into consideration on how to work with women and how to improve their status.

> "From this perspective, we work with our partners just to ensure, just to engage that women are there — both in quantity and in quality. But is difficult because there are many areas in provinces that do not have presence of international NGOs and thus, there is no programmatic push for the inclusion of women."[24]

In other words, highlighting women's participation in DRR seems to be more present in communities where international organizations partner with local government units than those that do not.

> "By law, it is required that one woman is a member of the village disaster team. Only in the Oxfam-supported areas is there additional support for women because they have a project on women empowerment. The same is true for ActionAid — giving support to villages and pushing for more women to get in. But if you compare this in other contexts where there is no presence of internationals or that there is no support, then the participation of women are expectedly less or even none at all. This is because if there is support, there is a push, there

is influence — get more women so projects can be funded. In a way, international support creates the space for women." [25]

Relatedly, even as the VCDM has been identified as the primary mechanism for women's participation in DRR, it actually easier said than done. As observed by one resource person, based on their experience, this is more pronounced when going up to other subnational levels.

> "There had been many considerations in taking into account women's leadership in natural disaster situations. For example, in villages, there are VCDMG and within which, there should be at least one woman there. This is absolutely non-negotiable. So in any VCDMG, there is at least one woman and this woman must be at least in the position of deputy in the group. It could also happen that the village chief is a woman and her deputy is also a woman. This is the kind of commitment that the government has. However, as you go up to the commune, district, provinces, you will see less women - not just in terms of numbers but also in terms of quality of participation in decision making. Our strategies work but it is very slow. We contribute to women's leadership in emergency response in villages, communes, and districts. One of the challenges is the training for women empowerment that has few attendance. In the villages, there are a lot of women. But if you organize with or through local authorities, there would be more men than women participating in the trainings. This is because there are more men elected as part of local authorities themselves." [26]

The strategy therefore --- especially for supporting international organizations --- is the support for women to be elected into public office – through capacitation and development of their leadership skills as well as negotiation with their political parties that they are able to stand for elections. In other words, the way towards women's meaningful participation in DRR is to open the space for them to be decision-makers in the institutional infrastructure at the lowest level of governance. As a government key informant said, "If you want to claim equal rights, you must also have equal capacity." [27] In the same vein, for some women from Kampot Province, equal participation and equal work of women and men during disaster situations should really be practiced.[28] To a large extent, the importance of women's leadership in DRR has

been recognized by the women themselves.[29] For instance:

> "A female village chief is more patient than a male village chief and they usually have closer relationships with people in the community. Women also become more open to talking about their needs to female leaders – such as concerns on reproductive health – during times of disasters." [30]

In summary, two views on women's participation in DRR emerge from the ground. On the one hand, according to research respondents from international organizations, their own deliverable on empowering women make use of existing local institutional arrangements to push for women's participation in DRR (e.g. VDMG that was created to implement the CBDRM at the most grassroots level), and the progress towards this goal is evident, albeit small and gradual. Continuous engagement with local authorities --- from more villages as well as those from communes, districts, and provinces --- should be undertaken in order to ensure the inclusion of women not only in DRR planning but also in decision-making. On the other hand, for the women respondents of the research, their participation in disaster planning and programming has been in light of various government institutions' effort at collecting data for vulnerability risk assessment (VRA), emergency preparedness and prevention (EPP), and mapping out needs of people affected by natural disasters. At least, in as far as these women respondents are concerned, they have not taken leadership in these activities as the opportunity for them to do so has been currently taken on by men.

Gains and Gaps in Integrating Gender in Institutional Infrastructures and Mechanisms

At the strategic level, the integrative and synergistic 'whole-of-government' approach of Cambodia in dealing with various issues is very much evident when it comes to gender and women's concerns. Foremost, the 1993 Constitution of the Kingdom of Cambodia explicitly provides for non-discrimination on the basis of gender, among others (Article 31); active and equal participation of women and men in political, economic, social, and cultural life (Article 35); and the elimination of all forms of discrimination against women (Article 45).[31] Just like the other AMS, Cambodia is a State Party to CEDAW.

The Ministry of Women's Affairs (MoWA) is Cambodia's main institution mandated to ensure gender-mainstreaming in all the work of government. It "plays a critical role in advocating for gender equality and in building capacity of sector ministries and institutions to integrate gender into their respective sectors."[32] Additionally, "it is responsible for monitoring and evaluating policies and programs to assess their contribution to achieving the Government's goals in promoting gender equality and the empowerment of women."[33] Other important bodies are the Cambodian National Council for Women (CNCW) as the " national inter-ministerial council to support the royal government by facilitating, following-up, and evaluating the implementation of national policies, laws, and other regulations in relation to the promotion of women's status, roles and welfare."[34] An inter-ministerial working group known as the Gender Mainstreaming Action Groups (GMAG) was also established "to mainstream the gender issues into their respective strategies, policies, programs/projects."[35]

In 1999, MoWA implemented the first five year strategic plan known as Neary Rattanak. Since then, there had been several five year strategic plans and the most recent of which is the Neary Rattanak IV – Five Year Strategic Plan for Gender Equality and Women's Empowerment 2014-2018. Furthermore, the Organic Law adopted in 2008 mandated that the "principles of gender equality and women's rights and empowerment, and the promotion of women's roles, participation and representation in politics and decision-making at the Province and Municipal, District and Khan, and Commune/Sangkat levels." [36]

Specific to the issue of climate change, the Gender and Climate Change Committee (GCCC) was created in MoWA to take responsibility for four sectors such as climate change, disaster, Tonle Sap and Mekong, and green growth "administration, finance and raise ideas that are relevant to climate change."[37] There are also Climate Change and Gender Committees (CCGC) at the local levels. Furthermore, Neary Rattanak IV specifically highlighted climate change, green growth, and disaster risk management and thus serving as clear

indication of all these as integral to the current strategic plan on gender.

In the CCCSP, MoWA was identified to contribute to the following strategies:

- Strategy 2 on reducing sectoral, regional, gender vulnerability and health risks to climate change impacts through the development of criteria based on the findings of vulnerability and adaptation analyses for prioritizing women's needs for climate change adaptation and mitigation actions;

- Strategy 5 on improving capacities, knowledge and awareness for climate change responses by increasing the level of awareness of public policymakers on the importance of gender equality in climate change adaptation and mitigation, to achieve sectoral goals in climate change and enhance national capacities to plan, implement and monitor gender-integrated climate change adaptation and mitigation initiatives;

- Strategy 6 on promoting adaptive social protection and participatory approaches in reducing loss and damage due to climate change by increasing women's participation in climate change policy making, establishing funding rules for gender and climate change initiatives and make operational through gender-responsive budget in the current and upcoming projects/programs/policies (both external and national sources), identifying effective mechanisms for scaling up the proven experiences on gender and climate change, and eliciting and analyzing lessons and best practices of gender and climate change for sharing and learning in national, regional and global forums; and

- Strategy 7 on strengthening institutions and coordination frameworks for national climate change responses through the enhancement of national capacity to plan, implement and monitor gender-integrated climate change adaptation and mitigation initiatives.

Accordingly, MoWA, in cooperation with the MoE, developed the Master Plan on Gender and Climate Change (MP-GCC) 2013-2022. The identified mission statement of this plan provided a clear indication of gender mainstreaming in both CCA and DRR:

> "Institutional policy and strategy support the climate change and gender considerations. It empowers and prepares people and community at risks with science-based adaptations to cope with climatic hazards and disasters, and stimulates safer investments, enhances climate friendly household economy particularly for the most vulnerable people n Cambodia." [38]

In general, construction and design of the disaster management architecture of Cambodia has been impressive, considering that the country is coming from a context of post-conflict transition. A very notable element in their instruments and mechanisms has been the mainstreaming of gender and the explicit inclusion of women in both protection and participation discourses.

Foremost, Chapter 4 (on Governance), Article 18 of the Law on Disaster Management explicitly states that part of the obligation of responding competent authorities in disaster affected areas shall "pay high attention to the needs of women, children, elderly, handicapped, and disabled persons." This essentially means that the law itself recognizes the gender as a dimension of vulnerability during disaster situations. In this sense, 'vulnerability' is defined by the law as "the characteristics and circumstances of a community, a system or asset that make it susceptible to the damaging effects of a hazard."[39]

The NAP DRR 2014-2018 sought to contribute to Neary Rattanak III (2009-2013) and identified as one of its expected outcome by 2018 that "vulnerable men, women and children in rural, urban, coast and mountain regions are well-informed with capacity to understand current and future risks, and are capable of organizing themselves to prepare for, respond to and be resilient to disasters" (NAP DRR 2014, 16). In light of its Strategic Component 4 (i.e. reduction of underlying causes of risks), it committed to achieving the sub-outcome of women being included in disaster management committees

(ibid., 21). Such complementarity between the NAP DRR 2014-2018 and Neary Rattanak III serves as a clear articulation of the interface of disaster and gender discourses in national plans .

In the case of NCDM, the SPCC 2015-2018 included gender and women's concerns. For example, in the discussion on 'disaster impacts and climate risks,' the NCDM committed to working towards "increasing exposure and sensitivity of the vulnerable communities, especially rural women, children and elderly, to climate change risks and disasters" based on their belief that "vulnerable households are susceptible to assets hazards" and that "women have low adaptive capacity to flood and drought risks (resources, tools, knowhow), their preparedness for coping with hazard is low" (NCDM 2015, 4). Accordingly, the NCDM SPCC adopted a gender-responsive framework because it understands the "status of women and their important roles in society and their vulnerability to climate change impacts" (NCDM 2015:6) and included, in consideration of plans and strategies, the concept of 'gender vulnerability.' In addition, the NCDM SPCC Strategy 3 on building disaster resilience and climate change adaptation capacity at all levels through education committed that "women will be promoted to participate in capacity building programs, as they are the most vulnerable, so that they can help themselves, their own families and others in the community" (ibid., 8). Furthermore, integral to planned actions on building preparedness capacity to respond and manage disaster and climate change and promoting public awareness is women's participation; it also plans to apply gender-sensitive methods to CCA and DRR (ibid., 10-11).

As previously mentioned, in the case of MoWA, the Neary Rattanak IV identified climate change, green growth, and disaster management as cross-cutting issues related to gender and women's concerns. As such, it identified as a specific strategic objective on promoting "gender equality in processess and policy implementation related to climate change, green growth, and disaster risk management within line ministries and institutions at the national and subnational levels, to reduce the impacts on vulnerable women, and to contribute to and benefit from green growth" (MoWA 2014, 22). Accordingly, the strategies listed under this objective are:

1. Strengthen the capacity and support for senior officials and technical staff in gender mainstreaming in the climate change, green growth and disaster risk management program;

2. Mainstream gender considerations in the development processes and implementation of policy, programs and strategies on climate change, green growth and disaster risk management;

3. Ensure equal participation of women, particularly, vulnerable women, in coordination processes and advocacy on climate change at the international, national and sub-national levels for women's interests;

4. Reduce the impact of climate change and disasters on women;

5. Increase women's participation in green growth activities;

6. Create new innovative schemes and activities to address gender issues in climate change, green growth and disaster risk management which are tested and proposed to line ministries for integration into regular on-going programs.

On the other hand, as set forth in the MP-GCC 2013-2022, the strategic objectives that MoWA committed to were:

1. Strengthen policy-strategy;

2. Gender-sensitive institutional capacity building;

3. Gender-responsive community capacity building;

4. Technical and economic empowerment of vulnerable people;

5. Primary health and first aid;

6. Security and insurance;

7. Piloting projects for demonstration.

Operationally, MoWA tries to ensure that women are given the opportunity to voice out their concerns

to relevant agencies --- spaces are provided to them to talk about their problems in their communities which are then raised to various authorities.[40] In a sense, this reflects the practice that women's participation comes in drawing information from them, plans crafted reflecting their inputs, and returned to them in the form of information dissemination related to disaster-preparedness. Additionally, at the local level, MoWA conducts VRAs, workshops on gender-mainstreaming, and training on climate change that targets mainly women as participants.[41] There are also initiatives at strengthening the role of women in DRR but currently still in the stage of broad efforts.[42]

The interface of the discourses on gender and natural disaster has been explicit in the strategic meta-narrative of climate change. In fact, one of the guiding principles of the CCCSP is "to ensure that climate change response is equitable, gender-sensitive, transparent, accountable, and culturally appropriate" (National Climate Change Committee 2013, 4). According to a government key informant, such principle is borne out of the recognition that climate change affect people differently and that women, although perceived to be part of the vulnerable groups, have important roles to play in the household and communities since they are the ones who are usually there.[43]

"Women are identified as vulnerable groups but they can actually do more. They can draw more attention to natural disasters since they are the ones who are affected the most. They can champion the issue and put pressure on government and even donors in terms of financing disaster management projects." [44]

This is consistent with the convergence of CCA and DRR, but this time, integrating the gender approach more systematically and comprehensively.

Specific to women in natural disasters therefore, the operational institutional horizontal relationship is between the NCDM and MoWA at the national level and their respective provincial, district, and commune agencies at the sub-national levels. In other words, as the NCDM and MoWA interact at the national level, the PCDM relates with the Provincial Department of Women's Affairs (PDoWA) interacts at the provincial level, the DCDM with the District Office of Women's Affairs (DOoWA) at the district level, and the VCDM with the CCWC at the village level. The CCDM comprise a member from the Women's Affairs and children at the commune level.

Furthermore, at the level of communes, there are three teams, namely, Search and Rescue, Health and Hygiene, and Information and Response, coordinated by the CCDM. Under the Health and Hygiene Team, there is a focal person in charge of women and children's affairs. Additionally, as previously mentioned, at the level of the VDMG, the affirmative action for women comes in the form of the position of Deputy Chief/Village Assistant is reserved for women. This essentially means that, as a matter of policy directive, women must serve in
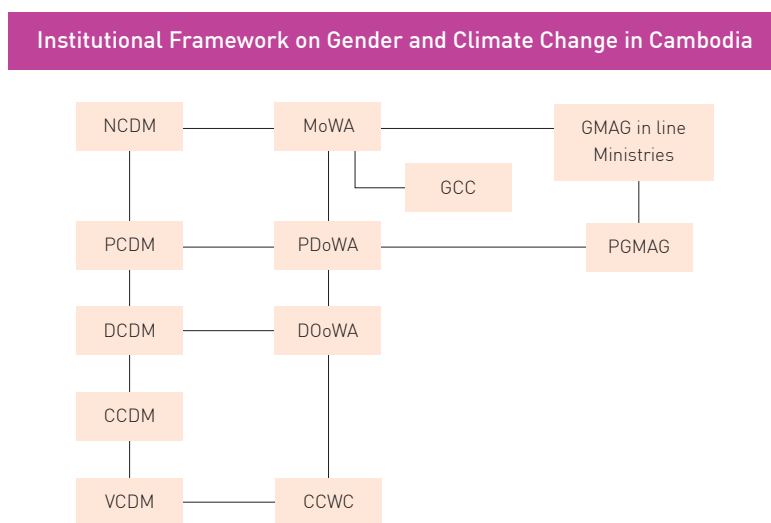

Figure 4. Existing Institutional Framework on Gender and Climate Change [45]

this position.[46] In other words, organizationally and as a matter of policy, there is an explicit practice of gender-mainstreaming and a clear articulation of a strategic road map for the inclusion of women.[47]

But even with this institutional mandate, women still have difficulty in gaining decision-making positions. For example, in the case of Kampot Province, only 107 are women out of 560 are members of the commune councils; and in the numerous communes of the province, only 8 women are commune chiefs.[48] According to one of the key informants from the province, these numbers should be improved because they believe that women leaders are effective because they pay more attention to details.[49] This view was similarly shared by a key informant from the NCDM in light of recognizing that women's participation, particularly, at the commune level, is vital in all stages of disaster response and thus, their knowledge on their rights and roles on disaster management must be improved.[50] Additionally, he also articulated the need for capacitating more women in the disaster infrastructure as first responders in disaster situations.

> "Even if women are the ones most affected by disasters, most of the responders are men --- therefore, women in the natural disaster organizations should also be trained on protection, recovery, and rehabilitation." [51]

In actual operations, what seems to be clearer is the vertical rather than horizontal relationships of bodies and institutions. For example, in the case of disaster management, it is really the NCDM relating with the PCDM, DCDM, CCDM, and VCDM; the same line of relations for MoWA from the national down to the local. Although the local disaster management bodies practice collection of data from women, they do not necessarily intersect with the local women's bodies.

For example, according to key informant respondents from the Kampot Province PCDM, they interview women on their own to know about their concerns in the context of natural disasters because it is required by law that women participate. But more than this, the practical side of it is that "there are more women in the communes anyway because men are usually elsewhere for

work." [52] However, they do this as part of their own gender-mainstreaming efforts and not necessarily in connection with cooperative work with their PDoWA. In contrast, the PDoWA from Kep Province shared that they work with the province's PCDM through the mobilization of women for data collection, information dissemination natural disasters preparedness and response, data gathering after natural disasters to respond to their specific needs and they share these information with relevant authorities that are part of the natural disaster response infrastructure at the local levels. As with the observation of the Kampot Province PCDM, the Kep Province PDoWA also observed that "more women are really affected because men from communities already migrated to cities for work." [53] Nonetheless, the difference in these practices is the standardization of the interface between local institutions on natural disasters and gender --- some seem to practice them while others do not despite of the institutional architecture that mandates that they should.

Thus, with these contrasting examples of institutional interface in natural disaster context, there seems to be an indication that there are variations in terms of the horizontal interactions of natural disaster and women/gender agencies at the local level. An interesting issue was pointed out by the Kep Province PDoWA that may not really fall within the immediate purview or mandate of the provincial PCDM --- the issue on rape and violence against women in the context of natural disasters:

> "As you know, women are aware that they should go to 'safe places' or evacuation sites when natural disasters happen. But how safe are 'safe places'? During these situations, couples fight, which may lead to domestic violence; or parents leaving their children to find food making them vulnerable to rape by strangers or other peole in the evacuation areas. These are possibilities. So what we do is to provide women and girls with information on rape and violence against women that may happen during these circumstances. We have no data as yet about actual cases but we still think that this should be highlighted in the information drive on prevention of violence." [54]

In fact, in as far as the perception of organizational mandates is concerned, gender-mainstreaming

seems to be understood only in general terms. For example, although there is institutional recognition on the need to protect women as vulnerable groups in disaster situations, there is no articulation of this 'protection mandate' when it comes to specific women's concerns. Thus, although there are mechanisms to protect women in natural disasters, sexual and gender-based violence is not within the mandate of DRR institutional bodies per se.[55]

The 'generality' view is shared by other agencies. In the case of the experience of the MoH, their strategy is that of general response, although with due acknowledgment on the role that women play in disaster situations:

> "When we talk about natural disasters, our strategy is general because our focus is not only for women. We believe that women should be taken cared of in many different aspects in health and one of them is during disasters. However, there is a need to provide information to the public on preparing for disasters — everyone should take care of themselves, their families, especially for the elderly and the small children. Natural disaster preparedness should be done by everyone and although women have a special role to play. But we see the challenges here when we have the disaster because the most important is the hygiene and sanitation and how to prevent the spread of communicable diseases. The risk of having contamination is more in disaster situations. If you only work with the women, it will not be as helpful since everyone must assist. So that is why we engage both women and men together — both have the responsibility… they have to help each other in order to respond." [56]

Taken together, it is quite apparent that there is conscious articulation and use of the gender perspective in Cambodia's disaster framework --- although more strategically compared to operationally and tactically. Implementation at the subnational levels --- particularly, in villages --- and engagement of people in local planning, in actual prevention of disaster impact, and in creating enabling environments for recovery and rehabilitation are integral to breathe life to strategic plans. Accordingly, women --- by virtue of their roles in their families and communities as well as of their potential to contribute to the institutional infrastructure of disaster management --- should be made fully part of the whole process and not merely mentioned as a matter of institutional

rhetoric. Failure to do so runs the risk of not being able to proactively respond to fast emerging realities. For example:

> "There is an emerging trend right now on labor migration that many people leave their villages — going to the city or in other countries — including the women. So there is a concern right now on how migration impacts the village disaster preparedness when both adult women and men leave. The ones who remain are the elders and the children who become more vulnerable to disaster because the women who are supposed to take care of them before, during, and after floods may no longer be there. So there is a need to change the vulnerability assessment of villages as well as the plans to reflect this emerging trend." [57]

At the end of the day, therefore, it all boils down to recognizing the implication of gender to DRR at the more practical level.

Research Insights

At the strategic (i.e. policy) level, Cambodia has systematic institutional infrastructure on DRR. It has a Law on Disaster Management which further institutionalized previous structure and practices on disaster preparedness and response. Vertically, it had the NCDM at the national level and similar coordinative bodies at the sub-national levels of provinces, districts, communes, and villages; horizontally, relevant implementing and support ministries have their respective DMWG. Furthermore, DRR has been integrated in the CCCSP. And alongside the CCCSP are SCCSP and Sectoral Climate Change Action Plans (SCCAP) developed by the different line ministries.

The convergence of institutional discourses were present not only in light of climate change and natural disaster – there was also an interface with gender as it relates to women as part of vulnerable groups that need to be protected and as active participants in mitigating the impact of both climate change and natural disasters. In fact, all government key informants echo the same thing: that in as far as any law and plans are concerned, based on the gender equality provision in its 1993 Constitution, it is a matter of national policy that gender is taken into consideration. In this regard, Cambodia follows a two-pronged institutional approach to gender: first, mainstreaming gender as

in the case of the CCSP, the SCCPs and SCCAPs --- particularly, the NCDM SPCC; and second, making it as a specific policy as in the example of a specific MP-GCC developed by MoWA in cooperation with the MoE.

Operationally (at least, based on how it was conceptualized), the implementation of these institutional instruments follow the vertical (i.e. national to subnational levels) and horizontal (i.e. inter-agency) paths. Monitoring and evaluation (M&E) are said to be done by all implementing agencies. However, because the implementation blueprints are quite new, and thus, implementation has not been fully assessed.

In other words, currently, all main instruments and plans that link gender and natural disaster are in the early years of implementation. But thus far, there is no M&E report --- at least, this short-term period points to the process of further institutionalization and internalization.

But even more telling is the fact that there is a need to fully concretized what has been envisioned in the strategic level in the lives of the women themselves. Indeed, women are vulnerable but they can still be agents of action and change. They can be sources of information as regards the needs of their families and their communities to be made part of local disaster plans as they are recipients of information on DRR, early warning and prevention. They can be leaders themselves as they navigate their way through decision-making spaces.

In conclusion, based on the responses of several research respondents, some interesting concerns may be considered for further examination:

- The need to concretize women's empowerment through strengthening efforts at building their leadership capacity and participate in DRR decision-making spaces;

- The practice of gender-disaggregation of data, particularly, at the community level in light of women's participation in information gathering, dissemination/advocacy campaigns;

- The impact of women's migration and

the possibility of the phenomenon of 'care deficit' in community disaster preparedness/early warning and response; and

- The issue of women and girls' protection in 'safe areas' as related to sexual and gender-based violence.

At the moment, these seem to be concerns lingering in the margins of the discourse and practice of gender in natural disasters in Cambodia. What needs to be done, therefore, it to try to place them at the forefront.

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Research Respondents
1. Resource Person Interviews (non-government actors)

   - Mr. Sam Chanthy, independent consultant and former researcher on natural disaster for Action Aid (interviewed on 15 May 2017)

   - Mr. Loek Sothea, Resilience Programme Manager, Oxfam (interviewed on 19 May 2017)

2. Key Informant Interviews (government actors)

   - Mr. Tim Phyari and Mr. Rim Chanra, MoWA (interviewed on 16 May 2017)

   - H.E. Dr. Soth Kimkolmony, Advisor, National, NCDM (interviewed on 16 May 2017)

   - H.E. Dr. Or Vandine, MoH (interviewed on 16 May

2017)

- Mrs. Moy Viroth, Mr. Mey Savuth, Mr. Chrem Vutha, Ms. Tho Phearun, Provincial Governor's Office, Kampot Province, PCDM (interviewed on 17 May 2017)

- Ms. Hout Ry, Kep Province, PDoWA (interviewed on 18 May 2017)

- H.E. Tin Ponlok, MoE (interviewed on 19 May 2017)

3. Focused Group Discussion (community women)

- Thirteen (13) women from five (5) communes in Kompot Province, namely Kompong Kandal, Aundong Khmer, Poek Koh, Krang Ampel, and Kompong Bay (focused group discussion conducted on 17 May 2017)

- Eight (8) women from two (2) villages --- Kompong Trach II Village and Kandal Tul --- from the Kompong Trach commune of Kep Province (focused group discussion conducted on 18 May 2018)

Endnotes

1   Districts in Phnom Penh are referred to as 'khans.'

2   Cambodia Disaster Profile. Accessed from http://nidm.gov.in/easindia2014/err/pdf/country_profile/cambodia.pdf

3   EM-DAT data set from the Centre for Research on the Epidemology of Disasters (CRED), accessed from http://www.emdat.be/disaster_list/index.html.

4   As aggregated from EM-DAT.

5   Leng Heng An. "Country Report of Cambodia: Disaster Management." Asian Disaster Reduction Center (ADRC), (2014). Accessed from http://www.adrc.asia/countryreport/KHM/2013/KHM_CR2013B.pdf

6   Image taken from the Strategic National Action Plan (SNAP) Assessment Report 2013

7   Resource Person Interview, Independent Consultant, May 15, 2017.

8   Image taken from Leng Heng An. "Country Report of Cambodia: Disaster Management." Asian Disaster Reduction Center (ADRC), (2014): 14. Accessed from http://www.adrc.asia/countryreport/KHM/2013/KHM_CR2013B.pdf.

9   Image taken from Consortium AAC/DAC/PIN/Oxfam/SCI 2014; Leng 2014; NCDM 2013a; Khna Sanday CCDM 2013; Lolok Sa CCDM 2014 (Sam 2015, 7).

10   Kingdom of Cambodia. 2015. Law on Disaster Management (unofficial translation). Copy of the document was provided to the author by the Royal Government of Cambodia.

11   Key Informant Interview, Ministry of Environment, May 19, 2017.

12   Key Informant Interview, Ministry of Environment, May 19, 2017.

13   H.E. Nhim Vanda, Foreword, Climate Change Action Plan for the National Committee for Disaster Management. 2015-2018. Copy of the document was provided to the author by the Royal Government of Cambodia.

14   Response from Focus Group Discussion Respondent, Kampot Province, May 17, 2017.

15   Response from Focus Group Discussion Respondent, Kep Province, May 18, 2017.

16   Resource Person Interview, Independent Consultant, May 15, 2017.

17   Ibid.

18   Key Informant Interview, Ministry of Health, May 16, 2017.

19   Drawn from the Focus Group Discussion, Kep Province, May 18, 2017.

20   Resource Person Interview, Independent Consultant, May 15, 2017.

21   Resource Person Interview, Oxfam, May 19, 2017.

22   Resource Person Interview, Independent Consultant, May 15, 2017.

23   Resource Person Interview, Independent Consultant, May 15, 2017.

24   Resource Person Interview, Oxfam, May 19, 2017.

25   Resource Person Interview, Independent Consultant, May 15, 2017.

26   Resource Person Interview, Oxfam, May 19, 2017.

27   Key Informant Interview, Ministry of Health, May 16, 2017.

28   Focus Group Discussion, Kampot Province, 17 May 2017.

29   From the women from the 5 communes of Kampot Province who participated in the focus group discussion, they said that all their commune chiefs are men; at the village level, there are 2 women out of 15 who serve as village chiefs. In the case of Kep Province, the one who participated in the focus group discussion said that in the commune Kompong Trac II composed of 7 villages, only one woman serves as village chief.

30   Focus Group Discussion, Kampot Province, 17 May 2017.

31   The 1993 Constitution of the Royal Kingdom of Cam-

bodia. Available online at http://www.wipo.int/wipolex/en/text.jsp?file_id=180004.

32   Ministry of Women's Affairs. "Outline of Master Plan on Gender and Climate Change 2013-2022." Copy of the document was provided to the author by the Royal Government of Cambodia. Hereinafter referred to as MoWA Outline.

33   Quoted from MoWA Cambodia. Accessed at https://about.me/mowa.gov.kh.

34   MoWA Outline.

35   Ibid.

36   Ibid.

37   Ibid.

38   Quoted from Master Plan on Gender and Climate Change (MP-GCC) 2013-2022.

39   Quoted from the Annex – Glossary, Law on Disaster Management.

40   Key Informant Interview, Ministry of Women, 16 May 2017.

41   Ibid.

42   Ibid.

43   Key Informant Interview, Ministry of Environment, May 19, 2017.

44   Ibid.

45   Data taken from Outline of Master Plan on Gender and Climate Change, Ministry of Women's Affairs.

46   Resource Person Interview, Oxfam, May 19, 2017.

47   Key Informant Interview, National Committee on Disaster Management, May 16, 2017.

48   Panel of key informants from Kampot Provinces Provincial Committee on Disaster Management, May 17, 2017.

49   Ibid.

50   Key Informant Interview, National Committee on Disaster Management, May 16, 2017.

51   Ibid.

52   Panel of key informants from Kampot Provinces Provincial Committee on Disaster Management, May 17, 2017.

53   Key Informant Interview, Kep Province Provincial Department on Women's Affairs, May 18, 2017.

54   Ibid.

55   Key Informant Interview, National Committee on Disaster Management, May 16, 2017.

56   Key Informant Interview, Ministry of Health, May 16, 2017.

57   Resource Person Interview, Independent Consultant, May 15, 2017.

Indonesia

Natural Disaster Context

Located in the Pacific ring of fire and at a "juncture of four tectonic plates, the Asian Plate, the Australian Plate, the Indian Ocean Plate and the Pacific Ocean Plate," Indonesia is one of the most disaster-prone countries in Southeast Asia (NAP 2006-2009). The country experienced its most devastating natural disasters in the years 2004-2006: the Indian Ocean earthquake-tsunami in December 2004 that claimed 165, 862 lives, the earthquake that hit Nias Island in March 2005 that claimed 912 lives, and the 5.9 earthquake in Yogyakarta in May 2006 that claimed more than 5,000 lives (ibid).

A report by the Asian Disaster Preparedness Center (ADPC) in 2003 categorized the intensity of various hazards in Southeast Asia. For Indonesia, earthquakes were considered "severe," floods, droughts, volcano eruptions, fires were considered "moderate," and typhoons, landslides, and tsunamis were considered "low." The report was validated by real-life events, particularly the earthquakes of 2004-2006, and proved that Southeast Asia, Indonesia included, is a "risky region." The ADPC report also showed that in Indonesia, between 1990 to 1999, "flood" was the "most frequent" disaster at 20 occurrences; "earthquake" claimed the most lives with 3,040 deaths; "wild fire" affected the most number of people (i.e. more than 3 million), and caused the most damage in economic terms (i.e. more than 30 billion dollars).

Very recently, in 2015, the country experienced yet another devastating natural disaster: forest fires that claimed the lives of 19 Indonesians and caused respiratory illnesses in more than 500,000 individuals in Southeast Asia, especially in neighboring Singapore and Malaysia. Because of the magnitude of its effects, the natural debacle was dubbed by some as "a crime against humanity" (Lamb, 2015). The fires also caused Indonesia to surpass Russia as the "fourth largest emitter of CO_2" (WRI, 2015).

The latest 2015 report of the Indonesian government – based on its disaster risk assessments – lists nine natural disasters that continually affect the country: earthquake, tsunami, flood, landslide, volcanic eruption, extreme tidal wave and abrasion, extreme weather, drought, and forest and land fire. In addition, the country is also vulnerable to non-natural disasters (such as disease epidemic and pandemic), and social conflicts (such as the dispossession of indigenous peoples due to logging and mining activities, and, the rise in attacks by Islamic militants).

The UN OCHA 2015 report echoes the Indonesian government's 2015 report on the country's risk profile.

For the first six months of 2017, the Indonesian government has reported that floods continue to be the most severe type of disaster in the country in terms of occurrences and costs.

Table 1 notes that there were 451 floods from January to May 2017, making flooding the number 1 disaster in the country, followed by tornados with 370 occurrences, and landslides with 364 occurrences.

DISASTER OCCURENCES JAN - MAY 2017

Table 1: Disaster Occurrences from January - May 2017 [1]
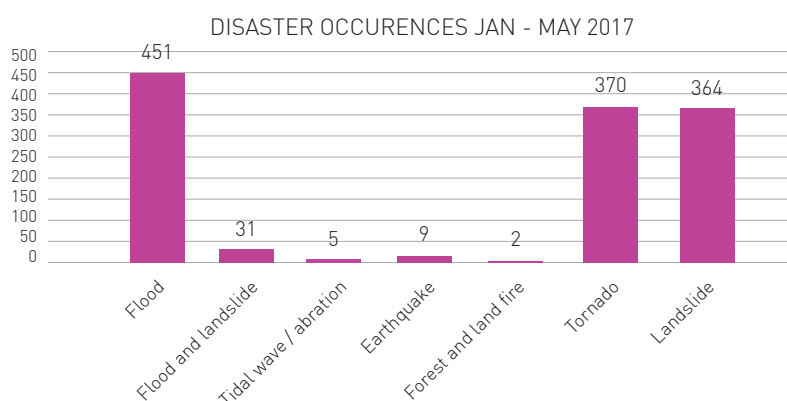
Type of Disaster	Occurances	Deaths	Injury	Other loss / displaced	Serious Damage	Medium Damage	Light Damage	Flooded	Health Facility	Religious Facility	Education Facility
Flood	451	71	63	1,139,940	963	191	808	203,665	23	188	321
Flood and landslide	31	18	37	101,252	128	636	4,358	17,163	0	4	8
Tidal Wave / Abration	5	0	0	10,155	23	0	2	0	0	0	0
Earthquake	9	0	47	1,180	194	212	524	0	3	41	24
Forest and land fire	2	0	0	0	0	0	0	0	0	0	0
Tornado	370	18	109	9,227	1,320	1702	6,047	0	8	35	49
Landslide	364	79	105	41894	476	297	567	575	2	11	6
TOTAL	1,232	186	361	1,303,648	3,104	3,038	12,306	221,403	36	279	408

Table 2: Information on Disasters in Indonesia from January - May 2017 ²

Table 2 shows that while landslides caused more deaths and injuries, floods had the highest number of victims – more than one million. Floods also caused damage on the most number of houses and facilities – more than 200,000 properties were affected.

Institutional Infrastructure and Mechanisms

Disaster Governance

The architecture of Indonesia's disaster governance is presented in the 2015 baseline report and elaborated in its annexes. According to this report, the main law guiding disaster governance in Indonesia is the Disaster Management Act of 2017, while the agency responsible is the BNPB/ADM or the National Disaster Management Authority. The BNPB/ADM is directly under the Office of the President.

This national level body has local counterparts in the form of the BPBD/LDMB or Local Disaster Management Boards, which are directly under the offices of the Provincial Governors. Aside from the BNPB/ADM and the BPBD/LDMB, there are 37 ministries and 11 agencies responsible for disaster risk management. The BNPB/ADM serves as the coordinating body of all these agencies but its role apparently "needs to be elaborated" (UN OCHA 2015, 46).

The above mentioned disaster governance architecture is guided by international, regional, national and local policies/platforms that Indonesia adheres to or utilizes.

International platforms

Indonesia's first National Action Plan for Disaster Risk Reduction formulated in 2006 was a commitment of the Indonesian government to UN resolution No. 63/1999 and the Hyogo Framework for Action and the Beijing Action Plan (NAP, 2006).

Regional platforms

The Indonesian government was a signatory to the Beijing Action Plan (NAP, 2006) and the 2005 ASEAN Agreement for Disaster Management Emergency Response (AADMER).

National policies and platforms

Thus far, Indonesia has had three National Action Plans on Disaster Risk Reduction (2006-2009, 2009-2014, 2015-2019). These plans are actually required by law, as per the 2007 Disaster Management Act. The Indonesian government has also created the DIBI or Indonesian Disaster Data and Information Management Database.

According to Tri Utami Handayaningsih, Deputy for the Disaster Risk Management Analysis Division, the following are the regulations pertinent to disaster governance: Law No. 24/2007; Government Regulation No 21, 22, 23/2008; Presidential Regulation No. 8/2008 (Undang – Undang Nomor 24 Tahun 2007 tentang Penanggulangan Bencana; Peraturan Pemerintah Nomor 21, 22, 23 Tahun 2008).[3]

Disaster management planning has also cascaded to the village level given the enactment of the "Village Law" or Law No. 6 of 2016. Said law mandates

local governments – in all 74,091 villages – to craft action plans for disaster risk and reduction.

Gender and Disaster Governance[4]

In Indonesia, gender mainstreaming in disaster governance is stipulated in at least two regulations: (1) Presidential Instruction No. 9 Year 2000 about "Gender Mainstreaming in national Development"; and (2) "Head of the National Disaster Management Agency (BNPB) Regulation No. 13 Year 2014 about the Mainstreaming of Gender in Disaster Management."

The first regulation, released by the Indonesian President in 2000, focused on the need "to conduct gender mainstreaming strategy in all processes of national government", "to increase the position, role and quality of women, as well as the attempt to realize gender equality and justice in the family, society and state." The regulation recognized that gender mainstreaming was "an integral part of functional activities of all institutions and agencies in the National and Local levels." Moreover, said mainstreaming was to consider already-existing laws and regulations, namely:

1. Article 4 verse (1) and Article 27 verse (1) of the Constitution 1945; [5]

2. Regulation No. 7 year 1984 about the endorsement of CEDAW;

3. Regulation No. 22 year 1999 about the Local Government;

4. Regulation No. 25 year 1999 about the Balance of Finances between National and Local Governments;

5. Regulation No. 25 year 2000 about the National Development Programme year 2000-2004

The Presidential regulation instructs the following to ensure gender mainstreaming:

- Ministers

- Head of Non-Department Government Institutions

- Leaders of Highest/High Secretariat Institutions

- Commander of the Indonesian National Army

- Head of Indonesian Police

- Indonesian Attorney General

- Governors

- Regents/Mayors

Ensuring gender mainstreaming, as per the Presidential Instruction, meant at least three specific things: (1) "implement gender mainstreaming to ensure the implementation of planning, arrangement, implementation, monitoring and evaluation of policies and [programs] of development with gender perspective according to the respective tasks and functions, and authorities"; (2) "truly pay attention to the Gender Mainstreaming Guideline in National Development (as attached in the Presidential Instruction as reference to the implementation of gender mainstreaming"; and (3) create a Ministry of Women Empowerment that would: (i) provide technical assistance to government institutions and agencies in the National and Local levels in implementing gender mainstreaming; and (ii) report the implementation of gender mainstreaming to the President.

BNPB Regulation No. 13 Year 2014 meanwhile was "created as a guideline for the Government, Local Government and non-government parties in implementing gender mainstreaming in disaster management." In particular, the Regulation aims to:

- Implement gender justice and equality principles in all components of disaster management;

- Encourage gender management by creating gender responsive planning and budget in disaster management;

- Encourage the manifestation of protection and fulfilment of women and men's rights in disaster management.

The regulation also lays out four (4) indicators or aspects of gender mainstreaming:

- Access;

- Participation;

- Control over resources and decision-

making; and

- Benefit of policies and programmes.

According to Tri Utami Handayaningsih[6], the regulation takes into account the different phases in disaster management, to wit:

Pre-disaster

- Risk assessment that is gender responsive
- Early warning system that is gender responsive
- Disaster mitigation and preparedness gender responsive
- Early relief and Protection:
- Involve women and men building disaster response plan
- Give equal place for women and men for representing their role in rapid assessment
- Protect vulnerable people to avoid gender-based harassment
- Provide major needs for both women and men in disaster response time as well as the process of getting refugees data
- Place the logistic for disaster survivor in accessible place, especially for women and girl
- Shape and weight of the aids packages are made possible to brought and moved by women
- Provide water and sanitation that are adjusted with the socio-culture condition and needs of women, men, boys, and girls

Recovery and rehabilitation:

- Both women and men are involved to recovery planning, implementation, and monitoring and evaluation. This includes:

  - Consider the needs of woman and girls to build house
  - Conduct sustainable dialogue for rehabilitation and reconstruction planning and budgeting.
  - Physical, social, and economic rehabilitation are involving women and men, especially for the process of

planning.

  - Extended skills are given to both women and men after the disaster.
  - Economic rehabilitation and development that give priority to women, woman as head of household, without-mom household, and other vulnerable family.
  - Special treatment for the men as head of household who have kids

The 2014 Regulation is quite comprehensive in that it outlines the processes that ensure gender mainstreaming including gender analysis and gender budgeting, including that of having a "Gender Mainstreaming Focal Point" that would serve as "apparatus from the ministries/institutions and/or local government officers that has the ability and are appointed to conduct this gender mainstreaming in respective work units."

It must also be noted that "Article 18" of the Regulation regarding "fulfillment of basic needs" looks to women as part of groups that need "special treatments," namely:

- Women household heads;
- Male household heads without a housewife;
- Pregnant and breastfeeding mothers;
- Other vulnerable groups.

Voices on the Ground: Community and Local Actors in the areas of Protection of Women and Participation in Decision Making

1. The tsunami that hit Aceh and other parts of Indonesia in 2004 is the locus of learning for integrating the gender perspective in disaster management.

Key informants from Indonesian civil society and community organizations look to the 2004 tsunami in Aceh as reference point for understanding how best to integrate the gender perspective in disaster management.

Komnas Perempuan, a civil society organization established in 1998, monitored gender-based violence at the time of the Aceh tsunami and did the same in other parts of Indonesia such as Papua and Poso. The organization has also been engaging government to acknowledge that gender-based violence does occur during natural disasters and that something must be done to prevent such

violence. It also tried to influence the Disaster Management Act of Indonesia or Law no. 24 of 2007. The key informant from Komnas Perempuan claims that while said Law did not reflect the advocacy against gender perspective, it nevertheless brought the issue of gender-based violence into the public discourse. The organization was able to utilize national movements and media to promote awareness on gender-based violence, including violence that happens during disasters.

KAPAL Perempuan, another civil society organization, spent six (6) years in Aceh post-tsunami and focused on the relocation and rehabilitation needs of women. It teamed up with local Aceh women to train women so that they themselves could access resources necessary to rebuild their lives. KAPAL Perempuan's work in Aceh aimed to ensure that female household heads would be able to access the same resources that their male counterparts were receiving post-tsunami.

The key informant from YTBI, meanwhile, claims that the 2004 Aceh tsunami brought many lessons for emergence responses because in that case, responses lasted for 6 months – instead of the more common 1-2 month response period. At the time, YTBI focused on making sure that tsunami victims got the kind of help that they needed – such as food for children that would increase rather than dampen the children's appetites. The organization also worked on a programme to fix damaged livelihoods of affected women in Aceh. It also teamed up with a youth organization to reach the victims.

2. Experiences of civil society organizations point to the need for disaster management to take into account varying local contexts and culture.

According to key informants, the reality of local contexts and culture often come to the fore in disaster situations and should be given much

Key Informant Meeting with Komnas Perempuan, Yayasan Tangul Bencan, Kapal Perempuan, and Pusat Krisis

attention in disaster management. The informant from YTBI shared the example of "local wisdoms and culture" running counter to humanitarian charter standards in the case of providing milk to children. According to humanitarian standards, babies and children need to be provided with formula milk. In some cases, however, formula milk made children sick.

Another example is the usual practice of providing sanitary napkins for women victims of disasters. In some areas, though, women use towels instead of these pads. Some, in fact, have no knowledge of what sanitary napkins are for.

The context of conflict must also be taken into consideration. In Aceh, for example, Komnas Perempuan had to look into concerns of women traumatized at the time not just by the tsunami but also by the armed conflict involving the Indonesian military and the Gerakan Aceh Merdeka (GAM). Meanwhile, in North Jakarta where flooding has been severe, the informant from Perempuan Mahardhika claims that the situation of laborers must be given due attention. Perempuan Mahardhika is a non-government organization that focuses on gender-based violence, maternity leave, young girls, and female laborers. According to the informant, disasters also hit factories and not just homes, leaving laborers without jobs. Women are more vulnerable because they are often "the first to be let go" by employers when companies need to downsize or close because of disasters. While the group does not have data on the exact number of women-job losses, it is familiar with this phenomenon. The group also claims that women laborers often do not want to leave their work during disasters, as this would mean loss in wages and/or overtime pay.

Still, according to the informant from Perempuan Mahardhika, disaster management must also be sensitive to the needs of the LGBT community. Members of the LGBT are often unable to express themselves, and thus must be sought out and assisted during disasters.

According to Tri Utami Handayaningsih,[7] disaster management must also take into consideration the issues of religion and culture, and that:

Key Informant Meeting with Komnas Perempuan, Yayasan Tangul Bencan, Kapal Perempuan, and Pusat Krisis

"Indonesia is a country, which mostly the inhabitant are Muslim. It means that many of our policy and stereotype are influenced by the Islamic way of [life]. In gender aspect, women and girls have special place and etiquette. If this way is completely implemented, gender issues will be all mainstreamed in management, including disaster. [Blending] the traditional and modern roles of woman in disaster management will protect women and girls."

"I think that we have some values of traditional roles of women, for example, it is commonly women preparing foods for family. In many cases of disaster in Indonesia, female refugees have activities in public kitchen so their role is still beneficial. Other thing, female refugees along with volunteers help children in mental-trauma healing. These such things should be considered in sharing responsibility and role for women and men in disaster management."

3. Gender mainstreaming in disaster management must happen both at the national and local levels. Moreover, while women's specific needs must be addressed, integrating the gender perspective in disaster management means recognizing the agency of women rather than merely categorizing women as a "vulnerable" sector.

According to the key informant of Pusat Krisis, women are often lumped together with children and the elderly as part of the "vulnerable sector." Because they are viewed as part of a broader sector, their identity as women – and thereby their needs – are often left unrecognized/unaddressed. This situation, she says, is aggravated by the fact that

current laws have not touched on women's interests in emergencies and post-emergencies.

At the national level, some groups have had experience working with government to integrate women's concerns during disasters, but such working together has yet to yield concrete outputs and outcomes. The YTBI, for example, was invited by the Ministry of Women Employment to join a focus group discussion (FGD) meant to create guidelines for disaster management. The Ministry, however, has not updated the YTBI regarding the status of such guidelines, i.e. whether or not it was adopted by government.

According to the key informant from Pusat Krisis, "in Indonesia, men decide but ultimately it is the women who do things." Concretely, women are mobilized in disaster management but are often not part of decision-making processes that shape disaster management.

The informant from UNDP-Indonesia claims that the disaster management law itself merely considers women as part of "vulnerable groups" along with children, the elderly and persons with disability. United Nations Development Programme (UNDP), for its part, does not limit the classification of women as vulnerable groups (or as pregnant and breastfeeding women only). Rather, UNDP focuses on livelihood activities that highlight the capacities of women and enables them to undertake businesses or livelihood activities that will generate income.

Integrating the gender-perspective in disaster management at the local level is not easy, according to the UNDP informant, owing primarily to the dominant practice where meetings or socialization are often for men only. For assistance, UNDP has sought the help of the Posyandu (Pos Pelayanan Keluarga Berencana Terpadu- Integrated Planned Families and Health Service Post), which regularly holds meetings, socializations and services for mothers and children such as immunization. The Posyandu also has gender-segregated data, thus, in some communities where Posyandu operates, such as in Jogjakarta, it is possible to get data on women, children, pregnant women and other such gender-based information.

UNDP-Indonesia has also established a "sister village" program where a high-risk village is partnered up with a low risk or safer village during evacuations – a kind of self-evacuation method.

Still according to the informant from UNDP-Indonesia, sometimes, the laws are not the problem; rather, it is the implementation of laws that is the problem. Moreover, some groups are more active than others. The UNICEF in Indonesia, for example, is one of the most active groups that focuses on women and children protection.

Gains and Gaps in Integrating Gender in Institutional Infrastructure and Mechanisms

As shown in the preceding section, voices on the ground reveal that women have specific needs and at the same time have agency. These needs and capacities have yet to be integrated, however, into disaster governance in Indonesia.

Indonesia already has an elaborate governance architecture to respond to natural disasters. There are numerous disaster-related laws, policies and institutions in place. What is lacking, however, is the mainstreaming of gender concerns in these responses. Of the 37 ministries and 11 agencies that participate in disaster governance, only one is gender related: the Ministry of Women Empowerment and the Protection of Women, which is considered part of the "Coordinating Ministry for Human Development and Cultural Affairs" (2015 Baseline Report). Moreover, as mentioned earlier, the DIBI, which is the disaster-related database of Indonesia, does not have gender-based disaggregated data.

The 2015 Baseline Report claims that in disaster situations, "risk of death is highest among females, and the oldest and youngest population subgroups." The Report concedes, however, that the DIBI does not include gender-related and age-related disaggregated data. Still, according to the Report, what is available are studies made from various group that provide the following information regarding women and disaster:

- According to a study by Doocy, et.al., published in the Bulletin of the World Health Organization, February 2007, "females accounted for nearly two-thirds of the total number of dead and missing in Indonesia after the 2004 tsunami";

Key Informant Meeting with UNDP and Perempuan Mahardhika

- According to a study by Oxfam, in four villages in the Aceh Besar district, "male survivors outnumbered females by a ratio of almost 3 is to 1";

- According to a study by the World Bank, women suffered more in the post-tsunami period, with female-headed households proving to be more vulnerable than male-headed households;

- According to UNIFEM, "strong patriarchal traditions and many years of conflict made it difficult for tsunami-affected women to assert their rights and raise their voices";

- Women were "largely absent" in meetings and consultations regarding post-tsunami recovery;

- Women could not claim benefits post-disaster because families were registered with government agencies in the name of the men/husbands;

- According to the 2002 and 2006 reports of the National Commission on Violence Against Women, Indonesian women experienced gender-based violence post-disaster as there were cases of sexual assault and rape;

- According to Oxfam, in a report after the 2006 Padang earthquake, women were "generally more vulnerable to chronic poverty and disasters due to gender inequalities in the distribution of income and access to credit, and unequal control over property and natural resources."

While Indonesian women clearly experience disaster-related difficulties, some groups do not consider them only as victims or survivors, but also acknowledge the important role that they play during and after natural disasters. According to Oxfam, in the village of Jenggala, it is the women who work in "remote fields and hilltops" who have a better understanding of where the floods and the landslides are likely to occur. Oxfam works closely with its local partner, Kostala, to assist communities in risk reduction and post-disaster assistance (Oxfam GB, 2012).

The International Red Cross, meanwhile, reported about good practices in Aceh in the post-tsunami period. For example, Aceh was able to solve the "problem of cash grants channeled through men and not reaching women and elderly." Still, according to the Red Cross, it was the women who considered the needs of other women, children and elderly after the tsunami – it was women who suggested that the stairway built in the hills in cases of another tsunami had to have handrails for women, children and the elderly.

According to Tri Utami Handayaningsih,[8] the "best practices" in gender mainstreaming in disaster governance in Indonesia include the following:

- Gender issues have already been mainstreamed in some agencies. Ministry of public Works apply the "gender perspective"-approach to plan post-disaster buildings;

- The needs of woman and girl (sanitary pads, private room to change cloth and private toilets are provided) as well as the room for couple to have sex are provided.

Research Insights

1. Pursue the development of guidelines on integrating concerns in disaster management. As mentioned above, some CSOs like the YTBI have already been consulted by the Ministry of Women Empowerment and Child Protection, but cooperation between the CSOs and the Ministry on this matter has not been harnessed.

2. There is a need to look into power relations between men and women that produce the subordination of women. According to KAPAL Perempuan, this is necessary so that women can break away from limited roles as wives or homemakers. The aim should be to ensure that men and women are able to access the same resources and perform the same roles, and, help each other during disasters. This is not easy, according KAPAL Perempuan. The organization has, in fact, received death threats because they were viewed as "the parties who changed the women."

3. According to Pusat Krisis, there must be coordination among government agencies. The informant claims that such coordination already exists but that it has to be "synergized" more. Moreover, such synergy must happen not just at the national level but also at the local level. The "big challenge" in Indonesia is how to foster gender sensitivity in local communities because "at the end of the day, it is the local people that need to understand gender mainstreaming."

4. For the Perempuan Mahardhika, factories and not just communities must be made gender-sensitive. The group has already started the work of educating laborers about the rights of women and what they can do if these rights are violated at the workplace-level. It has also been advocating issues on sexual assault and gender-based discrimination, including those relating to sexual orientation and gender identity (SOGI). The group thinks that women can be empowered so as to change to perspective that women are merely victims during disasters.

5. For the UNDP-Indonesia, interventions aimed at gender-mainstreaming in disaster management must consider the following: (i) specific approaches within the comfort zone of women to ensure that they be comfortable enough to convey their opinions; (ii) cultural backgrounds (i.e. culture often makes women very cautious in giving out their own opinions); and (iii) religious backgrounds (i.e. because some religions require the male to make the decisions in their households). According to the informant from UNDP, it is very important that women are mobilized in programme planning and institutional arrangements. Women should have opportunities to express their concerns in community and institutional processes.

6. For Tri Utami Handayaningsih,[9] the following are suggested:

- Mainstream the issue in all agencies and humanitarian actors;

- Involve woman, girls, man, and boys in decision making;

- Do socialization among woman and girls about natural disaster so they can spread their knowledge and understanding.

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Research Respondents / Key Informants:

Representatives of the following groups:

1. Masruchah from Komisi Nasional Anti-Kekerasan terhadap Perempuan (Komnas Perempuan)

2. Linda from Yayasan Tangul Bencana Indonesia (YTBI)

3. Budhis from KAPAL Perempuan

4. Dicky from Pusat Krisis

5. Tyas from Perempuan Mahardhika

6. Chris Usfinit from UNDP Indonesia

7. Tri Utami Handayaningsih of BNPB

Endnotes

1 Source for Tables 1 and 2 is http://dibi.bnpb.go.id/data-bencana/tematik, as accessed and translated from Bahasa Indonesia into English by the National Focal Person (NFP).

2 Ibid.

3 Resource Person interview via email, sent on June 20, 2017.

4 Regulations were sourced from official documents translated from Bahasa to English by the NFP Dwinta Kundalara.

5 Article 4 verse (1) states that "the President of the Republic of Indonesia holds authority to govern based on the Constitution." Article 27 verse (1), meanwhile, states that, "all citizens are equal in the eyes of law and governance and are obligated to uphold law and governance with no exception."

6 Resource Person interview via email, sent on June 20, 2017.

7 Resource Person interview via email, sent on June 20, 2017.

8 Ibid.

9 Ibid.

Lao People's Democratic Republic

Natural Disaster Context

Lao People's Democratic Republic (PDR) is a landlocked country, sharing borders with five other countries – China to the north, Cambodia to the south, Viet Nam to the east, Myanmar to the northwest, and Thailand to the west. It has seventeen (17) provinces and a Capital; it also has 148 districts, grouped into the northern, central and southern regions. With a land area of 236,820 square kilometers[1] and a population of 6.802 million, it has a relatively low population density (UNDP, 2017).[2]

The country's topographical features are dominated by mountainous areas and alluvial plains. About two-thirds of the territory is mountainous and thickly forested, with elevations of over 500 meters and unsuitable for agriculture. The most elevated parts stretch out over the northern region while the low-lying areas near the Mekong River comprise 20 per cent of the total land area. Most of the rice is grown in the alluvial plains all along the Mekong and its tributaries, with the plains of Vientiane province being the most extensive. The climate is hot and tropical, with rains and the highest temperatures occurring between May and October. The cool dry season runs from November to February and a short dry season in March and April (MPI, 2014).

Lao PDR is considered a low-risk country in terms of natural disasters compared to its neighbors in Southeast Asia. Between 1980 and 2009, the major natural disasters that affected Lao PDR were storms, floods and drought. Serious flooding was experienced in 1966, 1995, and 1996; it was also heavily affected by Xangsan storm in 2008 and typhoon Ketsana in 2009.[3]

The country is also susceptible to landslides, pest infestations, and forest fires due to slash and burn agriculture. Most flooding occurs from May to September as monsoon rains swell the upper Mekong. The northern mountainous region also experiences flash flooding. It is estimated that the country suffers from an average of 1.5 serious droughts and floods per year (GFDRR, 2011). From 1970 to 2009, there were 30 floods recorded in the country. The worst in over a century was experienced in August 2008, brought on by tropical storm Kammuri. There were six casualties reported and a damage to property estimated at $66.5 million USD. There were about 92,000 households affected and 200,000 hectares of agricultural land damaged (Adamson, 2008).

The most flood-prone areas are the alluvial plains of the Mekong and one near the Se Kong River in the south. Floods are usually caused by inadequate infrastructure, that is, the lack of dykes at critical areas, water control gates, lack of mobile pumps or pumping stations during flooding, deforestation, reclamation of wetlands, and poor land use planning. Climate change has also meant erratic rains and increased rainfall. For example, more than 200mm of rain in two days will cause flooding along the Mekong plain (MPI, 2014).

Compared to the most disaster-prone countries in the region (the Philippines, Cambodia, Viet Nam, Indonesia, Myanmar), Lao PDR is among the more relatively safe (along with Singapore and Malaysia). *The World Risk Report* ranks the country 100th with an index of 5.59.

The northern part of the country is more vulnerable than the south for a number of reasons. Those who live in the uplands are usually ethnic minorities, while 55 percent of the lowlanders are ethnic Lao. These groups also have less access to government services and may become unreachable during the rainy season. Poverty rates are also higher in the northern regions (CFE-DMHA, 2014).

Rice is the national staple food, and farming is the largest source of employment. Climate change has made growing this crop more unpredictable, as farmers can no longer rely on old weather patterns. Agricultural crops are reliant mostly on surface irrigation, meaning the source of water relies on river diversion, especially during the dry months (MPI, 2014).

Landslides are also another natural hazard, which occur due to rainfall in the slopes of the northern region.

Between 1980 and 2011, there were 24 reported major disasters, 62% of which was flooding, 21% were storms and 17% drought. Cyclones pass through the country 3-5 times during the rainy season; 35% of the Mekong River basin is in the country, and 90% of the land is the Mekong River Basin (JICA, 2012).

Institutional Infrastructure and Mechanisms

In 2003, the country adopted a *Strategic Plan on Disaster Risk Management* (SPDRM) in 2003 (GFDRR, 2011) with the following aims: "safeguard sustainable development and reduce the damage of natural or manmade disasters to community, society and country economy; shift strategy from relief and mitigation after disaster impact to community, society and economy of government organizations to preparedness before disaster strike emphasizing on flood, drought, landslide and fire parallel with continuing mitigate in post disaster period; turn from responsibility of only government agency to people centered in dealing with disaster by building capability for community; and promote forever protection of the environment and country rich such as: forest, land and water."[4]

The National Disaster Management Committee (NDMC) is the body responsible for formulating Disaster Risk Management (DRM) policy and coordinating other governmental bodies. It was formed through a Prime Ministerial Decree (158/ PM) in August 2009. The Secretariat is in the National Disaster Management Office (NDMO) located in the Ministry of Labor and Social Welfare (GFDRR, 2011). The NDMC is tasked with disaster preparedness and management, increasing awareness and direct relief operation.

As of 2015, disaster risk is taken into account in many instruments of governance – development planning, climate change policies, poverty reduction, and national defence; although there are no concrete legislative or regulatory provisions on DRM as of yet. A new department was established – the Department of Disaster Management and Climate Change (DDMC), signaling a shift from responding to disasters to a more preventive and preparatory approach. This new body is tasked with developing policies and building a legal framework. Various ministries – including health, education,

and agriculture are all in the process of developing guidelines. The Disaster Management Law is expected to be completed by 2017 (Preventionweb, 2015).

With the help of donor agencies, different government bodies are improving knowledge and information management systems for disaster. This includes the Department of Meteorology and Hydrology and the Mekong River Commission. Information-dissemination about disaster awareness and prevention is being piloted in schools.

While the labor and social welfare is primarily responsible for relief and early recovery, the Ministry of Natural Resources and Environment (MONRE), notably the Division for National Disaster Prevention and Control Committee (DPCC), is charged with long-term planning, which specifically incorporates distribution of rain forecasting and land use. According to representatives from this office, it is difficult to incorporate vulnerable groups in their programming.

The natural disaster institutional infrastructure of Lao PDR is seen in Figure 1.

Another major government body tasked with DRMM is the Lao Red Cross. Recently it has begun the implementation of the *Strategic Plan 2016 – 2020 of Advancement for Women*. The main unit in charge of realizing this action plan is the Lao Red Cross Commission for the Advancement for Women, Mothers and Children Work Section. The Plan draws from the country's second *National Strategic Plan for the Advancement for Women 2011 – 2015*, the third *Gender Equality Strategic Plan 2014 – 2020*, and the *Plan of Action 2014 – 2020* on the prevention and elimination of violence against women and children (LRC, 2015).

The *Vision on Disaster Risk Management of the Lao PDR 2030* shows a strong policy direction and commitment to disaster governance. Key priorities include DRR capacity development and institutional strengthening. Notable is the new law on Disaster and Climate Change, which is expected to be finalized in June 2017. The rationalization of organizational capacity is also envisioned to
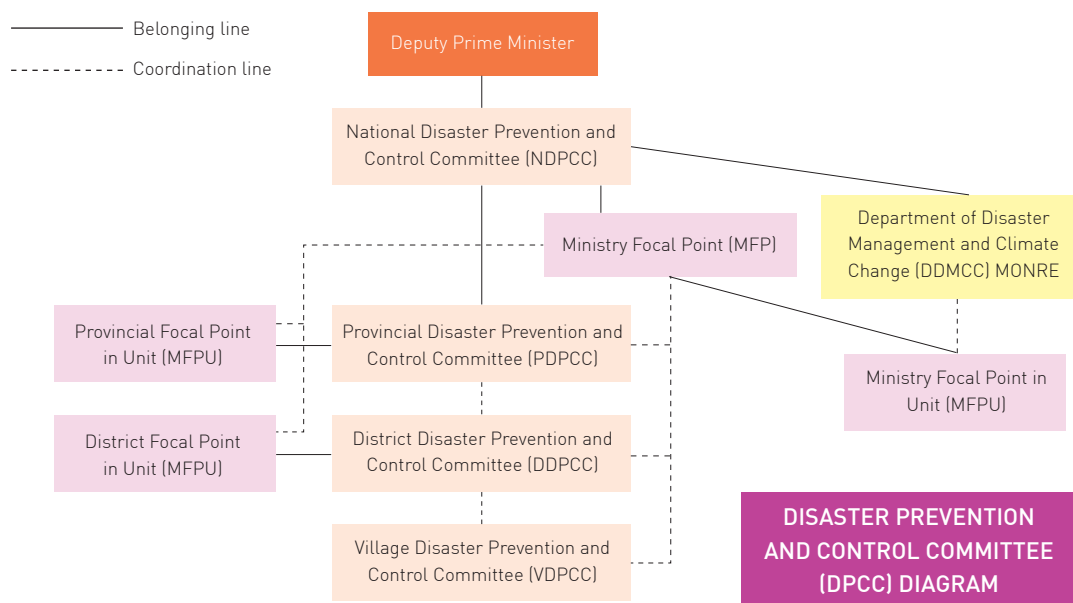
Figure 1: The Disaster Prevention and Control Committee (DPCC) Diagram [5]

make disaster management more responsive. Other priorities include the strengthening of early warning systems, the set-up of a disaster database inventory system, and the need to incorporate DRR in strategic planning and financing. Furthermore, there are also on-going initiatives at "revising the roles and tasks of the National DPCC, revising the decrees on the National DPCC's secretary and architecture and mechanisms, drafting the law on disaster management, and drafting the funds, vehicle equipment, consumer goods and consumption to facilitate prevention and management."[6]

Voices on the Ground: Community and Local Actors in the areas of Protection of Women and Participation in Decision Making

Focus Group Discussions (FGDs) were held in the districts of Meoun and Feung in the northern Vientiane province. There were ten (10) participants, mostly married women in their thirties to forties, all with children, save one. Both district participants recalled recent instances of flooding in November and December 2016. The main concerns were immobility caused by flooded roads and impassable bridges, making it difficult to conduct day-to-day travel and move agricultural produce. Children would miss schooling for as long as the waters remain.

According to the oral report of the chief of village, there are 536 families (4,474 residents) in the district of Meoun. The main livelihood is animal husbandry and growing rubber trees and other

crops. There are 10 grocery shops and 1 primary school. Of the last reported flooding, 76 were affected and received rice support from the Lao Red Cross three times. The chief of village requested the need for support for flooded rice fields and for better infrastructure – namely elevated roads, a steel bridge and dykes.

The oral report of Feung's chief of village cited 206 families (848 residents) currently living in the area. Like Meoun, villagers raise livestock and grow crops. The chief reported the need for training local people to respond to floods and other possible natural disasters. The village has a megaphone, which serves as an early warning device, although its range is limited and cannot cover the whole village. The chief also expressed a need for a boat, life jackets, and a well since potable drinking water is scarce during a flooding. As in Meoun, the chief said there was urgent need for dykes.

In both cases, there is a gendered division of labor in saving household property. Women generally took care of what was in the house while their husbands minded belongings outside, including securing livestock. Husbands go to the rice paddy and stock the rice elsewhere. "Some people did not go on time and the rice went with the water. They just cried."

Women were also mostly responsible for evacuating children and the elderly if needed. When floodwaters are too high, the points of evacuation are usually

houses of neighbors or cousins. "It doesn't matter whether they are relatives or not. We will just go to our neighbor's house, if they are on higher ground." There is a shared responsibility for the elderly people in Feung, where if the parents of neighbors needed assistance, one is ready to be able to assist. One respondent recounted an instance where they had to fashion a makeshift stretcher to carry one elderly woman who was staying at the edge of the village. "We prepare ourselves by packing things, taking care of elderly people. The women will pack things in the house – utensils, clothes, like this." Once the water receded, women would clean the house and the men would check the paddies to see if the rice and livestock survived the flood.

FGD participants from Meoun District

Inthe district of Meoun, respondents report that the school infrastructure did not inspire confidence in potential evacuees. After the flooding, women are usually tasked with cleaning the household while men care for the livestock and property outside of the home, including minding crops or rice paddies. Since they are also tasked with care work, women also reported needing assistance in access to medicines, as many of the children got sick of dengue, fever, and most commonly of diarrhea due to the unsafe drinking water caused by flooding.

> "We got diarrhea from unclean water, from the well or underground. But we had no choice. Dengue fever… for every family, at least one member had diarrhea."

Access to healthcare as a result of flooding is difficult because in the case of Feung, for example, the hospital is seven kilometers away. Apart from medicines, immediate post-flooding needs include cooking utensils and potable water.

In both cases, the villagers could generally count on their neighbors for support. Social cohesion was maintained despite stresses brought on by the flooding. One respondent from Feung noted that even when her neighbor saw her shoe being carried away by the flood, she waded in the water to bring the shoe back to her.

Perhaps unique to Lao PDR, unexploded bombs – the size of tennis balls – are also considered a hazard, especially when flooding moves or unearths them.

In the case of government assistance, the paramount concern is helping victims affected by floods. As for immediate disaster relief, "the government provides water, dry food, rice/sticky rice, kitchen materials, and hut materials."[7]

Gains and Gaps in Integrating Gender in Institutional Infrastructure and Mechanisms

The legal environment at the national level is positive for gender equality. There is 27.5% representation of women in the National Assembly, as there are 41 female members out of a total 149 seats (Lao National Assembly, 2017); at the local level, however, only 2% of village heads are female.

The Lao Women's Union (LWU), a mass organization that was set up in 1955, works for women and children's interests. The Lao National Commission for the Advancement of Women (NCAW) was established in 2003. Both institutions "constitute the core mechanisms in mainstreaming gender into various sectors to ensure social justice for women and to combat violence against women."[8] Additionally, as a State Party to CEDAW, it has established several inter-agency mechanisms such as the National Commission for the Advancement of Women and the National Commission for

Outside the Meeting Hall/Village Library with FGD participants at Feung District

Mothers and Children (NCMC) to promote and protect the human rights of women. There are also sub-Commissions for the Advancement of Women (CAW) at different levels of governance, and these are the ministry-level Commission for the Advancement of Women (MCAW), Provincial Commission for the Advancement of Women (PCAW), and the District Commission for the Advancement of Women (DCAW). From these institutional bodies alone, it can be deduced that Lao PDR has both the vertical (national to local) and horizontal (inter-agency entities) that seek to guarantee the rights of women in the country.

The commitment to mainstream gender in plans and policies has been integrated in the country's Vision 2030, Strategy to 2025, and Development Plan 2016 – 2020, specifically those relating to the Sustainable Development Goals (SDG), on achieving gender equality and the empowerment of women and girls.[9] In this regard, the Government is said to "provide public services, infrastructure and social protection policies, and the promotion of shared responsibility within the household and the family."[10] However, except for the existence of a Committee on the Advancement of Women, Mothers and Children in MONRE, the explicit mainstreaming of gender has not been evident in natural disaster institutional infrastructure and mechanisms.

For example, the *National Disaster Management Plan (NDMP) 2012 – 2015* has no gender component. The objectives were primarily to make sure that disaster reduction is a priority, to capacitate local governments for community-based DRM, and to mainstream DRR strategies in government policies and programs. As of 2015, gender-specified vulnerability has not been included in risk assessment, although there are plans to make the proposed Post Disaster Need Assessment (PDNA) tool gender-sensitive. The new NDMP, currently being drafted, plans to include the gender dimension although there are no details as yet (Preventionweb, 2015).

Published in 2016, Community-Based Disaster Risk Reduction Manual identified the need to take into consideration vulnerable groups, including women. While 'gender balance' is considered a guiding principle, this has not yet translated into concrete action, apart from being aware that gender

needs to be taken into consideration in current and future plans and programs, and that women should be represented in setting up committees at the local level (MONRE, 2016). Lao PDR has also benefitted from aid programs to mainstream gender in climate change mitigation initiatives.

The Lao Red Cross first *Strategic Plan for the Advancement of Women 2013 – 2015* conducted awareness campaigns to integrate gender in the workings of the Lao Red Cross from the central to the provincial levels. Currently more than half of LRC's staff are women. Despite this, however, not enough women are placed in leadership positions. Only 4 out of 17 heads of office are female, and only 8 out of 23 vice-heads of office are female (LRC, 2015).

As regards data collection, its Sendai Framework progress report shows that Lao PDR collects sex disaggregated data on (i) deaths attributed to disasters; (ii) missing persons attributed to disasters; (iii) injury and illness attributed to disasters; (iv) number of people whose dwellings were damaged by natural disasters; (v) number of people whose dwellings were destroyed by natural disasters; and (vi) number of people whose livelihoods were disrupted or destroyed by natural disaster (Preventionweb, 2017).

Lastly, there may be a need to incorporate how women's livelihood is impacted by disasters, as suggested by a representative from the environment ministry. There is not enough assessment as to how the destruction of weaving looms, a major economic activity of women in Lao PDR, contributes to decreased income for the household. The support for weaving is mainly coursed through the Lao Women's Union and is not incorporated in other sectors, notably agriculture, commerce and finance (Kusakabe, 2005).

Research Insights
Lao PDR has undertaken moderate efforts at mainstreaming gender in the strategic level of its natural disaster institutional response infrastructure. The Lao Red Cross, as the primary early relief agency, is determined to make its programs and practices gender-sensitive, capacitate its female workforce, and improve the ratio of women to men in important decision-making roles. Though

Sharing a meal with some members of the Lao Women's Union in Meoun District

the *Vision on Disaster Risk Management of the Lao PDR 2030* has no explicit gener-specific principles or targets, other institutional line agencies practice them.

Furthermore, there are already existing women's bodies in the country, such as the "female board members in the National Assembly, LWU, NCAW, NCMC, Lao Red Cross, and MONRE committee on women, mothers and children,"[11] that can spearhead gender mainstreaming in natural disaster institutional infrastructure and mechanisms. In this regard, there is a huge potential to realize this at the strategic level and concretize them at the operational level.

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Research Respondents
1. Five women villagers from Meoun district
2. Five women villagers from Feung district
3. Mrs. Phenxay Somdee, Meoun district representative – Lao Women's Union
4. Mr. Somphordee and Mr. Somlot Khamphegxay – provincial representatives, Lao Red Cross
5. Mr. Souphasay Komany, Director - Division for National Disaster Prevention and Central Committee Secretariat (Ministry of Natural Resources and Environment)
6. Mr. Pangna Phranakhone, Technical Officer - Department of Planning and Cooperation (Ministry of Agriculture and Forestry)
7. Mr. Vorasith Sirikanh, Head Deputy, Operation and Maintenance Division - Department of Irrigation (Ministry of Agriculture and Forestry)
8. Ms. Ketkeo Oupalavong, Deputy Director - Advancement for Women and Mother and Children Work Division (Lao Red Cross)
9. Ms. Ninphaseuth Xayaphonesy, Deputy Director General – Lao Women's Union
10. Mr. Phoukhong Sisoulath, Director General - Department of Treaties and Law (Ministry of Foreign Affairs)

Endnotes

1. Davong Oumavong, Lao PDR Research National Focal Person (NFP), personal communication with the author, June 30, 2017. Herein after referred to as Lao PDR NFP.

2. According to Davong Oumavong, based on the 2015 Statistics Handbook, "the Lao population is about 6,492,228 or 6.5 million, in which there are female engage with 49.8% (3,237,458 million)."

3. Lao PDR NFP, personal communication with the author, June 30, 2017.

4. Strategic Plan on Disaster Management in Lao PDR 2020, 2010 and Action Plan (2003-2005). Accessed at http://www.preventionweb.net/files/22032_15958strate-gicplanondisasterriskman.pdf.

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7. Ibid.

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9. Lao PDR NFP, personal communication with the author, June 28, 2017.

10. Ibid.

11. Ibid.

Malaysia

Natural Disaster Context

The disaster landscape of Malaysia is dominated by historical instances of flooding. These occurrences have been the most damaging by far in terms of damages wrought and have been recorded since the 1880s. The most recent large flood (2010) was in Kedah and Perlis. This destroyed 45,000 hectares of farmland in the "rice bowl" of Malaysia (Chan, 2012). While outside of the Pacific Rim of fire, Malaysia still bears the burden on periodic weather and climactic events which include El Niño and La Niña, along with the more regular monsoon season, which exacerbates flooding in low lying areas (ibid). Thunderstorms and extremely heavy rains during the monsoon season have also caused landslides. The Tsunami in 2004 also affected coastal areas.

A disaster, as defined by the National Security Council (NSC) in Malaysia (NSC D20, 1997), is:

> "An incident that occurs in a sudden manner, complex in nature, resulting in the loss of lives, damages to property or the environment as well as affecting the daily activities of local community. Such incident requires the handling of resources, equipment, frequency and extensive manpower from various agencies as well as effective coordination and the possibility of demanding complex actions over a long period of time."

"The types of disaster defined under NSC D-20 are classified as follows: (1) natural disasters such as floods and landslide; (2) industrial and technological disasters; (3) accidents involving dangerous or hazardous materials; (4) collapse of high rise buildings and special structures; (5) aviation accidents in public areas; (6) railway accidents; (7) major fire incidents; (8) collapse of hydroelectric dams or reservoirs; (9) nuclear and radiological accidents; (10) release of poisonous and toxic gases in public places; and (11) air and environmental disasters such as haze."

The predominant description for the disaster apparatus of Malaysia is a "top down, government centric model" with the National Security Division (NSD) (or the National Security Council, MKN), which is attached to the Prime Minister's office, as the main body "responsible for the coordination activities related to the preparation for, prevention of, response to, and handling of disasters (natural and technological)."

These activities are organized via Committee System for better coordination and mobilization of agencies involved in disaster related activities. This is further trickled down via four levels: (1) National Disaster Management and Relief Committee (NDRC) (2) the State Disaster Management and Relief Committee (SDMRC); (3) the District Disaster Management and Relief Committee (DDMRC); and (4) at the Village level which is managed by the DDMRC. There is integration as far as "vertical coordination" (between levels) and "horizontal coordination" (between agencies at a given level) coordination are concerned.

Disaster management policy emanates specifically form NSC Directive No. 20, which defined the responsibilities of agencies involved in disasters. It has been updated in 2012 to consider complex disasters that now plague the Malaysian state (Shafiai and Khalid, 2012).

This approach (top-down) has been criticized previously, as it does not prepare fully for future disasters. There are also remaining issues for post disaster relief and rehabilitation that need to be addressed (ibid.).

However, in 2015, Malaysia set up a new National Disaster Management Agency or Agensi Pengurusan Bencana Negara (NADMA). The aim of this agency is to better support the most hazard-prone areas with small agency units that have been placed at the community or village level. The mini disaster management units will be headed by the Civil Defense Department, and the focus will be on disaster-prone states in the East Coast, Sabah and Sarawak. The management and coordination of natural disasters has been placed under this new agency. (Malaysia Disaster Reference Handbook 2016)

While the top-down, governmental approach has been largely effective especially in the area of flood management, a growing and largely educated population has necessitated the exploration of a more "horizontal" or "bottom up" approach where communities who are affected by disasters are engaged and empowered and resilient. This will also mean a more measured approach in disaster response and management, that should include, for example, "the Government must consider gender differences when giving out aid and support, as disasters often affect men and women differently." There will also be a need to take a second look at the needs of vulnerable groups in Malaysia, some of whom are not eligible for government support due to their status. These may include: the poor, children, refugees, unregistered migrants, internally displaced persons, and trafficked persons (ibid).

Institutional Infrastructure and Mechanisms

Two new developments have been noted by the researcher, in discussion with officials from the Ministry of Women, Family and Community Development [1] as potentially defining in terms of forwarding the protection and enhancing the role of women during natural disasters.

First, the newly created (2015) Agensi Pengurusan Bencana Negara or NADMA sends the call for assistance to relevant national agencies after a natural disaster has taken place. NADMA frames natural disasters as a security issue, and relies on data released by local counterparts at the district and state level to determine the type and amount of assistance needed during a particular natural disaster.

The described best practices also emanate from the systems created around the coordination of these agencies: *Infobanjir*, for example, a government data application, is able to consolidate updates on a daily basis and how many are still in the refuge and how many have gone home from district and state level offices related to disaster management. This gives national agencies a clear view of the needed supplies and services post disaster.

The Ministry of Women, Family and Community Development through the ASEAN Commission on the Promotion and Protection of the Rights of Women and Children (ACWC) has planned

2 Regional Consultative Workshops titled 'Development of ASEAN Gender Mainstreaming Strategies for Programme, Project Planning and Implementation'. The first workshop was held in July 2017 with participants from 10 ASEAN Member States (AMS) to develop a Gender Assessment Tool which will be used to conduct in-country gender mainstreaming status assessments for AMS. The second workshop is tentatively scheduled for 2018.

Currently, the *National Action Plan for the Advancement of Women* "outlines strategies and actions to be undertaken by various government agencies, private sector, and non governmental organizations in enhancing the status of women." [2] Of the 13 areas in the *National Action Plan*, it seems the locus of women and natural disasters may be found in the context of the environment and climate change.

The two agendas (natural disasters and mainstreaming gender) seem to be in their nascent stage of interface, with Climate Change as the key issue as it has only in these recent years that the Ministry of Women, Family and Community Development have seen the National Resource Agency (NRE) approaching them about gender issues:

> "They are calling us in whenever there is a climate change conference because now, as I was made to understand, in the climate change forums, they are putting a specific agenda on climate change and they are focusing on the mitigation part what are the women's needs and men's need…" [3]

Steps towards the meaningful correlation of natural disaster policies and gender mainstreaming policies are underway but will possibly need more gender specific data from the ground during natural disasters.

There is a mechanism in place already, with a system that collects available data from the *infobanjir* application. This system will be useful in times of flooding as it uses GPS to locate and provide information on evacuation centres and flood levels throughout Malaysia. At present, the Department of Social Welfare is working to expand the existing *infobanjir* application to include all types of natural disasters in Malaysia, and to be known

as *infobencana.* It will assist to search for and link victims in evacuation centres with family members.

Voices on the Ground: Community and Local Actors in the areas of Protection of Women and Participation in Decision Making

Fieldwork in Kelantan conducted in late April 2017 provided a view into the lives of community women who are regularly affected by monsoon-related flooding. The referent "big flood" remains the 2014 flooding in Kelantan but the women interviewed have said that flooding is "regular" and retrofitting of houses (raising floors, houses on stilts) in areas, which are frequently flooded, is a common occurrence.

Having dealt with floods numerous times, these women discussed the usual practices of moving vehicles to higher grounds and belongings to higher floors. They say the difficulty lies in longer stretches of rain or flooding (5 days or more) when they must resort to wading through floods to get additional supplies. When asked about roles in these situations, the women interviewed did not make much distinction. As described by the translator:

> "They have to walk in the water and the water is this high… and really brown and you can't really see what is inside. They will use their boots but these aunties have to ask their spouse to do it but sometimes in desperate times, because they have to feed their children, they have to do it on their own." [4]

In more detail, the roles are interchangeable when childcare is involved, although the wife still takes the lead in child minding responsibilities:

> "Like they were saying that as their roles… they are being surrounded by water. They take turns taking care of the children, because sometimes, kids get excited by the floods and they go down to the water to swim, so it's kind of entertainment, it's like a festival for the children… The wife [is] most likely to take more control of the children during the floods, just to control their behavior… For example, she needs to cook, then she takes turns with her husband and the only time they really go out is when they really need the food. The husband goes back and if the husband [is] not capable of going out, then the wife takes charge." [5]

On special consideration for women/girls during these times, again, the need to keep traditional roles seems to be crucial in the "return to normal":

> "I asked them and they said during the flood situation, if there is difference between men and women and they said no, there is not. Do we have to put extra security for them (girls)? They said no, they said as a housewife, they just need their aids for cooking because they are the ones who cook and provide the food for the family. [That is] the priority for the women." [6]

This is echoed from the point of view of the collective experience of the Ministry of Women, Family and Community Development:

> "…When it ends, women want to go home and make sure the stuff are there. They also help back home when their homes are destroyed by the flood. They check if the kitchen is fine and they can resume their roles; the men as well. The school is up and running. The children can go to school." [7]

Two scenarios arise during flooding events: (1) families evacuate to designated sites (usually social halls or schools); (2) families choose to stay at home mostly to look after belongings and secure property. If the family chooses to remain in their homes, it is not the responsibility of government agencies to look after their needs. This is quite evident to both the women interviewed as well as the state level and national level agencies involved. From the community perspective, their understanding of post- disaster management seems to be one of self-help where they do not expect the government, or even the community to intervene: "post flood situation is like basically cleaning up, reorganize, and then maybe rebuild damage and that's all. There is not further community or government action." [8]

The Ministry of Women, Family and Community Development mentions that volunteers sometimes assist in clean up operations in some areas, but international organizations present are few, with only the ICRC definitively named. [9]

In the case of families in temporary evacuation sites, processing is still done via "family" as the unit of reference and assistance and temporary shelters are provided for with the needs of the family unit in

The Evacuation Center and Social Hall used during the 2014 Kelantan floods.

mind. The village chief interviewed also added that in the case of evacuations, women and children are the first ones evacuated with some men choosing to be left behind to mind belongings.[10]

The Village Chief acts as "interest aggregator" in the case of the village visited. In this particular case, the village chief recounts his role in mediating between new housing developers and longtime village residents on the issue of drainage. He sees himself as in the middle:

> "He will hear their complaints and he will take it on and he will bring it to his officials – the provincial leader and there's like the MP sort of… So basically, his job is to come to that level and those leaders will take off to the other levels. It's likes a pyramid system."

Gains and Gaps in the Integration of Gender in Institutional Infrastructure and Mechanisms

At the national level, there is a full program of gender mainstreaming that is detailed in the *National Action Plan for Women,* which details the 13 areas in which gender mainstreaming will take place along with other initiatives such as the policy of having 30% of women in decision making in the public and corporate sectors, gender responsive budgeting, the creation of a gender focal point, the use of sex disaggregated data (including the 11th *Malaysia Development Plan,* which aims to "enhance inclusiveness towards an equitable society through compiling gender disaggregated data, and,

the gender mainstreaming project in cooperation with the United Nations Development Program (UNDP) that includes the goal of "institutional capacity building : gender mainstreaming and monitoring." [11]

However, there may be a need to consider how these gender-mainstreaming initiatives are appreciated at the community level where the context may vary in different areas. For example, while the community in Kelantan visited by the researcher seemed to be able to cope well during times of natural disasters, an alternative view via related literature produced a different narrative, albeit at a time closer to the flooding event.

The research team of Aziz, Selamat, Endut, Shuib, Mohajer and Fernando of the Centre for Research on Women and Gender (KANITA) in Universiti Sains Malaysia, Penang found in their case study entitled *Women, Gender, and Disaster: A Case Study of Flood Victims in Kota Bharu* (2016) that there remains a lacking gender specific response in gender gap in floods as well as the existing disaster management plan. The research group states that, "gender issues and women resilience during flood disaster are socially constructed under different geographic, cultural, political-economic and social conditions. They have a complex social consequence for women and men." They breakdown these consequences into the following categories: (i) need for clearer procedure and instruction, especially for single mothers and those with small children; (ii)

Village women in Kota Bahru

need to focus on specificities of social networks that differ between men and women; (iii) Issues of privacy and "Aurat" must be addressed; and (iv) distribution of aid is usually a male endeavor which marginalized women and disregards their specific needs.

Circulation of women's issues in disasters is also met via forum. University Kebangsaan Malaysia held a forum in 2015 on 'Speaking Without a Sound: The Gender Perspective on Flood Management,' which stressed the lack of women's voice due to the lack of consultation with the sector in flood mitigation planning.

Most adversely affected were women who were also disabled – the pregnant, nursing mothers, and single mothers. In the floods that affected Tumpat, Kuala Kerai and Manik Urai in Kelantan, for example, women stayed at home and were not able to receive emergency supplies.

"Those facing the greatest risks were single mothers and ailing women who alone by themselves headed families of small children. There were no husbands or fathers to help them evacuate or fetch relief packages from the authorities and non-governmental organizations (NGO)" (Kamaruddin and Azman, 2015).

Research Insights

1. There are differences in the experiences detailed by this case study and previous studies which point to the fact that there is a need to examine community contexts more closely, to determine variations across the community, district, state and country levels.

2. In the same vein, there may be a need to find ways to make 'gender mainstreaming' a bottom-up endeavor as well. Much of the work that has been done and will be done is a top down endeavor, in consonance with the current infrastructure on DRRM. Considering that there may be differences in local contexts, measures towards bottom-up participation and decision-making mechanisms that can empower women in natural disasters should also be explored.

3. The practice of collecting gender disaggregated data during flood relief may also need to be re-examined in order for data gathered to be useful to end users.

4. While there is a required 30% for women in public and corporate sector decision-making, there are also women in other levels and other sectors that need to be recognized towards empowerment.

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Research Respondents
Interviews and Small Group Discussions

Small group discussion with women whose households were affected by flooding, Kelantan, 27 April 2017.

Interview with Village Chieftain, Kelantan, 27 April 2017.

Interview with Staff at local social hall (Kem Kijang), Kelantan, 27 April 2017.

Interview with Social Welfare office (Kota Bahru), Kelantan, 27 April 2017.

Focus Group Discussion with the Ministry of Women, Family and Community Development, Putrajaya, 28 April 2017.

Endnotes

1. Focus Group Discussion, April 28, 2017
2. Ministry of Women, Family and Community Development (presentation, undated).
3. Focus group discussion, April 28, 2017.
4. Small group discussion with women in Kelantan, 27 April 2017.
5. Ibid.
6. Ibid.
7. Focus group discussion, Ministry of Women, Family and Community Development, 28 April 2017.
8. Focus group discussion with women in Kelantan, April 27, 2017.
9. Focus group discussion, Ministry of Women, Family and Community Development, April 28, 2017.
10. Key Informant Interview with Village Chieftain, April 27, 2017
11. Ministry of Women, Family and Community Development (presentation, undated).

Myanmar

Natural Disaster Context

Myanmar is one of the most vulnerable countries to natural hazards in Southeast Asia. Due to its geographical location, Myanmar is constantly exposed to cyclonic storms, floods, earthquakes, tsunamis, landslides, and epidemics. In 2012, the country ranked first on the UN Office for the Coordination of Humanitarian Affairs' (OCHA) list of "most at risk" Asia-Pacific country (UN OCHA, 2013).

In 2016, the Global Climate Risk Report ranked Myanmar as one of the countries most affected by extreme weather events over the past twenty years. Myanmar was also ranked in 2014 by The Resource and Climate Vulnerability Index (RCVI) as one of the 20 highest risk countries across the globe. Viet Nam, Philippines and Cambodia are the three other countries in Southeast Asia that were also ranked in the top 20 highest risk countries by the RCVI. The RCVI is considered as a single measure of a nation's social and economic vulnerability to climate change stresses. Based on the RCVI, countries that are at more risk of climate-related internal displacement are also more exposed to climate-induced conflict (UN OCHA, 2016).

Almost a decade ago, Myanmar suffered from the worst natural disaster ever experienced by the country. In May 2008, Myanmar's Irrawaddy Delta was hit by the devastating Cyclone Nargis. Cyclone Nargis is considered as one of Myanmar's deadliest humanitarian disasters. It was also one of the two major natural disasters that Southeast Asia has experienced in the last decade, the other being the 2004 Indian Ocean Tsunami.

Cyclone Nargis killed thousands of people and destroyed whole villages, as well as crop farms and critical infrastructure such as schools and clean water sources. Nargis also resulted in the death of thousands of heads of livestock and shrimp. Aside from deaths and destruction of homes and infrastructure, Cyclone Nargis also caused displacements of people. In terms of the gender profile of casualties of Nargis, the UN Women noted that the death rate of women during the cyclone Nargis was twice as high as those of men (2015).

In May 2008, Cyclone Nargis resulted in:

> 84,500 deaths, 53,800 missing and 19,300 injured. Out of 7.35 million people in the 37 affected townships across the Ayeyarwady and Yangon Divisions, some 2.4 million people and 13 townships were estimated to have been severely affected. Approximately 800,000 people were displaced and the Food and Agricultural Organization of the United Nations (FAO) estimated 63% of rice paddy fields in the country were impacted. The cyclone also caused widespread destruction of homes and infrastructure, including roads, jetties, water and sanitation systems, schools, hospitals, fuel supplies and electricity networks. A large number of water sources were contaminated and food stocks damaged or destroyed. Overall, it was estimated Nargis caused USD 4 billion of economic losses (MCCR, 2013).

Complicating the situation in Myanmar in the aftermath of Cyclone Nargis is that the military government rejected the international community's aid efforts or initiatives for the country including granting the US military permission to deploy its airlift capabilities to the disaster relief effort (Yu-Hong and Boon, 2012). The government declined to authorize ship-to-shore operations despite numerous offers of naval support (CFE-DMHA, 2017).

Had the international community been allowed in time, the impact of Cyclone Nargis could have been abated. To quote Yu-Hong and Boon (2012), "but with few helicopters and roads to disaster areas destroyed, it was impossible to deliver aid supplies to the victims without foreign military assistance. As a result, scores of victims perished due to dehydration, hunger and hypothermia even though they had survived the initial onslaught of Cyclone Nargis."

Recent history of natural disasters in Myanmar includes two major earthquakes, three severe cyclones, floods, and other smaller-scale hazards (see Annex). The Center for Excellence in Disaster

Management and Humanitarian Assistance (CFE-DMHA) compiled brief profiles of each of these natural disasters that occurred in Myanmar.

Institutional Infrastructure and Mechanisms

According to the CFE-DMHA (2017), the government of Myanmar has made significant progress in light of disaster management in the country since the 2008 Cyclone Nargis. For instance, the Government of Myanmar has modified its structure and created new authorities, as well as plans to improve the effectiveness of disaster management at all levels. Nevertheless, while these efforts demonstrate Myanmar government's determination to make necessary adjustments, the resources to implement the policy changes have been slower to develop.

In 2011, under the leadership of President Thein Sein, the Myanmar government formed the National Disaster Management Agency (NDMA). The NDMA was chaired by the Union Minister for Social Welfare, Relief and Resettlement. Earlier on in the aftermath of the 2004 Indian Ocean Tsunami, Myanmar government created the National Disaster Preparedness Central Committee (NDPCC), a policy formulating body chaired by the Prime Minister of Myanmar. In 2013, the NDPCC was chaired by the Vice President of Myanmar. Under the NDPCC, the National Disaster Preparedness Management Working Committee was formed. It is chaired by Vice President and vice-chaired by the Union Ministers of the Ministry of Social Welfare, Relief and Resettlement (MSWRR) and the Ministry of Home Affairs (MoHA). The Permanent Secretary of MSWRR serves as the secretary of the committee (CFE-DMHA, 2017).

In 2011, the Myanmar government also updated the Standing Order on Natural Disaster Management in Myanmar. The Standing Order was created after the devastation caused by Cyclone Nargis in 2008 and was finalized in January 2009. It defines the mandate, roles and responsibilities for national level institutions in disaster management in Myanmar. For instance, it defines the role of the armed forces in expediting search and rescue activities, protection and other disaster relief efforts. The responsibilities of the Ministry of Defense and armed forces are delineated according to four disaster phases: Normal Times, Alert and Warning, During Disaster, and Relief and Rehabilitation.

In the *Myanmar (Burma) Disaster Management Reference Handbook 2017*, the Standing Order on Natural Disaster Management in Myanmar is described in the following manner:

> The Standing Order was created post the devastation caused by Cyclone Nargis. It reflects lessons from the disaster response efforts during Cyclone Nargis and includes actions to be taken by Government agencies in the course of future disasters. It also guides the formation of committees and coordination mechanisms for a timely and coordinated disaster response (44).

In 2012, the government of Myanmar approved the *Myanmar Action Plan on Disaster Risk Reduction* (MAPDRR). The MAPDRR provides a framework for multi-stakeholder engagement on disaster risk reduction (DRR) in the country. Prepared with substantial consultation with various stakeholders, the main goal of the MAPDRR is "to make Myanmar safer and more resilient against natural hazards, thus protecting lives, livelihood and development gains." The MAPDRR identifies 65 projects that need to be implemented to meet the government's commitments to the *Hyogo Framework of Action* (HFA) and the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) (2012).

The Myanmar Action Plan on DRR provided for the creation of the Myanmar Disaster Preparedness Agency, Management Working Committee and Sub-Committees of MDPA (MAPDRR 2012). The Myanmar Disaster Preparedness Agency (MDPA) is under the chairmanship of the Union Minister for Social Welfare, Relief and Resettlement. It is composed of 13 members wherein the Union Minister for Defense and the Union Minister for Home Affairs are Co-Chairs and the Deputy Ministers of concerned ministries are members of the Agency. The Deputy Minister of MSWRR is the Secretary while Director General, Relief and Resettlement is the Joint Secretary of the Agency.

The Management Working Committee is made up of 11 members and is under the chairmanship

of the Deputy Minister for Social Welfare, Relief and Resettlement. It is constituted to coordinate the activities of MDPA and supervise the implementation of disaster management activities in accordance with guidelines of MDPA. The Deputy Minister for Defense and Deputy Minister for Home Affairs are co-chairs and the Director-General, Relief and Resettlement Department and the Director General, Fire Services Department are Secretary and Joint Secretary of the committee, respectively.

There are 14 sub-committees of MDPA created for the effective implementation of activities of the MDPA. Each Ministry has its own Executive Committee for Disaster Management. Figure 1 shows the overall institutional framework.

In 2013 and 2015, the government of Myanmar enacted the National Disaster Management Law and the Disaster Management Rules, respectively. Both laws outline the roles and responsibilities of military and civilian actors in disaster management in Myanmar. Both were also drafted by the Ministry of Social Welfare, Relief and Resettlement in consultation with disaster risk reduction experts and Myanmar Disaster Risk Reduction Working Group composed of 56 international and national organizations, led by UNDP (MSWRR-RRD, 2012).

The National Disaster Management Law of 2013 is the principal national law guiding disaster management in Myanmar. It was ratified on July 31, 2013 in line with priorities established in the *Myanmar Action Plan on Disaster Risk Reduction.* Chapter III of the Disaster Management Law contains provisions for the establishment of disaster management bodies and their duties and responsibilities. It includes provisions on requesting assistance from the Armed Forces for search and rescue operations, security in disaster-affected areas and for the delivery of assistance to victims more generally. Chapters III and IV also provide for the cooperation and liaison with foreign countries and other regional and international actors when assistance is required to expedite a response (CFE-DMHA, 2017).

The Ministry of Social Welfare, Relief and Resettlement Relief and Resettlement Department

(RRD) of Myanmar describes the National Disaster Management Law in the following manner:

Myanmar Disaster Management Law includes the provisions for formation of disaster management bodies and their duties and responsibilities for all phases of disaster, establishment of disaster management fund at national and Region/State level. The Law also provides the guidance to carry out the measures of disaster risk reduction along with the development plans in the country.

The Disaster Management Rules guides the implementation of the National Disaster Management Law of 2013. Chapter II of the Rules details the Functions and Duties of the Ministry of Social Welfare, Relief and Resettlement; Chapter III contains the Functions and Duties of the Relevant Ministries, Government Departments, and Government Agencies, while Chapter IV lists the Functions and Duties of the Department of Relief and Resettlement.

Under the current laws on disaster management, the lead government agencies involved in disaster management are the following:

- National Disaster Preparedness Central Committee (NDPCC),
- National Disaster Management Committee (NDMC),
- Ministry of Social Welfare, Relief and Resettlement (MSWRR),
- Ministry of Home Affairs (MoHA),
- Armed Forces of Myanmar,
- Ministry of Foreign Affairs, and
- Ministry of Health.

The National Disaster Preparedness Central Committee (NDPCC) is a 23-member policy formulating body for disaster management in Myanmar chaired by the Vice President. It has been constituted to take systematic preparedness measures and to undertake effective emergency response and recovery. To supervise the implementation of Disaster Management activities in accordance with the guidelines from the NDPCC is the National Disaster Preparedness Management Working Committee (NDMC) chaired by the Minister for Social Welfare, Relief and Resettlement. Disaster Preparedness Committees have been constituted at Region/State, district,

township and village tract levels to implement disaster management activities (MSWRR-RRD).

The Ministry of Social Welfare, Relief and Resettlement (MSWRR) is the central government department for disaster management. Its main functions include coordination and support to national level Disaster Preparedness Working Committee, disaster assistance, and disaster management training. It also serves as the secretariat of NDMC. The MSWRR is divided into two departments, namely the Social Welfare Department (DSW) and the Relief and Resettlement Department (RRD). The DSW takes the responsibility of responding to the social needs of Myanmar citizens while the RRD is responsible for conducting disaster management activities in accordance with the international norms and standards (CFE-DMHA, 2017).

The Ministry of Home Affairs (MoHA) is the focal point for search and rescue operations as well as the vice-chair in various committees including security, while the Ministry of Health (MoH) is the focal point for health facilities and health services in preparedness and response. The Ministry of Foreign Affairs communicates with Myanmar embassies, consulates, foreign embassies, ASEAN, United Nations, and international relief organizations during disaster activities. The Ministry has designated responsibilities during normal times, pre and post disaster and during rehabilitation. Its duty during the onset of a disaster is limited. The armed forces conduct search and rescue, humanitarian assistance, transportation and logistics, relief and rehabilitation, health assistance, security, and preparedness activities. They are represented in the National Disaster Management Committee (NDMC), the Disaster Management Centre, and the Search and Rescue Work Committee (CFE-DMHA, 2017).

Voices on the Ground: Community and Local Actors in the areas of Protection of Women and Participation in Decision Making

Disasters in Myanmar are not limited to natural disasters. Rather, disasters include both natural and man-made (relating to the ethnic conflicts within some regions). Both natural and man-made disasters pose huge challenges to both the government and its people, but natural disasters taking place in conflict zones/areas proved to create even more or greater challenges.

Women and girls are not the only vulnerable groups to natural disasters. Equally or even more vulnerable are the elderly, people with disabilities, ethnic minorities, and internally displaced peoples of the society, including those living in conflict areas.

Those in camps and evacuation centers suffer more due to the lack of gender-responsive/sensitive facilities (or structures), e.g., there are no separate comfort rooms for women, sleeping quarters are hardly segregated, no trash bins for women's sanitary napkins, and no separate shower rooms for women. It becomes impossible to address these concerns since women rely on religions infrastructure, that is, monasteries used as evacuation centers.

Based on the *Gender Needs Assessment of Myanmar Floods in 2015,* there were no separate rooms for women, no curtain or separate covers, no bathing space, not enough toilets, no place to dispose of sanitary napkins, and no place for cooking for women. Temporary shelters such as schools, relatives' and friends' houses, and religious buildings such as monasteries and churches are not safe for women.

Road access, high transport costs, and security concerns/issues exacerbate the problems in conflict areas and make disaster response and management difficult in conflict areas. Trainings and workshops for capacity building are held but not in camps due to problems mentioned above. Post-psychosocial counseling is usually provided by the government. However, limited budget support and capacity of staff prevent effective disaster risk management outcomes. The Departments of Social Welfare and Relief and Rehabilitations are not present in all districts, but both recognize the advantage of working together.

Gender mainstreaming is also recognized as important, but the budget for it is not enough. Moreover, relevant agencies of the government face some difficulties in actualizing it due to lack of baseline data on needs of peoples in different regions and how to effectively integrate gender concerns in disaster risk management.

In recent years, more items are added to emergency and dignity kits (particularly for women). However, the DRR does not store food anymore due to spoilage.

Gender-based violence (GBV) exists but awareness of it is rather low. And while physical and sexual violence are considered to be forms of violence, some social and cultural practices are never considered as a form of GBV. Also, while GBV cases occur in natural disaster contexts, these cases are not reported. The impression was that women and girls are not aware about GBV or that the actual actions of violence constitute GBV.

Traditional views about husbands in control of their wives' mobility and social engagement persist. In terms of decision-making powers and social

networking, women are also more vulnerable than men. In families, men often controlled women's mobility and social engagement, as women believe that husbands have the right to control their wives. Nonetheless, both men and women in the community are not fully aware of gender-based violence or gender equality.

Female humanitarian workers and flood response volunteers are discriminated and restricted from participating in flood responses efforts due to safety reasons and some traditional cultural views and practices.

An example was a woman CSO leader who went to a village in Rakhine state with aid packages but was not allowed by a local monk for safety reasons. Even if she was capable of managing the work,

Myanmar Disaster Preparedness Agency
Chairman: Union Minister for Social Welfare, Relief and Resettlement

MYANMAR DISASTER PREPAREDNESS MANAGEMENT WORKING COMMITTEE

Deputy Minister for Social Welfare, Relief and Resettlement	Chairman
Deputy Minister for Defense	Vice Chairman
Deputy Minister for Home Affairs	Vice Chairman
Ministers on Disaster Preparedness in Respective State/ Regions	Member
Director General for Department of Educational Training and Planning	Member
Director General for Department of Health	Member
Secretary for Mandalay City Development Committee	Member
Secretary for Yangon City Development Committee	Member
Secretary for Nay Pyi Taw City Development Committee	Member
Director General for Relief and Resettlement Department	Secretary
Director General for Fire Service Department	Joint Secretary

FOURTEEN SUB-COMMITTEES

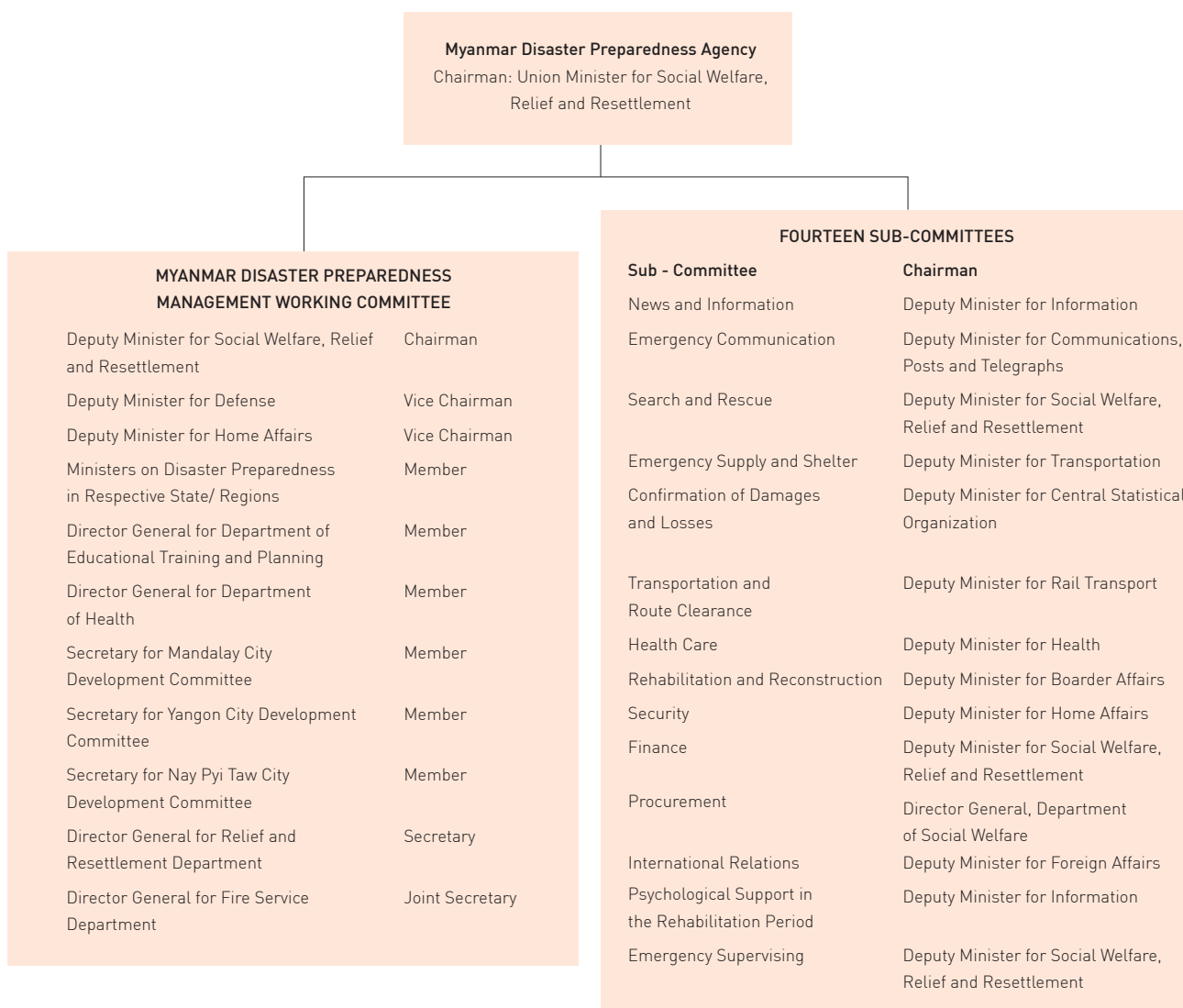| Sub - Committee	Chairman
News and Information	Deputy Minister for Information
Emergency Communication	Deputy Minister for Communications, Posts and Telegraphs
Search and Rescue	Deputy Minister for Social Welfare, Relief and Resettlement
Emergency Supply and Shelter	Deputy Minister for Transportation
Confirmation of Damages and Losses	Deputy Minister for Central Statistical Organization
Transportation and Route Clearance	Deputy Minister for Rail Transport
Health Care	Deputy Minister for Health
Rehabilitation and Reconstruction	Deputy Minister for Boarder Affairs
Security	Deputy Minister for Home Affairs
Finance	Deputy Minister for Social Welfare, Relief and Resettlement
Procurement	Director General, Department of Social Welfare
International Relations	Deputy Minister for Foreign Affairs
Psychological Support in the Rehabilitation Period	Deputy Minister for Information
Emergency Supervising	Deputy Minister for Social Welfare, Relief and Resettlement

Figure 1: Institutional Framework for Myanmar Disaster Preparedness Agency, Management Working Committee and Sub-Committees [1]

she was advised not to do it on her own but to be accompanied by women's groups. The local monk's views are supported by women from the community (Gender Needs Assessment, 2015).

In another example, female flood response volunteers in Chin State were taken less seriously than males. No one listened when a female flood volunteer gave instructions to shift boxes from one place to another, but when a male flood volunteer gave the instructions, the community followed (ibid).

There was an observation that government policy response was aimed at short-term intervention rather than a long-term one. This echoes one finding of the *Review of Myanmar's Disaster Management Law from the Angle of Inclusivity* (MCCR, 2013) that the disaster management law was "too much focus on emergency planning and response and not enough on prevention and risk reduction."

Finally, there's an expressed concern that the lack of gender- and age-disaggregated data affect government's efforts at disaster management. This concern is more visible in conflict zones or areas.

Gains and Gaps in Integrating Gender in Institutional Infrastructure and Mechanisms

A study done by the Myanmar Consortium for Community Resilience (MCCR) in 2013 found numerous gender gaps in the Disaster Management (DM) Law of Myanmar in particular, and of Myanmar's disaster management process in general. In its report entitled *Review of Myanmar's Disaster Management Law from the Angle of Inclusivity*, the MCCR identified two key gender gaps:

- Lack of understanding of the complex vulnerabilities of the population and insufficient attention to reducing their vulnerabilities; and
- No specific mention of addressing the needs of women, children, aged persons or persons with disabilities.

One of the key recommendations made by the study is for the Rules and Regulations to "overtly mention how the needs of women, children, persons with disabilities and aged persons are to be met at each stage of the disaster management

cycle."[2] More specifically, it identifies Chapters Three and Four of the law "where meticulous detail can be given of precisely how children, women, persons with disabilities and aged persons will be protected and included throughout the DM cycle and who will be responsible for ensuring each of their needs are met in practice, for example, which Ministries/Departments for which groups and which level of Minister is relevant."[3]

As observed by the MCCR (2013), the making of the Disaster Management (DM) Law was characterized by insufficient planning and preparation. The process of consultation was not inclusive of specific groups, particularly those with expertise in disability, gender, children and aged populations. As a result, key actors and groups were omitted in the process of drafting the disaster management law and consequently, critical information on how to meet the specific needs of these groups throughout the disaster management cycle is missing in the final version. On the whole, Myanmar's DM law lacks sufficient emphasis on meeting the needs of people who have high vulnerability to natural disasters. In fact, there is only one sentence in the law that alluded to women, children, aged persons, and people with disability (MCCR 2013, 22).

Having acceded to the Convention of the Elimination of All Forms of Discrimination

Interview with Assistant Director, ASEAN Committee on Women of the Department of Social Welfare, and Deputy Director of the Relief and Resettlement Department at the Ministry of Social Welfare, Relief and Resettlement in Naypyidaw, Myanmar

Against Women (CEDAW) in 1997, Myanmar has finalized its *National Strategic Plan for the Advancement of Women* (NSPAW) in the country, and its government is working with civil society to develop laws to tackle violence against women. Nonetheless, as reported by the MCCR in its study in 2013, "big question marks remain about how effectively this legislation will address women's needs in regards to risk reduction and disaster mitigation. Practices in Myanmar have so far continued to largely overlook the specific needs and vulnerabilities of women" (MCCR 2013, 19).

On December 11, 2015, U Nyan Tun, Vice President of the Republic of the Union of Myanmar and Chair of the National Natural Disaster Management Committee (NNDMC), launched the *Post Disaster Floods and Landslides Needs Assessment* (PFLNA).

The PFLNA was an assessment on damages, losses and needs and intended to support the development of a realistic recovery plan from the severe and widespread floods and landslides in July and August 2015 across 12 out of 14 states and regions in Myanmar. The rationale, findings and recommendations of the gender assessment are described below (UN Women, 2015):

> Under the mandate provided by the NNDMC, the assessment that was undertaken by the World Bank, UN and EU covered 15 sectors, including gender as a crosscutting issue. It was conducted in close consultation with government, civil society, affected communities, and the private sector.

UN Women, Myanmar and the World Bank led the collection, analysis, validation and interpretation of the gender chapter of the PFLNA together. According to Dr. Yin Yin Nwe, President's Advisor and Chair of the Advisory Group to the NNDMC, "the chapter on gender was one among three others that was well-anchored in consultations with multiple stakeholders, including local NGOs." Not only did gender constitute a stand-alone chapter, it was also mainstreamed into other sectors – agriculture, fisheries and livestock; banking and finance; health and education; housing, water and sanitation, electricity, and communications; as well as employment and livelihoods and social protection.

According to this gender assessment, women's and girls' priorities in a disaster differ in nature and degree from those of men and boys because their roles and statuses differ from — and are often secondary to — those of men and boys…. pre-disaster vulnerabilities of women and girls are exacerbated during disaster, although they also display great resilience. Myanmar has more men than women, and a high proportion of female-headed households; one out of four of which were affected in the disaster.

Some of the key gender-based concerns that emerged are as follows: Age- and sex- disaggregated data were lacking across sectors; compared to men and boys, women and girls were at greater disadvantage and had lower recovery capacity (associated with lower incomes and loss of already-fewer productive assets); women had limited mobility and less access to employment and socioeconomic resources; they had higher food insecurity and malnutrition; they were subject to increased care work with fewer safety net resources, leading to debt; they experienced a

Site visit of the Emergency Operating Center under the DRR

high level of stress; they were subject to worsened privacy, safety and security; and their participation and decision-making in response and recovery was limited, especially at local levels.

This assessment shows that women and girls brought their capacities, knowledge and networks to bare on coping and recovery — assets that must be drawn on in recovery planning. Investing in women has multiplier effects, as women tend to use benefits accruing to them for families and communities.

"To optimize and sustain investment in recovery," the assessment notes, "it is critical that women and their priorities be included in disaster assessment, response and recovery planning, and implementation — and it is especially critical that female-headed households be targeted" (UN Women, 2015).

Research Insights

Myanmar has exhibited moderate efforts at mainstreaming gender in its natural disaster governance infrastructure. There are opportunities to enhance these initiatives, particularly, in light of communicating national emergency plans and strategies to communities (including women) as well as further the capacity for gender-sensitive disaster management of actors at various levels.

Additionally, awareness-raising on and understanding of GBV in the context of natural disaster situations may also be included in the crafting of appropriate institutional responses. For example, provision for safe shelters of women (e.g. women-only shelters; partitions or curtains to separate women from men; separate bathing spaces and toilets for women and men) can be integral to the design of early relief and response.

Myanmar is on the right track in the convergence of natural disaster and gender but their efforts can be further enhanced.

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16   Thein Zaw Htike (DSW)

17   Win Ohnmar (DSW)

18   Daw Toe Toe Aung (DSW)

19   Daw Yin Yan Pyone (DSW)

Endnotes

1   See Ministry of Social Welfare, Relief and Resettlement's Relief and Resettlement Department (MSWRR-RRD). "Disaster Risk Reduction in Myanmar," (n.d.) Accessed from http://www.themimu.info/sites/themimu.info/files/documents/IEC_DRR_Myanmar_Achievement.pdf

2   See Myanmar Consortium for Community Resilience (MCCR). "Review of Myanmar's Disaster Management Law from the Angle of Inclusivity", 2013: 8.

3   Ibid, 29.

4   List of natural disasters taken from Center for Excellence in Disaster Management & Humanitarian Assistance (CFE-DMHA). "Myanmar (Burma) Disaster Management Reference Handbook, January 2017," (2017): 22-23. Accessed from https://www.cfe-dmha.org/LinkClick.aspx?fileticket=zf5i3c7xwDA%3D&portalid=0

Annex: Myanmar's Natural Disasters (2011-2016)[4]

Natural Disaster	Impact on Myanmar
August 2016 Monsoon Floods	At least 377,000 people were displaced from their homes in 6 states, Magway being the most affected area, where some 60,000 people were displaced. Five people died, 2 in Sagaing, 2 in Kachin, and 2 in Yangon. Many schools remained closed across affected areas. Floodwaters were gradually moving south towards the Ayeyarwady Delta.58 Monsoon conditions persisted as moderate to strong over the Andaman Sea and the Bay of Bengal, which created further rainfall.
July 2016 Myanmar Floods	Heavy rain started across the country, causing flooding and landslides in Rakhine, Sagaing, and Kachin. The Rakhine State Government reported that more than 24,306 people were displaced across the four most affected townships, Minbya (13,123 people), Ann (4,659 people), Mrauk-U (3,696 people), and Kyauktaw (2,828 people). As of 29 July, 15,000 people were displaced due to monsoon flooding in Sagaing, Mandalay, Magway, Kachin and Chin. The Relief and Resettlement Department (RRD) faced logistical challenges due to limited road access and flooded rivers in some areas.

Natural Disaster	Impact on Myanmar
June 2016 Tropical Cyclone Roanu	The monsoon brought higher rainfall intensity and triggered flooding in several areas in Sagaing, Rakhine, Ayeyarwady, and Bago. Based on the RRD, the incidents caused 8 deaths and affected 27,757 people. The flood also submerged 5,685 houses and damaged 246 houses in the Bago and Sagaing regions, as well as Chin and Rakhine states. A total of 14 deaths were reported from the Union-level Relief and Resettlement Department, media sources and the Rakhine State Government.
2015-2016 South-East Asia Drought	In Myanmar, a total of 146 villages suffered from water shortages during the 2015 summer season. In 2016, roughly 300 villages had shortages, with the majority of those villages located in the townships of Ngapudaw, Thabaung, Kyaunggone and Yekyi, according to the records of the Directorate of Water Resources and Improvement of River Systems (Government of Myanmar, March 14, 2016). According to the Myanmar Department of Meteorology and Hydrology, since mid-February 2016, Myanmar has been experiencing a severe impact of El Niño including extreme temperatures, unusual rainfall patterns, dry soil, high risk of fires and acute water shortages.
July 2015 Tropical Cyclone Komen	In July 2015, Tropical Cyclone Komen produced high winds and heavy rain in several states and regions (Western and Northern Myanmar). Twelve out of the fourteen regions and states were affected by flooding. On 31 July, Myanmar's President declared Chin and Rakhine states and the regions of Sagaing and Magwa, to be natural disaster zones.
July 2015 Myanmar: Floods and Landslides	Heavy rains caused floods and landslides in several parts of Myanmar in June 2015. On 30 July, Cyclone Komen made landfall in Bangladesh, bringing strong winds and additional heavy rains to the country, which resulted in widespread flooding across 12 of the country's 14 states and regions (Ayeyarwady, Bago, Chin, Kachin, Kayin, Magway, Mandalay, Mon, Rakhine, Sagaing, Shan, Yangon). On 31 July, the President declared the Chin and Rakhine states, as well as the regions of Magway and Sagaing a natural disaster zone. According to the National Natural Disaster Management Committee (NNDMC), 125 people were killed and 1.7 million people were temporarily displaced by floods and landslides.
July 2014 Myanmar Floods	In July 2014, heavy seasonal rains, landslides and strong winds throughout Myanmar (mostly the lower parts of the country) caused damage, flooding, landslides, and the collapse of riverbanks in several regions. The most affected states/regions were Ayeyarwady, Bago, Kayin, Kachin, Magway, Rakhine, Shan, Tanintharyi and Yangon (OCHA, August 15, 2014). At the beginning of August, continuous rains caused flooding in Bago Region. As of August 8, around 15,850 people from Bago, Kawao, Thanatpin and Wah townships were reported in temporary shelters. Authorities provided emergency assistance such as food rations and non-food items, and WFP sent an assessment team (OCHA, August 11, 2014). By the end of August,

Natural Disaster	Impact on Myanmar
	over 36,000 people had been displaced by floods or strong winds. In most cases, people took shelter with relatives, in monasteries or schools, and were able to return home within a few days. In the Hpakant Township in Kachin, over 3,400 people were displaced by floods after several days of heavy rains. In Mon State, some 7,000 people were temporarily evacuated. In Rakhine State, some 6,400 people were displaced due to floods and rising river levels.
August 2013 Myanmar Floods	Heavy monsoon rains and overflowing local rivers caused flash floods in various parts of Myanmar in late July 2013, affecting Kayin, Mon, and Rakhine States. It also affected the regions of Taninthayi and Ayeyarwady Regions. The flash floods initially displaced over 38,300 people, leaving 6 dead and 1 person missing, and damaged residential buildings, roads and bridges. By August 7, 73,300 people were residing in temporary relocation camps. Many others were able to return to their places of origin as heavy rains ceased and the floodwaters receded in most affected locations. In September, floods displaced more than 22,000 people across many areas of the country. Many were able to return home after floodwaters subsided. While some people were displaced for several weeks, most were displaced only for several days. Due to heavy rains, the Sittoung River overflowed and flooded nearby areas in the Bago Region from October 28 –November 2. In 4 townships, Taungoo, Yedashe, Ottwin, and Htantabin, approximately 50,000 people were displaced by the floods and sheltered in 72 relief camps opened by the government. Two deaths from the floods were reported. Floodwaters receded on November 5, and as of November 6, 15,830 people were in 33 relief camps. As floodwaters continued to recede, they were expected to soon be able to return to their places of origin as well (OCHA, November 30, 2013)
November 2012 6.8 Earthquake in Northern Myanmar	In November 2012, at least 16 people were killed and 52 injured, with over 400 houses, 65 schools, and some 100 religious buildings damaged.
August 2012 Floods Across Myanmar	The floods in different states and regions displaced 86,000 people and affected over 287,000 people. Ayeyarwady Region was the worst affected with 48,000 people displaced. Over 136,000 acres of farmland, houses, roads and bridges were damaged
October 2011 Floods in Magway Region	Nearly 30,000 people were affected. Over 3,500 houses and 5,400 acres of croplands were destroyed.
March 2011 6.8 Earthquake in Shan State	Over 18,000 people were affected and at least 74 people were killed, while 125 were injured. Over 3,000 people became homeless.

Philippines

Natural Disaster Context

The Philippines can be described as sitting "in the eye of the storm" when describing the country's disaster risk profile, ranking as the third most disaster prone country in the world. With an average of 20 typhoons a year, the country has earned the moniker "Asia's typhoon welcome mat" (Philippine Disaster Reference Handbook, 2015). The most destructive of typhoons in recent history include Yolanda (International name: Haiyan) that took 6,300 lives and cost Php 93-B in damages in the Visayan region (NDRRMC, 2013). Increased severity of storms (Haiyan is a prime example) due to climate change effects such as rising sea levels coupled with the loss of mangroves, which would have buffered the impact of such storms, make for a highly vulnerable coastal population. Corollary to incidences of tsunamis and storm surges are the prevalence of floods during the monsoon season along with the increased possibility of landslides.

Droughts and dry spells as evidenced by the El Niño phenomenon has also hurt the Philippines, damaging the agricultural sector in 13 of 17 regions in the country.

The Philippines is also positioned within the Pacific's Ring of Fire, which makes it prone to seismic and volcanic events as well (Philippine Disaster Reference Handbook, 2015). The country is host to 22 active and 5 very active volcanoes. Linked to this risk are the tectonic plates that are likewise "seismologically active." Most worrisome for the population is the West Valley Fault, which lies along the densely populated Metro Manila area.

Recent years have also seen the rise of "complex emergencies" where socio-economic or political factors dovetail with the effects of natural disasters, and inflict damages that require careful monitoring and response. In 2009, for example, evacuees from the Zamboanga siege, which affected swathes of Zamboanga City, were also affected by seasonal flooding that compounded the need for assistance in an already tense atmosphere that required an understanding of cultural, ethnic and religious lines.

One feature, which may be more apparent in the Philippine case, is the need for permanent relocation in areas, which have been identified as no longer fit for human habitation. Many of these areas are occupied by informal settlers who may need additional assistance in relocating to safe areas with access to basic services.

Institutional Infrastructure and Mechanisms

Disaster Management and Mitigation in the Philippines is governed by Republic Act (RA) 10121 or the Philippine Disaster Risk Reduction and Management Act of 2010, which superseded Presidential Decree 1566 that utilized the National Disaster Coordinating Council (NDCC) as the lead government body in managing disasters. With the current law, the NDCC to the National Disaster Risk Reduction and Management Council (NDRRMC) takes its place and creates councils at the provincial, city and municipal levels to coordinate disaster management (including the implementation of the National DRRM Plan as fit to the local context). It also provides a space for civil society in disaster risk reduction and management.

The NDRRMC is comprised of an Executive Director and a Council occupied by incumbents in national agencies and chaired/co-chaired by the following: Department of National Defense (DND) (Chair), Department of Interior and Local Government (DILG), Department of Social Welfare and Development (DSWD), Department of Science and Technology (DOST), and the National Economic and Development Authority (NEDA). Membership in this Council was expanded further from 19 to 44.

It is responsible for the following: (i) good governance; (ii) risk assessment and early warning; (iii) knowledge building and awareness-raising; (iv) reducing risk factors; and (v) preparedness for effective response and recovery. Additionally, the Office of Civil Defense (OCD), with an eye on implementation, coordinates activities under the ambit of these Councils.

The NDRRMC is chaired by the DND with 4 Vice Chairpersons on the following thematic pillars: prevention and mitigation (DOST), preparedness (DILG), response (DSWD), and rehabilitation and recovery (NEDA). Members of the Council include 14 line agencies, 11 other government agencies, 2 government financial institutions, 1 quasi-governmental agency, 1 union of Local Government Units, 1 private organization, the Office of Civil Defense administrators, and the executive director of the NDRRMC.[1]

At the local level, Local Chief Executives shall Chair the Local Disaster Risk Reduction and Management Council (LDRRMC), and local DRRM offices shall be established in every province, city, municipality, and barangay. These offices shall be responsible for setting the direction, development, implementation, and coordination of DRRM programs within their territorial jurisdiction.[2]

Seventeen regional DRRMCs, 81 Provincial DRRMCs, 140 city DRRMCs, 1,494 municipal DRRMCs, and 42,046 barangay DRRMC Committees support this. DRRMC coordination during disasters or emergencies is seen in Table 1.

The NDRRMC-established mechanism in disaster response is the cluster approach. This harmonizes efforts of all humanitarian actors in responding to the needs of internally displaced persons (IDPs). There are 11 response clusters (and the agencies in charge):

- Food and non food items (DSWD)
- Camp coordination (DSWD)
- Camp management (DSWD)
- IDP Protection (DSWD)
- Education (Department of Education–DepEd)
- Water Sanitation and Hygiene (Department of Health–DOH)
- Search Rescue and Retrieval (Armed Forces of the Philippines–AFP)
- Law and Order (Philippine National Police–PNP)
- Logistics and Emergency Telecommunications (OCD)
- International Humanitarian Assistance (Department of Foreign Affairs–DFA)
- Management of the Dead and Missing (DILG)

According to the National Focal Point (NFP) for this study, all response clusters have been gender mainstreamed.[4] This is defined in the *National Disaster Risk Reduction and Management Plan (NDRRMP) 2011 - 2028* as one of the cross cutting themes:

"Gender mainstreaming is about the recognition, acceptance, identification and addressing of the different roles, needs, capacities and vulnerabilities of men and women. The NDRRMP is committed to promoting gender-sensitive vulnerability and capacity-analysis in all disaster risk reduction and management activities. It encourages balancing the roles, responsibilities, needs, interests, capacities of and effect on both genders of contingency plans as well as implementation of community-based activities. Gender mainstreaming is about reducing the vulnerabilities of men and women to disasters, and encourages a balance in the participation and decision making roles of men and women in DRRM" (NDRRM Plan 2011-2028: 36).

Affected Areas	DRRMC Coordination
1 Barangay	Barangay Disaster Committee
2 or more Barangays	City / Municipal DRRMC
2 or more Cities	Pronvincial DRRMC
2 or more Provinces	Regional DRRMC
2 or more Regions	NDRRMC

Table 1. Disaster Coordination [3]

Front lining initiatives on women affected by natural disasters are the DOH and the DSWD. The DOH has as Health Emergency Management Bureau (HEMB) that has a preparedness and response division, and coordinates with other disaster-related agencies (DILG, DSWD, and OCD), which may issue joint memoranda, aside from department orders and circulars to instruct respective bureaucracies during times of natural disasters.[5]

The DOH maintains clusters in health which include: (i) health and medical services; (ii) nutrition; (iii) water, sanitation and hygiene (WASH); and (iv) mental health. All four clusters contribute to programs run during times of natural disasters. In summary, the following services that involve women's health and wellbeing that may be offered during times of natural disasters is seen in Table 2.

Further downstream, the DOH has Disaster Response and Assistance Management (DREAM-H) managers to ensure the running of hospitals and DOH related programs in times of natural disasters in line with the DRRM Plan. However, according to Dr. Afuang of the HEMB Unit of DOH, the importance of a proactive Local Chief Executive (LCE) in the success of the enterprise as the local government holds the key to integrating disaster risk reduction, response and management, and increasing the level of awareness of their constituents. She names the province of Albay in the Bicol region of southeast Luzon as having an "ideal structure." Aside from the prioritization of the LCE, a resilient health system (DOH also promotes the communities as partner through their "5K" Vision or *Kaligtasang Pang Kalusugan sa Kalamindad sa Kamay ng Komunidad*), pre-positioning of supplies and working early warning systems help tremendously during times of natural disasters.[7]

In terms of international assistance in these programs, UNICEF has contributed to training, and World Health Organization (WHO) has contributed to capacity building in these or similar areas.[8]

The protection cluster, on the other hand, falls under the DSWD as an agency. With schools less considered as evacuation sites, DSWD has piloted "Women Friendly Spaces" (Tanauan, Leyte) and "Pilot Evacuation Centers" (Sta. Cruz, Laguna), which more specifically respond to the needs of evacuees, including vulnerable groups such as women, children and the elderly.

The Municipal Welfare Social Worker and Development Officer (MSWDO) plays a crucial role in the protection of women and children before, during, and after natural disasters. The Office of the MSWDO frequently serves as a link between the local government units (LGU) and the communities in identifying beneficiaries and organizing communities after natural disasters.

Affected Areas	DRRMC Coordination
Health and Medical Services	Reproductive Health Adolescent Health STDs; HIV AIDS MISP-SRH ("kits") Outbreaks Emergencies and post-disaster outbreaks
Nutrition	Malnourished children Pregnant and lactating mothers
WASH	Sanitary facilities
Mental Health / Psychological Services	Ensuring mental health after disasters (e.g. Batangas earthquake)

Table 2. Health and Well-Being Clusters [6]

Other initiatives after natural disasters include the Office of the Presidential Assistant on Recovery and Rehabilitation (OPARR), which was created via Memorandum No. 62 by former President Benigno C. Aquino III in the wake of Super Typhoon Yolanda in December of 2013. This was given the task to additionally oversee rehabilitation, recovery and reconstruction efforts and coordinate with the already existing NDRRMC and other stakeholders including affected local governments, government agencies, funders and consultants.

President Benigno S. Aquino III, on April 22, 2015, signed Memorandum Order No. 79 transferring the functions of the Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR) to the National Economic and Development Authority (NEDA) in order "to ensure continuity and enhance the coordination and monitoring of various rehabilitation programs undertaken by the government for those affected by Super Typhoon Yolanda."

In his last year in office, President Aquino III signed into law the *Children's Emergency Relief and Protection Act* or RA 10821 that protects minors who are of the most vulnerable sectors during times of disaster via: (i) improved family tracing for unaccompanied minors; (ii) disaggregated data collection to identify children; (iii) training workshops on child-focused response; (iv) expedited restoration of lost civil documents; and (v) limitation on the use of schools as evacuation centers.

Voices on the Ground: Community and Local Actors in the areas of Protection of Women and Participation in Decision Making

In the case of Sta. Cruz, in Laguna, the MSWDO named at least 8 barangays, which were highly vulnerable during floods. She notes that while there are seasonal rains, it was the experience of Tropical Storm Ondoy, which flooded areas from October until April (2009-2010) that has made the most impact on the communities. This was followed by the experience in Typhoon Pepeng (2009) and Typhoon Santi (2013).

After these experiences, there were two big improvements in Santa Cruz: the building of the

Pilot Evacuation Center (2014) that would seek to address the issue of temporary shelter during times of flooding in the area, and the establishment of the relocation site in Barangay Ugong that were funded via DSWD Core Shelter and a donation from the International Organization for Migration (IOM).

While the MSWDO has organized the women into an organization, KALIPI, and there do exist homeowner's association(s) in the relocation site, there still seems to lack a sustainable solution to the livelihood issue. Some training, also coordinated and facilitated by the MSWDO and/or the Technical Education and Skills Development Authority (TESDA), has taken place, not all have thrived either because of lack of resources, markets or just the will to continue with the livelihood training given.

Mothers did appreciate home-based livelihood, such as carpet and rag making using "*retaso*" or discarded pieces of cloth, which they buy by the

Pilot Evacuation Center in Sta. Cruz, Laguna

Lactating room for women in the evacuation center in Sta. Cruz, Laguna

Child-friendly spaces in the evacuation center in Sta. Cruz, Laguna

Relocation site in Sta. Cruz, Laguna

Day Care Center in Sta. Cruz, Laguna

Barangay Ugong Relocation Site – also within Santa Cruz is the Barangay Ugong relocation site intended for families who used to reside along the lakeshore or riverbed. While located within Santa Cruz and safe from flooding, interviewed families have mentioned the need for sustained livelihood nearby, particularly for the women in the community who still have to tend to their children. The Relocation Site has a daycare center and a nearby school (from elementary to Senior High School) and access to health services from the Barangay.

sack from nearby factories. What is lacking, in the opinion of many of those interviewed, was the access to markets and work without the additional cost. As one resident differentiates their old residence from the new one,

> *"Mas okay doon, kasi hindi na kami namamasahe at hindi katulad dito, kung wala kang kinse pesos, di ka makakarating sa … kasi sa palengke, yung mga kapatid ko, nangingisada pero dito lahat binibili"* (It's better there because we do not have to commute and unlike there, if you do not have 15 pesos, you cannot reach the market place. My siblings sell fish in the marketplace but here, I have to buy everything).

However, when asked about how life has improved in the new area of domicile, the resident adds

"*pagtatanim – saging, kamoteng kahoy*" (you can plant bananas and root crops).

Members of the community have said that after some time (three to four years), they have gotten used to living in the area and life is generally good. There is a "make do" spirit within the community and a general atmosphere of looking after one another in their new locale. Their concerns over livelihood and access to water and electricity are shared concerns that they have raised collectively. They have also acceded that they are safe in their new home: *"Ayun, di na kami nababaha. Safe naman."* (We are no longer flooded. It is safe.) The Homeowner's Association President in the DSWD Core Shelter is *Tita* Helen who is respected by the community. Small group discussion

participants claim that *Tita* Helen resolves community problems, whether they be between men or women, sometimes literally "getting in the middle of it" to referee the dispute.

The MSWDO also echoes this sentiment: that women have a role to play in community leadership, noting that a fair number of community leaders – including those who report and assist during times of natural disasters – are women. She also claims that women have also assisted in orienting other women in their community on laws such as the *Violence Against Women Act* and *Women's Rights*.

Gains and Gaps in the Integration of Gender in Institutional Infrastructure and Mechanisms

The Commission on Audit noted that the full implementation of RA 10121 was still lacking and noted difficulties in "coordinating, collaborating, making timely decisions, which came across as un-readiness and ineptitude to respond to a host of emergencies and crippling crisis," and noted the pitfalls of shared authority where "command and control can hardly operate in an expedient manner." Accountability for public funds and private donations in the aftermath of Yolanda were widely questioned, alongside what was perceived to be the substandard quality of rehabilitation efforts, particularly in the housing sector.

Further, Section 13 of RA 9710 or the Magna Carta of Women covering *Women Affected by Disasters, Calamities and other Crisis Situations* states that:

"Women have the right to protection and security in times of disasters, calamities and other crisis situations especially in all phases of relief, recovery, rehabilitation, and reconstruction efforts. The State shall provide for immediate humanitarian assistance, allocation of resources, and early resettlements, if necessary. It shall also address the particular needs of women from a gender perspective to ensure their full protection from sexual exploitation and other gender-based violence committed against them.

Responses to disaster situations shall include the provision of services, such as psychosocial support, livelihood support, education, and comprehensive health services, including protection during pregnancy.

Timely, adequate and culturally-appropriate provision of relief goods and services such as food, water, sanitary packs, psychosocial support, livelihood, education and comprehensive health services including implementation of the Minimum Initial Service Package (MISP) for sexual and reproductive health at the early stage of the crisis

Proactive adoption of measures by camp managers to prevent sexual violence in evacuation centers and relocation sites which include: (1) security and safety of women as key criteria for selection of evacuation sites; (2) separate functional and well-lit latrines for men and women with locks; (3) bathing facilities with privacy; (4) regular security patrols preferably by female police officers; and (5) prohibition of alcohol, drugs and gambling, among others."

However, Abarquez and Parreño (2014) note that gender differences affect the following areas: (i) disaster prevention and mitigation which saw more women's concerns are more complex than just prevention of disasters as decision making and other concerns were also raised; (ii) in disaster preparedness, women comprise about 30 – 60 % of disaster teams at the barangay level but at the local level, much contextual sensitivity is required; (iii) disaster response also needs cultural sensitivity, especially in areas where the possibility for gender-based violence is high; and (iv) disaster rehabilitation and recovery scenarios have highlighted the resilience of women, particularly as they go about seeking livelihood opportunities and in women's reproductive work.

Porio (2014) also pointed out that women-headed household in Metro Manila have a more difficult time recovering post-disaster than male-headed households.

Research Insights

The Philippines has had several institutional measures that operate in cases of natural disasters. In fact, these measures are known to institutional actors and thus, applied when requisite circumstances are present. There is a strong coordination between LGUs and national government agencies and such best practice should be duely documented.

Furthermore, there is current thinking as regards permanent relocation sites as evacuation from many disaster-affected areas necessitate the permanent movement of affected peoples. In this light, the needs of recovery and rehabilitation, particularly in the area of housing and livelihood, must also be broadened.

Interestingly, the Philippines is strong in both natural disaster and gender institutional framing and practices. However, both areas of concern have yet to concretely and fully complement each other. This essentially means the need for discursive and practical convergence in order to fully manifest the operationalization of gender considerations in natural disaster response.

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Research Respondents
Interviews and Small Group Discussions

1. Lucy Acosta, PESO, Sta. Cruz, Laguna, June 5, 2017

2. Mardith Afuang, MD, MPH, Department of Health, May 16, 2017

3. Lucille M. De Leon, MSWDO, Sta. Cruz, Laguna, June 5, 2017

4. Esther Geraldoy, DSWD, Personal Communication, June 25, 2017

5. President, IOM Homeowners Association, Barangay Ugong, Sta. Cruz, Laguna, June 5, 2017

6. Small Group Discussion and Interviews with female residents of Barangay Ugong, Sta. Cruz, Laguna, June 5, 2017

Endnotes

1   Esther Geraldoy (NFP), personal communication with the author, June 25, 2017.

2   Ibid.

3   Ibid.

4   Ibid.

5   Mardith Afuang, personal interview, May 16, 2017.

6   Mardith Afuang, personal interview, May 16, 2017; and researcher's notes

7   Ibid.

8   Ibid.

Singapore

Natural Disaster Context

The Republic of Singapore borders Malaysia along the Johore Straits. It is an island city-state, the smallest of all nations in the ASEAN.

According to the 2014 assessment of Prevention Web, Singapore has a very low risk in natural disasters.[1] However, they have had experiences of flash floods due to heavy rains but no extensive effects were reported.[2] In fact, recorded data from Emergency Events Database (EM-DAT) of the Centre for Research on the Epidemology of Disasters (CRED), there were no deaths or affected people recorded for natural disasters from the subgroups of climatological (e.g. drought, glacial lake outburst, widlfire), geophysical (e.g. earthquake, mass movement, volcanic eruption), hydrological (e.g. flood, land slide, wave action), and meteorological (e.g. storm, extreme temperature, fog) from data sets from years 1900 to 2000; and from this same period, the only recorded deaths and affected people were biological in nature (i.e. viral epidemic) in 1999, 2000, and 2003.[3] CRED defines 'disaster' as "a situation or even that overwhelms local capacity, necessitating a request at the national or international level for external assistance; an unforseen and often sudden event that causes great damage, destruction and human suffering (Guha-Sapir, Hoyois, and Below, 2016). Accordingly, to be included in the EM-DAT, any one of the following should be present: 10 or more people killed; 100 or more people reported affected; declaration of a state of emergency; and call for international assistance.

According to Hu-Yung Lai and Tan (2013), based on various government reports, the list of affected people and those who died in natural disasters in Singapore were in the following years:

- 1978, floods – less than 100 affected; 7 deaths
- 1997, SEA haze – less than 100 affected, 0 deaths
- 2000, hand, foot and mouth disease (HFMD) – 3,790 affected; 3 deaths
- 2003, severe acute respiratory syndrome (SARS) – 238 affected; 33 deaths
- 2006/07, SEA floods – less than 100 affected; 0 deaths
- 2009, H1N1 avian influenza – 1,348 affected; 18 deaths

More recently, heavy rainfall caused flashfloods in the city. The June 2010 flashflood that affected business and shopping areas along Orchard Road was an example of this. A few informal conversations with Singaporeans during the course of this research also mentioned flashfloods affecting several parts of the city due to heavy rains.

But even as the country has not been affected by large-scale natural disasters compared to other countries in the Southeast Asian (SEA) region, given that almost 80% of the over 5 million of the population reside in high rise buildings, high population density in these areas can translate into extensive damage to life and property as a result of a natural disaster situation.[4] According to Yu-Hung Lai and Tan:

> "A major disaster of any sort could inflict mass casualties and extensive destruction to properties in Singapore. Clearly, like its neighboring countries, Singapore is also vulnerable to both natural and man-made disasters alongside its remarkable economic growth. The potential risks may result from its dense population, intricate transportation network, or a transnational communicable disease. Moreover, Singapore can be affected by the situations in surrounding countries. For example, flooding in Thailand and Viet Nam may affect the price of rice sold in Singapore" (2013: 1).

Needless to say, therefore, Singapore prepares for emergency events in relation to responding to largely disasters and emergencies (both natural and human-made) in the context of a highly-urbanized society. And in this sense, Singapore learns from particular experiences they had.

For example, Singapore has been periodically affected by trans-boundary haze pollution coming

from forest fires and open burning from Indonesia for several decades[5] --- the worst have been in 1997 and then again in 2015. During this period, the impact of the haze in Singapore has been the increase of respiratory tract illness, asthma, and rhinitis; additionally, accidents and emergencies in connection with haze-related complaints were said to have also increased. Impact on the Singaporean economy was noted in the areas of tourism, construction, and factory productivity.[6] During the September 2015 haze situations, schools were closed and food delivery services were suspended; the Singaporean Government also took measures to protect the more vulnerable citizens.[7] The trans-boundary haze pollution was a human-made issue that crossed over to politics and governance. In this regard, the haze pollution was one of the agenda discussed between Indonesian President Joko Widodo and Singaporean Prime Minister Lee Hsein Loong during their first bilateral retreat in 2016.[8]

Another experience that changed the institutional approach to emergency or crisis situations has been that of the severe acute respiratory syndrome (SARS) that hit in 2003 (Perreira, 2008). According to Hu-Yung Lai and Tan (2013), the SARS epidemic experience shifted the paradigm from a single-agency led response centered on civil defence, to a multi-sectoral governance structure adopting "a comprehensive disaster management framework, an all-hazard approach that includes a mechanism for seamless integration at both strategic and operational levels among various government agencies" (8). In other words, SARS was a health crisis situation that impacted on the political, economic, and social lives of the people and was dealt with largely a comprehensive and systematic state-centric response. Of these, the one most felt by the people was the government's institution of "many draconian policies, such as social distancing, quarantine and isolation, as risk mitigating measures" that "created an instinctive withdrawal from society for the general population" and triggered behavior "which resulted in the public avoiding crowds and public spaces with human interaction" (Hu-Yung Lai and Tan 2013, 19-20).

According to a resource person interviewed for this study, since Singapore has neither a large scale natural disaster or crisis experience where a large part of the population has been affected, there can be no measure as regards resilience.

> "All the systems, plans, and programs are in place but my only worry is the psychological recovery of the people. We are so not used to disaster and if one day, it does happen --- yes, we can respond, yes we can survive but can we really recover psychologically? We do not know because we have not experienced them ourselves. We are prepared as a nation but are we also resilient? We haven't gone through any large scale natural disaster so how do we even know that we are resilient. Singapore is a very young nation. Generations before me --- like my grandmother and mother's generation --- are resilient because they experienced war, they lived through World War II. It is our generation and the younger generation that we are worried about --- the post-war generation may not be as resilient as the previous generations."[9]

The last largescale crisis that impacted Singapore was during the Second World War, the 1942 Battle of Singapore.

In 2015, Singapore remained in the top 1 of the Change Readiness Index (CRI), as it did in 2013.

Institutional Infrastructure and Mechanisms

Article 150 (1) of the 1965 Constitution of Singapore provides special powers to the President to issue a Proclamation of Emergency when "grave emergency exists whereby the security or economic life of Singapore is threatened."[10] This was reiterated by a respondent from the Ministry of Home Affairs (MHA) who said that "in extreme circumstances, the President can also declare a state of emergency under Article 150 of the Singapore Constitution."[11]

Additionally, Singapore Civil Defence Act of 1986 provides the main legal mandate as regards instutional response in times of emergencies. Specifically, it defines civil defence emergency along the lines of both natural and human-made disasters consisting of "any fire, explosion, earthquake, oil spill, eruption, flood, storm or other happening (whether or not attributable to an attack by an enemy or to any warlike act) that causes or may cause destruction of or damage to property or loss of life or injury or distress to persons or that in any way endangers the safety of the public in Singapore

or in any part thereof."[12] In this regard, civil defence is thus understood to constitute "the planning, organization, coordination and implementation of measures, other than measures amounting to an actual combat, that are necessary or desirable for the safety of the public, and are designed to guard against, prevent, reduce, or overcome the effects or possible effects of a national emergency or a civil defence emergency and includes the conducting of, and participation in, drills, exercises and training for such purposes."[13]

In the same vein, the Singapore Civil Defence Shelter Act of 1997 provides for the legal mandate with regard to sheltering the population during times of a state of emergency as declared by law.[14] As mandated by law, 'shelter' is defined as "a shelter in any building or part thereof for the use of any person needing to take refuge therein during a state of emergency" that includes 'household shelter' or "shelter in a house or flat for the use, primarily, of the occupants of that house or flat, and of persons ordinarily frequenting that house or flat, during a state of emergency"; 'storey shelter' "located on any storey of a building which is subdivided into flats for the use, primarily, of the occupants of, and of persons ordinarily frequenting, the flats on that story of the building;" 'public shelter' or "shelter in any building or part thereof for the use of any person needing to take refuge therein during a state of emergency;" and an 'improvised shelter' or "any building or part thereof which has been designated by the Commissioner under section 7 as a shelter for the use of any person needing to take refuge therein during a state of emergency."[15]

Other laws related to crisis management are the Emergency Act, Immigration Act, Public Order Preservation Act, and Infectious Disease Act.

Overall, Singapore's management and response to crisis situations (both natural and human-made) employs a 'whole of government approach,' which essentially means that they are state-driven. According to the presentation of the Ministry of Foreign Affairs (MFA) on "Crisis Management: A Singaporean Perspective," a crisis or emergency is defined as "sudden incidents involving actual or potential loss of lives or damage to property on a large scale requiring multi-agency efforts or which may pose grave implications on a national,

diplomatic or political level,"[16] and thus backed by legal frameworks --- such as the Singapore Civil Defence and Singapore Civil Shelter Acts --- "provides legal authority for Government to act during crisis situations, lends legitimacy to Government decisions and actions required during crisis, and helps maintain or restore social order."[17]

This 'whole of government approach' is also adopted in the country's integrated risk management' (IRM), which is aimed at strengthening risk awareness of government and the wider public. According to Hu-Yung Lai and Tan (2013), the IRM "medical response systems during emergencies, mass casualty management, risk reduction legislation for fire safety and hazardous materials, police operations, information and media management during crises and public-private partnerships in emergency preparedness" (ibid, 6). Inter-agency cooperation, communication, and coordination is therefore key for the comprehensive institutional infrastructure that responds to both natural and human-made disasters or emergencies.

This institutional infrastructure is Singapore's Homefront Crisis Management System (HCMS) (Figure 1) comprised of three levels. At the top of the strategic level is the Homefront Crisis Ministerial Committee (HCMC) that provides "strategic and political guidance on handling crisis." It is chaired by the Minister of the Ministry of Home Affairs (MHA) --- the government agency that serves as the primary polic-formulating institution for safety and security.

> "The Ministry of Home Affairs (MHA) coordinates the entire Government effort to prepare for various crisis scenarios, such as a terrorist incident, flu pandemic and others that could affect Singapore on a national scale. This is done through the Homefront Crisis Management System (HCMS) where MHA will work closely with other Ministries and Government agencies to coordinate a Whole-of-Government response to the crisis." [19]

> Below the MHA is the Homefront Crisis Executive Group (HCEG), chaired by the Permanent Secretary of the MHA, and is responsible for planning and managing various types of disaster in the country.

> "Our civil [defence] and disaster management agencies are constantly improving their operational

Homefront Crisis Ministerial Committee
(HCMC Minister for Home Affairs)

Homefront Crisis Executive Group
(HCEG PS for Home Affairs)

HCMC/HCEG Secretary
(Deputy Sec. Security, MHA)

Incident Manager (i.e. Singapore Police Force, Singapore Civil Defence Force or Ministry of Health)

Crisis Management Groups
(CMGs)

Secretariat (Ministry of Home Affairs)

CMG Health

CMG Border Control

CMG Housing & Social Support

CMG Diplomatic Support

CMG Transport

CMG Education

CMG Economic Sustainability

CMG Environment

CMG Safety & Security
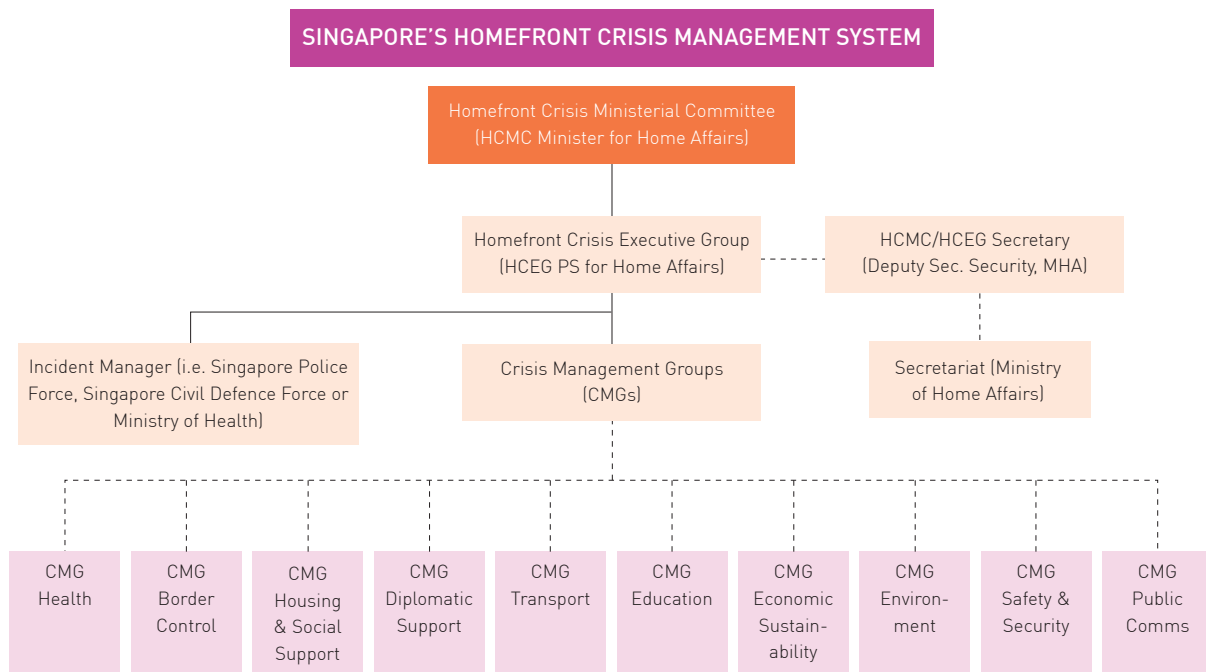
CMG Public Comms

Figure 1. Singapore HCMS Structure[18]

capabilities to handle disasters and crises. In addition, over the years, the Home Team has introduced a variety of [programs] to better prepare the community for emergencies. These include outreach [programs] such as the SG Secure Campaign to educate the public on emergency preparedness and training the public in basic first aid, fire-safety and emergency preparedness skills to respond to a major incident occurring in the neighbourhood." [20]

As further explained by another key informant respondent:

"In the event of a national disaster, the Ministry of Home Affairs (MHA) leads at the strategic level of incident management. The Homefront Crisis Management System (HCMS) is spearheaded by the Homefront Crisis Ministerial Committee (HCMC) and the Homefront Crisis Executive Group (HCEG). The HCMC, which is chaired by the Minister for Home Affairs, provides strategic and political guidance on handling a crisis. Permanent Secretary (Home Affairs) chairs the HCEG, which comprises high-level representatives from ministries and government agencies. It ensures that HCMC decisions and directives are carried out.

The Homefront Crisis Executive Group (HCEG) makes executive decisions and provides operational oversight before and during a crisis. It is chaired by the Permanent Secretary [Home Affairs] with high-

level policy makers from various ministries and government agencies (including the Permanent Secretaries and Heads of Statutory Boards) as members. Commissioner SCDF is a member of HCEG. HCEG is scalable and flexible as the role of the HCEG is to ensure that a comprehensive and integrated multi-agency system is in place to anticipate threat and disaster scenarios, and to prepare contingency plans to avoid, pre-empt, prevent or ultimately deal with any peacetime emergency." [21]

At the operational level is the Crisis Management Groups (CMGs) composed of relevant ministries that are responsible for responding to various facets of disasters (e.g. health, border control, housing and social support, diplomatic support, transport, education, economic sustainability, environment, safety and security, and public communication). Alongside it is the Incident Manager (IM) for the management of civil emergencies taken on by the Singapore Civil Defence Force (SCDF) that directly connect to the work of various agencies (e.g. Ministry of Health, Ministry of Information, Communications and Arts, Ministry of Foreign Affairs, and National Environment Agency) at the tactical level and coordinating multi-agency emergency response under the HCMC. As IM, the SCDF is responsible for undertaking pre-emergency planning and for coordinating responses during emergencies (see Figure 2).

The SCDF developed a national contingency plan known as the Operations Civil Emergency (Ops CE) that requires a multi-agency response. In this light, the SCDF defines civil emergency consisting of "sudden incidents involving large-scale loss of lives or damage to property; major incident with potential to escalate in scale; grave national, diplomatic or political implications; and require multi-agency response to manage the entire spectrum of events arising from the incident."[23] Identified emergency scenarios in the OpS CE are: major fires, major transport incidents, major industrial types accidents, and acts of terrorism involving hazardous materials (or hazmats). Natural disasters, such as earthquakes that may occur without enough warning, are not included; at most, the only one listed as a natural threat is the imminent rise in sea level.

Integral to Singapore's institutional programs are the crisis and post-crisis response and recovery and community-level preparedness. For the former, they have institutionalized the National Care Management System (NCMS) that "provides expertise on psychological and emotional support to cushion and mitigate emotional trauma during and post-crisis situations."[24] The NCMS is led by the Caring Action in Response to an Emergency (CARE) Network. As regards the latter, they have the Community Emergency and Engagement (C2E) Committees "formed in each constituency to strengthen community resilieance by involving residents, grassroots leaders, educational institutions, business, religious, voluntary welfare organizations and other community partners" as well as the Community Development Councils (CDCs) that "administer various [programs] and schemes to residents."[25] According to a resource person respondent, both the CARE and C2E are designed for immediate life saving response at the community level.[26]

Specific to the initiatives of the SCDF is the Community Emergency Preparedness Programme (CEPP) composed of three sub-programs, namely, 'I Am Safe,' 'Response Ready,' and 'Lifesaver' programs.[27] According to an SCFD key informant respondent:

"The SCDF conducts the CEPP which is available to members of public at the Public Education Centers located within the four SCDF Divisions. Since its introduction in 2003, the [program] has been an effective platform in enabling the SCDF to impart emergency preparedness (EP) knowledge and skills to the community. It is a highly subscribed programme and more than 40,000 individuals participate in the programme annually.

In November 2016, the five-modular CEPP was streamlined into a three-tier structured [program], focusing on core lifesaving skills and essential emergency procedures with greater emphasis on practical hands-on engagements." [28]

Furthermore, the SCDF has a community engagement framework is known as the 'Civil Defence (CD) Ready Programme' intended to highlight community awareness on emergency preparedness and basic life saving skills to particular audience --- the residential heartland (CD Ready Home), student population (CD Ready School, and workforce (CD Ready Workplace). In the case of the CD Ready Home:

"The Emergency Preparedness (EP) Day event is the SCDF's flagship community outreach efforts in the residential heartlands to engage the residents in EP and lifesaving skills.

In Singapore, more than 80% of the population resides in high-rise public housing, which makes the heartlands a good venue to conduct the EP Days.

Since its introduction in 2003, the EP Day event has been successful in generating interest and awareness on community emergency preparedness. It is a carnival-like event where residents can pick up knowledge on emergency preparedness and lifesaving skills.

More than 40 EP Day events are held annually across the island and these half-day events are held predominantly in the residential heartlands with an average turnout of 500 residents per event. As terror attacks are on the rise, Singapore has an anti-terrorism movement named SGSecure that was launched in September 2016, and EP Day events now focus on anti-terrorism messaging in support of SGSecure.

One of the highlights of the EP day event is the

ORGANISATION STRUCTURE OF SINGAPORE CIVIL DEFENCE FORCE
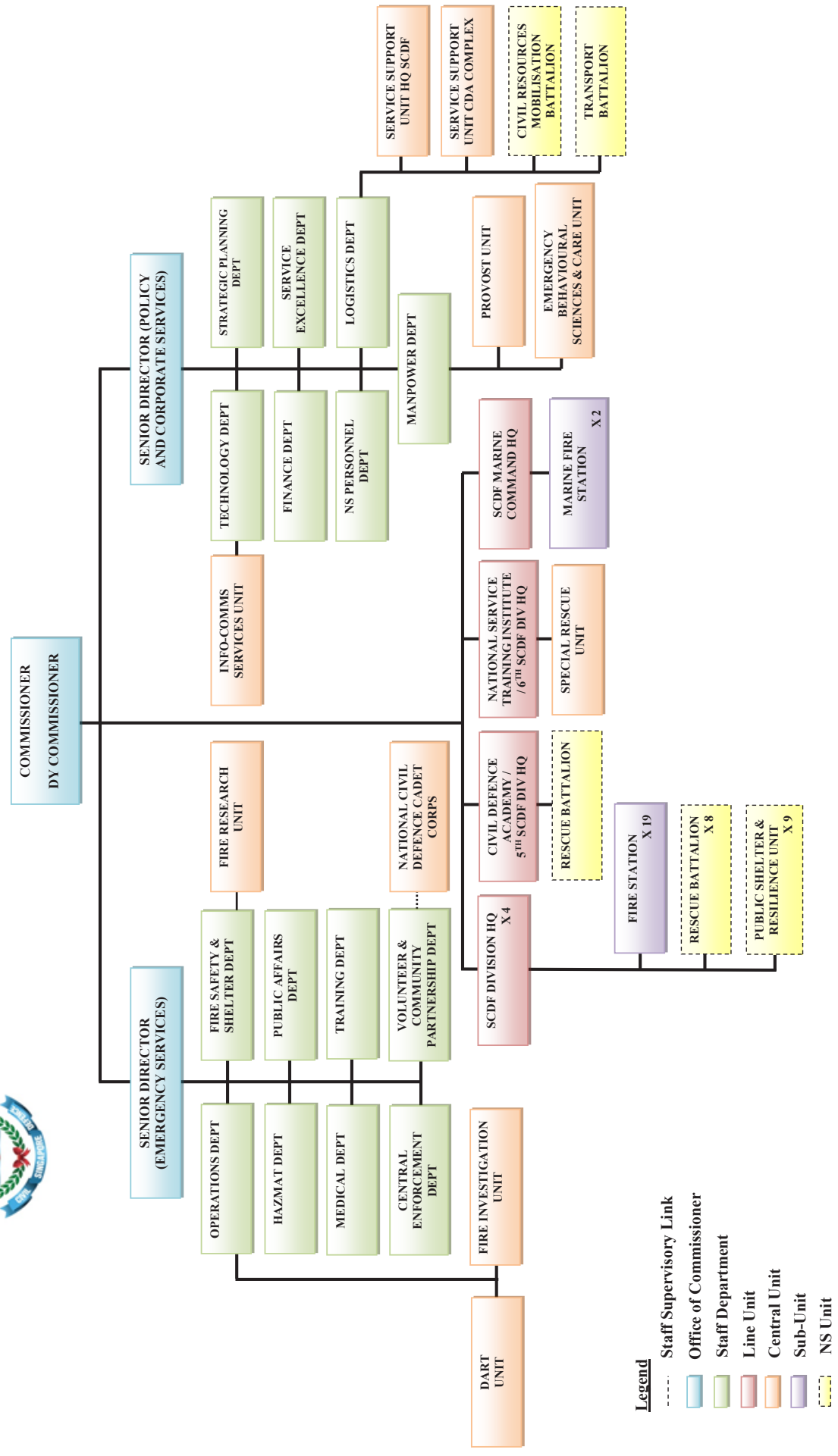
Figure 2. SCDF Organisation Structure [22]

scenario-based exercise, which aims to prepare residents for emergencies and to encourage community resilience by getting them to be more self-reliant in times of emergencies. The scenario exercise, in the form of 'live' demonstration, is currently based on terrorism-related scenarios such as gunmen attack, to sensitize and educate residents in dealing with terror situations, in case they were to be caught in a terror attack one day.

Booths are also set up to educate residents on 'Triangle of Life' skill sets – namely first aid, CPR-AED procedure and basic firefighting. Residents can hands-on at the booths to get a taster of such life-saving skills, and should they be keen to learn more, they can sign up for our Community Emergency Preparedness Programme (CEPP)." [29]

To a large extent, SCDF is central to the country's management and response to crisis situations. As summarized by the SCDF key informant:

"All our programmes aim to train the various communities to be competent in the Triangle of Life. Through adequate training and encouragement, the community will be encouraged to step forward to take on the role as 'Community First Responder', and render assistance during emergencies prior to the arrival of emergency responders." [30]

All of the study's respondents share the same view that the disaster/emergency infrastructure is largely state-centric. Other actors or service providers --- such as as local non-government organizations (NGOs) do not have direct roles, although they do contribute in a very indirect way. For example, a resource person from the Singapore Committee for UN Women said that, "We do think that the Government does a good and consistent job in taking care of its citizens --- we have been involved in government consultations on various, along with other NGOs, although nothing specific to natural disasters." [31] Another resource person from Mercy International explained:

"The Government is fully in charge of implementing all natural disaster programs so NGOs do not have much role in it because everything is covered by government. However, we have a long-term indirect partnership with SCDF as one of the stakeholders of the natural disaster preparedness program. This is done through message alignment where we share the same message with the SCDF that preparedness is way for communities to survive." [32]

A similar insight was provided by resource person from the Singapore Red Cross (SRC) who said:

"In as far as Singapore is concerned, response is largely government-driven. There is very little role of civil society — largely, only in support of government. The civil emergency mechanism is in place and this is what should work." [33]

Furthermore, as added by another resource person, in the case of SRC, their support role focuses on assisting the 'walking injured' in times of emergencies.

"We do not have any formal agreement - we function as a needs basis should the government need emergency support. For example, in the family assistance center managed by the MHA, we can be asked to assist in providing first aid. Another is during the disaster itself - or what we call event support - that the SCDF may also ask for assistance." [34]

But then again, he quickly noted that response to largescale disaster has not really been tested because it has not happened yet: "It is not a question if Singapore is safe from disaster --- it is a question on how when it strikes." [35] In this light, he cited the CARE network as being there to provide specialized psychosocial support but may not necessarily be as effective when dealing with a mass scale post-disaster/emergency situation. Therefore, there is really a role for civil society to support disaster and crisis/emergency response in the country. After all, the test of resilience is effectively rising from the destruction and rebuilding various facets of the peoples lives --- and this will take joint efforts both from state and non-state actors.

Thus, although the institutional infrastructure on disaster and crisis/emergency response is largely state-led, there are still spaces for non-government actors to participate. Operationally, since Singapore has yet to experience a large scale emergency, their current participation is focused on preparing for the event --- through messaging and support services deployment in the eventuality of such a situation. Strategically, the entry point for civil society actors would be the consultations called by government on various issues. Apart from these spaces, others take a more proactive role. Such is the

case of the S. Rajaratnam School for International Studies (RSIS) that established a Humanitarian Assistance and Disaster Relief (HADR) Program in 2014 "to facilitate and enhance policy-relevant and academically rigorous research on preparedness and response strategies to the fragile and unpredictable humanitarian scenarios" in the Asia Pacific through a comprehensive examination of "emerging humanitarian landscapes, regional emergency response frameworks, disaster preparedness, humanitarian technology, and the indication and development of response niches for civilian and military actors."[36] Integral to their initiatives would be engaging with the relevant national government agencies in Singapore as well as from other countries, including a community of practitioners.

> "They often refer to it as public-private-people sector. The people or the third sector is civil society. There are instances when key stakeholder meetings are called by government — these are think tanks, NGOs — coming together to share updates and their insights /responses on issues. But this has not yet been done in the case of natural disasters. So when we talk of interface in the context of natural disasters, the ones pointing outward are humanitarian assistance provided by both our government and NGOs while the ones pointing inward would be those that have to do with preparing people and communities or initiatives at trying to build community resilience." [37]

Gains and Gaps in Integrating Gender in Institutional Infrastructure and Mechanism

Women and girl's rights are enshrined in the Singapore's 1961 Women's Charter --- particularly those related to spousal and family relations, property rights, marriage and divorce, and violence. But in the context of natural disasters or emergencies, these issues have not interfaced with the institutional discourse and practice. This is because in as much as the comprehensive disaster/emergency preparedness and response has been institutionalized, gender has not been made explicit.

As a matter of practice, data collection, such as those collected by the Ministry of Health (MoH), have been disaggregated on the basis of gender, age, and ethnicity. However, according to the Interim National Progress Report on the Implementation of the Hyogo Framework for Action (for the period of 2007-2009) submitted by Meteorological Services Division, National Environment Agency (NEA), the description pertaining to gender was that of not having "acknowledgement of the issue in policy or practice; or, there is some acknowledgement but nothing/little done to address it."[38] Such observation, in fact, begs the question on how comprehensive the Singapore system is if there is no explicit consideration as regards gender.

The total population of Singapore was estimated at 5.54 million with 61% of this number were Singapore citizens, 10% permanent residents, and 29% non-residents. This data shows that for every 1,000 females, there were 965 males in 2015, and 963 in 2016.[39] As Table 1 illustrates, from 2012 to 2016, there were more elderly women than elderly men.

From the same time frame, there were more men participating in the labor force than women (although there is an increasing trend for the latter): 76% male, 57.7% female (2012); 75.8% male, 58.1% female (2013); 75.9% male, 58.6% female (2014); 76.7% male, 60.4% female (2015); and 76.2% male and 60.4% female, (2016).[41] There were more men participating full time in the labor force while there are more women engaged in part time labor. Even volunteers in grassroots organizations under people's associations have more males than females during the five-year time frame, despite little increase in the percentage for women.[42] However, when it came to the data on volunteers in general, the gap between male and female volunteers is very close --- with women outnumbering men in years 2012 and 2014 (see Table 2).

Deducing from these gender data, the following observations may be significant in seeing the link between gender and disaster or crisis/emergency response:

- There are more females than males in the general population, although the difference is not largely significant;

- There are more elderly women than elderly men;

- Although there is an increasing trend on women's participation in the labor force, there is a significant gap as regards male and female participation;

Year	% of Elderly Women	% of Elderly Men
2012	54.3	45.7
2013	55.3	44.7
2014	55.1	44.9
2015	54.9	45.1
2016	54.7	45.3

Table 1: Percentage of Elderly Women and Men [40]

- Women participating in the labor force are more engaged in part time work; and

- There is an increasing trend of women participating in general volunteer work.

As regards the laws, policies, and programs on natural disaster and crisis/emergencies, gender is not part of the institutional discourse because it is not seen as an issue. To a large extent, this is a reflection of the predominant belief in Singapore that there is no distinction with regard to the status of women and men and accordingly, gender equality is a non-issue. As one resource person explained:

"Based on my own understanding, from the Singapore context, (women's) vulnerability is marginal. The disparity of access between women and men may not really be there and there are strong safety nets on the ground." [44]

Given this perspective, the dominant claim is that the natural disaster and crisis/emeregency "policies and practices are all-inclusive and have no gender-biasness."[45] In other words, there is no preferential treatment for women and there is no need for affirmative action since women and men in Singapore are (perceived to be) equal anyway. According to one resource person interview respondent:

"Programs run by the Singapore Government [are] not gender-sensitive because gender itself is not an issue. There is no major discrepancy on the social status of men and women. So in progams such as natural disasters, we don't really highlight gender issues --- hence, programs are all inclusive as they say. You would see equal participation of women and men in these programs." [46]

Based on such notion, mainstreaming gender at the strategic or policy level does not exist. In fact, both institutional respondents from the MHA and the SCDF have the exact explanation on this matter when they said:

"There is no particular strategy/approach that we adopt to incorporate gender perspective in our laws, policies and programs. We are generally gender neutral in terms of operations. Our departments that work on policy matters and our line departments are staffed by a good mix of both gender." [47]

The same claim was made as regards some operational initiatives. For example:

"Our information materials, orientation programs and volunteer training [do] not provide any distinction based on gender. Both genders are welcome to sign up for our [programs] and also as our volunteers."[48]

However, the 'good mix of both genders' or welcoming 'both genders' to be involved does not necessarily mean gender balance or parity. For example, as shown by the number of women in senior management, operations, and personnel, women's participation in the disaster/crisis

Year	% of Females	% of Males
2012	42.1	57.9
2013	43.5	56.6
2014	44.1	55.9
2015	44.6	55.4
2016	45	55

Table 2: Percentage of Females and Males as Volunteers in Grassroots Organizations [43]

institutional infrastructure is significantly low or none at all (see Table 3).

An insight from another resource person took note of the perceived equality between women and men but highlights the importance of gender-disaggregation and women's participation:

> "The message of inclusivity is typically the response we get from government when asked about gender — the message is, 'don't worry because we take care of everyone.' However, there would still be a strong preference to have things disaggregated. So while we believe that in times of disasters, the Singapore government can take care of both men and women, we would still like to know what is particularly done for women and other groups. Because in any context, when women are not part of decision-making, it would be less likely that their interests would be represented." [50]

This insight essentially points to the important fact that the belief in the existence of the equality between women and men does not diminish the utility of gender-mainstreaming in strategic institutional discourse and practice since natural disasters and crisis/emergency situations affect women and men differently. For this reason, inclusion and participation of both should be concretized --- and in the case of women, they can contribute to the nuancing of preparedness and response programs based on their own experiences.

In fact, as related to the outbreak of SARS in 2003 that led to the recalibration of the institutional paradigm of crisis/emergency preparedness and response towards a 'whole-of government-approach,' basic data as related to gender could have served as an entry point to integrating gender considerations. For example, Quah and Hin-Peng (2004), in their study on crisis prevention and management related to the SARS outbreak found that "women were more inclined than men to take preventive measures," a finding which "is consistent with other studies on health behavior in Singapore" (366).[51] Furthermore, another study found that out of the 238 SARS cases, 67.6% were females (or 161 females compared to 77 males) (Goh et al 2006, 303). Of this number, most of the affected females were in the 25-34 age range (53), followed by those from 15-24 (29) and 35-44 (29) (ibid). Interestingly, there were 84 female health care workers affected compared to 13 male; and 77 female non-health care workers[52] affected compared to 64 males (ibid.). Beyond the statistics lies the 'human face' of the epidemic that claimed lives and the threat of loss. In this light, human stories of women and men vary --- with the former being burdened more psychososially than the latter. For example, there have been stories on how women dealt with the loss of their husbands due to SARS, and nurses (who are mostly women) who contracted the disease because they were caring for SARS patients.[53] Such realities – whether in numbers or in lived narratives – do point to the fact that women and men are impacted by crisis differently, which brings the point of the importance of gender in any disaster preparedness and response architecture, even in the case of Singapore.

However, as previously mentioned, this has yet to be made explicit in the Singaporean case. Another example would be in terms of the temporary shelters during emergency situations provided in law where there is yet any articulation both at the strategic and operational level for nuancing gender dimensions of temporary displacements. Provisions for protecting against sexual and gender-based violence (SGBV) --- which happens in many evacuation areas or temporary shelters in other countries --- is not in the language of any natural disaster and crisis/emergency plan or program in Singapore. This is the case despite on-going campaigns against violence against women (VAW) or domestic violence by several Singaporean

Year	Number of Males	Number of Females	Subtotal
Senior Management (Directors)	13	3	16
Division Commanders	7	0	7
Staff Department	360	160	520
Central Unit	200	30	230
Line Unit	1690	190	1880
National Service Unit	8400	0	8400

Table 3. Number of Women in Disaster/Crisis Institutional Infrastructure[49]

NGOs. To a large extent, therefore, the natural disaster and crisis/emergency system that does not take into consideration issues such as VAW may not be prepared or capable to handle them when they do occur. Although sexual harrassment is not taken lightly by the SCDF as an organization, their client-based programs have tended to 'invisibilize' them: "VAWG does not come under the purview of SCDF." [54]

In trying to explain this this gap, a resource person shared:

> "Maybe the lack of experience of natural disaster in Singapore domestically is also a reason why gender has not been explored in this context. It is not really an active pigeonholing of gender but it is more on it not being actively discussed in situations of disasters. Certainly we have the programs and mechanisms on natural disasters but I think because we haven't experienced these situations, [it] may explain the kinds of priorities we have right now."[55]

In other words, gender is not (yet) a priority probably because they have not experienced natural disasters themselves and have not seen how gender is implicated in crisis/emergency preparedness and response. However, in the case of their SARS experience --- which was already considered to be a crisis/emergency situation --- a closer attention to data and narratives would already served as a guide for consideration of a gender-nuanced institutional response. But this has yet to be made explicit, at least on the strategic level. Nonetheless this does not mean that the institutional infrastructure completely sets gender aside as there are incipient ideas related to it, although still largely outside of the strategic institutional architecture. Thus, even as there was indeed no explicit expression of gender nor any mention of women as part of the vulnerable group at the strategic level, incipient ideas as regards them are noted and may probably (eventually) related to the tactical level.

First incipient idea is the inclusion of a 'special category' category of women as part of vulnerable groups. For example, both MHA and SCDF made it very clear that:

> "Singapore does not make any distinction based on gender in our laws, policies and programs related to emergency and disaster response. However, special

attention would be given to care for the needy and vulnerable members of the society who may be affected, which would include pregnant women, children and the elderly." [56]

Deducing from the articulations of both MHA and SCDF, the conditions of vulnerability accruing to women may be in connection with their reproductive role (i.e. pregnancy and childcare) and age (i.e. elderly women). For example, during the September 2015 haze, the government "urged the elderly, pregnant women and children to minimize outdoor exposure."[57] Similarly, in the health bulletin issued by NEA in August 2016, the same advisory was given:

> "The elderly, pregnant women, and children should minimize prolonged or strenuous outdoor physical exertion…persons who are not feeling well, especially the elderly and children…should seek medical attention." [58]

But between the pregnant women and the elderly, the latter seem to be a more prominent idea. This was validated by other respondents of the study of which the responses were:

> "What I think is more highlighted in connection with vulnerability is our aging population. For us, we are focusing on our aging population besides (or instead of) gender. Vulnerability [is] somehow perceived to be tied with mobility --- and the less mobile are the elderly. For me this is more concerning than gender. In Singapore's context, there is no obvious risk of the exclusion of women."[59]

"The country's focus is on the elderly and the impression is there are more elderly women than men — which makes elderly women as a category of its own when it comes to vulnerable groups."[60]

Statistically (as shown in Table 1), there are indeed more elderly women than men, and in the context of natural disaster and emergency/crisis response, a point for consideration would be specific responses to their needs. Such consideration is feasible and doable because in practice, Singapore seems to be doing several steps that caters the situation of elderly, and what needs to be done is to nuance the response to elderly women who are more in number than elderly men.

Second incipient idea is with regard to 'special considerations' for women. For example, when asked about how the SCDF tries to ensure the human rights of women during the different stages of disaster response and assistance, the key informant shared what he believed to be one of their best practices:

"One example would be in the event of a hazmat incident. Special provisions are made for female decontamination for modesty.

Protecting the modesty of the female victims vs. urgency of saving life. If situations permit, it will be best if female victims can be handled by female responders, treated by female paramedic, decontaminated by female staff and holding area specific for female before conveyance to advance care." [61]

Furthermore, there was also the recognition that "more can be done to assist the female gender in the recovery phase of the disaster --- housing, mental health, physical health, etc."[62] But of course, this is easier said than done. Comparing with other country contexts, the operationalization of disaggregated response based on gender has not really been as doable as imagined for the specific reason that not to many of the first responders are women. In the case of Singapore, the institutional infrastructure on disaster and crisis/emergency response does not really have that many women. Thus, as opined by the SCDF respondent:

"(But) often, it is tough to be able to achieve this due to responding crew composition variation, volume of female victims vs male victims, triaging of conveyance for advance care is via victim injuries not by gender." [63]

Nonetheless, when asked about providing spaces for women's participation in the institutional infrastructure on disaster and crisis/emergency response, both MHA and SCDF claim that there are opportunities for women --- particularly, "female staff officers both in MHA and SCDF working in relation to disaster and emergency response do get to participare in disaster and post-disaster planning and programming."[64] The same cannot be said for the participation of women at the community level since both institutions replied

that they have no data on this item: "We do not track gender specific data on participation rates."[65] But as per the observations of NGOs, women in communities are more likely to participate in various preparedness programs. For example, as one resource person explained:

"In the Singapore context, most of the youth leaders in communties are young women --- they are more socially active and they have very good participation in social programs. For the older generation, many are housewives and thus, have not really participated in the formal labor force --- but they are usually the ones who volunteer as community helpers or community responders. These women have more time and thus can volunteer more. In fact, there are many mothers who bring their children to orientation programs."[66]

Thus, a third incipient idea would be related to the role of women in communities as well as in the households. This is because more than participating in preparedness and response programs cascaded in various communities, it is still vital to recognize the need for community women's participation in designing these programs themselves. For example, the women can contribute to preparedness kits in a way that would take stock of the family's needs. In the SCDF instructions for 'ready bags,' there was mention as regards "child care supplies and other special care items" as essential things "to meet the special needs of any special groups in the family, e.g. infants."[67] Additionally, it also instructed that people "may have more than one Ready Bag, e.g. one for each family member; decide what is most practical for your family." In theory, the larger part of the population that stay home more often because they are either working part time or not working at all (i.e. housewives and elderly) are women. If this this the reality, then they would be the ones to decide what each of their family member would need. Furthermore, they would be more conscious of what female members of their families would need, regardless of age. Thus, it is more likely that they may prepare more gender-sensitive and age-appropriate ready bags. This, of course, is a just matter of logical deduction where practical implications may be considered because to a large extent, appropriate and effective preparedness is in the details.

As aptly explained by one resource person,

"In various ways, in different types of disasters, we always try to highlight women and women's situations not only from the victimization perspective but also the importance of including women in the rebuilding and patching up a village, a society, and a country. So this goes to prove that the frame of UNSCR 1325 is useful for conflict related disasters. For other scenarios like natural disasters where women and children are [the] first consideration because they experience the worst impacts of climate change — worst hit than anybody else. This has to be recognized and it is not just a group of men who should decide on what to do with it. The recognition should be on how a group of women too can come up with remedies, to budget, to have open eyes to have disaster relief take on women's concerns into account, and to make sure women are involved in the decision-making and rebuilding. In other words, women are there in all aspects of it." [68]

Given that these incipient ideas are present outside of the strategic level of the disaster and crisis/emergency institutional infrastructure is indicative that Singapore still considers gender, albeit not as explicitly. Gender-inclusivity is the predominant institutional discourse that reflects a more 'generalized' rather than 'specific' or 'preferential' response. However, since gender has not been explicitly mentioned in any law, policies, or plans, the tendency is to say that the whole institutional infrastructure is gender-blind. This is not overwhelmingly true for Singapore primarily because there are implicit indications as regards considerations for women based on certain circumstances such as reproductive and care giving roles and social perception (i.e. modesty). These considerations may, in fact be taken, as possible discursive entry points to advance a more gender-aware disaster and crisis/emergency strategic environment and infrastructure in the country. An explanation provided by one of the resource persons provides a guiding insight as regards the openness to consider gender:

"We are starting a project with communities in Indonesia so that fires could be mitigated and henceforth, haze lessened. It is a very indirect way of looking at the problem. As you know, the haze issue has political undertones and thus, it is very difficult for the Singapore Government to engage

the Indonesian Government in a GtoG level so the strategy was to go via NGO route. We conducted a scoping study a couple of months back just to understand the issues on the ground. All projects of our organization, even not focused specifically on women and women's empowerment, always has considerations as reagards gender. So when we asked communities in Indonesia about local knowledge about the fires and how to manage them, we really found out that there are many local actions, especially from women. Because women know their roles in their families and communities, they are also very much aware on how fires affect them. Thus, when proposing the final project to the Singapore Government, the insights from these women will definitely be part of it --- that they will be drivers of the project." [69]

Furthermore, there is also the perspective on the role that Singapore may play:

"I think we should look at the flip-side. I mean we've talked about what happens in Singapore but we must also talk about what happens outside. This is where the conversation should also take place. I mean pitching gender in natural disaster in the ASEAN is an appropriate space. The gender lens in natural disaster is important — even a multi-dimensional lens of framing things in a certain way. Knowledge transfer is also very vital here — training on gender mainstreaming across the board. How do we use the experiences of others when we come back to our respective countries? How do we ensure that these would be carried to the strategic level?" [70]

In other words, the potential of Singapore lies in its ability to prepare internally and to assist externally. From this vantage point, it can learn from the policies and practices of others on gender-sensitive natural disaster and emergency/crisis preparedness and response, integrate these learning in its own system, and share this knowledge back to its neighbors in terms of a state-centric implementation.

Research Insights

Singapore has not yet been affected by large scale natural disasters in the same magnitude as those that have affected other countries in the region. The nearest experience they had was with regard to SARS and the haze. Learning from these events, they reflexively and proactively developed a comprehensive and systematic institutional infra

Meeting with RSIS and MFA.

structure to respond to emergencies and crisis situations. Central actor and implementer here is the government, supported by NGOs, and followed by the communities; central strategy is that of preparedness --- being able to respond when a disaster does strike.

At the strategic (i.e. policy) level, Singapore has them --- both inward-and-outside looking programs and initiatives. All resource person respondents share the common view that DRR is largely a state-centric concern. This essentially means that it is strictly the government's business to prepare and respond to natural disaster and emergency situations. However, because the country has yet to experience any large scale natural disasters, none of these have been put to the test. In this regard, in as far as DRR is concerned, all that the government has implemented are in preparation of their occurrence and in assisting other countries that have experienced them.

In connection with gender, all plans and programs are silent on it --- it is not a priority neither is it a concern because the underlying claim is that of inclusivity. All resource persons agreed to this claim altough based from either possibilities: (1) gender is not a concern because of the perception that women and men are seen as equal in Singaporean society; or (2) gender is not a priority in DRR because women are not seen as part of the vulnerable groups, except when they are pregnant. In as much as the institutional vulnerability discourse is concerned, the vulnerable groups are children, elderly, and persons with disabilities.

However, a closer look at gender-related data do point to the necessity to reconsider this position --- specifically, on building on incipient ideas on women in connection with the roles they play in Singaporean society. Additionally, even from the perspective of agency and participation, it has been pointed out that women (youth) have the potential to contribute to DRR preparedness initiatives. This observation makes sense in light of the gender data on women who have a tendency to volunteer more. In this regard, it is possible to recruit more women to be part of the institutional infrastructure themselves --- as responders, as care providers, among others.

Taken together, the comprehensive disaster and crisis/emergency institutional infrastructure of Singapore can benefit from acknowledging more deeply how gender is implicated planning for and responding to such situations. Gender-inclusivity can actually be exemplified when institutionalized in the rubrics of policy and actuated in the various stages of response (i.e. preparedness, early relief, recovery, and rehabilitation).

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44   Resource Person Interview, Singapore Red Cross, May 25, 2017.

45   Email response of a prospective key informant contact, April 24, 2017.

46   Resource Person Interview via Skype, Mercy Interna-tional, May 5, 2017.

47   Quoted from both MHA and SCDF key informants' written responses. Received on June 2, 2017.

48   Ibid.

49   Quoted from SCDF key informant's response. Received

on June 2, 2017.

50   Resource Person Interview via Skype, May 8, 2017.

51   This study entitled "Crisis Prevention and Management during SARS Outbreak, Singapore" linked demographic data on "sex, age, and attitude (anxiety and perception of open communication with authorities)" and found that they "were associated with practicing preventive measures."

52   According to the study, on-health care workers pertained to family members, friends or visitors, in-patients, and others.

53   See for example, Judith Tan, "Gone but Not Forgotten." The New Paper on Sunday, March 10, 2013 Accessed at https://www.nuh.com.sg/wbn/slot/u3007/Patients%20 and%20Visitors/Newsroom/Media%20Articles/2013/ MAR/100313%20TNP%20Pg%2010%20-%2012.pdf.

54   Quoted from SCDF key informant's written response. Received on June 2, 2017. With regard to sexual harassment, the respondent explained:
"The organization takes a serious view on sexual harassment. Officers may approach the Director of Manpower or Deputy Commissioner directly and any such complaints would be investigated thoroughly and professionally. Depending on the nature and seriousness of case, the organization would not hesitate to report the complainant to police for further investigations."

55   Resource Person Interview, S. Rajaratnam School of International Studies, May 25, 2017.

56   Quoted from both MHA and SCDF key informants' written responses. Received June 2, 2017.

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59   Resource Person Interview, Singapore Red Cross, May 25, 2017.

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61   Quoted from SCDF key informant's response. Received on June 2, 2017.

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Thailand

Natural Disaster Context

Thailand is "less susceptible to natural hazards than many of the countries in the Asia-Pacific region" due to "land masses in the east and [it] does not lie on a tectonic plate boundary" (CFE-DMHA, 2015). The country, however, has had its share of hazards-turned-disasters, the most recent of which was the 2011 Bangkok flooding.

There is some disagreement on the level of risk of particular hazards in Thailand. According to the Department of Disaster Prevention and Mitigation (DDPM), "floods, accidents and explosions" are the "greatest source of risk" (ibid). The U.S Agency for International Development Office of Foreign Disaster Assistance (USAID-OFDA) lists "floods, storms and droughts" as the riskiest.

According to the Disaster Risk and Financing Program (DRFP, 2012) of the World Bank, the scale of hazards in Thailand from 1970-2009 is as follows:

- High: flood;

- Medium: landslide, drought, storm;

- Low: earthquake, forest fire, tsunami.

For DRFP, "disaster risk is a function of hazard (storms, floods, droughts, earthquakes, etc.), exposure (people's location and assets), and vulnerability (susceptibility to damage and loss)," and "is normally expressed as the probability of loss of life or destroyed or damaged assets in a given period of time" (ibid, 4).

Meanwhile, according to the DDPM 2012 Report, the tsunami of December 2004 was the "most catastrophic disaster" in Thailand. The 9.0 magnitude earthquake devastated the provinces of Phuket, Trang, Phang Nga, Krabi, Ranong, and Satun.

There seems to be growing consensus, however, that flooding is the "most serious hazard in Thailand" and is "both common and destructive" (ibid).

The flooding of 2010 and 2011 brought severe damage to Thailand's people, land, and properties. Data for 2010 are as follows: 5 million people affected, 79 fatalities, 6,400 sq. km. of agricultural land flooded. The total cost of damages amounted to more than USD$ 1 billion. Figures for 2011 are as follows: 2.5 million people affected, 813 fatalities, 17,578 sq. km. of agricultural land flooded with the total cost of damages amounting to more than USD$46.B billion (ibid.). It was "the worst flooding yet in terms of the amount of water and people affected," and that aside from affecting agricultural lands, the floods also affected industry with seven major industrial estates "inundated by as much as 3 meters (10 feet) during the floods" (DRFP 2012, 12).

Floods, alongside droughts, high surface temperatures, storms, and sea level rise reveal the effects of climate change on Thailand's physical environment. Bangkok has always been touted to have "the potential of being submerged in water in the coming decades" and in fact, even before the Great Flood of 2011, the Bangkok Metropolitan Administration (BMA) signed the Bangkok Declaration on Mitigation of Climate Change in 2007 with 23 public and private organizations. Bangkok aims to deliver "3.5% percent of its renewable sources in 2020" (ibid).

Institutional Infrastructure and Mechanisms

Thailand's disaster governance is anchored on the Disaster Prevention and Mitigation Act of 2007 that mandates disaster management at the national and local levels (CFE-DMHA, 2015). At the national level, there is the National Disaster Prevention and Mitigation Committee (NDPMC), which is responsible for national policy-making. The NDPMC is chaired by the Prime Minister or the designated Deputy Prime Minister. At the local level, policy-making is done by the Provincial Disaster Prevention and Mitigation Committees and the Bangkok Metropolitan Committee.

The Department of Disaster Prevention and Mitigation (DDPM) is in charge of "coordinating all disaster management activities with the relevant

organizations" (ibid). As per Article 11 of Disaster Prevention and Mitigation Act B.E. 2550, DDPM is "mandated to be the central government agency under the umbrella of the Ministry of Interior to undertake the work on disaster prevention and mitigation at a national level" (ibid).

Created through the Bureaucrat Reform Act of 2002, the DDPM was formed by the following organizations responsible for disaster prevention and mitigation: (1) Civil Defense Division of Department of Provincial Administration; (2) Department of Accelerated Rural Development; (3) Department of Social Welfare, Department of Community Development; and (4) Office of National Safety Council. The DDPM has a head office in Bangkok, 18 Regional Operation Centers, and 75 Provincial Offices across Thailand (DDPM, 2012).

On climate change concerns, there is the Office of Natural Resources and Environmental Policy and

Planning's (ONEP's) Office of Climate Change Coordination (OCCC), which is the national lead for coordination for the United Framework Convention on Climate Change (UNFCC) and the Kyoto Protocol (CFE-DMHA, 2015).

The implementing mechanism for disaster management in Thailand is seen in Figure 1.

Aside from the government structures, there are many groups in Thailand that play a "vital role in providing assistance to the affected communities" during disasters: "civil societies, local, national and international public organizations such as business sectors, non-government organizations, volunteers, academics, monks, churches and many others" (GFPN-APEC 2009, 30).

After the 2004 tsunami, groups like the Federation of Southern Fisherfolk and Save Andaman Network that had been working in the affected communities for quite some time were crucial in post-disaster
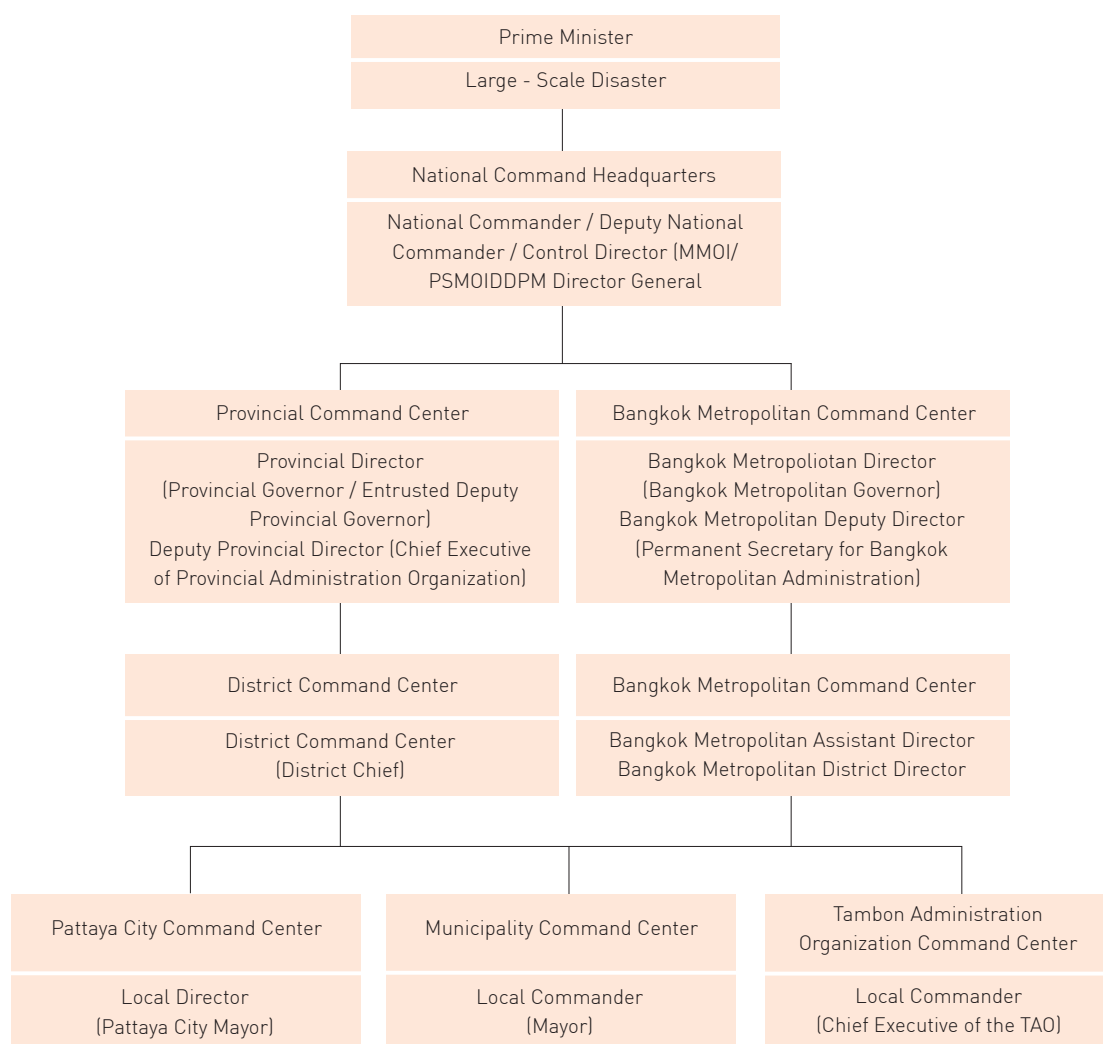

Figure 1: Implementing Mechanism Arrangement for Disaster Management in Thailand [1]

efforts, especially in relation to distribution of relief goods.

Of late, the DDPM crafted the Strategic National Action Plan (SNAP) on Disaster Risk Reduction 2010 – 2019 "in close collaboration between national government agencies, private sectors, and civil society organizations to address the implementation of the Hyogo Framework Agreement (HFA)." The HFA (2005-2015) was a post-2004 Tsunami agreement between 8 affected countries in Asia and 168 nations, and served as a "global guideline on undertaking prioritized disaster risk reduction activities." The SNAP comprises guidelines and action points in four disaster risk reduction strategic components, namely (i) prevention and mitigation; (ii) preparedness; (ii) emergency response; and (iv) post-disaster management (ADPC, 2013).

Voices on the Ground: Community and Local Actors in the areas of Protection of Women and Participation in Decision Making

1. Key informants from local communities and local governments confirm that disaster management in Thailand is indeed about flood management.

The local government of the province of Trang confirms that flood is the recurring disaster in the province. In the past year alone, three floods have devastated the province, one in December 2016, another in January 2017, and still another in February 2017. According to the Provincial Governor, around 50,000 people or 10% of Trang's population had to be evacuated, as floodwaters would not subside for two weeks – each time it hit the province. Out of ten districts in the province, five were affected by the floods.

Said data from the Governor was validated by at least two village communities or tambons. One community is an area where agricultural activities abound (hereinafter referred to as the "agricultural area"), and the other community is dominated mostly by the rubber/palm oil plantation sector (hereinafter referred to as the "rubber plantation area").

According to the village chief of the agricultural area, their village is a "water basin," as it is situated along the side of River Trang, and water from rains always passes through the village before it goes to the next one. The name of the village, in fact, reflects the village's precarious situation. It is named after "Hong" which literally means, "swamp area," and after "Trut," which is a kind of tree that grows in swamp areas.

According to the villagers interviewed in this study, the flooding that they used to experience was "not dangerous" because "water went out to the sea" and "there used to be a forest". In recent years, however, "development and housing" has caused floods to remain the village, and that "the land is not natural as before." These floods, the villagers claim, now reach 2 to 3 meters high and "everyone with one-story houses" always needs to be evacuated. These villagers "don't have enough money for a second floor" and have to contend with being evacuated each time there is a flood. One villager said that sometimes, "the flood is not high but it is strong." Another said, "I have to stand in flood water while cooking." The effect is not only physical, some claim, but they also describe it as "psychological." This is because they get worried and are afraid each time they experience flooding and most "are not able to work." Others are also worried that "it feels like it has become a normal situation."

The villagers claim that the local administration once constructed a dyke along the Trang River to prevent flooding but the dyke was "not strong enough and [was] made from soil" and was destroyed by flood, and this made the subsequent floods more destructive.

According to the Tambon Chief, 732 out of 1,800 families were affected by the 2016-2017 floods. In each of these families, there are three to four persons. Aside from homes, the floods also affected agricultural production. Moreover, employees could not reach their places of work, and carpenters and construction workers could not perform work

Focus Group Discussion (FGD) with village officials and community women in Trang (rubber plantation and fisheries)

Group Discussion with Trang Provincial Governor (center), and Trang Provincial Officials and Staff who work on disaster risk reduction management

at a time of flooding. In the words of the Village Chief, "all have been affected by floods."

The rubber plantation area is in an even worse situation than the agricultural area because it is located in an area where two rivers meet. During floods, they are often the first and the hardest to get hit. According to the Tambon Chief, 50% of their area are flood areas, with 11 villages always affected by floods. Economic activities in the area such as rubber/palm oil plantation and fisheries/ aqua culture are also always affected.

The villagers of the fisheries area claim that "the river is not able to flow naturally" and that a canal that used to be part of the river is now a "dead canal." There have been attempts, they say, to dig a "man-made canal" that would make the river waters flow faster to the sea but construction has still not been completed, even after three years – also due to insufficient funds. All these cause the water to rise 2 to 3 meters and the "floods stay for almost three months." People cannot fish because of the floods and the rubber trees cannot produce sap, the villagers claim.

Key informants from civil society groups also attest to the devastation that floods bring to Trang. Aside from problems with housing and healthcare, there is also the problem with safety. During floods in Trang, a CSO leader reveals that residents have to contend even with poisonous animals such as snakes that get into houses. Another CSO leader claims that he had experienced 6 floods in a year and in that experience, the major problem he

encountered was having no access to water services.

2. Communities affirm the positive, active presence of Thailand's disaster management infrastructure and mechanisms. They also claim, however, that said presence must take into account specific contexts and that a 'one-solution-fits-all' formula will not work.

In Trang, the "government goes directly to the people" during disasters. "We do not hold office at city hall during floods," the Trang Governor claims. The Trang government also has a record of the households and is thus able to reach all affected areas "100%." Government also has a clear structure that can be mobilized during floods – from village heads to village organizations (women's groups included).

They "are always prepared" according to the Governor. This is why, he claims, there have been very few deaths during floods. In the floods of 2016-2017, for example, only three people died. Moreover, all those whose livelihoods have been affected by floods have been reached by government: some 421 families of fishers and more than 500 families engaged in aqua culture. Government also assisted in repairing the homes of 721 flood-affected households.

The Trang Government provides temporary housing during evacuations, food, water, healthcare, and post-disaster rehabilitation. The Natural Resources and Environment Ministry of the province, for example, makes sure that the cleanup of the province happens immediately after the disaster. It also looks after wastewater and makes sure that water services are back to normal at the soonest time possible post-disaster.

Even the military is mobilized during disasters, mostly for tasks and functions related to evacuating affected residents. Assistance of the military becomes necessary, especially since most Thais do not want to leave their homes or give up their lands, despite the risks that floods bring.

The provincial government always has funds ready for disasters according to the Finance Department of the Trang government. A fund of 50 million baht is reserved for every disaster, for assistance of up to two months. The amount of 4,000 to 20,000 baht is allocated per family. There are also "development fees" post-disaster such as 1,100

baht/rie (1 rie: 1,600 sq m) and 1,600 baht/rie – for at most 30 ries per affected family. For the most recent flood, the provincial government spent 37 M baht out of the reserved 50M baht. Sometimes, there is a problem with red tape (i.e. some delay) in the allocation of local funds from the national treasury. Generally, however, funds for disaster are sufficient, according to local government officials.

For said government mobilization, the Governor claims that they follow at least three strategies: "(1) go down to the people; (2) team work; and (3) be cautious, not careless." It is very important, the Governor says, for all departments to work together before, during, and after disasters. It is also important, he says, that government is not careless so as to think that every disaster will affect the communities in the same way. For example, government must not rely solely on data gathered during a previous disaster and must act based on existing conditions.

The residents of the two tambons that were interviewed attested to the veracity of the claims made by Trang government officials. The warning systems of government, they say, are very effective and help residents prepare for floods. There were also no complaints of relief goods or funds not reaching the communities. Except for some instances of delay, service provision of government during floods was perceived to be accessible. In the fisheries area, for example, key informants from the communities said they "appreciate the work of governor, coming every day, 2-3 times/day, plus head of district was very helpful."
Affected families were able to receive 3,000 baht per month for three months. Those who were not able to register with government, however, could not access the 3,000 baht, hence, there were concerns that "the poorest of the poor are not entitled" to assistance. Moreover, villagers claim that the impact of floods is not the same for everyone. Some are affected for days, others for weeks and months. Government assistance, they say, must consider these differences in impact.

The location of the affected area must also be taken into account, according to the villagers. In the rubber plantation area, for example, engineering interventions must include road construction and a canal that will prevent water from the two rivers

to get into the communities.

Furthermore, according to the CSO leaders interviewed, government tends to "do disaster management according to [the] budget." What government needs to do, they say, is to work with villages in planning disaster preparedness and responses. Each area is affected differently, they claim, so planning and implementation of disaster governance must happen at the level of the community.

3. Good practices on disaster management can be seen on the ground. These practices always involve community and/or civil society mobilization and cooperative relations with government.

In the rubber/palm oil plantation area, no one died in the recent floods (December 2016-January/ February 2017) because the villagers "know the rain" and are able to prepare accordingly. Villagers have also learned to adapt to recurrent floods and those who can, construct two-story instead of one-story houses. The owner of the "most flooded house" in the village/entire province even created her own "floating house" which allows her to keep her belongings safe and dry – even while she evacuates to her parents' home during floods.

The villagers also claim that, "the family is the foundation because flooding is experienced first by the family." Thus, disaster management for them is primarily about families first helping themselves. The role of the local administration is awareness raising – through early warning mechanisms and community planning on disaster preparedness and responses.

In the rubber plantation area, the community takes pride in having its own community radio. This radio is used to communicate weather-related news across 11 villages. It also serves as the community's early warning system.

Said community also has its own healthcare organization composed of health volunteers that work with government to meet healthcare needs of villagers during disasters. To date, there are more than 100 volunteers, all trained as primary health workers. These volunteers offset the lack of doctors and official health officers in the community. One

volunteer is assigned to look after 10 families and are paid for with a meager 600 baht/month. They are trained for basic family health care and can deal with diseases like leptospirosis, diabetes, obesity, etc. They are also trained on HIV issues. All this is in line with the local administration's "health for all policy."

Aside from community local administrations and local people's organizations, the civil society organizations play the crucial role of "service provider" during and after disasters. In Trang, there is a group called "Civil Society Network" that is mobilized during floods and maintained in between disasters. It has a provincial center and is composed mostly of volunteers from the private, non-governmental sector. The physical center of the network, for example, is a community radio network. The members of this radio network are members of media and they, in fact, use the community radio to broadcast news about disasters and how people can be prepared. The network is also able to raise funds for disaster assistance through the radio programs. After disasters, the network uses the same radio programs to report to the public how donated funds were utilized.

The network also has member-volunteers from the "off-road association." This association volunteers its off-road vehicles – something that government does not even have – during disasters. These vehicles allow them and government to reach very remote places that are otherwise difficult to reach. The network also works with existing women's groups, especially in healthcare-related assistance during floods. It also has youth/student volunteers that help in packing relief goods. The network also has resources needed – such as boats, walkie-talkie and other communication devices – to respond quickly to community needs that arise during disasters.

For Dr. Monthip Sriratana from the National Research Office and former Member of Parliament of the Democrat Party of Thailand, "research is good practice." There must be data and analysis, she says, that policy makers and government officials can use to deal with disasters more effectively.

4. *The current discourse on the ground reveals "ambivalence" towards integrating gender in disaster management.* On the one hand, many recognize that women experience disaster differently from the men. On the other hand, these same people assert that in disaster management, gender must not matter, and, men and women must be treated in the same way. This ambivalence is one indicator that the gender perspective has not been fully integrated in Thailand's disaster governance.

"Women risk their lives during disasters."
"Men think of themselves but women think of everyone else."
"Women have to take care of children and the elderly."
"Women are more busy during floods."
"There are more women beneficiaries than men during disasters."
"Women are mobilized easily, better organized."
"Women work during floods but do not make decisions."

These lines were repeatedly claimed during interviews with various informants – both men and women – from the communities and civil society groups in the province of Trang. There seemed to be a general consensus on at least three things: (i) during disasters, women experience additional burden as women (i.e. as mothers, daughters, wives); (ii) women are at the forefront of disaster management; (iii) women are mobilized for disaster management, but they do not make the decisions that shape disaster management.

Alongside this discourse, there were always accounts that revealed the view that women should not be treated differently from men. According to the Trang Provincial Governor, for example, women in Thailand "normally" do housework (e.g. cook, do housework), but they also do agricultural work. Moreover, everyone in the household share in the work, not just the women. During disasters, the provincial government does not think in terms of gender, he says, although they have data on households headed by women.

Women concerns, if any, are addressed by the Trang Office for Social Development and Human Security. This office or department trains women, including those affected by disasters, to undertake income-generating activities. It also provides temporary shelter for displaced women and children, but the provincial government "provides for everyone in the family."

Group Discussion with the Head and Staff of the International Relations Division of the Department of Disaster Prevention and Mitigation (DDPM)

The interviews and discussions with community and civil society leaders revealed, however, that while women were not discriminated upon in disaster management, particularly as beneficiaries of government assistance, women were not generally involved in decision-making. As noted above, some have mentioned that, "women work during floods but do not make decisions." The same respondents claim that women should participate more in making decisions related to disaster management.

Gains and Gaps in Integrating Gender in Institutional Infrastructure and Mechanisms

Thailand has not formally (i.e. legally) integrated gender into disaster management. The two main governing structures, the NDPMC under the Prime Minister, and the DDPM under the Ministry of Interior, have very limited gender-related mechanisms within their structures. In 2001, as per the endorsement of Cabinet of a gender policy which was "an order to all line Ministries and Departments to establish mechanism within organizational to mainstream gender in all areas of public work," all line agencies, including the DDPM, were required to appoint a Chief Gender Equality Officer (CGEO) and Gender Focal Point (GFP). In 2009, the DDPM issued a Gender Master Plan aimed at "achieving gender equality within the organization, raise awareness and capacity building on gender" and promoting "gender in community based Disaster management and in development of gender knowledge" (GFPN-APEC 2009, 21-22).

For its gender mainstreaming, the DDPM worked with the Office of Women's Affair and Family Development, which is "the machinery for gender equity" in Thailand, and "mandated to promote gender mainstreaming in all line ministries' policies and program."

According to the ADPC:

"Thailand was 69th in global rank of Gender Inequality Index (GII) in 2011 out of 146 countries. Although Thai women occupy a good position in society, there is also much evidence of gender bias. The group of women, particularly girls, older women, women with disabilities, women headed household, women migrant workers and pregnant women are recognized as vulnerable and require specific care. Special needs of women such as accessible toilets, safety, and reproductive and maternal healthcare are often forgotten in relief efforts. Many women, particularly the vulnerable groups, are left out in the relief distribution."

In 2012, in the aftermath of the massive floods in 2011, Oxfam gathered women's groups from South East Asian and South Asian local communities in Bangkok "to urge governments and institutions to put women and girls at the heart of disaster prevention and risk reduction work (Oxfam Asia Blogs, 2012). In that event, Ines Smyth, Oxfam Gender Advisor, said that, "vulnerability to disasters and poverty is closely linked with gender inequality" (ibid). Therefore, "states must provide a specific focus on the disaster resilience of girls and women" (ibid). Eduardo Klien, Regional Director of HelpAge International based in Changmai Province, meanwhile, said that, "we have yet to change the common perception that they are weak. Whatever their age – as kids, adults or older persons – they play remarkable roles to help their communities prepare for and recover from a disaster."

Although disaster management in Thailand still cannot be considered gender responsive, efforts are underway to integrate gender into disaster management. This is revealed, for example, in the appointment of gender-specific personnel in the DDPM, and the collaboration of disaster management-related agencies with the Office of Women's Affair and Development. There is thus some official recognition that participation of Thai women in disaster management is important – even while the legal policy environment has yet to be adjusted to reflect such recognition.

Key informants from the DDPM claim that they are aware that women experience disaster differently from men. They are also conscious that the DDPM is mandated to integrate the gender perspective in

disaster management. At the same time, they also concede that such integration has not fully taken place, as evidenced by the lack of gender-segregated data and the lack of disaster-related guidelines or checklists that are gender-specific.

Key informants from the Office of Women and Family Affairs, under the Ministry of Social Development and Human Security, claim that the latter has been working closely with DDPM in the past years, particularly in terms of training gender focal points. The two offices also worked on a manual on disaster management with gender perspective that was propelled by the "2011 big flood" in Bangkok. For that flood, the two offices made sure that government assistance included women-specific goods (e.g. sanitary napkins, bras for the women and milk for kids), and that there were separate rooms for women in evacuation centers. They also provided psychological services to lessen the anxiety of women affected by the flood.

When asked whether DDPM has a gender focus, key informants from the Office of Women and Family Affairs said, "it was hard to say" because "it has yet to be assessed." The DDM Act of 2007, they say, is "not very clear on gender and no women organization sits in the DDPM." Moreover, DDPM is pre-occupied with so many concerns that understandably, gender concerns may not have been its focus.

Still, according to the Office of Women and Family Affairs, there are now new spaces for integrating gender in disaster governance. Firstly, the Office is developing an Action Plan for Women and Development and intends to work with DDPM and its provincial organizations for said purpose. Secondly, the Office and the DDPM can work together using the SDGs as platform since the same already has targets for both gender equality and disaster management. Thirdly, the Office and the DDPM can work with local communities and CSOs on the very recent (i.e. April 2017) "enabling policy on responsive gender budgeting in all sectors."

The Thailand Commission on Human Rights (CHR), meanwhile, claims that while it does

not work closely with the DDPM or the Office of Women, it is able to assist in post-disaster management, particularly in ensuring that the rights of vulnerable groups are protected. The informants from CHR cite the example of a case in Phuket where small fishers were displaced after the 2004 tsunami. Post-tsunami, the lands of these fishers were already issued by government to private individuals/businesspersons, hence, their further displacement. The Thailand CHR assisted the fishers in filing a legal case and after almost two decades, a judge recently ruled in favor of the fishers. Key informants from CHR could not stress enough the need to frame women's rights during and after disasters as human rights.

Research Insights

1. The issue raised by the local communities and the civil society network regarding the need to make disaster management more "context-specific" is worth probing and addressing.

   This recommendation of the communities and CSOs may also be extended to the need to disaggregate disaster-related data based on gender lines. Said data will be a useful and necessary reference for policy makers, national, and local government executives, community organizations and civil society groups involved in disaster governance. The recommendation also suggests that disaster management planning and implementation must be localized.

2. The recommendation of the communities to look into long-term solutions must be considered. These solutions, in operational terms, are as follows: (i) develop engineering solutions such as the building of new canals and road works to ensure better flow of water from river; (ii) examine development projects and ensure that these will not exacerbate flooding and other such natural disasters; (iii) ensure community participation in all phases of disaster management; and (iv) ensure participation of local women in planning – not just implementing – disaster governance mechanisms.

3. The "new spaces for integrating gender in disaster management" identified by the Office of Women need to be considered seriously. These spaces are: the Action Plan for Women and Development, the SDGs, and, gender-based budgeting. In these spaces, the DDPM, the Office of Women and Family Affairs, the Thailand CHR, the local administrations, the local community organizations, civil society groups and members of the academe, can converge and work jointly.

4. As suggested by both the DDPM and the Office of Women and Family Affairs, guidelines and/or checklists on gender and disaster management must be developed as tools that both government and non-government stakeholders can use in disaster management.

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Research Respondents
Key Informants

1. Trang Provincial Officials:
- Provincial Governor Mr. Siriphat Phathakul
- Mr. Worawut Khaisang: Social Development and Human Security Dept.
- Mrs. Ruthai Kangseng: Disaster Prevention and Mitigation Dept
- Ms. Wipa Limkamsook: Natural and Environment Dept.
- Ms. Arunee Manakla: Fisheries Dept
- Mr. Chaiyut Kyunritkeau: Dept of Agriculture and Extension
- Maj Gen Tawatchai Rak-archeep: Deputy of Internal Security of Trang (Military)

2. Tambon (Village) Chief and women (in an agricultural setting) affected by flooding; total number: six (6)

3. Tambon/Village Chief (in the rubber plantation/fisheries setting) affected by flooding; total number of participants: nineteen (19).

4. Owner of the "most-flooded" house in Trang.

5. Leaders of the "Civil Society Network" of Trang; total number: four (4).

6. Head and staff of the International Relations Division of the Department of Disaster Prevention and Mitigation (DDPM); total number: five (5).

7. Officials of the Office of Women and Family Affairs, under the Ministry of Social Development and Human Security; total number: three (3).

8. Ms. Rataya Kobsirikarn, Deputy-Secretary General of the National Human Rights Commission of Thailand.

9. Dr. Monthip Sriratana from the National Research Office and former Member of Parliament of the Democrat Party of Thailand.

Endnotes

1   Taken from Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior. "Thailand Country Profiles 2011," (2012).

Viet Nam

Natural Disaster Context

People in Viet Nam have long been vulnerable to natural disasters. Based on a report entitled Climate Change Analysis and Adaptation Responses that was prepared for informing IFAD's Country Strategic Opportunities Program 2012 – 2017 for Viet Nam, globally, the country has been named a "Natural Disaster Hotspot." It was ranked 7th on economic risk, 9th on the percentage of land area and population exposed, and 22nd on mortality from multiple hazards.

> With the majority of the population living in low-lying river basins and coastal areas, more than 70 percent of the population is estimated to be exposed to risks from multiple natural hazards. National statistics show every year [that] natural disasters cause an average of 750 deaths and result in annual economic losses equivalent to 1.5 percent of GDP. However, since damage and loss data are chronically underreported, real totals may be much higher (GFDRR, 2011). The trend is toward increasing losses. Between 1989 and 2008, property losses averaged of US$240 million per year. The average annual losses during the last four years of that period were some three times the longer term average (MONRE, 2010). In terms of human exposure, floods are responsible for almost 60 percent of impacts on the population, followed by storms and drought. In economic terms, storms are responsible for about 55 percent of losses, followed by flood and droughts (GFDRR). In the uplands – where a large percentage of the ethnic minorities reside and who are greatly reliant on rain-fed, hill-slope agriculture – detailed information on natural disaster impacts is not readily available, however flash floods, drought and landslides tend also to be major concerns (Report on Climate Change Analysis and Adaptation Responses).

Due to its geographic position and topography, Viet Nam suffers from various natural hazards. These natural hazards include typhoons, tropical storms, floods, drought, seawater intrusion, landslides, forest fires, and occasionally earthquakes (World Bank, 2014).

Floods and storms are recurring disasters in Viet Nam that heavily affect the north central and delta region. Floods occur primarily in the central plain, along the Red River basin and Mekong delta, and cause more fatalities. Storms, on the other hand, occur along the coastal region and cause more physical damage. Storms and typhoons that are accompanied by heavy rain, coastal flooding, and landslides often affect the north central region. Within Viet Nam, the disaster-prone provinces with the highest frequencies of both storms and floods are Quang Binh, Thanh Hoa, Quang Tri, Thua Thein Hue, Quang Ngai, and Binh Dinh (Give2Asia, n.d.).

> According to historical data from 1989-2010, storms and typhoons accounted for 49 percent of all natural disasters. Viet Nam has seen increasing numbers and intensity of storms and typhoons, especially in the last three decades. Over a 50-year period (1954-2006), there were 380 storms and tropical depressions affecting Viet Nam, almost equally divided between the north, central, and southern regions. Storms are often accompanied by long heavy rain, and a storm surge causing flooding. Up to 80-90 percent of Viet Nam's population is vulnerable to storms.

> In 2009, Typhoon Ketsana swept through central Viet Nam, killing 163 people and causing a total economic loss of $785 million. In 2006, Typhoon Xangsane hit 15 provinces in the central region and caused $624 million in damages, approximately 2.9 percent of total GDP. A flood in 2008 caused a similar impact damaging $479 million in assets.

> Floods are also one of the major and most dangerous types of natural disaster in Viet Nam, constituting 37 percent of all disasters. The flood season in each region varies according (to) the rainfall pattern. The flood season in the Red River and Thai Binh River system normally occurs from May to September, earlier than in other regions. The flood season on the rivers from Thanh Hoa to Ha Tinh is from June to October every year. On the rivers from Quang Binh to Binh Thuan, the flood season is from September to December.

> Flash floods and mudflow often occur in mountainous areas where steep slopes and high

rainfall combine with inadequate drainage systems. Flash floods can also occur due to rupture of small reservoirs. Flash flood has occurred and is likely to occur across 33 mountainous provinces in the country in four regions: the northern mountains, central, central highlands and southeast.

Drought causes the third greatest losses in Viet Nam despite only representing two percent of disaster events. In some particular years, drought reduces food productivity by 20-30 percent, thus severely threatening people's livelihoods and food security. In recent years, droughts have occurred in all regions of the country successively.

Due to the geophysical landscape consisting of large mountainous areas and lowland areas by the deltas, Viet Nam is vulnerable to landslides, especially in the northern and central highlands. However, total landslides account for a mere three percent of all natural disasters (Give2Asia, n.d.).

Institutional Infrastructure and Mechanisms

In 1990, the government of Viet Nam established the Central Committee for Flood and Storm Control (CCFSC). The CCFSC is a cross-ministerial agency with subordinate provincial and local committees. It is mandated to manage disaster mitigation, emergency response, and long-term reconstruction and recovery. Nonetheless, a World Bank Report in 2014 found that at project appraisal stage, "the CCFSC's actions had largely focused on disaster emergency response and relief … while institutional capacity and resources available for the agency to carry out its mandate were limited" (World Bank, 2014). Based on the report:

> Studies carried out during project preparation noted annual funding gaps for all natural disaster-related expenditure requirements ranging between US$46 million to US$130 million for the period between 2000 and 2003. Project preparation also revealed that the institutional framework for implementing a comprehensive approach to DRM, covering both disaster risk prevention and response, needed to be further developed and expanded to fully involve key agencies and relevant stakeholders.

A National Strategy for Disaster Prevention, Response and Mitigation to 2020 (NS) and a National Action Plan were approved by the Prime Minister of Viet Nam in November 2007 and September 2009, respectively. The National Strategy (NS) provides Viet Nam's primary disaster risk management (DRM) objectives to move away from the traditional emergency response and relief focus to a comprehensive and integrated DRM while the National Action Plan provides for the NS's implementation.

> The Strategy lays out Viet Nam's primary disaster risk management objectives in order to move from the traditional focus on preparedness and response with a strong emphasis on structural measures (such as dykes and seawalls) to a comprehensive and integrated approach to disaster risk management including structural measures (i.e. building and rehabilitation of reservoirs, dams and dykes) and non-structural measures (i.e. CBDRM, capacity building and institutional strengthening activities). The Strategy also provides guidance to sectors and provinces in formulation and implementation of their programs to achieve the overarching objectives of the Strategy. Subsequently, all 19 ministries and 63 provinces developed sectoral and provincial action plans respectively for Strategy's implementation. These sectoral and provincial action plans built upon the experiences from the project-supported Integrated Natural Disaster Mitigation Investment Plans (IDRMPs), which were prepared in 12 provinces. The IDRMPs have been highly appreciated by the provincial and local governments and incorporated into respective provincial and local plans (World Bank, 2014).

Both the NS and the Action Plan are currently being implemented. Both also receive funding from the central and local governments, donors, and international organizations (ibid). However, there are challenges that affect the effective implementation of the National Strategy and National Action Plan.

Also in 2009, the Prime Minister of Viet Nam approved the National CBDRM Program. The program is being implemented in some 6,000 disaster vulnerable communes across the country through funding support from the central and local governments, donors, and international organizations. The program follows CBDRM

models including CSPs, community early warning and evacuation systems, and community-scale mitigation measures with participatory approach that have been aggregated and consolidated into a nationwide CBDRM program (World Bank, 2014).

In recent years, Viet Nam has developed and promulgated relevant legal documents. These include Law on Dyke, Water Resources Law, Law on Forest Protection and Development, Law on Environment Protection, Land Law, Law on Natural Resources and Minerals, Law on Fisheries, etc., Ordinance on Flood and Storm Control, Ordinance on Exploitation and Protection of Water Resources Structures, Ordinance on Exploitation and Protection of Hydro- meteorological Structures, etc. (National Strategy for Disaster Prevention, Response and Mitigation to 2020, 2007).

To further strengthen the legal framework, the Viet Nam National Assembly developed a new law for disaster risk management 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 May 1, 2014. The new law maintains existing good practices and addresses a number of gaps in the prior legislative framework for disaster risk management. 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;
- The 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.

Figure 1 shows the overall institutional framework for disaster management in Viet Nam from the national level to the commune level. At the national level is the Central Steering Committee for Natural Disaster Prevention and Control (CSCNDPC) and the National Committee for Natural Disaster Search and Rescue.

The CSCNDPC, as established by the Prime Minister, acts as the inter-sectoral coordinator assisting the Government and the Prime Minister in organizing, directing, and administering the prevention of, response to, and remediation of consequences of natural disasters nationwide. Tasks of the CSCNDPC are in light of guiding policy formulation and plans to respond to natural disasters, directing and coordinating response to natural disasters, deciding in urgent measures, including mobilization of resources to respond to natural disasters and their impacts, data collection on damages, and needs to guide appropriate strategic response, and monitoring the work of natural disaster mechanisms.[2]

The CSCNDPC is comprised of the following members:[3] the CSCNDPC is comprised of the Minister of Agriculture and Rural Development as the Chairperson; a Deputy Minister of Agriculture and Rural Development as the permanent Vice Chairperson; a Vice Chairperson of the Government Office as a Vice Chairperson; the Permanent Vice Chairperson of the National Committee for Search and Rescue as a Vice Chairperson; and leaders of ministries, ministerial-level agencies and government-attached agencies of Agriculture and Rural Development; Natural Resources and Environment; National Defense; Public Security; Information and Communications; Industry and Trade; Transport; Construction; Education and Training; Health; Culture, Sports and Tourism; Foreign Affairs; Labour, War Invalids and Social Affairs; Science and Technology; Planning and
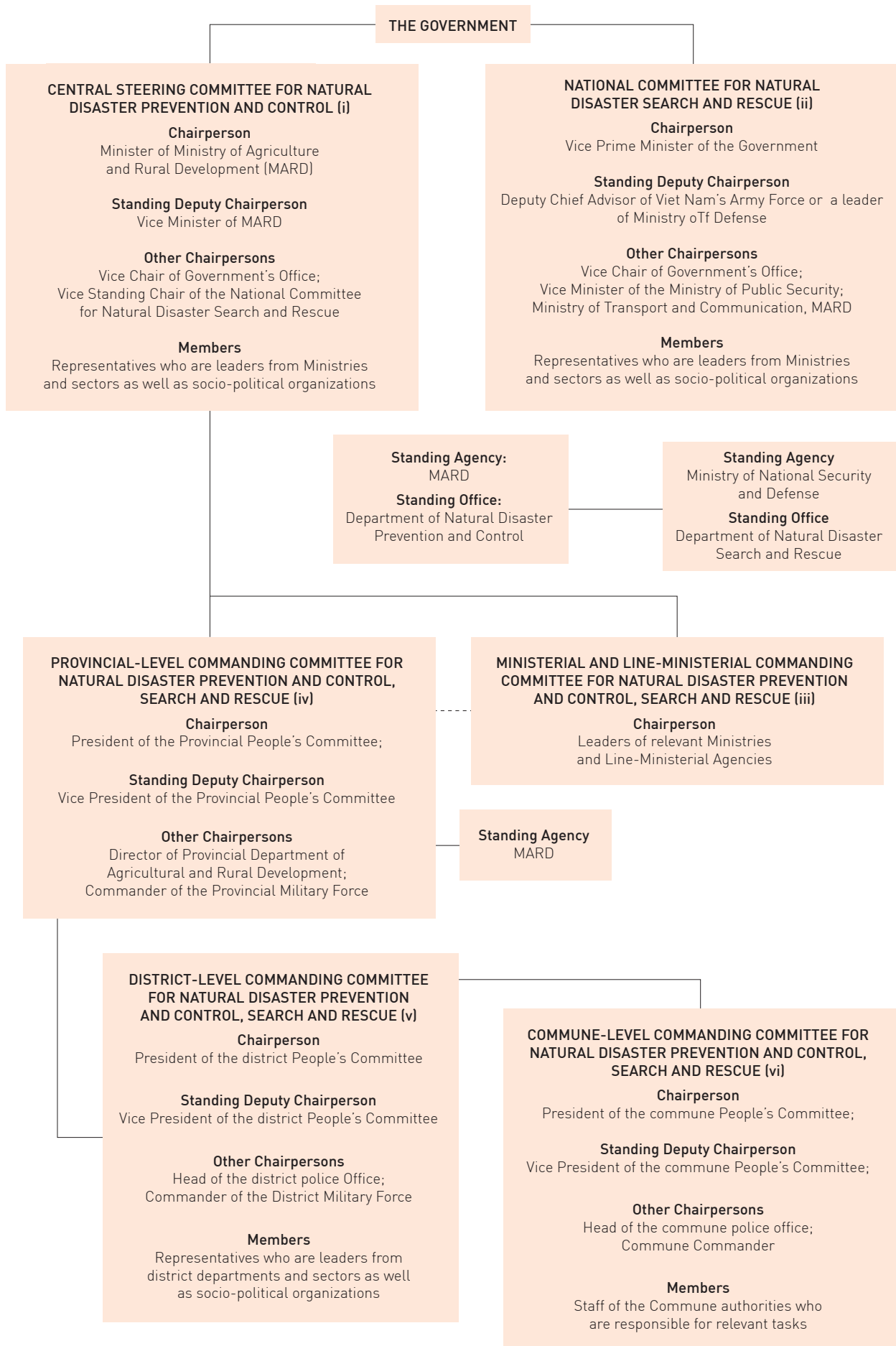
THE GOVERNMENT

CENTRAL STEERING COMMITTEE FOR NATURAL DISASTER PREVENTION AND CONTROL (i)

Chairperson
Minister of Ministry of Agriculture and Rural Development (MARD)

Standing Deputy Chairperson
Vice Minister of MARD

Other Chairpersons
Vice Chair of Government's Office;
Vice Standing Chair of the National Committee for Natural Disaster Search and Rescue

Members
Representatives who are leaders from Ministries and sectors as well as socio-political organizations

NATIONAL COMMITTEE FOR NATURAL DISASTER SEARCH AND RESCUE (ii)

Chairperson
Vice Prime Minister of the Government

Standing Deputy Chairperson
Deputy Chief Advisor of Viet Nam's Army Force or a leader of Ministry oTf Defense

Other Chairpersons
Vice Chair of Government's Office;
Vice Minister of the Ministry of Public Security;
Ministry of Transport and Communication, MARD

Members
Representatives who are leaders from Ministries and sectors as well as socio-political organizations

Standing Agency:
MARD

Standing Office:
Department of Natural Disaster Prevention and Control

Standing Agency
Ministry of National Security and Defense

Standing Office
Department of Natural Disaster Search and Rescue

PROVINCIAL-LEVEL COMMANDING COMMITTEE FOR NATURAL DISASTER PREVENTION AND CONTROL, SEARCH AND RESCUE (iv)

Chairperson
President of the Provincial People's Committee;

Standing Deputy Chairperson
Vice President of the Provincial People's Committee

Other Chairpersons
Director of Provincial Department of Agricultural and Rural Development;
Commander of the Provincial Military Force

MINISTERIAL AND LINE-MINISTERIAL COMMANDING COMMITTEE FOR NATURAL DISASTER PREVENTION AND CONTROL, SEARCH AND RESCUE (iii)

Chairperson
Leaders of relevant Ministries and Line-Ministerial Agencies

Standing Agency
MARD

DISTRICT-LEVEL COMMANDING COMMITTEE FOR NATURAL DISASTER PREVENTION AND CONTROL, SEARCH AND RESCUE (v)

Chairperson
President of the district People's Committee

Standing Deputy Chairperson
Vice President of the district People's Committee

Other Chairpersons
Head of the district police Office;
Commander of the District Military Force

Members
Representatives who are leaders from district departments and sectors as well as socio-political organizations

COMMUNE-LEVEL COMMANDING COMMITTEE FOR NATURAL DISASTER PREVENTION AND CONTROL, SEARCH AND RESCUE (vi)

Chairperson
President of the commune People's Committee;

Standing Deputy Chairperson
Vice President of the commune People's Committee;

Other Chairpersons
Head of the commune police office;
Commune Commander

Members
Staff of the Commune authorities who are responsible for relevant tasks

Figure 1: Viet Nam Disaster Management Authority [1]

Investment; Finance; Viet Nam Television; and Voice of Viet Nam; heads of a number of units of the Ministry of Agriculture and Rural Development, the Ministry of Natural Resources and Environment, the Ministry of National Defense, the National Committee for Search and Rescue, and the Academy of Science and Technology of Viet Nam, as members. Additionally, the CSCNDPC Chairperson may invite leaders of the Viet Nam Fatherland Front Central Committee, the Central Women's Union, the Central Ho Chi Minh Communist Youth Union, the Central Viet Nam Red Cross Society and other related organizations to join the Central Steering Committee for Natural Disaster Prevention and Control.

On the other hand, the National Committee for Natural Disaster Search and Rescue (NCNDSR) serves as the inter-agency coordinating body that assists the Government and the Prime Minister in directing and coordinating the implementation of natural disaster response initiatives. It also directs the Steering Committee for Natural Disaster Search and Rescue of Ministries, Line-Ministerial Ministries, provinces and specialized and part-time agencies to carry out the work.

It is composed of the following:[4] Deputy Prime Minister as Chairperson; one leader from the Ministry of Defense or the Deputy Advisor of the Viet Nam Army Force as Vice Chairperson and one leader each from the Office of the Government, Ministry of Public Security, Ministry of Transport and Communication, and the Ministry of (MARD) and Rural Development. Standing Members of the NCNDSR are leaders of ministries, ministerial-level agencies and government attached agencies from Industry and Trade, Natural Resources and Environment, Health, Construction, Science and Technology; Information and Communication Education and Training, Interior, Finance, Planning and Investment, Foreign Affairs, Labour - Invalids and Social Affairs, Viet Nam Television and Radio, Voice of Viet Nam; Chief of the Office of the National Committee for Natural Disaster Search and Rescue.

The commanding committees, which are present in various relevant ministries, ministerial-level agencies and government-attached agencies,[5] provide advice and assistance on the conduct of natural disaster prevention and control and search and rescue, coordinate with other ministries, ministerial-level agencies and localities in the implementation of disaster prevention and control, and decides on urgent measures of response and mobilization of resources. The Ministries of National Defense, Public Security, Transport, Construction, Industry and Trade Finance Natural Resources and Environment, Information and Communications, Health, Education and Training, and Labour, and War Invalids and Social Affairs have been mandated to establish these commanding committees within their respective institutions.[6]

The natural disaster institutional infrastructure is also present at the local level. At the provincial level, Provincial People's Committee Chairpersons are tasked to establish provincial-level standing committees. These bodies advise and assist the provincial level People's Committees in the management, command, and administration of initiatives in their respective localities. They likewise formulate natural disaster response plans and projects, and examine and urge various provincial departments and local agencies in the performance of their tasks related to natural disasters. Organizationally, it is composed of the provincial-level People's Committee chairperson as the committee chairperson; a provincial-level People's Committee vice chairperson as the permanent vice chairperson; the provincial-level Agriculture and Rural Development Department director as a vice chairperson in charge of natural disaster prevention and control; and the commander of the provincial-level military command as a vice chairperson in charge of natural disaster relief and rescue.[7] Furthermore, the commander of the provincial-level Border Guard, leaders of provincial-level departments and local agencies involved in natural disaster prevention and control and search and rescue as members; the chairperson of the provincial-level commanding committee for natural disaster prevention and control and search and rescue may invite leaders of the provincial-level Fatherland Front, Women's Union, Youth Union and Red Cross Society to join the provincial-level commanding committee for natural disaster prevention and control and search and rescue.[8]

The same institutional infrastructure and process is reflected at the district level with the presence of district-level commanding committees created by the district level People's Committee chairperson. They perform the same tasks as the provincial-level commanding committees but operating only at the level of districts.

In the same vein, at the commune level, commanding committees are also established by their respective local People's Committee Chairpersons, and similar to provincial and district-level commanding committees, they are tasked to examine, urge, command and administer natural disaster prevention and control work within the locality.[9] Additionally, they are also mandated to transmit directions and commands as regards natural disaster response in the communities and engage in the formulation and approval of natural disaster plans. Leading the commune-level commanding committees are the commune-level People's Committee Chairperson and Vice Chairperson, Police Chief and Commander of Military Command and the irrigation and agriculture officers and heads of political and mass organizations in their respective communes as members.[10]

Voices on the Ground: Community and Local Actors in the areas of Protection of Women and Participation in Decision Making

Based on conversations conducted during the field visit, there is a sentiment that long-term support should be provided by the government. As observed, government's response is mostly felt when natural disasters occur.

While Viet Nam Women's Union has been legally recognized as part of the DRRM system and gender equality has been explicitly mentioned in the 2014 DRM legislation and its legal and technical guidelines, gender mainstreaming continues to challenge government program implementers.

According to some respondents, there was a time when women representatives were not notified about meetings, and hence, were systematically excluded from the planning to implementation process. And even if women are represented in the National Steering Committee, their representation

is "marginal" and ministries lack orientation on women's issues.

Implementers of disaster policy also lack understanding of the needs of women. They also show lack of gender sensitivity in dealing with needs and concerns of women.

While men and women are both at risk during floods, women are particularly more vulnerable because many of them earn their living by commuting and trading on boats. Moreover, they are also less likely to have received weather warnings and information about floods.

In recent years, drought has become a major natural disaster in Viet Nam and has affected economic capabilities of women in agriculture. But efforts to survey men and women are futile, since women do not usually attend due to caregiving work. This is a similar situation in other types of disasters.

A full picture of vulnerabilities of women in natural disaster contexts in Viet Nam is captured in a research coordinated by Institute of Labour Science and Social Affairs (ILSSA), UN Women, Viet Namese Women's Union, and CARE International (2015, 14). Such vulnerabilities are seen in the following areas:

- Participation and access to early warning systems;
- Loss and damage;
- Disaster preparation in the household;
- Involvement in decision making throughout disaster processes;
- The distribution of household and care roles in the family and how these impact on and are impacted by disasters, and how these affect women's vulnerability and their ability to be involved in decision-making

In their research report entitled Gender Analysis of Disaster Risk Reduction and Management in Viet Nam, Mitchell and the team found that "several of women's practical needs (such as clothing and relief) may be met through disaster relief and development in general, but that lack of access to swimming lessons, land-titling and decision-

Key Informant Meeting with ASEAN Desk Officer, Ministry of Foreign Affairs, representatives from the National Steering Center for Natural Disaster Prevention and Control and the Research Center for Female Labour and Gender, Director of the International Cooperation Department (ICD), Deputy Director (ICD), and Assistant to the Deputy Director (ICD) at the Ministry of Labour, Invalids, and Social Affairs in Hanoi, Viet Nam

making are examples of more deeply ingrained inequities (household roles, food and health, violence against women, damage and loss and other areas)" (2016, 15).

They also documented the low rate of women on provincial- and commune-level CFSCs (especially ethnic minority women). Those currently present at the provincial level are often only there due to the decree, with some level of resistance still observed. Moreover, the research noted the high level of demand for information and awareness, and emotional support of women.

A lot more insights on women's vulnerabilities to natural disasters have been documented in the research report titled, "Gender Analysis of Disaster Risk Reduction and Management in Viet Nam."

Gains and Gaps in Integrating Gender in Institutional Infrastructure and Mechanisms

In December 2008, a National Target Program on Responding to Climate Change (NTP-RCC) was approved by the government of Viet Nam. The NTP highlights the need to conduct vulnerability assessments at sectoral, regional, and community levels. It also identifies the poor, women, and children as among the groups that are most vulnerable to the impacts of climate change and natural disasters. However, an observation about the NTP is that it does not explain the different roles and responsibilities as well as decision-making powers of men and women. This oversight of the program is critical, as climate change and natural

disasters can worsen existing gender inequalities, create additional workloads for women, and lead to higher vulnerability of women in poor households (UN Viet Nam, n.d.)

As designed, the NTP-RCC emphasizes gender equality as one of its guiding principles. Based on a desk review of the gender dimensions of climate change in Viet Nam that was commissioned by the UN Programme Coordination Group on Gender, "women's involvement in the consultations for the NTP-RCC's development was limited, and concrete gender targets have not been formulated. The number of women officials in the Ministry of Natural Resources and Environment and the provincial Departments of Natural Resources and Environment is limited (n.d., 2). Moreover, Oxfam (n.d.) noted that the action plans for the NTP-RCC developed by line ministries and provinces are, as yet, not specifically mandated to address gender equality in the climate change adaptation/disaster risk reduction.

In almost all disaster-prone countries, it has been well documented that women are disproportionately exposed and highly vulnerable to disaster risks. Most policy recommendations also include that women should be involved in decision-making processes on disaster management. In Viet Nam, however, disaster risk management has long been dominated by men.

It is important to note, however, that in Viet Nam, legislative and policy frameworks are in place to

address gender inequality and promote women's rights. These include the Law on Gender Equality and the Law on Domestic Violence. However, traditional attitudes and practices within the country, which impede the realization of women's rights, persist. While progress on some fronts, such as participation in decision-making has been achieved, the position of ethnic minority women and girls, and women's access to economic resources, remains uneven (Oxfam 2009).

There is neither any mention on disasters and climate change in the National Strategy for Gender Equality 2010 – 2020 nor in the National Programme for Gender Equality 2011 – 2015. Key gender laws such as Gender Equality Law (2006) and Law on Domestic Violence Prevention and Control (2007) also make no reference to the issue.

Nonetheless, in recent years, Viet Nam has witnessed significant changes in its processes on disaster management.

The Law on Natural Disaster Prevention and Control (2013) has four references to women. This document is considered one of the fundamental principles in disaster preparedness and response to ensure gender equality (amongst other principles). The other references are in respect to women but they are specific to pregnant and breastfeeding women as vulnerable subjects and the need to focus on the safety of pregnant women for evacuation. The last reference is to implement measures for women (as well as other vulnerable groups) against the extreme cold.

The National Strategy on Climate Change 2011 makes two references to women. The first is in the specific targets of the strategy and refers to guaranteeing gender equality in the context of climate change, and the second looks at health issues and considers women as a vulnerable group.

Likewise, MARD's Community Based Disaster Risk Management Guidebook produced in November 2014 considers women as a section within vulnerable groups but goes on looking at wider issues of gender mainstreaming. It also identifies specific more at risk categories of women again naming women with disabilities, ethnic minority women, the poor, pregnant and the elderly. It makes solid pints on how women have been sidelined in the CBDRM process and have been considered as victims rather than active decision makers, and sets forward steps for ways to mainstream gender activities into CBDRM.

Interestingly, one of the most effective government documents in mainstreaming gender issues into disaster management is the 2005 Natural Disaster Risk Management Project Ethnic Minority Policy Framework. This Policy Framework mainstreams gender issues in several sections with a good analysis of how women's traditional roles lead to gender disparities and increased vulnerabilities. It notes that ethnic minority women are often not aware of their rights that are exacerbated by the prevalence of traditional customs and practices that have a negative impact on women's health and development. The strategy calls for local participation and consultation and raises the question for local authorities to see how the project can contribute to gender equality.

Over the years, efforts to increase women's representation within Viet Nam's DRM system have been undertaken (UNDP Viet Nam, n.d.).

To increase women's representation within Viet Nam's DRM system, the Viet Namese government has partnered with Australian Aid, UNDP, UN Women, and Oxfam, among other organizations. The partnership's initiative, Strengthening Institutional Capacity for Disaster Risk Management in Viet Nam, "seeks to facilitate comprehensive and inclusive disaster risk reduction legislation in Viet Nam with the goal of ensuring that women are effectively represented and voiced at all levels of DRM" (UNDP Viet Nam, n.d.).

> Among other aims, the initiative is seeking to mainstream gender equality into DRM legislation and promote gender leadership into the DRM system. It also seeks to ensure that women are represented in the Committee for Natural Disaster Prevention and Control, which serves as a key focal point in DRM.

The initiative targets all 63 provinces as well as members of the committee at the national level and in the provinces. So far, the initiative has responded to different levels of community needs in 20 disaster-vulnerable provinces that are in need of gender equality promotion. Women representatives in those provinces now serve as members of commune/provincial committees for disaster prevention. In 2014, more than 200 women were trained and are now able to carry out community-based disaster risk assessments and contribute to local natural disaster prevention and control plans.

The Viet Nam Women's Union is now legally recognized as a part of the DRM system and gender equality is explicitly mentioned in a revised draft of DRM legislation and revised legal and technical guidelines on DRM.

"Recognizing the vital role Viet Namese women already play in disaster preparedness and response, the new law provides for a stronger institutional set-up for women to make communities across Viet Nam safer and more resilient," said UNDP Deputy Country Director Bakhodir Burkhanov. Nguyen Thi Truc, the environment official, says she is seeing progress in gender equity— with the support of the program, she says she now feels more confident in her work.

Looking forward, UNDP and UN Women are seeking international assistance for building capacity for women representation in formal DRM system as well as equipping all members of the Committee for Natural Disaster Prevention and Control at all levels with necessary knowledge and skills for gender mainstreaming.

Ms. Tran Thu Thuy, Chief of the General Office of the Viet Nam Women's Union said that the Union would take stock of its first year of involvement as an official member of the DRM system. "This will help to learn from its experience and ensure that women leadership in DRM is taken up effectively in all provinces," she said.

The UN in Viet Nam and its partners are also trying to raise awareness on women's rights in disaster management. With the law now in place, Viet Namese women can utilize their new rights and responsibilities to improve their daily life and reduce vulnerabilities during and after disasters (UNDP Viet Nam, n.d.).

Indeed, awareness of gender equality has increased, in part as a result of interventions by the Viet Nam Women's Union and other organizations in Viet Nam. However, this does not always translate to increased gender equality in practice, especially for ethnic minority women (Oxfam, 2009). Findings of a study by UN-Viet Nam Programme Coordination Group on Gender and Oxfam in Viet Nam that are reported in a policy discussion paper captured the following realities in Viet Nam.

> Women's participation in household decision-making has increased slightly, though men continue to make the final decisions, for example, in relation to large expenses. Women's community participation has also increased, in particular in events, which relate to women's traditional role such as festivals and social events; however, participation in local formal political and management structures remains low.
>
> Women in the study sites were taking on more agricultural tasks as a result of male out-migration and local non-farm employment. Women's productive role and contribution to households is being affected as a result of natural disasters and climate stresses, which impacts on their ability to maintain household subsistence. At the same time, women and female-headed households have less access to livelihood assets, which would enable them to cope with major shocks and stresses. This, combined with women's limited participation and influence in decision-making in disaster risk management, places them at a significant disadvantage. Men take the lead in most disaster risk management (DRM) activities, such as rapid response teams, search and rescue and protecting crops and livestock, while women's participation tends to be confined to caring and domestic responsibilities such as communal cooking and looking after the sick and elderly. Men and women identify different measures in response to climate change, yet women's voices are not being heard in decision-making on natural resources, and disaster management, despite their central role and responsibilities.

Climate change impacts affect men and women differently. Human capital impacts include disproportionate effects on women's mental health due to their caring role and increased domestic violence during periods of stress related to natural disasters. In addition, women eat less in times of food shortage and suffer more health problems, for example, due to lack of clean water and water shortages. Both men and women experience increased workloads, with men taking on more physical work during extreme events, and women working harder in preparing for disasters, although this pattern is changing in the face of seasonal male out-migration. In the field sites visited, more men than women were reported as dying as a result of natural disasters, at least partly due to their role in search and rescue (S&R). However, women's deaths may occur over a longer time period as a result of prolonged stress, and other factors discussed above, and may go unreported due to the time lag.

While temporary out-migration is a common coping strategy for households affected by natural disasters and other shocks, this option is primarily open to men and to households with some level of labor capital and resilience. For women, male out- migration may open up opportunities to challenge traditional gender roles. However, it also undoubtedly increases their workload, including coping with natural disasters, while for men, as husbands and fathers, separation has emotional costs, and many would prefer to stay home. Access to (larger scale) credit, another important coping mechanism in the face of shocks and crises, is more limited for women than for men, as women are less likely to have their names on land use certificates which are required to access (larger) loans. Women have generally good access to microcredit though, with e.g. support from the Women's Union, and also borrow from relatives, neighbors, and from money-lenders (the latter usually at high interest rates). While some banks are now requiring both men and women sign papers for new loans, other organizations typically continue to lend to male household heads.

Knowledge of climate change and possible future impacts is still limited, even in more disaster prone communities. Even where villagers are aware of possible impacts, they lack resources to respond and post-disaster coping and recovery activities tend to focus on restoring existing livelihood systems, rather than more transformative change,

which could increase household resilience. Only a few, better off households can diversify their income sources, by for example, borrowing to invest in farm machinery which can then be leant to others. Better off households are also able to relocate, or build houses, which are stronger and more flood resistant. While education is seen as an escape route from poverty, girls leave school earlier than boys, and female illiteracy rates remain high, especially in the ethnic minority community of Avao. Young people who do gain an education in this remote area tend not to return, with implications for the future of these communities (Oxfam, 2009).

Research Insights

Viet Nam can be said to have moderate efforts in mainstreaming gender in the strategic level of its natural disaster institutional response infrastructure. Further efforts may still be undertaken, particularly in light of capacitating national and local government agencies on mainstreaming gender specifically in their disaster preparedness and management plans. From capacitation can come the development of vertical protocols --- such as the crafting of a 'guidebook on gender mainstreaming in disaster preparedness and response' at the central, provincial, municipal and community levels.

Such efforts must continue to promote the participation of women, ensuring their concerns are integrated in any plans that will be developed. On this note, the capacity of the Viet Nam Women's Union at the central, district, and commune levels to participate in the Steering Committee for Natural Disaster Prevention and Control can be further enhanced.

Needless to say, awareness-raising on climate change and gender equality for women is key in their meaningful participation --- and this includes not just participation in decision-making but also in livelihood programs.

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Endnotes

1   Adopted from the website of the Central Steering Committee for Natural Disasters Prevention and Control, accessed from http://phongchongthientai.vn/he-thong/so-do-chung/-c2.html. Translated into English by National Focal Person (NFP).

2   Adopted from the Term 4 of the Degree No.66/2014/ND-CP detailing and guiding the implementation of provisions of Law on Natural Disaster Prevention and Control.

3   Adopted from the Item 2 of the Article 18 of the Degree No.66/2014/ND-CP detailing and guiding the implementation of provisions of Law on Natural Disaster Prevention and Control.

4   Adopted from the Article 6 the Decree No. 30/2017/ND-CP dated March 21, 2017 of the Government on regulations on response to emergency, acts of god and search and rescue

5   Adopted from the Item 2, Article 19 of the Decree No.66/2014/ND-CP detailing and guiding the implementation of provisions of Law on Natural Disaster Prevention and Control.

6   Adopted from the Item 1, Article 19 of the Decree No.66/2014/ND-CP detailing and guiding the implementation of provisions of Law on Natural Disaster Prevention and Control.

7   Adopted from the Item 1, 2 and 3 of the Article 20 of the Decree No.66/2014/ND-CP detailing and guiding the implementation of provisions of Law on Natural Disaster Prevention and Control.

8   Ibid.

9   Adopted from the Item 1 & 4 of the Article 22 of the Decree No.66/2014/ND-CP detailing and guiding the implementation of provisions of Law on Natural Disaster Prevention and Control.

10   Adopted from the Item 1, 2 and 3 of the Article 22 of the Decree No.66/2014/ND-CP detailing and guiding the implementation of provisions of Law on Natural Disaster Prevention and Control.

Summary Observations

As the ASEAN moves toward efforts at responding to natural disaters as a region, it has yet to fully integrate the gender approach in its regional disaster response. Already in the community-building phase of its institutional evolution, certain issues still remain in the norm-construction stage. In the case of women's human rights in particularly difficult circumstances (e.g. natural disasters situations), there is very faint discursive recognition in institutional agreements. For example, only the the Vientiane Declaration on Enhancing Gender Perspective and ASEAN Women's Partnership for Environmental Sustainability have explicitly articulated women's adequate protection in natural disaster situations as a matter of commitment, while the AADMER – including its strategic policy document, the ASEAN Vision 2025 on Disaster Management – have been (and continue to be) silent on it. In other words, gender has yet to interface in the natural disaster institutional and strategic discourse in the ASEAN. And accordingly, no initiative has been crafted in the operational and tactical levels.

This study was undertaken in order to compile policies and practices on women's protection in situations of natural disasters, and to document best practices in gender mainstreaming in natural disaster response and assistance, particularly, those that provide spaces for women's participation. It was guided by an institutionalist perpective that sought to locate gender in laws, policies/plans, institutions, and practices. From this conceptual analytical map, the study inferred on how women's human rights can be further promoted and protected in natural disaster situations.

In the case of individual AMS, based on the indicative findings of the study, there are more evident efforts as regards mainstreaming gender in natural disaster institutional infrastructure and mechanisms – with some countries fairly more advanced than others. Currently, the indicative pattern of responding to women's concerns in natural disasters reflect how
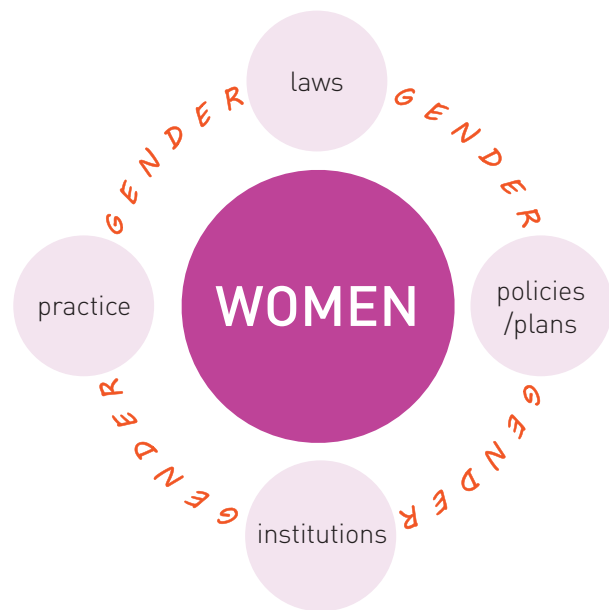
Schematic Diagram of Research Framework

individual states perceive women – on the one hand, women are seen either as part of vulnerable groups or as agents for change or a combination of both; or they are the same as the rest of the population with no differential needs or capacities, on the other. Such perceptions feed into and affect strategic, tactical, and operational governance planning and implementation of natural disaster response initiatives, and ultimately, it impacts on a State's capacity to guarantee, promote, and protect women's human rights before, during, and after natural disasters.

Based on the indicative results of the study, the summary observations are the following:

1. On natural disaster context

   • The 10 AMS have differential natural disaster risks from most prone to least prone, although most have experienced large-scale natural disasters;

   • Situations of natural disasters, their impact on the population, and the capacity of state institutions to come to the assistance of affected people may be complicated by situations of armed conflict in some countries.

2. On institutional insfrastructure and mechanisms

- Framing institutional and governance responses to natural disasters depends on its impact on societal systems. For example, when heavily affecting the economy, the frame is related to (sustainable) development or climate change adaptation and the focus is on building resilience of the most basic unit of its society as more akin to self-help. On the other hand, when there is little or no risks of natural disasters, the frame is emergency/crisis response in connection with national security;

- All AMS have existing disaster management institutional infra-structures such as the presence of national bodies for disaster coordination and response. Natural disaster infrastructure and mechanisms follow the governance architecture in each of the countries: national coordination and decentralization; vertical (national to local), and horizontal (between agencies – taking on health, relief, etc). At the strategic level, all AMS recognize the importance of community implementation;

- Some have national laws specific to natural disasters such as Brunei Darussalam, Cambodia, Indonesia, Myanmar, the Philippines, Thailand, and Viet Nam. Lao PDR, Malaysia, Myanmar, and Singapore have specific policy directives on natural disasters. Brunei Darussalam, Cambodia, Indonesia, Myanmar, and Thailand have their natural disaster national/strategic action plans.

3. On mainstreaming gender in laws, policies, institutions, and practices.

- Integrating the gender approach into the meta-frames of sustainable development, climate change, and/or national security depends on (a) the maturity of gender mainstreaming in the whole governance architecture; (b) the extent to which gender is recognized as an issue; and (c) the discursive construction of women in these societies. Accordingly, the propensity to ensure women's human rights in difficult circumstances also depends on the synergy between gender and disaster response;

- Furthermore, there are also varying appreciations for and on women's participation. At its most basic, women participate as information providers, to vulnerability assessment and post-disaster needs audit, and as information recipients of disaster/emergency preparedness. But at a more substantive level, they are recognized and thus are sought to contribute more meaningfully in the strategic, tactical, and operational stages of response mechanisms – preparedness, early relief, recovery, and rehabilitation. Thus, integrating the gender approach in the institutional infrastructure of natural disasters can be a substantive entry point to operationalize women's protection and empowerment primarily because of the care roles they play in their families and communities;

- However, women's specific concerns – such as sexual and gender-based violence, violence against women and girls, women's economic and political empowerment – are difficult to surface, discuss, and make a matter of concern in natural disaster and emergency/crisis institutional infrastructure and mechanisms;

- Currently, only two ASEAN Member States explicitly combined gender in their policy directive and/or national plans – Cambodia, with their gender and

climate change, and Indonesia, with their gender mainstreaming in natural disasters;

- In terms of identifying the efforts of each ASEAN Members State on mainstreaming gender in their natural disaster institutional architecture and instruments, the deduced categories are:

  - Incipient efforts (i.e. initial recognition but not yet institutionalized at the strategic level): Singapore and Thailand;

  - Modest efforts (i.e. early stages of inclusion at the strategic level and/ or efforts done more in practice by government or non-government organizations): Brunei Darussalam, Lao PDR, Malaysia, Philippines;

  - Moderate efforts (i.e. gender-mainstreaming evident at the strategic level): Indonesia, Myanmar, Viet Nam; and

  - Strong efforts (i.e. gender-mainstreaming evident at both strategic and operational levels): Cambodia;

- From the perspective of community women and non-government actors from different countries, the need to mainstream gender should be reflected not just in the strategic and operational levels but more so in implementation on the ground. As all ASEAN Member States recognize the importance of community-level participation in natural disaster response and preparedness, the inclusion of women in the planning and implementation processes should also be paid attention to. The strategic imperatives are a matter of institutional commitment, but concretizing these at the local level is paramount. Women's meaningful participation should also create spaces for their inclusion in decision-making, as well as advancing their potential as community leaders. Drawing from the societal roles of women need not limiting them to subordinate positions, they can actually draw strength from their domestic roles to contribute to the imperatives of providing early relief, recovery, and rehabilitation in the context of natural disasters.

- Additionally, particular patterns at the ground level should also be recognized and considered in the design of natural disaster and emergency/crisis institutional governance. These are women's contribution to early warning and prevention, the intersection of gender and culture in disaster relief and response, gender dimensions of migration, and women's access to resources in post-disaster situations, to name a few.

Moving back at the regional level, there is a need to consolidate the gains of the institutional infrastructure and mechanisms in all AMS on gender and natural disasters and collectively strengthen them. Thus, a possible initial initiative is to map out a general framework on women in natural disasters in the region. For this purpose, a draft text for an ASEAN Regional Action Plan on Women in Natural Disaster Contexts should be explored as a regional policy guide.

Strategically, should a regional action plan on women in natural disasters be adopted, the ASEAN will be the first regional organization in the world to pioneer this initiative.

Recommendations for the ASEAN on Women in Natural Disasters
(July 2017)

Gender Mainstreaming

1. Operationalize commitments set forth in ASEAN instruments – namely, the ASEAN Agreement on Disaster Management and Emergency Response, the Ha Noi Declaration on the Enhancement of Welfare and Development of ASEAN Women and Children, the Vientiane Declaration on Enhancing Gender Perspective and ASEAN Women's Partnership for Environmental Sustainability, and the ASEAN Declaration on the Elimination of Violence against Women – by drafting an ASEAN Resolution at the ASEAN Ministerial Meeting (AMM) for the integration of the gender approach in disaster risk reduction, climate change adaptation, sustainable development, and national security frameworks.

2. Call for the cooperation between ASEAN human rights bodies – namely, the ASEAN Inter-governmental Commission on Human Rights (AICHR) and the ASEAN Commission on the Promotion and Protection of the Rights of Women and Children (ACWC) – and relevant ASEAN Sectoral Bodies such as the ASEAN Committee on Disaster Management (ACDM) and the ASEAN Coordinating Centre on Humanitarian Assistance on Disaster Management (AHA Centre) to create a Regional Technical Working Group on Women in Natural Disasters as well as draft a Regional Action Plan on Women in Natural Disasters.

3. Encourage ASEAN Member States to apply the Convention on the Elimination of all forms of Discrimination against Women (CEDAW) in the harmonization of the framing of natural disaster and emergency/crisis preparedness, response, recovery, and rehabilitation.

4. Encourage ASEAN Member States to strengthen their practice of gender mainstreaming in their respective institutional infrastructure and mechanisms on disaster risk reduction, climate change adaptation, sustainable development, and national security.

5. Propose to ASEAN Member States the development of guidelines and checklists on natural disaster and emergency/crisis preparedness, response, recovery, and rehabilitation with gender components for the use of practitioners.

6. Request ASEAN Member States to develop and/or strengthen gender-sensitive and gender-inclusive training programs on natural disaster and emergency/crisis preparedness, response, recovery, and rehabilitation across the institutional infrastructure (i.e. policy-makers and disaster governance managers), different levels of implementation (i.e. vertical and horizontal), and to both civilian and military responders to these situations.

Participation

7. Encourage ASEAN Member States to guarantee the substantive participation of women and girls in the drafting and/or implementation of laws, policies, and/or strategic plans on disaster risk reduction and management. Women participation

should come from different levels of governance (i.e. national and local), across relevant agencies and sectors.

8. Call on ASEAN Member States to institutionalize the participation and leadership of community women in all phases of natural disaster preparedness, response, recovery, and rehabilitation by involving them in the planning, programming, early warning and early relief, and post-disaster initiatives.

9. Encourage ASEAN Member States to target the increase of women's involvement as decision-makers, trainers, and first responders in the natural disaster and emergency/crisis institutional architecture.

10. Develop an ASEAN inter-governmental program on the leadership and empowerment of women relevant to natural disaster and emergency/crisis preparedness, response, recovery, and rehabilitation.

11. Establish a network of experts on gender equality, climate change and disaster response that may conduct further studies to highlight evidence in terms of policies, impacts, expense, benefits, effectiveness of expenditures and investments in these areas.

Protection

12. Request ASEAN Member States to draft and/or implement laws, policies, and/or strategic national plans specific to the protection of women and girls during natural disaster situations.

13. Develop a regional quick response mechanism to assist natural disaster-affected ASEAN Member States in efforts to provide gender and culturally-sensitive early relief initiatives (e.g. family packages, hygiene kits, women and children-friendly spaces/shelters, early psychosocial counselling).

14. Establishment of a gender-balanced (50% female and 50% male) and gender-sensitive regional quick response team (QRT) composed of trained humanitarian personel, medics, engineers, midwives, among others.

15. Encourage ASEAN Member States to conduct exchange/learning activities and cooperative capacity development trainings to prevent sexual and gender-based violence (SGBV) and violence against women and girls (VAWG) in the context of natural disasters and other humanitarian emergency situations. Exchange/learning activities should also include gender-sensitivity training for military forces as first responders in disaster situations that may be conducted by civil society, humanitarian assistance groups, and/or experts on disaster-related SGBV and VAWG.

Monitoring and Evaluation

16. Request ASEAN Member States to practice gender-disaggregated data collection for populations affected by natural disasters.

17. Encourage ASEAN Member States to apply gender analysis in the conduct of vulnerability and post-disaster assessments, as well as in contingency planning for emergency preparedness and response.

18. At the ASEAN level, for an inter-sectoral body Regional Technical Working Group on Women in Natural Disasters to develop evidence-informed policies to respond to the different facets of women's human rights in the context of natural disasters and emergencies/crisis situations.

Participants of the Research Validation Workshop, 09 June 2017, Manila, Philippines