APP
ASIAN PREPAREDNESS PARTNERSHIP

# Sri Lanka Baseline Assessment Country Report

*Program for Strengthening Capacity of Governments, Local Humanitarian Organizations and the Private Sector on Preparedness for Emergency Response in Asia*

ADPC
September 2018

BILL & MELINDA GATES foundation

adpc

# Acknowledgements

The ADPC Sri Lanka Office compiled the Sri Lanka Baseline Survey Report. Dr. Buddhi Weerasinghe, Ms. Nirmala Fernando, and Ms. Ganga Samarawickrema authored the report. Dr. Nishara Fernando and his research team at the Social Policy Analysis and Research Center (SPARC) at the University of Colombo conducted the survey. Lowil Espada completed the layout of the report.

ADPC Sri Lanka Office wishes to thank Mr. G.L.S. Senadeera, Director General, Disaster Management Center, Mr. Nuwan Madawan Arachchi, Assistant Director, Preparedness Planning, Disaster Management Center, Assistant Directors of District Disaster Management Coordinating Units of Colombo, Rathnapura, Galle, Kandy, Kurunegala, Anuradhapura, Jaffna, Batticaloa, and Badulla, Mr. Jeevan Thiagarajah, Chairman, Center for Humanitarian Affairs, Mr. Chandraratne D. Vithanage, Senior Assistant Director, Ceylon Chamber of Commerce and all the respondents, members of the focus group discussions, and key informants for their collaboration.

# Foreword

In the aftermath of the 2016 and 2017 floods, which were extreme climate events, Sri Lanka has realized the urgent need to strengthen preparedness for effective emergency response. Being an island nation, enhanced climate variability triggered by climate change is predicted to exacerbate the frequency and impact of such events in Sri Lanka. The Post Disaster Needs Assessment for the 2016 and 2017 flood events revealed opportunities to improve the response capacity, and the need to develop stronger stakeholder coordination. Disaster Management Center, Sri Lanka, believes that the project "Strengthening Capacity of Government, Local Humanitarian Organizations, and the Private Sector on Preparedness for Response" launched by the Asian Disaster Preparedness Center (ADPC) in collaboration with the Bill and Melinda Gates Foundation is a timely intervention for Sri Lanka. We commit to full cooperation for its successful implementation. The Baseline Survey presented here is an important contribution to our current efforts of improving National Disaster Risk Management initiatives for the country, aligned with the Sendai Framework for Disaster Risk Reduction (SFDRR) 2016-2030. We hope that the findings of this survey will guide the implementation of the national and sub-national coordination platforms for disaster risk reduction, and we expect that the project will support the strengthening of capacity building needs identified therein.

I would like to express my appreciation to ADPC and the Bill and Melinda Gates Foundation for selecting Sri Lanka as a pilot country for carrying out this Baseline Survey. We look forward to developing a sustainable partnership to make Sri Lanka safer from disasters.

Dr. S. Amalanathan
Director General
Disaster Management Center, Sri Lanka

# Contents

# Acronyms and Abbreviations

| | |
|---|---|
| **AAL** | Annual Average Loss |
| **ADPC** | Asian Disaster Preparedness Center |
| **CAT DDO** | Catastrophic Drawdown Option |
| **CKDu** | Chronic Kidney Disease of unknown etiology |
| **DDMCU** | District Disaster Management Coordinating Unit |
| **DEWN** | Disaster and Emergency Warning Network |
| **DMC** | Disaster Management Center |
| **DRM** | Disaster Risk Management |
| **DS** | District Secretary |
| **ENSO** | El Nino Southern Oscillations |
| **EOC** | Emergency Operation Center |
| **GAR** | Global Assessment Report |
| **GDP** | Gross Domestic Product |
| **GDI** | Gender Development Index |
| **GII** | Gender Inequality Index |
| **GN** | Grama Niladhari |
| **HCT** | Humanitarian Country Team |
| **HDI** | Human Development Index |
| **IASC** | Inter-¬Agency Standing Committee |
| **ICT** | Information and Communication Technology |
| **IDI** | ICT Development Index |
| **IDRC** | International Development Research Centre |
| **LECZ** | Low Elevation Coastal Zone |
| **LNGO** | Local Non-governmental Organizations |
| **NBRO** | National Building Research Organization |
| **NDRSC** | National Disaster Relief Services Center |
| **NEOP** | National Insurance Trust Fund |
| **NPO** | Non-Profit Organizations |
| **PPP** | Public Private Partnership |
| **PVI** | Prevalent Vulnerability Indicator |
| **SAARC** | South Asian Association for Regional Cooperation |
| **SFDRR** | Sendai Framework for Disaster Risk Reduction |
| **SOP** | Standard Operation Procedures |
| **UNISDR** | United Nations International Strategy for Disaster Risk Reduction |
| **VSSO** | Voluntary Social Service Organizations |
| **WASH** | Water and Sanitation |

# Executive Summary

Asian Disaster Preparedness Center (ADPC), in collaboration with the Bill and Melinda Gates Foundation, launched the program *'Strengthening Emergency Response Capacity of Local Humanitarian Actors in Asia'* in six Asian countries: Cambodia, Myanmar, Nepal, Pakistan, the Philippines, and Sri Lanka.

Each country has completed a sample baseline survey of selected at-risk geographical areas with the goal of investigating the current context and engagement of government entities, the private sector, local NGOs / civil society organizations, international organizations, academia, and the media in emergency response. These country reports will be summarized into a Regional Synthesis Report for the six countries providing a comparative contextualization for the implementation of the said program.

This report aims to summarize the baseline findings from Sri Lanka to better understand the areas of opportunity for strengthening capacities for a more effective humanitarian response.

The report commences with the country profile and proxy indicators that reflect the prevalent vulnerability context of the country. These proxy indicators are presented to enable a comparison of the prevalent vulnerability in the six countries selected for implementation of the program.

The current hazard and risk profiles and policy, legal and institutional framework for disaster risk management existing in the country has been presented.

The survey findings that follow are segmented into responses from government organizations, local non-governmental organizations, the international non-governmental organizations and the private sector in that order.

The survey reveals that organizational structure, administrative and financial procedures in the government organizations adhere to legal provisions and are adequate. Functioning of local non-governmental organization are also guided by regulations. A concern emerges in inadequate provision of personal risk insurance cover for staff involved in emergency response in both these sectors. Adequacy of staff and technical capacity for emergency response needs strengthening in both government and non-government sectors. Perception of all responders reveal the need for an effective coordination and enhanced knowledge sharing amongst stakeholders.

Recommendations formulated based on survey findings include enhancing awareness on Humanitarian Coordination, establishing national and subnational coordinating platforms of stakeholders, re-establishment of the cluster approach, developing a comprehensive emergency response database, capacity building, improved knowledge management and enriching secondary and tertiary education curriculum for DRM.

# Sri Lanka Baseline Assessment Country Report

## Preamble

The program on *Strengthening Capacity of Government, Local Humanitarian Organizations, and the Private Sector on Preparedness for Response* is being implemented by ADPC in collaboration with the Bill and Melinda Gates Foundation (BMGF) to improve emergency response preparedness in six Asian countries: Cambodia, Myanmar, Nepal, Pakistan, the Philippines, and Sri Lanka. Selection of the countries was based on the extent of each country's current vulnerability and risk.

The objectives of the program are as follows:

- To improve humanitarian leadership and coordination through systematic and local institutional strengthening
- To attain better coordination of humanitarian actions by enhancing humanitarian information management and knowledge exchange
- To establish more effective partnerships among national and local humanitarian actors

The goal is to improve the collaboration and south-south knowledge and information exchange between participating countries leading to the formation of the **Asian Preparedness Partnership** (APP) in the region.

## Objectives of the Baseline Survey

The baseline survey had the following objectives.

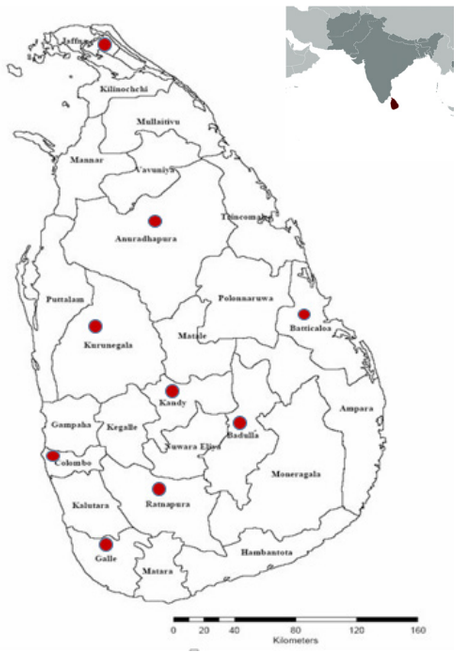
1. To map the current status of the humanitarian ecosystem in the given context regarding the capacity to manage a humanitarian crisis at the institutional, organizational, strategical, and operational levels and providing a baseline against which the progress and the impact of the program can be measured.

2. To establish a strategic roadmap for strengthening the humanitarian institutional leadership capacity required to streamline the responses and early recovery.

## The Methodology for the Baseline Survey

Selection of geographical areas for the baseline survey was based on the DesInventar Database of the Disaster Management Center. The nine most hazard-prone districts were selected: Anuradhapura, Badulla, Batticaloa, Colombo, Galle, Jafna, Kandy, Kurunagala, and Ratnapura (see Figure 1).

Figure 1 Geographical Locations Selected for Survey




The sample was comprised as follows.

| | |
|---|---|
| Central Government Organizations | 38 |
| Local Government Authorities | 19 |
| Local NGOs | 39 |
| Private Sector Organizations | 7 |
| Academic Institutes | 9 |
| Media | 7 |
| INGO | 9 |
| UN Organizations | 5 |
| Humanitarian Networks | 2 |

The instruments used for data collection included:

- Literature Review
- Structured questionnaires
- Key Informant Interviews (KIIs)
- Focus Group Discussions (FGDs)

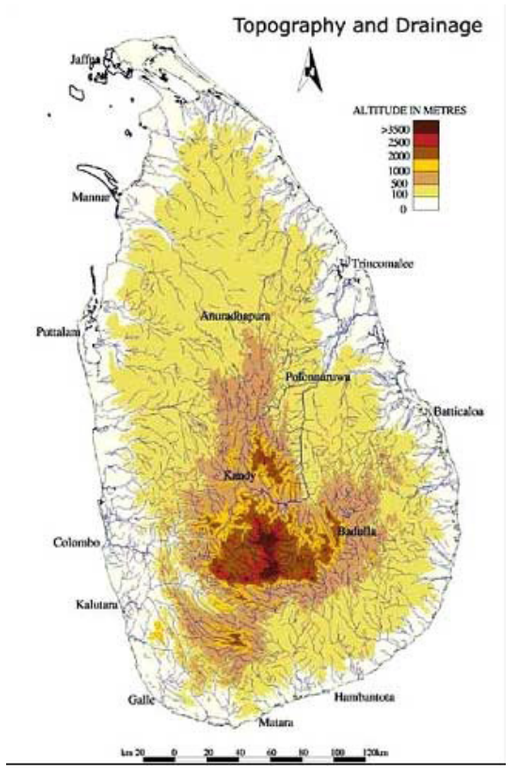
Sinhalese, Tamil, and English were the languages used, based on preference of the interviewees.

Questionnaire survey was carried out using the on-line Survey Monkey[1] platform. Data was collected, entered into a database and analyzed using tools of Survey Monkey. Results were validated at a workshop with participating stakeholders.

## Country Overview

Sri Lanka is an island situated in the Indian Ocean, at the base of the Indian Sub-Continent. Geologically, Sri Lanka is part of the South Indian Peninsula. Both countries stand on the same continental shelf. Sri Lanka is 880 km north of the equator, and has a land area of 65,525 sq. km. Together with internal waters it is 1,570 sq. km.,

Figure 2 Topography of Sri Lanka[2]




1 https://www.surveymonkey.com/
2 http://iri.columbia.edu/~mahaweli/

and the total area within the national boundary is 67,095 sq. km. The landmass includes a highland massif situated in the south-center, which is surrounded by an intermediate zone of upland ridges and valleys. Lowlands and a coastal fringe of sandbars and lagoons surround the intermediate zone.

From sea level, the relief ascends in three peneplains to a maximum of 2500 meters[3] (see Figure 2).

## Climate[4]

Sri Lanka has a tropical monsoon climate with seasonal rainfall. Two monsoon periods with two inter-monsoon periods control the rainfall rhythm. The South Westerly monsoon period is from May to September. The North Westerly monsoon is from December to February. The average temperature of the lowlands ranges between 25-30 degrees Celsius, which is affected by altitude. Based on rainfall distribution, the country is classified into three climatic zones: wet, dry, and intermediate. The wet zone covers the south-western region, including the central hills, and receives high mean annual rainfall over 2,500 mm, without pronounced dry periods. The dry zone predominantly covers the north central, northern, and eastern parts of the country, receives a mean annual rainfall of less than 1,750 mm, and has a distinct dry season from May to September. The intermediate zone receives a mean annual rainfall between 1,750 to 2,500 mm with a short and less prominent dry season. Monthly average conditions for temperature and precipitation can be seen in Figure 3.

The island has 46 different agro-ecological regions differentiated by monthly rainfall expectancy and distribution, soil type, elevation, land use, and vegetation. The aspiration of this micro zonation is that matching crop types with zonal characteristic will build adaptive capacity of crops to climate change impacts (see Figure 4).

Figure 3 Average conditions of Precipitation and Temperature[5]

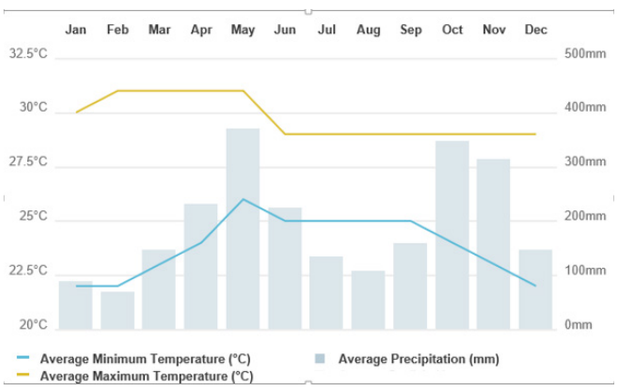
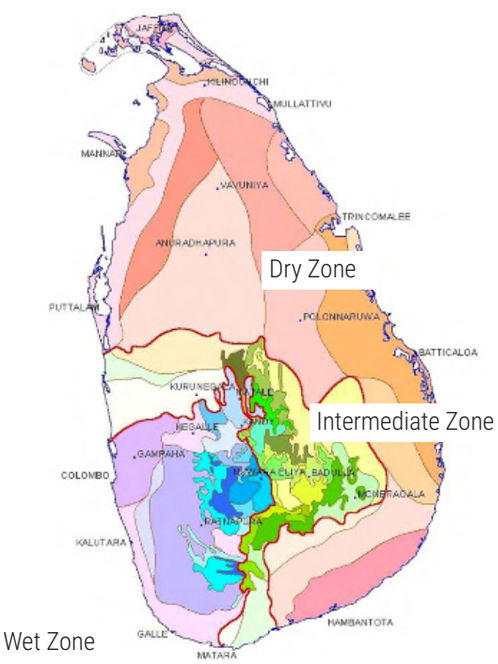



Figure 4 Agro-ecological zonation of Sri Lanka[6]




Source: Department of agriculture

3 Adopted from https://www.britannica.com/place/Sri-Lanka/The-land#ref24273

4 Adopted from https://www.britannica.com/place/Sri-Lanka/The-land#ref24273

5 http://www.bbc.com/weather/1248991

6 https://www.gov.lk/index.php

## Demography and Culture[7]

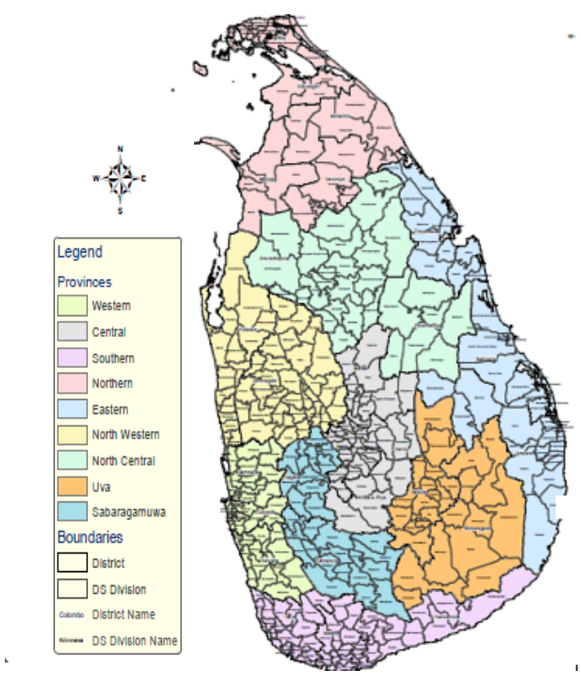
Sri Lanka's population is 20.7 million. It has a pluralistic society which is multi -ethnic, multi-lingual, and multi-religious. The largest ethnic group is Sinhalese (74%), followed by Sri Lankan Tamils (12%), Muslims (7%), Indian Tamils brought by the British for plantation labor (5%), small communities of Malays and Burghers (persons of Dutch or partly Dutch descent), and a small number of Veddhas (Indigenous people). Religious composition includes Buddhists (70%), Hindus (13%), Muslims (10%), and Christians (6%).

## Administrative System[8]

Sri Lanka has three levels of government: central, provincial, and local. According to the 1978 constitution, the head of state and government is the President. There is a universal right to vote in political elections for adults. Parliamentary and presidential elections are held every six years. Parliament has a single chamber with 225 members. The Provincial Council functions as the legislature of the province and has power to pass a statute on any subject assigned to the provincial council under the constitution subject to the condition that they do not violate the constitution.

There are nine Provincial Councils with the Provincial Secretary as the main Administrative Officer. The provincial authorities are governed by the Provincial Councils Act 1987. The nine provinces are organized into 25 districts, each administered under a District Secretary. A district is divided into a number of Divisional Secretary's Divisions (commonly known as DS divisions), which are in turn subdivided into Grama Niladhari Divisions (GN Divisions). There are 256 DS divisions in the country (see Figure 5).

Figure 5 Administrative Divisions[9]




## Local Governance[10]

The local government bodies are collectively known as local authorities and are constituted by elected members. Local government is specified in the 13th amendment to the constitution of 1978. The main Acts relating to local authorities are the Urban Councils Ordinance 1939, the Municipal Councils Ordinance 1947 and the Pradeshiya Sabhas Act (No. 15 of 1987). The Ministry of Local Government and Provincial Councils is responsible for policy and legislation at the national level. The National Local Governance Policy of 2011 provides revised mandates including pro-active disaster risk reduction to local authorities. There are 335 local authorities constituted by 23 municipal councils, 41 urban councils and 271 peri-urban and rural pradeshiya sabhas. The central government and provincial councils provide grants for their operations. Local authorities are mandated for the collection of taxes and user fees as well as property tax, rent, and grants. They are also responsible for providing a variety of local public services

7 http://www.clgf.org.uk/default/assets/File/Country_profiles/Sri_Lanka.pdf
8 ibid
9 http://www.statistics.gov.lk/misc/Map%20of%20Administrative%20District.pdf
10 http://www.clgf.org.uk/default/assets/File/Country_profiles/Sri_Lanka.pdf

including roads, sanitation, drains, housing, libraries, public parks, and recreational facilities.

## Hazards

Hazards are processes, phenomenon, or human activities that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation[11].

The Tsunami of 2004 is the most catastrophic hazard impact in recorded history. Tsunami was an extremely rare event. Droughts, floods, landslides, coastal erosion, cyclones with accompanying sea surges, and lightning are the major natural hazards apart from epidemics such as dengue that prevail in Sri Lanka.

In the last two decades, chronic kidney disease of unknown etiology (CKDu) has emerged as a significant contributor to the burden of chronic kidney disease (CKD) in rural Sri Lanka. The prevalence of CKDu is as high as 22.9% in some districts, and studies have found an association with farming occupations[12]. The draft National Disaster Management Plan (2017) has identified this as an emerging non-communicable disease with negative impact on the response and recovery capacity of affected households.

Studies indicate that climate change and phenomena such as ENSO may impact the frequency of hydro-meteorological hazards, which are on the rise[13].

Disaster Management Center (DMC) developed hazard profiles for each province and district throughout the island for major hazards including floods, drought, landslides, coastal erosion, cyclones, sea surges, sea level rise, tsunamis, and lightning. However, since the profiles are in different scales, their application in the decision making process is limited[14].

The Accelerated Mahaweli River Diversion Project of 1977, the largest development project in the country to date, established large resettlement schemes in the dry zone. The resulting deforestation has cleared elephant habitats and their migratory corridors creating a human-elephant conflict, cause for largest number of animal attacks that is now a serious concern.

## Vulnerability

Vulnerability represents the conditions determined by physical, social, economic, and environmental factors, or processes that increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards[15].

Inter-American Development Bank (2011)[16], Cardorna & Carreno (2013) [17]and Wisner (2016)[18] discuss the use of the Prevalent Vulnerability Index, (PVI), made up of a series of indicators to benchmark vulnerability that characterize prevailing vulnerability conditions reflected in exposure in prone areas, socioeconomic fragility and lack of resilience in general. The UNISDR publication - Global Assessment Report (GAR 2009) categorizes them as Proxy Indicators (PIs), which cover economic status, population density, Human Development Index, income, literacy, poverty, inequality, and access to technology

11 http://www.preventionweb.net/english/professional/terminology/v.php?id=488
12 http://www.sciencedirect.com/science/article/pii/S0035920307001526
13 Ministry of Mahaweli Development and Environment 2015, National Adaptation Plan for Climate Change Impact in Sri Lanka: 2016 to 2025; UNESCAP, RIMES, Science and Policy Knowledge Series, Integration of DRR and Climate Change Adaptation into Sustainable Development, El Niño 2015/16 Impact outlooks and Policy Implications, December 2015.
14 PDNA Report Floods and Landslides 2017, Sri Lanka
15 http://www.preventionweb.net/english/professional/terminology/v.php?id=508
16 Inter-American Development Bank (2011), Indicators for Disaster Risk and Risk Management, TECHNICAL NOTES No. IDB-TN-276.
17 Cardona, O. & Carreño, M. (2013). System of indicators of disaster risk and risk management for the Americas: Recent updating and application of the IDB-IDEA approach. In J. Birkmann (Ed.), Measuring vulnerability to natural hazards (2d ed.) (pp. 251–276). Tokyo: United Nations University Press.
18 Wisner Benjamin (2016), Vulnerability as Concept, Model, Metric, and Tool, http://naturalhazardscience.oxfordre.com/view/10.1093/acrefore/9780199389407.001.0001/acrefore-9780199389407-e-25.

and natural resources. These are indicators that reflect relative weaknesses and conditions of deterioration that would increase the direct effects associated with hazard impacts. These proxy indicators are addressed under initiatives to achieve Sustainable Development Goals SDGs (2016-2030)[19]. Inter-American Development Bank (2011)[20] suggests that these indicators are variables that reflect, in general, an adverse and intrinsic predisposition of society when faced with a dangerous phenomenon, regardless of the nature and intensity of these events. Although the current program is focused on strengthening the capacity of local stakeholders on preparedness to emergency response and the activities envisaged under the program might not bear direct consequences on the proxy indicators, it is important to mention these indicators as they provide a backdrop of prevalent vulnerability in the six countries under study.

Table 1 presents the status of selected proxy indicators. Unless otherwise stated, the values are extracts from the 2016 Human Development Report and provide values for the year 2015.

## Table 1

### Proxy Indicators of Prevalent Vulnerability

| Selected Indicators for Demography | |
|---|---|
| Population (millions)2015 | 20.7 |
| % Urban Population 2015 | 18.4 |
| % below 15 years | 24.7 |
| % 15 – 64 years | 68 |
| % over 65 years | 7.9 |
| **Selected Indicators for Economy** | |
| Total GDP (2011 PPP $ Billion) 2015 | 231.6 |
| Young age dependency ratio per 100 people | 37.4 |
| Old age dependency per 100 people | 14.1 |
| Total Debt Stock % GNI 2015 | 54.6 |
| Country Rank (Low number indicates higher debt stock) | 19 |
| **Selected Indicators for Poverty & Income Disparity** | |
| % population below PPP $1.90 income per day | 8.9%[34] |
| Gini coefficient | 39.2 |
| **Selected Indicators for Human Development** | |
| HDI (Medium) | 0.766 |
| HDI country ranking | 73 |
| **Selected Indicators on Gender** | |
| Gender Development Index (GDI) | 0.934 |
| Gender Inequality Index (GII) | 0.386 |
| GII country ranking | 87 |
| **Selected Indicators on Education** | |
| Education index[41] | 0.738 (2013) |
| Government expenditure on education (% of GDP) | 1.6 |
| Adult literacy rate (15 years and older) | 92.6 |
| Adult literacy rate (Youth % 15-24 male) | 98.4 |
| Adult literacy rate (Youth % 15-24 Female) | 99.2 |
| **Selected Indicators for Access to Technology** | |
| ICT Development Index (IDI) | 3.77 |
| IDI World Ranking | 116 |
| Telephones and cellular subscribers per 100 people | 112.8 |
| Personal computers per 100 people | 2.7 |
| Internet users % population | 30 |
| **Selected Indicators for Health** | |
| Healthcare spending (% of GDP) | 2 |
| Doctors (per 10,000 people) | 6.8 |
| Child malnutrition (% under age 5) | 14.7 |
| **Ecosystems** | |
| Land area covered by forest (%) | 29.9 |
| Percentage of protected areas | 17.2 |
| **Population in the Low Elevation Coastal Zone LECZ** | |
| % population in Low Elevation Coastal Zone | 11.79 |

## Population

By 2041, one out of every four people is expected to be elderly, making Sri Lankans the oldest population in South Asia[21]. This will add to the pressure mounting on the productive population of Sri Lanka, and impact household purchasing

19 http://www.un.org/sustainabledevelopment/sustainable-development-goals/

20 Inter-American Development Bank (2011), Indicators for Disaster Risk and Risk Management, TECHNICAL NOTES No. IDB-TN-276.

21 The World Bank, Sri Lanka's Demographic Transition: Facing the Challenges of an Aging Population with Few Resources. September 2012.

power and savings. These factors influence household resilience and coping capacity.

The average population density[22] is 325/ km2. The coastal belt shows higher urbanization, and thus higher population densities. A total of 11.7% of the population of Sri Lanka lives within the Low Elevation Coastal Zone (LECZ)[23]. This area is vulnerable to floods, sea level rise, cyclones, and storm surges, which are expected to increase in frequency and intensity with climate change. According to the International Development Research Centre (IDRC), over the next 50 years, people living at low altitudes in developing countries, particularly those in coastal Asia, will suffer the most from extreme weather patterns[24].

Sri Lanka envisages an increase of the current urban population of 21.1% to 50% by 2016 and to 70% by 2030[25]. Though Sri Lanka is taking important steps to implement its urban vision, significant challenges to urban development that are emerging may increase prospective risk. One example is the filling of wetland areas which serve for flood water retention thus increasing vulnerability for floods.

## Economy

Over three decades of conflict and ethnic tensions in Sri Lanka came to an end in 2009. This has opened the possibility of a new period of peace. Despite the conflict and the devastating 2004 tsunami, the country achieved middle-income status in 2009. However external debt stock is documented to be 54.6% of Gross National Income (GNI)[26]. The revenues required to service this debt each year incurs large budget deficits to allow the government to meet its essential day-to-day responsibilities. The government's high debt-to-GDP ratio reflects an imbalance between high import and low export, with Foreign Direct Investment (FDI) remaining below 2%. [27]

## Poverty and Income Distribution

The country has done well in moving people out of poverty, which influence coping capacity and recovery of households. However, inequality gaps have not closed[28].

Poverty and the number of people living on less than 1.25 USD a day reduced from 13.2% in 2002 to 3.2% in 2012/13. Despite these improvements, nearly one in four lives on less than 2.50 USD a day,[29] which is just above the poverty line. These people are at risk of being impacted by the negative effects of economic or climatic shock.

## Human Development

Sri Lanka falls under the 'high' human development category with a Human Development Index (HDI) of 0.766 positioned at 73 out of 188 countries[30]. It is the only country in South Asia to be in this category. It has eliminated gender disparities in enrollment in primary, secondary, and higher education but has not ensured gender equality in the labor market and in access to decision-making positions[31].

## Gender

Sri Lanka has a Gender Inequality Index (GII) of 0.388 and ranks 87 out of 144 countries. Sri Lanka shows a value of 0.934 for the Gender

22 2012 Census
23 The zone is derived from a Digital Elevation Model (DEM) by selecting all land contiguous with the coast that was 10 meters or less in elevation. Zonal statistics are generated for urban, rural and total population and land area for the country as a whole and within the LECZ
24 https://www.sciencedaily.com/releases/2015/10/151021104907.html
25 The World Bank, Sri Lanka's Demographic Transition: Facing the Challenges of an Aging Population with Few Resources. September 2012
26 http://www.indexmundi.com/facts/sri-lanka/indicator/DT.DOD.DECT.GN.ZS
27 World Bank, op.cit. from United Nations Sustainable Development Framework, Sri Lanka 2018 – 2022
28 Sri Lanka Millennium Development Goals Country Report 2014
29 World Bank, op.cit. from United Nations Sustainable Development Framework, Sri Lanka 2018 – 2022
30 http://lk.one.un.org/wp-content/uploads/2017/08/Final_UNSDF_2018-2022.pdf
31 https://www.adb.org/sites/default/files/institutionaldocument/172710/sri-lanka-country-gender-assessment-update. pdf

Development Index (GDI). It is the ratio of the female to the male HDI. The GDI reflects gender inequalities in achievement in the same three dimensions of the HDI. There are five GDI groups which are based on the absolute deviation of GDI from gender parity, 100. |GDI–1|. Sri Lanka belongs to Group 3 which comprises countries with medium equality in HDI achievements between women and men (absolute deviation of 5-7.5 percent).[32].

The proportion of female participation and representation in public institutions and politics remains low, and is below the global average.[33] From 1989 to 1994 women comprised 5.8% of parliamentarians, and by 2014 the proportion had only marginally increased to 6.8%.[34] Overall, only 35 percent of women in Sri Lanka are employed. In the estate sector women make up 52 percent of the workforce. According to the Sri Lanka Labour Force Survey, unemployment among females stood at 7 percent compared to 2.9 percent for males[35].

### ICT Development

Sri Lanka's ICT Index (IDI) value is 3.77 (2016), and ranks 117 out of 176[36]. This is a concern because of the reduced ability to latch onto modern ICT applications for disaster monitoring, forecasting and climate modeling capabilities.

### Health

Sri Lanka currently allocates 2% of its GDP for health. The government offers free healthcare to its citizens. According to WHO (2017)[37], 44% of its members reported to having less than 1 physician per 1000 p. population. Sri Lanka has 6.8.

Child malnutrition in Sri Lanka is a concern. A total of 14.7% of the total segment under the age of 5 years is malnourished. The Global Nutrition Report suggests that Sri Lanka is among the highest in the world when it comes to wasting prevalence at 19.6%, ranking 128 out of 130 countries. It is also one of the few countries where the wasting prevalence is higher than stunting, causing concerns for the long-term effects of poor nutrition on Sri Lanka's human development. The 2010 National Nutrition Policy of the Government covers the issue of underweight children, and all aspects of nutrition.

Serious issues for men's health and the ongoing prevalence of external risks for men are reflected in life expectancy projections that predict that by 2021 male life expectancy will reach 71.7 years, while female life expectancy will reach 81.7 years[38].

Non Communicable Diseases (NCDs) show an increasing trend.

### Environment

Sri Lanka has 29.2% forest cover and 17.2% PAs, but faces the threat of illegal deforestation. Degradation of ecosystems will impact sustainability of ecosystem services for human settlements and livelihoods.

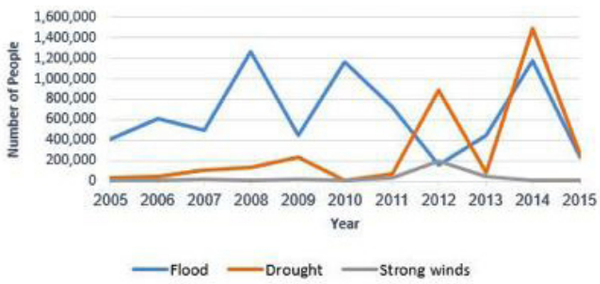
## Disaster Risk Profile

Disaster risk is the potential loss of life, injury, or destroyed or damaged assets which can occur to a system, society, or a community in a specific period of time, determined probabilistically as a

32 http://hdr.undp.org/en/composite/GDI
33 Demographic Dividend, op.cit.
34 MDGR 2014, op.cit.
35 Department of Census and Statistics, 2016. Sri Lanka Labour Force Survey - Annual Bulletin. Retrieved from: http://www.statistics.gov. lk/samplesurvey/LFS_Annual%20Bulletin_2016.pdf
36 http://www.itu.int/net4/ITU-D/idi/2017/index.html
37 WHO (2017), How Much Should Countries Spend on Health? By William Savedoff. http://www.who.int/health_financing/en/how_much_should_dp_03_2.pdf
38 Ministry of Health, 2015. Annual Health Bulletin. Retrieved from: http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/AHB/2017/AHB%202015.pdf Note: The Department of Census and Statistics has completed the Demographic Health Survey for 2016 which contains an updated figure, and will be released by the end of 2017

function of hazard, exposure, vulnerability and capacity[39]. In terms of the number of people affected and the social cost incurred in relief and rehabilitation, floods and droughts are in the forefront of natural disasters (see Figure 6).[40]

Figure 6 Total People Affected by Selected Natural Hazards during 2005 – 2015[40]

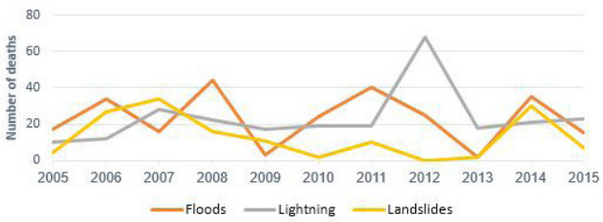



In terms of cumulative fatalities, injuries, destroyed infrastructure, houses, and livelihoods affected, although not included in the data for the time period 2005 – 2015 from DesInventar, the Asian Tsunami of December 2004 tops the list, with floods and cyclones following behind. On event basis, floods, lightening, and landslides account for most fatalities in that order (see Figure 7).

Meteorological and agricultural droughts occur every three to four years. The droughts of 1953-56, 1975-76, 1981-83, and 1995-96 proved disastrous. The impacts from El Niño in 2015, and the ongoing drought in 2016 and 2017 in parts of Sri Lanka have also had severe impacts[41].

Drought is considered a critical disaster due to its impact on the rural poor whose livelihoods center on rain-fed agriculture. Around 81% of Sri Lanka's population is rural.

Figure 7 Figure 7 Disaster Mortality Due to Major Hazards during 2005 – 2015[41]




## Potential for Unexpected Extreme Nuclear Event

Kudankulam Nuclear Power Plant in the Tirunveli district of the southern Indian state of Tamil Nadu raises the potential of an unexpected impact of a nuclear accident for Sri Lanka[43]. The first reactor of the plant attained criticality on 13 July 2013 and started commercial operation from 31 December 2014. Commercial operation of a second unit started on 15 October 2016.

Pakistan Executive Committee of the National Economic Council in 2013 approved the construction of two 1100 MW reactors (World Nuclear Association 2014). Bangladesh Power System Master Plan has approved establishment of two 1000 MW nuclear plants by 2020[44]. The SAARC region is therefore at risk for a potential nuclear accident.

The Atomic Energy Authority, Sri Lanka is mandated to deal with radiological incidents. However, the country's capacity to deal with such an emergency is minimal. This calls for a trans-boundary response mechanism.

39 http://www.preventionweb.net/english/professional/terminology/v.php?id=7818
40 DesInventar, Disaster Information Management System Sri Lanka
41 Source: Department of Social Services
42 Ibid
43 http://www.world-nuclear-news.org/NN-Kudankulam-II-project-launched-17101601.html
44 Begum, z. (2011). Status of Nuclear Activities of Bangladesh Atomic Energy Commission, 16th WIN-Global Conference, Marseilles, May

# EM-DAT Risk Profile for Sri Lanka

According to UNISDR, the level of disaster loss is the ultimate indicator of success of public policy in disaster risk management.

Fundamentally, if losses are increasing, disaster risk management efforts are not effective and vice versa. UNISDR has recommended collecting data on Annual Average Loss (AAL) as an indicator of risk and resilience in order to highlight future losses that a country may experience[45].

> AAL is the expected loss per annum associated with the occurrence of future perils, assuming a very long observation timeframe. While there may actually be little or no loss over a short period of time, the AAL also accounts for much larger losses that occur less frequently. As such, AAL is the amount of funds that need to be put aside annually in order to cumulatively cover the average disaster loss over time. It considers the damage caused on the exposed elements by small, moderate, and extreme events and results in a useful and robust metric for risk ranking and comparisons.
>
> Probabilistic risk assessment gives an overview of estimated losses, which can provide guidance to predict and plan for future losses. This information can be used to plan and prioritize investments and strategies for managing disaster risk.
>
> UNISDR, 2013

The Internationally Reported Database CRED EM - DAT[46] disaster data for events that qualify the following criteria:

- Ten or more people reported killed
- One hundred or more people reported affected
- Declaration of a state of emergency
- Call for international assistance

These criteria allows inclusion of drought impact when deaths occur. However, droughts can have significant impacts on livelihoods in Sri Lanka and consequently on household income even without causing fatalities. Therefore, national and sub-national databases are important to monitor droughts and small scale disasters not recorded in the EM-DAT.

The following data (see Figure 8 and 9) presents the frequency of hazard impact and the Average Annual Loss (AAL), which have been adopted from CRED EM – DAT as presented in the Prevention web domain[47].

Flood (78.2%) and storms (9.1%) are the most frequent according to EM-DAT, but the significance of droughts is underscored due to the way the database is constructed. Landslides (5.5%) have been on the increase due to human activity on slope areas.

For Sri Lanka, the AAL for floods is the highest at 86.3% followed by storms at 11.2%. However, the significance of droughts is not emphasized here, and may exacerbate due to climate change.

A recent World Bank study[48] for Sri Lanka shows that an estimated 380 million USD is lost annually due to disasters, especially floods, which account for 240 million USD losses annually.

45 www.unisdr.org/files/35716_newsystemofprogressindicatorsfordrr.pdf

46 www.emdat.be Universitè catholique de Louvain Brussels – Belgium

47 http://www.preventionweb.net/countries/lka/data/

48 Sri Lanka: Ending Poverty and Promoting Shared Prosperity, WB October 2015

Figure 8 Frequency of Disasters

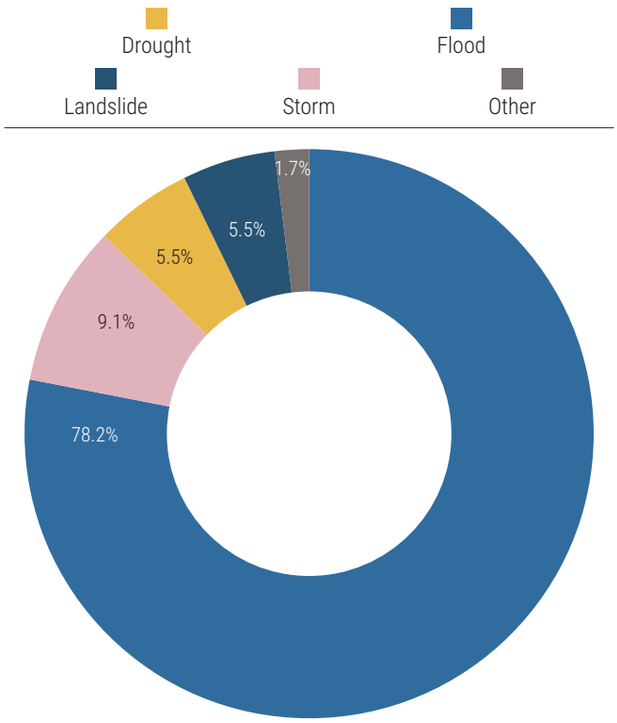
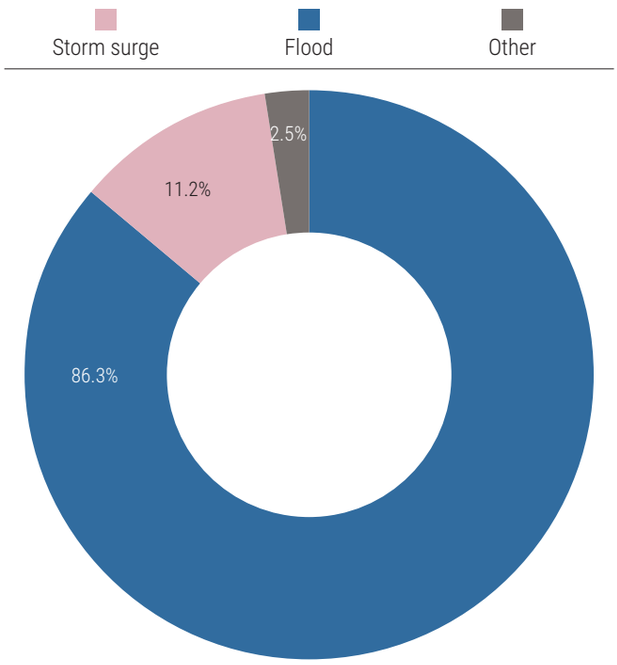



Figure 9 Annual Average Loss (%)




## Legal and Institutional Arrangements for DRM

The widespread destruction caused by the 2004 Tsunami re-confirmed the urgent need for multi-sectoral, inter-institutional, and multidisciplinary approaches to managing disaster risks in the country. In its aftermath, **Sri Lanka Disaster Management Act No. 13 of May 2005** was enacted in the Parliament. The **National Council** for Disaster Management chaired by His Excellency, the President was established to coordinate disaster risk management in Sri Lanka as per provisions of the act, and the **Disaster Management Center** (DMC) was established in mid-2005 as its executing agency. Its primary role is the coordination of disaster risk management work.

Cabinet **Ministry** for Disaster Management was established by Gazette extraordinary[49] on February 20, 2006. Currently, the following institutes operate under the Ministry.

- Disaster Management Center (DMC)
- Department of Meteorology
- National Building Research Organization (NBRO)
- National Disaster Relief Services Center (NDRSC).

Sri Lanka has formulated the following policy instruments for DRM:

- National Policy for Disaster Risk Management
- Final draft of Sri Lanka Disaster Management Plan and
- The National Emergency Operations Plan (NEOP).

49 The Gazette of the Democratic Socialist Republic of Sri Lanka, is a public journal of the Government. It prints certain statutory notices from the government. Gazette extraordinary is a special edition.

Figure 10 Timeline of the Main Hazard Occurrences and DRM Framework Development

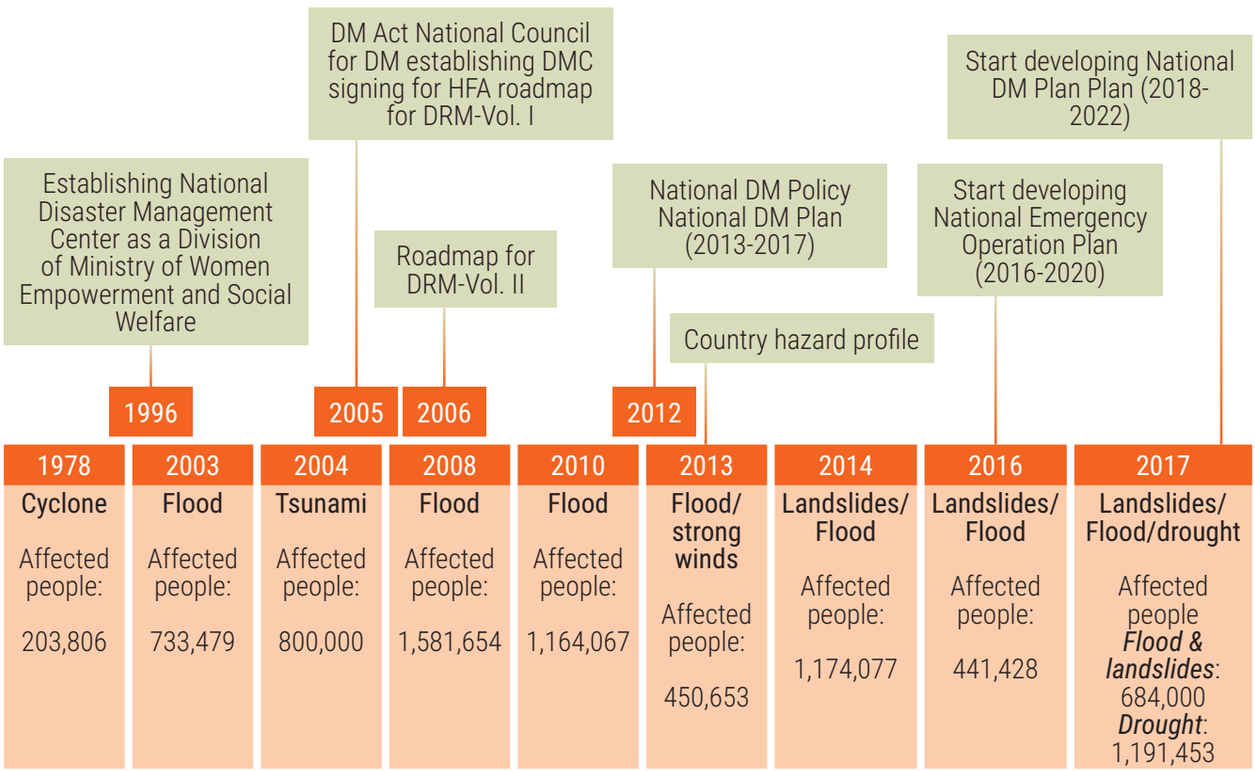



Figure 11 Institutional Framework for DRM

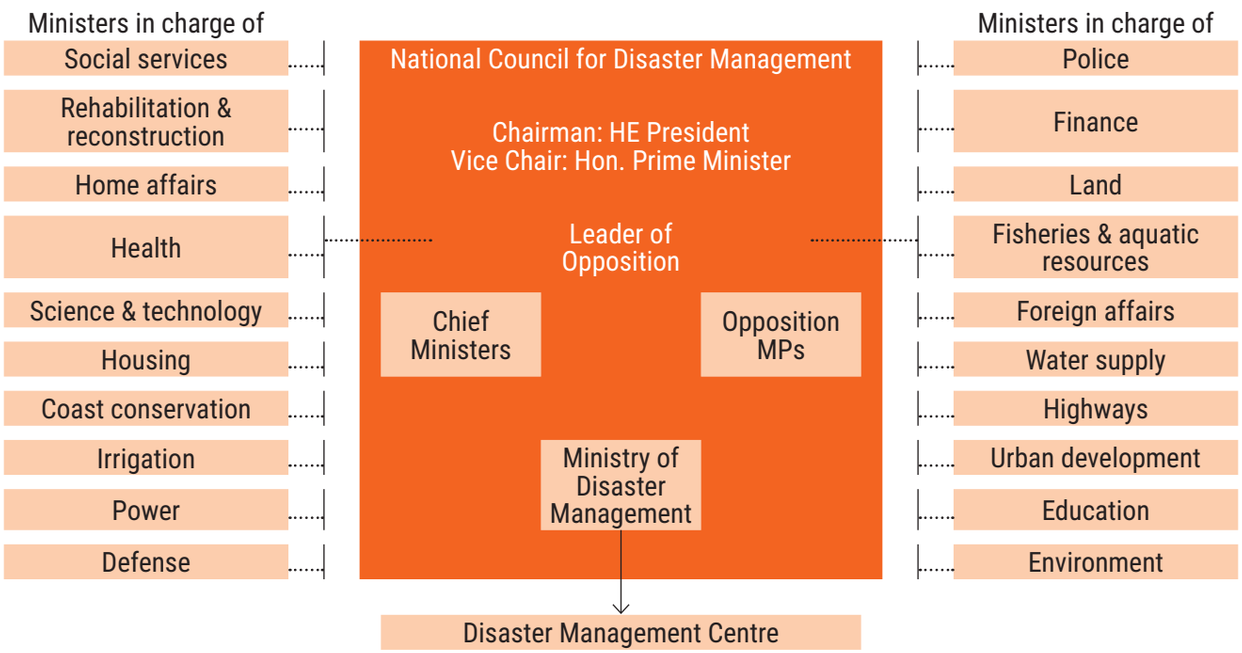
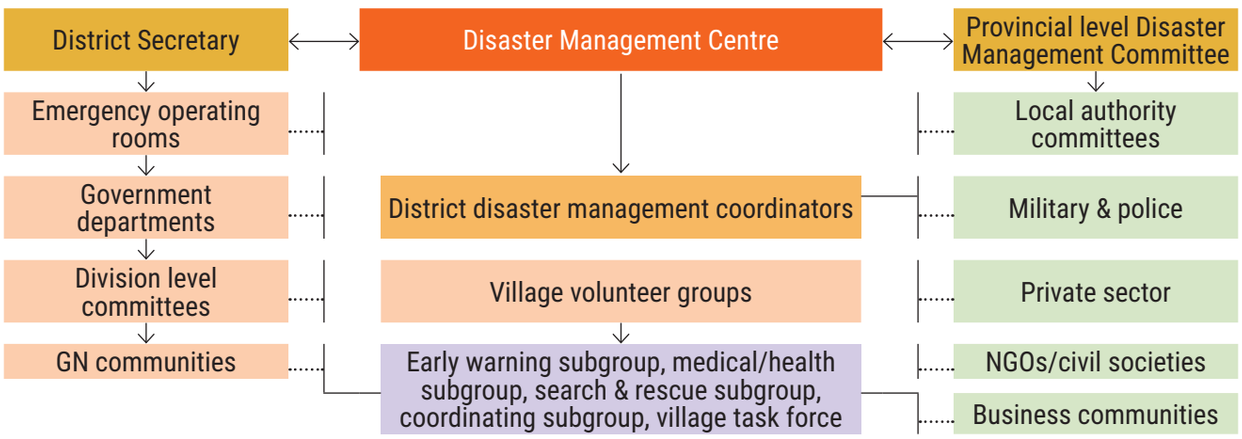


Figure 12 Current Framework for Devolution of DRM




The DMC has established District Disaster Management Coordinating Units (DDMCU) affiliated with the District Secretariat in all Districts of Sri Lanka as mechanisms to devolve activities. Village-level committees were formed, but their sustainability is uncertain. Figure 10 depicts the timeline of major disasters and the legal and policy evolution for DRM. Figure 11 shows the DRM framework lead by National Council for Disaster Management chaired by His Excellency, the President[50].

Transfer of Powers (Divisional Secretaries) Act No 58 of 1992 introduced the Divisional Secretariat system and made the Divisional Secretaries (Div.Secs.) as the custodian of state land and handed over the functions relating to the alienation of state land to the Div.Secs. Disaster Risk Management is a *de facto* mandate of the District and Divisional administrations. Devolution Framework for DRM is depicted in Figure 12.

The National Policy on Local Government (2009) mandates local governments to participate in proactive disaster risk management. However by-laws to implement the policy are not currently operational.

## National Financial Allocation for DRM

Analysis of budget estimates from 2009 to 2016 (see Table 2) reveals that the total allocation for direct interventions related to Disaster Management activities by agencies under the purview of the Ministry varies from 0.04% to 0.1 % of the total annual budget.[51]

### Table 2

Budget Estimates for DRM 2013 -2016[66]

| Description | Annual expenditure in LKR Millions | | | |
|---|---|---|---|---|
| Budgetary Allocation of agencies under the MDM | 2013 | 2014 | 2015 | 2016 |
| Disaster Management Centre | 698 | 1,806 | 920 | 978 |
| National Disaster Relief Services Centre | 425 | 2,379* | 1485 | 582 |
| National Building Research Organization | 116 | 983 | 551 | 669 |
| Department of Meteorology | 46 | 43 | 603 | 324 |
| Total annual budget of the government | 2,566,996 | 2,599,000 | 3,338,000 | 3,699,000 |
| Allocation for DM as % | 0.05 | 0.11 | 0.11 | 0.07 |

50 A Road Map for Disaster Risk Management:2005 www.dmc.gov.lk

51 Source: Annual Budget Estimates- Ministry of Finance & Planning

According to the World Bank (2015), [52]"annual expected sector-specific loss from natural disasters represents 0.50% of Sri Lanka's GDP and is equivalent to 3% of total government expenditures". This reflects the need for an increased allocation for disaster risk reduction in the country.

## Instruments for Disaster Risk Financing

### Insurance

Currently, 18 out of 21 insurance companies in the country contribute to sharing the risk by offering non-life insurance policies for fire incidents[53].

The Agrarian Insurance Board formed by the Agricultural Insurance Law, No. 20 of 1973, introduced an insurance scheme for crops destroyed by disasters. After the enactment of the Agriculture and Agrarian Development Act, No. 20 of 1999, the Board has expanded the insurance scheme for registered farmers affected by natural hazards[54]. Twenty crops are covered under the insurance scheme.

The Board has proposed a weather-indexed system to cover losses to crops and livestock. Since 2010, it also provides an insurance cover based on the weather index for paddy and tea production.

The SANASA Insurance Company Ltd., established under the regulation of Industry Act No.42 of 2000, offers life insurance coverage for selected hazards such as lightning, fire, floods, and snake bites. This insurance scheme was initially formed by community-level Funeral Aid Societies.[55]

The Department of Fisheries provides two insurance schemes for fishermen registered with the Department. The first scheme provides life insurance coverage due to accidental death at sea, and the funds are released through the National Insurance Trust Fund. The second scheme, *Divi Sayura Deewara* Insurance is the Department's initiative with Ceylinco Insurance to provide the coverage for both natural and accidental deaths by charging an annual premium from the registered fishermen. Through a 2012 cabinet paper, accidents due to cyclones were also included.[56]

The National Insurance Trust Fund (NITF), under the Ministry of National Policies and Economic Affairs, expanded their insurance coverage by introducing a new Natural Disaster Insurance Scheme in April 2016. The Ministry of Finance, on behalf of the government, has agreed with the NITF to establish an insurance policy to cover disasters caused by natural hazards in the country, except for drought. This covers lives and properties, especially all households and small business establishments (annual return not exceeding LKR 1.0 million) damaged due to cyclones, storm surges, floods, landslides, earthquakes, tsunamis, and similar risks excluding drought[57].

NITF will not cover crop losses in the agricultural sector as they are already covered by the Agrarian Insurance Board. The scheme is managed by the NITF and NDRSC. The annual premium, which is borne by the government, is LKR 300 million for a maximum coverage of LKR10 billion. Within the maximum coverage, LKR 1.5 billion is allocated for emergency relief expenses and LKR 8.5 billion for property (housing) and small and medium sized enterprises with an annual turnover of less than LKR 10. million. The maximum amount

52 Sri Lanka: Ending Poverty and Promoting Shared Prosperity, WB October 2015
53 Creating a Global Tapestry of Insurance Regulation, Annual Report 2014, Insurance Board of Sri Lanka http://www.ibsl.gov.lk/images/annual_reports/IBSL_Annual_ Report_%202014.pdf
54 Agriculture Insurance Board http://aib.gov.lk/index.html
55 SANASA Insurance Company Ltd.http://www.sicl.lk/
56 Interview with Mr. Nihal Palitha, Director – Industries Division, Department of Fisheries
57 National Insurance Trust Fund http://www.nitf.lk/Home.html

payable to an individual property is LKR 2.5 million. The highest limit for emergency relief varies depending on the type of disaster, such as LKR 25 million for landslides and LKR 500 million for tsunamis.

### Catastrophic Drawdown Option

In addition to the NITF, the government has worked with the World Bank to establish a Development Policy Loan (DPL) as a contingent line of credit, with a Catastrophic Drawdown Option (CAT-DDO). The Cabinet of Ministers has approved the establishment of a DPL facility with CAT-DDO up to 102 million USD, effective from 2014[58]. The government has to declare a state of disaster to activate the facility mentioned above. The fund can be drawn over a period of three years, which may be renewed up to four times for a total of 15 years.

## Baseline Assessment of Current status of preparedness for emergency response in Sri Lanka

The baseline study was done as the first step of the program implementation to establish the current status of emergency preparedness in the selected countries. It would serve as a benchmark to inform decisions on interventions to be carried out. It will also be useful to assess the impact of the interventions at the end of the program and is therefore part and parcel of the monitoring and evaluation mechanism. Baseline data will be used to define road maps towards strengthening emergency response capacities of local actors at country level which will be aggregated at the regional level for the program.

58 Annual Report 2014 - Ministry of Disaster Management

The baseline survey mainly focused on key local actors in the emergency response including government organizations, local non-government organizations, and private sector entities. Following sections provide the key findings of the survey results against above 3 sectors which was the basis to develop the road map for the country in order to strengthen the emergency response capacities of local actors.

## Findings of the Baseline Sample Survey for Government Organizations

### Purpose of the Organization

In Sri Lanka, the purpose of relevant Governmental organizations was assessed using the availability of a vision and mission statement for each organization. All 57 government organizations have responded that a vision and a mission statement have been formulated. Additionally, all organizations have their own web portals which display this information.

### Institutional Capacity

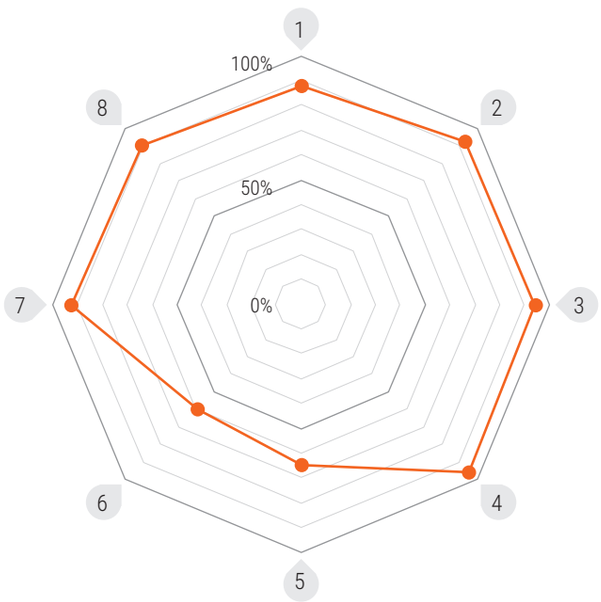
Institutional capacity was assessed based on several criteria (represented by numbers) and sub-criteria (represented by bullet points) as follows:

1. Organizational Structure
2. Administrative Processes
   - Manuals on administrative procedures
   - Manuals on human resource management
   - Recruitment Policies
   - Code of Conduct

- Work Place Harassment Policy
- Gender Sensitive Work Place Policy
- Adequacy of documented procedures
- Staff orientation in administrative procedures

Figure 13 Responses for Sub-Criteria under Administrative Process

| | | | |
|---|---|---|---|
| 1 Manual on administrative process | 2 Manual on resource management | 3 Recruitment policies | 4 Code of conduct |
| 5 Workplace harassment policy | 6 Gender sensitive workplace policy | 7 Adequacy of documented procedures | 8 Staff orientation in administrative process |




In Sri Lanka, government organizations are established through legislation or gazette notification based on Cabinet approval pending Parliamentary enactment. The organizational structure and cadre are a constituent part of these enactments. Administrative procedures are governed by the Establishment Code issued by the Ministry of Public Administration and Management.[59] Responses obtained for the availability of manuals, policies, adequacy of these documents and the level of staff orientation provided are depicted in Figure 13 as a spider chart in the shape of an octagon where each angle of the octagon represent the eight sub-criteria under the administrative process outline above. The outer most line of the octagon represents a value of 100% responses (availability), while the innermost represents 0%. The diagram offers a visual graphic to compare responses obtained for the eight sub-criteria.

Gender Sensitive Workplace Policy (59%) and Workplace Harassment Policy (64%) show lower values compared to other sub-criteria. This may reflect deficiency for gender equality in the labor market pointed out under Section 4.5 above. Sri Lanka's country rank for Gender Inequality Index at 87 also indicates a necessity for improvements in this area.

## Staff Security

Staff security was assessed to determine whether employees working in hazardous locations were covered by risk insurance. It was inferred that the Government organizations had no special insurance cover for officers working in disaster risk management.

## Financial Management

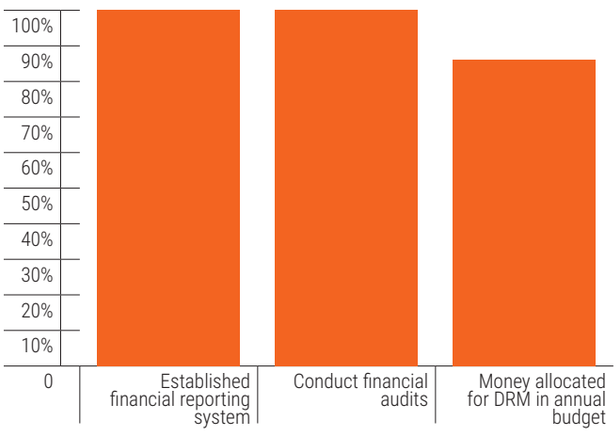
Government organizations were requested to respond Yes or No to the following criteria.

1. Availability of an established financial reporting system
2. Conduct of annual financial audits
3. Annual budgetary allocation for DRM

59 http://www.pubad.gov.lk/web/index.php?option=com_content&view=article&id=184&Itemid=279&lang=en

Responses obtained for these criteria are depicted in Figure 14.

Figure 14 Responses Obtained for Financial Management




Financial reporting is mandatory for all government organizations, as they are required to apply financial regulations compiled by the Ministry Finance.[60] Auditing is subject to the Sri Lanka Accounting and Auditing Standards Act No. 15 of 1995 and the Auditory General is mandated to call for audits for government organizations.[61] Therefore the 'yes' responses for these two criteria were 100% (See Figure 14).

A total of 86% of the organizations responded that there was an annual allocation for DRM, but the level of the allocation was not captured by the survey.

## Monitoring and Evaluation (M & E)

M & E capacity was evaluated based on the following criteria.

1. Availability of a written monitoring, evaluation, and learning policy.
2. Availability of a communication strategy for disseminating learning from monitoring, evaluation, and learning results.

Responses obtained are depicted in Figure 15.

Figure 15 Availability of Written M & E Policy


A total of 95% of the sample responded 'yes' to the above mentioned two criteria's, which indicates the existence of the procedures and templates for M&E, however their effective usage is limited which was inferred during the KIIs and the group discussions.

## Technical Capacity for Emergency Response

Organizational technical capacity for emergency response was assessed based on the following criteria which also indicate organizational preparedness for emergency response.

1. Staff Adequacy to perform emergency response
2. Established Standard Operation Procedures (SOP)
3. Availability of emergency response plan
4. Conduct of simulation drills
5. Staff training for preparedness in emergency response

The % (yes) responses obtained for criteria 1, 2, 3, and 4 are given in Table 3.

60 https://www.govdoc.lk/financial-regulations-sri-lanka/
61 http://www.auditorgeneral.gov.lk/web/index.php/en/scope-of-

## Table 3

### Responses for Technical Capacity for Emergency Response

| Criterion | % (yes) Response |
|---|---|
| Staff Adequacy to perform Emergency Response | 54 |
| Established Standard Operation Procedures (SOP) | 0 |
| Availability of Emergency Response Plan | Not assessed |
| Conduct of Simulation Drills | 61 |

Only 54% of the organizations responded that staff is adequate to conduct their mandated roles. This raises concerns about capacity to manage an emergency among 46% of government stakeholders sampled.

In terms of established Standard Operation Procedures, the responses indicated that none of the sampled organizations had them in place. However, at a workshop for stakeholders conducted by the DMC to facilitate formulation of Institutional Emergency Response plans,[62] it became clear that the Emergency Operation Centre (EOC) of the DMC, Atomic Energy Authority, Ceylon Electricity Board, and the Department of Health do possess formulated SOPs. Other government organizations lack detailed SOPs for Emergency Management.

The National Emergency Operation Plan of the DMC is currently pending approval. Although other organizations are expected to formulate Institutional Emergency Operation Plans, they are yet to do so[63].

Responses for participation in simulation drills revealed that 61% of the organizations sampled for the survey, did conduct simulation drills.

Figure 16 depicts the number of capacity building events in which officers of the governmental organizations have taken part.

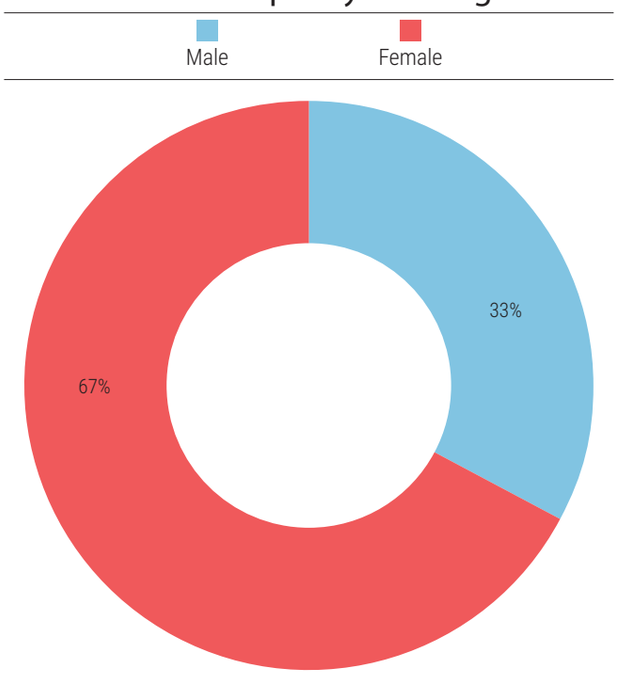
62 Personal communication with Chathura Liyanaarchchi. Asst. Director, Preparedness Planning Division, DMC
63 ibid

## Figure 16 % Response for Staff Training for Emergency Response Activities


The Figure reveals an inadequacy in both the types and numbers of such events undertaken for government organizations.

Figure 17 depicts gender disaggregated data for capacity building of staff training.

## Figure 17 Gender Disaggregated Data for Capacity Building



It reveals that female staff has have been provided more opportunities for capacity building than their male counterparts.

## Coordination between Stakeholders

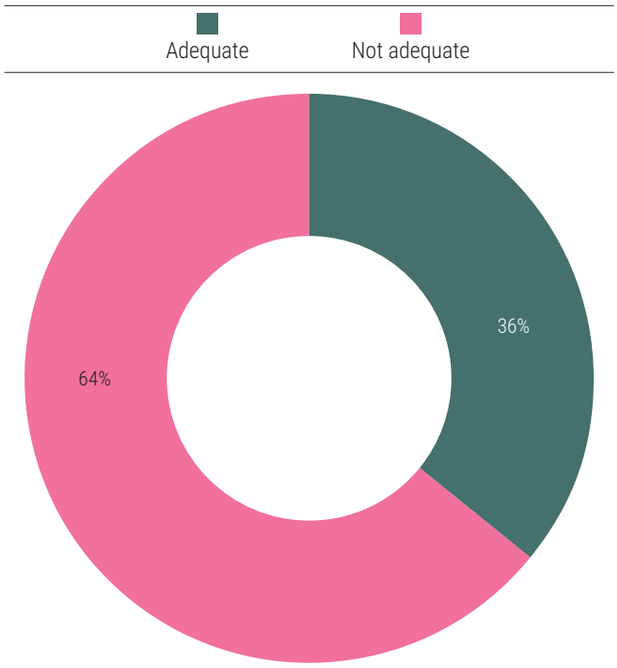
The level of coordination between stakeholder organizations during emergency management was requested on the following two criteria:

Inclusion in a disaster management coordination network

Perception of the adequacy of its functional effectiveness

"Yes" responses for inclusion in a disaster management coordination network was 100%. The responses on the perception of its effectiveness is given in Figure 18.

Figure 18 Perception of Effectiveness of Existing Coordination Network




The majority of the respondents (64%) expressed that the coordination effectiveness is not adequate and reveal an urgent need of action to enhance this weakness.

## Cluster Approach for Humanitarian Coordination

When emergencies occur, strong coordination means lesser gaps and more overlaps in the assistance delivered by humanitarian organizations. The foundations of the current international humanitarian coordination system were set by the

General Assembly resolution 46/182 in December 1991. In 2005, the Humanitarian Reform Agenda introduced a number of new elements to enhance predictability, accountability, and partnership. The Cluster Approach was one of these new elements. Clusters are groups of humanitarian organizations, both UN and non-UN, in each of the main sectors of humanitarian action (e.g. shelter, health, logistics). They are designated by the Inter- Agency Standing Committee (IASC) and have clear responsibilities for coordination.[64]

There was no cluster approach at the time of the Tsunami (2004). However, in its aftermath UNHCR provided assistance with emergency shelter to 100,000 people in Sri Lanka. In support of the overall humanitarian operation, it also hosted an important inter-agency Logistics Operations Centre[65].

In early 2005, the Office for the Coordination of Humanitarian Affairs (UNOCHA) established a Sri Lanka Country Office to provide support to the government in emergency response and preparedness.[66] The cluster approach was functioning throughout the civil strife between the government and the terrorist group called LTTE.

64 https://www.humanitarianresponse.info/en/about-clusters/what-is-the-cluster-approach
65 UNHCR's response to the Tsunami emergency in Indonesia and Sri Lanka, December 2004 - November 2006, http://www.unhcr.org/afr/461504522.pdf
66 http://lk.one.un.org/7060/en/office-for-the-coordination-of-humanitarian-affairs-in-sri-lanka

This conflict lead to a serious issue of Internally Displaced Persons (IDPs). However, after the end of the war in 2009, with the improvement of the humanitarian situation, UNOCHA phased-out its operations between 2011 and 2014. The cluster approach specifically was phased out by 2013.

In the aftermath of the 2016 floods, which drew much criticism due to the way in which response and relief efforts were handled by the government, a voluntary emergency response plan was put into operation convened by the UN Resident Coordinator's Office and Chair of the Humanitarian Country Team (HCT) to complement the government-led response in Sri Lanka. The emergency response plan outlines the support from UN agencies and local and international NGOs during emergencies.[67] It embeds a sectoral approach, with Oxfam and World Vision leading water, sanitation and hygiene (WASH), Plan International and Save the Children leading the education, UNICEF leading nutrition and child protection, UNFPA leading women' protection, WFP leading food security, FAO leading agriculture, WHO leading health, IOM, IFRC, and UN Habitat leading shelter.[68]

## Shortfalls in Response Capacity during Floods 2017

The PDNA for floods May 2017[69] in Sri Lanka identified several shortfalls in response capacity in the government sector. These are listed below to supplement the findings on institutional capacity.

### Early Warning

- The capacity of the Department of Meteorology for predicting extreme events needs to be enhanced.
- The collaboration between the Department of Meteorology, Irrigation and NBRO to synergize real-time data from the newly installed networks of automated rain gauges appear inadequate due to a lack of data sharing.

### Communication flow

- The VHF Radio communication between the EOC and District Units was not fully operational due to lack of proper maintenance and monitoring. Therefore, the redundancy of communication channels appear to have been constrained at the EOC. However, communication channels of the Office of the Chief of Defense Staff (OCDS) of the Sri Lanka Armed Forces operational headquarters and Police have been in service filling this gap to a large extent.
- There was lack of verification as to whether information provided by the EOC was received at the ground level.
- Vulnerable communities were reluctant to evacuate their residences due to fear of security of households. This reveals the need for building credibility of the governance system to provide security of assets during evacuation triggered by early warning.

### Chain of Command for Emergency Operations

- A clearly defined chain of command was lacking, where several different sources were issuing instructions for emergency operations.

### Preparedness for Response

- Relief distribution was less than optimal due to the inadequacy of preparedness, coordination, and collaboration between NDRSC and the EOC. Maps providing information on safe locations, distribution

67 http://www.colombopage.com/archive_17A/Jun02_1496422485CH.php
68 Communication with Watsala Jayamanna, UNICEF
69 PDNA (2017), UNDP, Sri Lanka

mechanisms, key ground level responders, and service providers are lacking.

- Proper capacity building for IDP camp management is lacking in disaster-prone areas.

- There is a lack of an adequate mechanism to share real-time information and numbers on gender/age/disability status affected/ displaced people; locations of safety centers; who was providing what type of relief assistance and where, etc. This hampered effective operation of many government and non-government actors involved in emergency response.

### Provision of Compensation

- As current disaster management regulations allow for the payment of compensation for property damage and damaged housing structures, tenant's sustained losses in assets are not compensated.

- Delays in payment of compensation were reported due to verification processes of requests.

These shortfalls must be addressed in building preparedness for emergency response.

Extract from Key Informant Interview (KII)

*Chaminda Pathiraja Director, National Disaster Relief Services Centre (NDRSC), Ministry of Disaster Management.*
NDRSC maintains a central warehouse for a reasonable stock of Non-Food Relief Items (NFRIs).

A MoU has been signed with the armed forces to deploy Army, Airforce, and Navy forces as needed to support relief and response efforts during an emergency. Thus, it is expected that human resources for operational work are secured. However, the lack of an Emergency Management Database is a There is still a need for clear-cut guidelines on the roles and responsibilities of stakeholder organizations, both government and non-government, that contribute to relief and response work to avoid duplication of efforts.

Additionally, Contingency Plans are required to gauge and plan surge capacity for extreme events. This needs to accompany the enhancement of early warning potential of mandated organizations.

NDRSC's organizational efforts require a more proactive stance.

## Knowledge Management

The level of knowledge management for emergency response in the government sector was measured by assessing the following criteria and sub-criteria:

1. Availability of institutional database for emergency response
2. Production of knowledge material[70]
3. Sharing of the produced knowledge material
4. Types of organizations with which knowledge material is shared, and the level of sharing

Responses (for yes) obtained for Criteria 1 to 3 are depicted in Figure 19.

70 Due to lack of data procured on kind the of knowledge material produced, after the sample survey, their relevancy for preparedness for response cannot be deduced.

Figure 19 Level of Knowledge Management

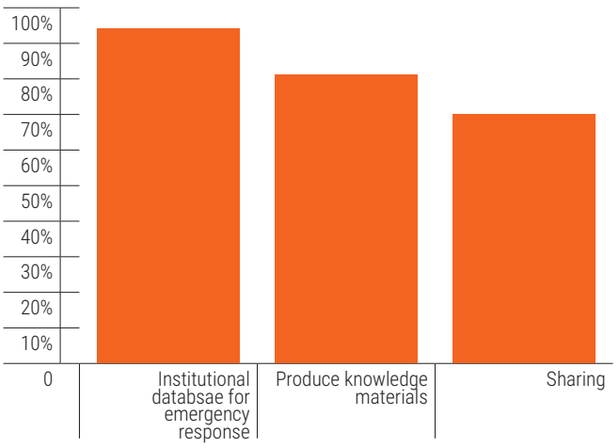
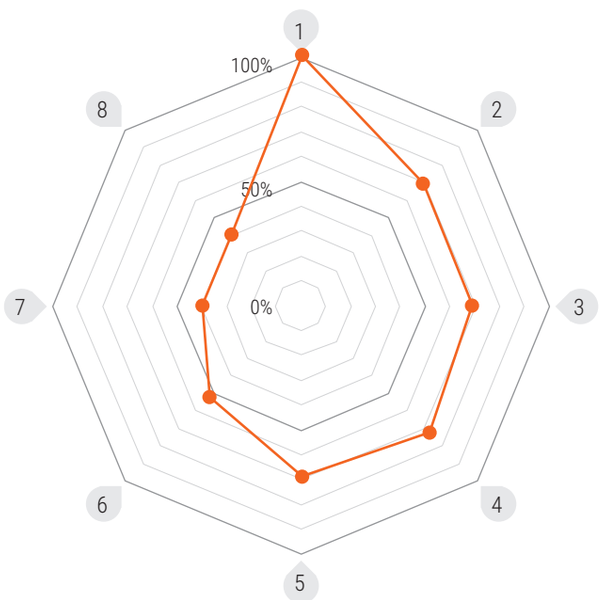



Figure 20 Types of organizations with which knowledge material is shared

| | | | |
|---|---|---|---|
| 1 Government | 2 International NGOs | 3 Bilateral organizations | 4 Donor agencies |
| 5 Local NGOs | 6 UN organizations | 7 Private organizations | 8 Media |




The responses obtained for availability of institutional databases is contradictory to information obtained from the KII with the Director, NDRC as well as the observations of the Flood PDNA 2017. It is likely, (though requires further investigation) that the responses may be referring to the presence of an institutional database, and not one dedicated to emergency response.

Responses for criterion 4 is depicted in Figure 20 as a spider chart.

Responses reveal that the highest level of sharing is between government agencies, followed by INGOs, Bilateral organizations, Donor Agencies and LNGOs. Sharing with UN organizations is even lower, and sharing with private organizations and the media is the lowest.

One reason for this could be that knowledge material is produced relate to activities undertaken for programs and projects in collaboration with and in between the government agencies, INGOs, Bilateral Organizations, Donor agencies and the LNGOs. However, this requires further verification and follow up.

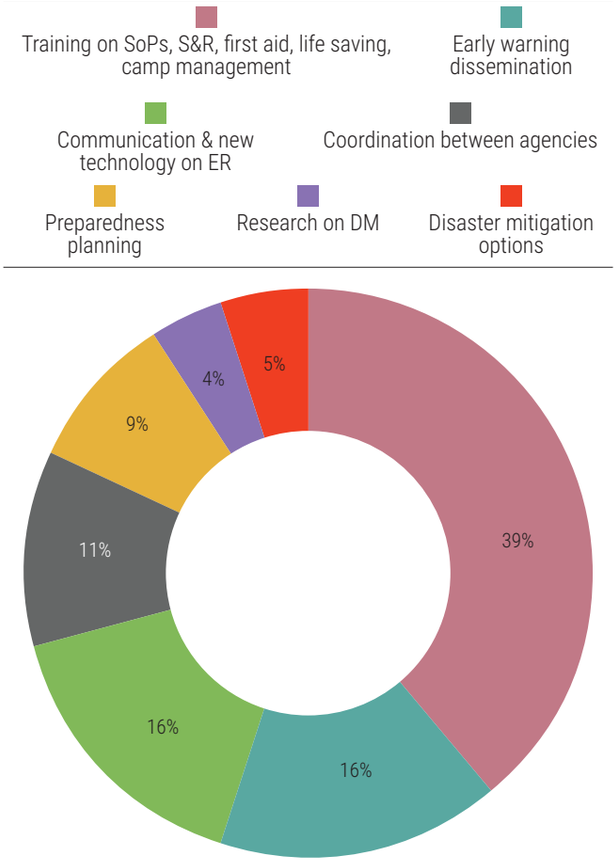
## Capacity Building Needs

As one of the key objectives of the program is to strengthening capacity of the local actors, it was paramount for the sample survey to find out the capacity building needs of the staff of the concerned governmental agencies on preparedness for emergency response. The responses received are depicted in Figure 21.

The responses reveal that SOPs, Search and Rescue, First Aid, Life Saving, and Camp Management are most desired capacity building activities by the governmental agencies. These are followed by Early Warning Dissemination, Communication, and New Technologies for Emergency Response, closely followed by Coordination. Preparedness Planning Disaster Mitigation, and Research on DM is lowest at 4%.

These responses are helpful in designing capacity building initiatives that meet the needs expressed by the organizations.

Figure 21 Capacity Building Needs Listed




# Findings of the Baseline Sample Survey for LNGOs

LNGOs and Civil Society Organizations (CSOs) contribute significantly to the relevance of the emergency response through their proximity to disaster-affected communities, their understanding of culture and language, and their sensitivity to political and social dynamics. Therefore, baseline assessment of the existing capacities, their role in the coordination mechanisms for emergency response and their knowledge and information exchange mechanisms was most important intention of the baseline assessment in Sri Lanka.

## Legal Mandate

Responses were sought under the following criteria:

1. Registration with the national government

2. Geographical location(s) of emergency response activities at national or within the nine provinces (see Figure 1) at provincial, district or DS Division level.

## Registration

All NGOs are required to register prior to commencement of activities and are regulated by a number of legal enactments.

The Voluntary Social Service Organization Act No. 31 of 1980 (the "VSSO Act") requires all organizations that receive government grants or require visas for expatriate staff to register under this Act. Non-Profit Organizations (NPOs) may also register as limited liability companies under the Companies Act No. 17 of 1982, as Trusts under the Trust Ordinance No. 17 of 1917, as Charities under the Inland Revenue Act No. 38 of 2000, as Approved Charities under the Inland Revenue Act No. 4 of 1963 or the Inland Revenue Act No. 28 of 1979 or under the Mutual Provident Societies Act No. 55 of 1949. An NPO can also be formed by an Act of Parliament. The Voluntary Social Service Organizations (Registration and Supervision) (Amendment) Act, No. 8 of 1998, was an amendment to the VSSO Act. This amendment allows for an Interim Board of Management to be appointed to administer the affairs of an organization in cases of fraud or misappropriation.

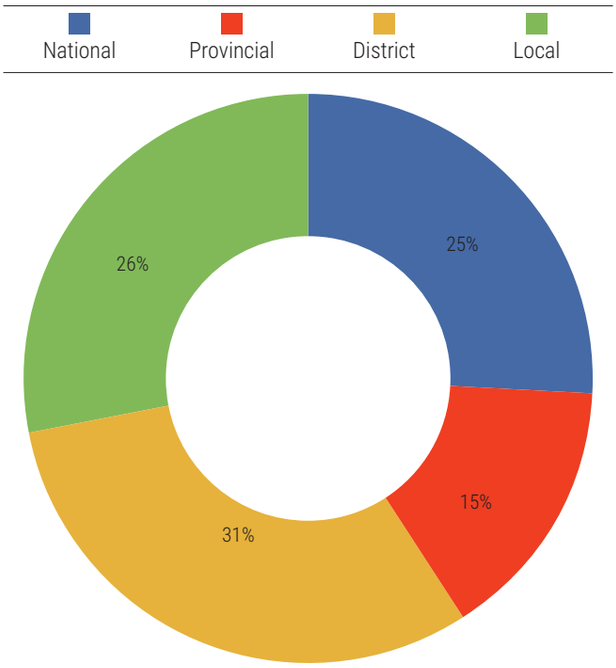
In 1999, a Presidential Circular was issued, calling all NGOs to re-register with the National NGO Secretariat, asking them to declare their sources of funding, annual expenditure, and annual budgets. A pre-requisite for re-registration includes clearance from the Ministries in charge of the subjects of Defense, Foreign Affairs and Plan Implementation, as well as the relevant

line Ministry. NGOs conducting activities in any District or at Divisional Secretariat levels also have to register with the applicable District Secretary or Divisional Secretary.

## Geographical Locations of Work

Operational areas of the NGOs sampled are given in Figure 22.

Figure 22 Geographical Areas of LNGO Operation




## Purpose of the Organization

The purpose of the organization was assessed using the availability of a Vision and Mission statement for each organization. A total of 97% of the sample responded that their organization had a Vision and Mission statement formulated.

## Institutional Capacity

Institutional capacity was assessed based on several criteria (represented by numbers) and sub-criteria (represented by bullet points) as follows:

1. Organizational structure
2. Administrative processes
   - Manuals on administrative procedures
   - Manuals on human resource management
   - Recruitment policies
   - Code of Conduct
   - Work Place Harassment Policy
   - Gender Sensitive Work Place Policy
   - Adequacy of documented procedures
   - Staff orientation in administrative procedures

## Organizational Structure

All organizations responded “Yes” to the availability of the organizational structure.

## Administrative Process

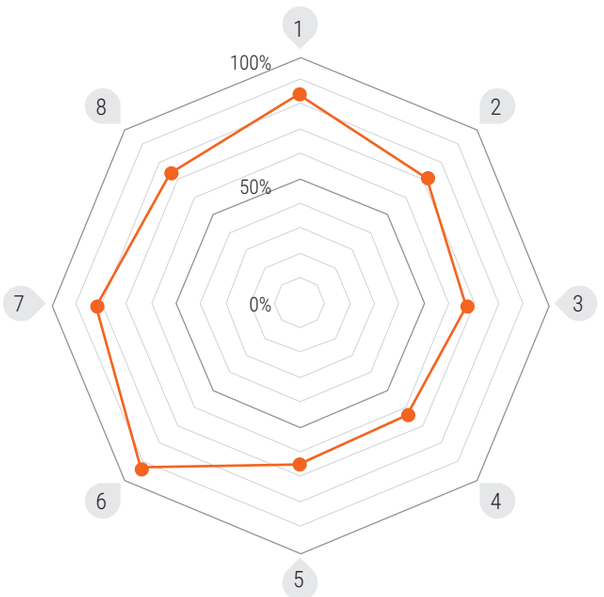
Responses for administrative process are depicted in Figure 23 as a spider chart.

Responses for the gender sensitive work policy and the workplace harassment policy are lower than other administrative criteria, which are reasonably high. Responses for adequacy of available documents is near 80%.

Statement of Recommended Practice for NPOs including NGOs (SL SoRP – NPOs [including NGOs]) guides their administrative processes and therefore they are sustained at an acceptable level.

Figure 23 Responses for LNGO Administrative Processes

| | | | |
|---|---|---|---|
| 1 Administrative procedures | 2 Recruitment policies | 3 Code of conduct | 4 Workplace harassment policy |
| 5 Gender sensitive workplace | 6 Adequacy documented procedures | 7 Staff orientation in administrative procedures | 8 Average score for administrative processes |




## Staff Security

Staff security was assessed by evaluating whether the organizations have insurance coverage for their staff working in emergency response. A total of 58% of the NGOs responded that they do have insurance coverage for their staff.

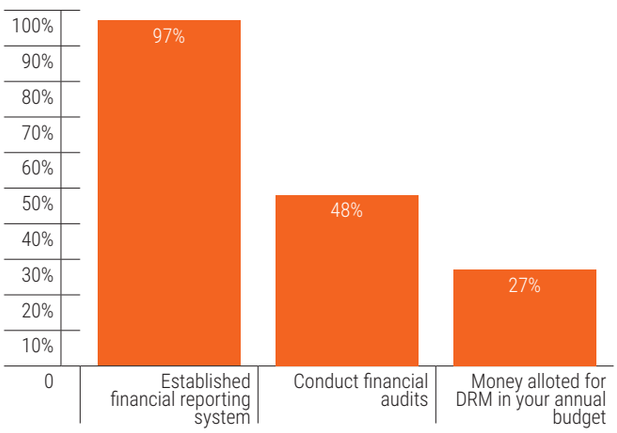
## Financial Management

The study team assessed financial management of NGOs assessing the following criteria:

1. Availability of an established financial reporting system
2. Conduct of annual financial audits
3. Annual budgetary allocation for DRM

Responses obtained for these criteria are depicted in Figure 24.

Figure 24 Responses for Criteria on Financial Management




Sri Lanka Accounting and Auditing Standards Act No. 15 of 1995 is also applicable to NGOs, and they are accountable under the Statement of Recommended Practice for NPOs including Non-Governmental Organizations (SL SoRP – NPOs [including NGOs]). Thus, the low figure of 48% for financial auditing is surprising and requires follow up to understand non-compliance with requirements.

A total of 27% of the sample surveyed responded that they have an annual budgetary allocation for DRM which varies between 3-4% of the total annual budget.

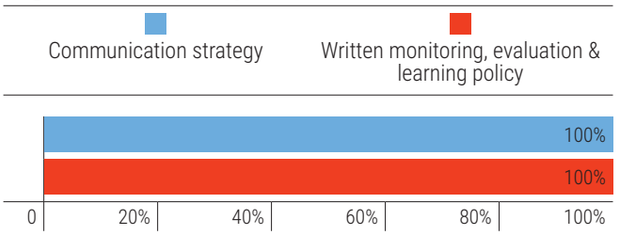
## Monitoring and Evaluation (M & E)

M & E capacity was evaluated based on the following criteria:

1. Availability of a written Monitoring, Evaluation, and Learning policy
2. Availability of a communication strategy for disseminating learning from Monitoring, Evaluation, and Learning results

The responses on the availability of an M & E policy, and a strategy for communication is displayed in Figure 25.

Figure 25 Responses on M & E




Responses indicate an adequate level of M & E processes by most of the organizations. However, this result might reflect the status for general institutional processes as the KIIs and FGDs indicated inadequate M & E processes specifically for emergency response.

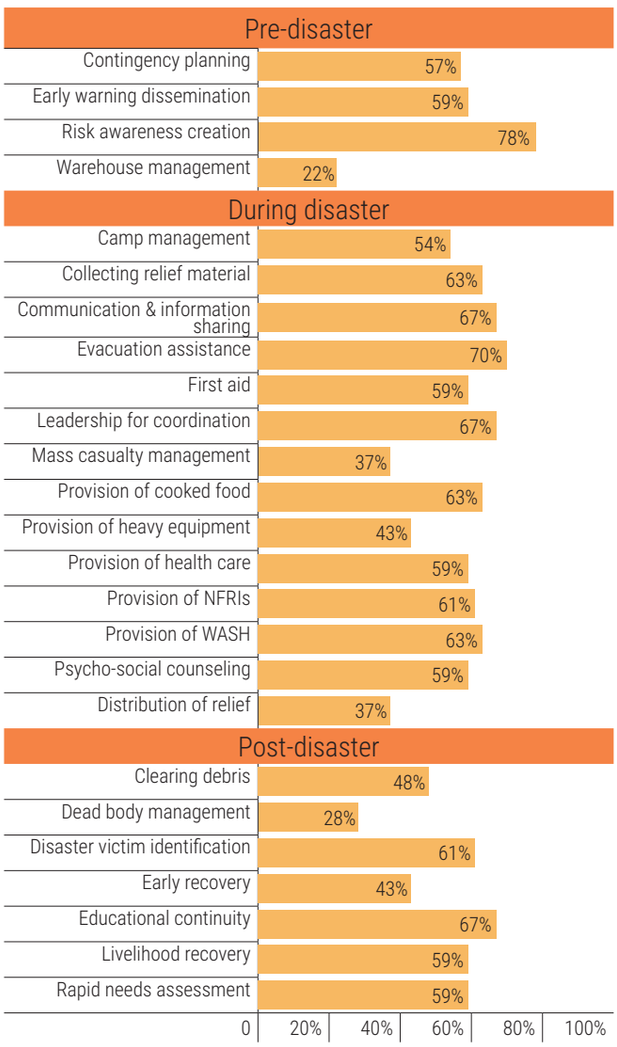
## Technical Capacity for Emergency Response

Organizational technical capacity for emergency response was assessed on the following criteria, which also serve to indicate organizational preparedness for emergency response.

1. Emergency response activities undertaken by the organization
2. Staff adequacy to perform emergency response
3. Established Standard Operation Procedures (SOP)
4. Availability of Emergency Response Plan
5. Conduct of simulation drills
6. Staff training carried out for preparedness in emergency response

Responses obtained for criterion 1 is displayed in Figure 26.

Figure 26 Percentage Responses for ER Activities Undertaken




Pre-disaster activities are more focused on risk awareness creation, followed by early warning dissemination, and contingency planning in that order. There is a lack of Warehouse management.

During disasters, NGO activities appear to be more prominent for evacuation assistance, information sharing, leadership for coordination, collection of relief material, provision of cooked food, WASH, and provision of Non-Food Relief Items (NFRIs). These are followed by psycho-social counseling, provision of healthcare and first aid, and assistance in camp management.

Figure 27 Staff Training for Emergency Response Activities

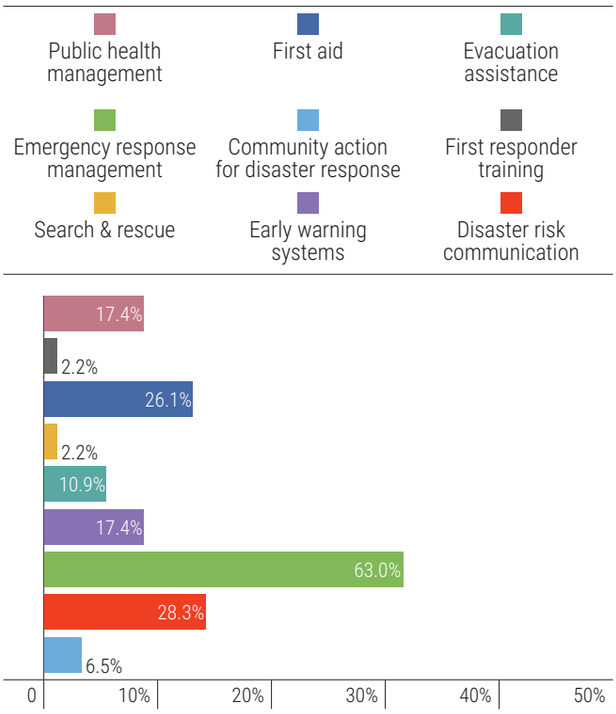
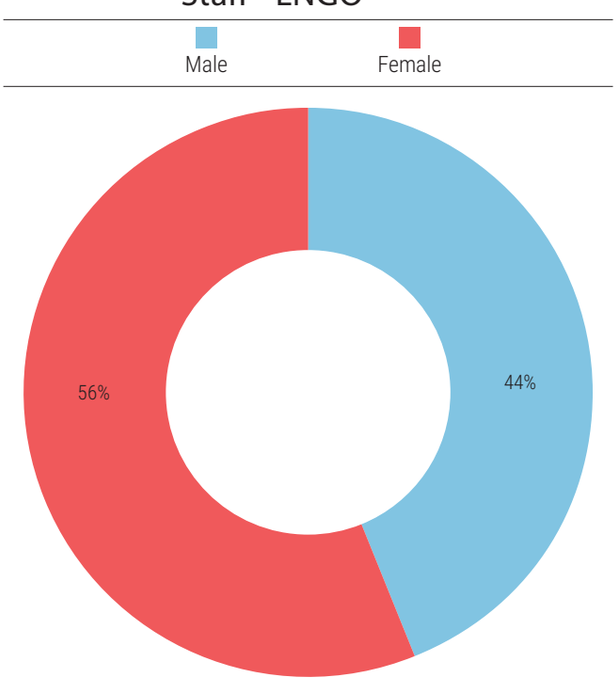



Figure 28 Gender Disaggregated Data for Capacity Building of Staff - LNGO




Provision of heavy equipment, mass casualty management, and assistance for distribution of relief is low. Mass casualty management demands skill, and amateur efforts during the war has reportedly been more damaging than helpful.

Responses reveal that activities demanding physical resources are lower in NGO emergency response work.

Responses for the criteria assessing the 'Staff adequacy to perform Emergency response' under technical capacity received 61% positive response. This indicates that NGOs have a better status than their government counterparts regarding adequacy of their staff to respond to emergencies.

Figure 28 depicts gender disaggregated data for capacity building. Figure 26 reveals that NGO staff have had more types of capacity building compared to their government counterparts. Staff Training for Preparedness in Emergency Response is depicted in Figure 27.

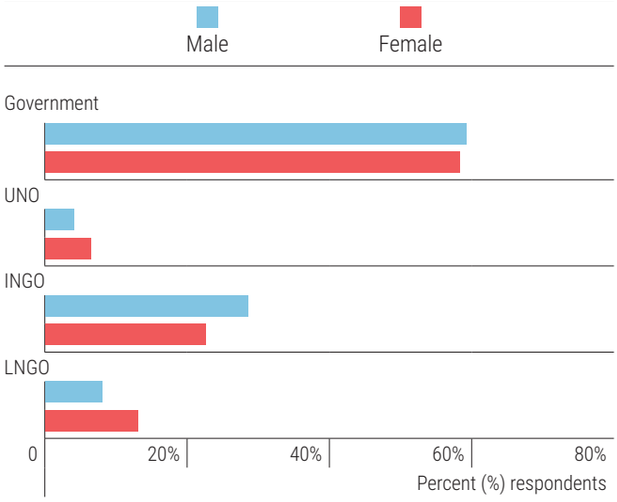
Figure 28 reveals that more female staff have undergone capacity building. The percentage of males who have undergone capacity building is higher than in the government sector.

## Providers of Capacity Building

Figure 29 depicts the level of capacity building initiative provided by the government, UN organizations, INGOs and NGOs.

Most capacity building initiatives have been conducted by the government, followed by INGO, NGO, and UN organizations in that order. However, when comparing Figure 16 for the government sector and Figure 27 for the NGO sector, the capacity building initiatives undertaken overall are inadequate.

Figure 29 Level of Capacity Provided by Stakeholders




## Coordination between Stakeholders

The level of coordination between stakeholder organizations during emergency management was requested on two criteria.

1. Inclusion in a disaster management coordination network

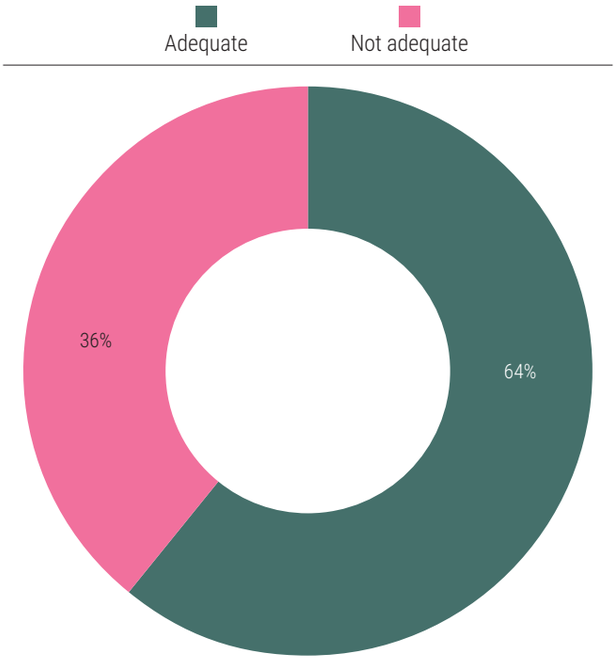
2. Perception of the adequacy of its functional effectiveness

A total of 67% responded "Yes" to being included in a disaster management coordination network.

The responses on the perception of its effectiveness are displayed in Figure 30.

A total of 61% of the NGO sample perceive effectiveness of their coordination during emergencies as adequate. However, the lapses observed in the 2017 Flood PDNA suggest that perception may be optimistic and coordination needs to be enhanced.

Figure 30 Perception of Effectiveness of Existing Coordination Network




## Knowledge Management

The level of knowledge management for emergency response was assessed using the following criteria:

1. Availability of institutional database for emergency response

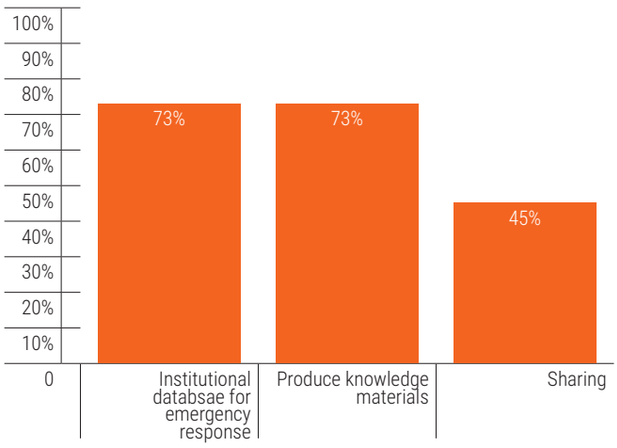
2. Production of knowledge material

3. Sharing of the produced knowledge material

4. Types of organizations with which knowledge material is shared, and the level of sharing

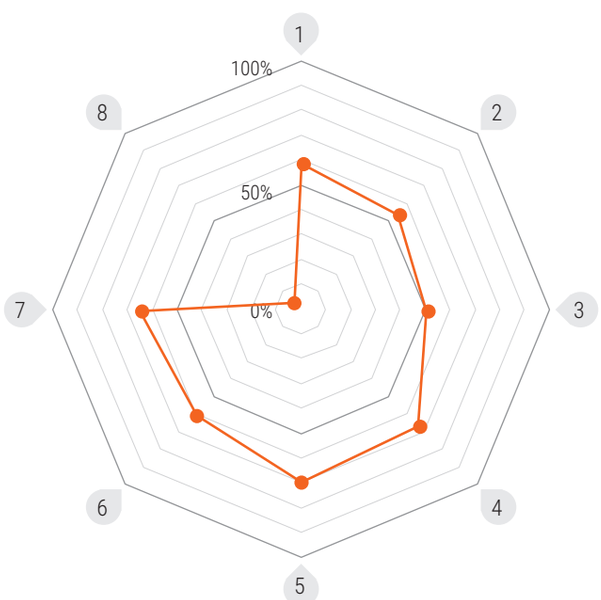
Responses obtained for criteria 1 to 3 are depicted in Figure 31. Responses for criterion 4 are depicted in Figure 32 as a spider chart, where the outer most ring depicts 100% responses while the innermost is 0%.

## Figure 31 Level of Knowledge Management – NGO (% Yes)




## Figure 32 Status of Sharing Knowledge Products

| | | | |
|---|---|---|---|
| 1 Government | 2 International NGOs - level of coordination | 3 Bilateral organizations - level of coordination | 4 Donor agencies - level of coordination |
| 5 Local NGOs - level of coordination | 6 UN organizations - level of coordination | 7 Private organizations - level of coordination | 8 Media - level of coordination |



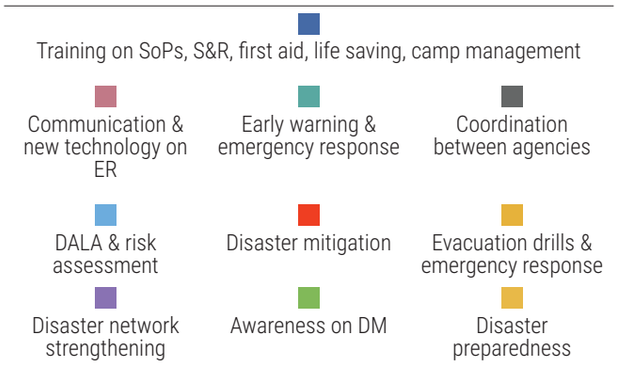

A total of 73% of the NGOs have institutional databases. However, the responses don't reveal whether these constitute emergency response information. Production of knowledge products stand at 73% of responses but their sharing appears to be inadequate at 45%.

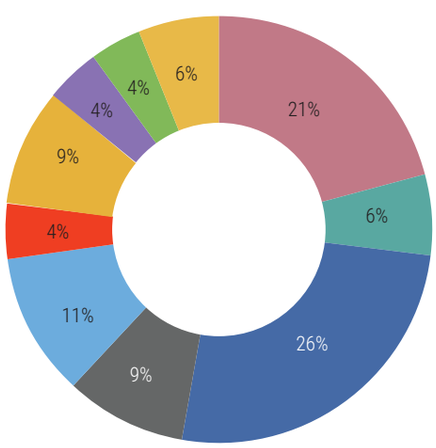
Responses reveal that sharing is weak with media. Sharing process with all stakeholders should improve considerably for lessons learnt to be integrated in future work.

## Capacity Building Needs

The study team requested a list of staff capacity building needs. The responses received are depicted in Figure 33.

## Figure 33 Staff Training Needs of LNGOs



Capacity building in areas such as first aid, camp management, psycho-social counselling, search and rescue (S&R), and first response actions top the priority needs.

It should be noted that S&R requires a high level of competency, and is usually handled by the armed forces. Communication technology follows as the second highest priority.

Damage and Loss Assessment (DALA) and risk assessment comes in third. Both these activities are carried out in collaboration with government focal points. Coordination and emergency response drills come in fourth. Disaster preparedness, early warning dissemination, and emergency response come in fifth. Disaster network strengthening, awareness, and mitigation follow.

Table 4 provides a comparison of the government sector and NGOs in terms of capacity building needs.

## Table 4

### Comparison of Capacity Building Needs

| Prioritization of Capacity Building Needs | | |
|---|---|---|
| | **Government Organizations** | **LNGO** |
| 1 | Camp Management<br>First Aid<br>Search & Rescue (S & R)<br>Life Saving<br>Standard Operation Procedures (SOP) | Camp Management<br>First Aid<br>Search & Rescue (S & R)<br>Psycho-social counseling |
| 2 | Communication<br>Early Warning Dissemination<br>New Technology for Emergency Response | Communication Technology<br>Database Management |
| 3 | Coordination between Agencies | DALA<br>Risk Assessment |
| 4 | Preparedness Planning | Coordination<br>Evacuation Drills<br>Emergency Response |
| 5 | Disaster Mitigation | Early Warning Dissemination<br>Disaster Preparedness |
| 6 | Research | Awareness on DM<br>Strengthening Networking<br>Disaster Mitigation |

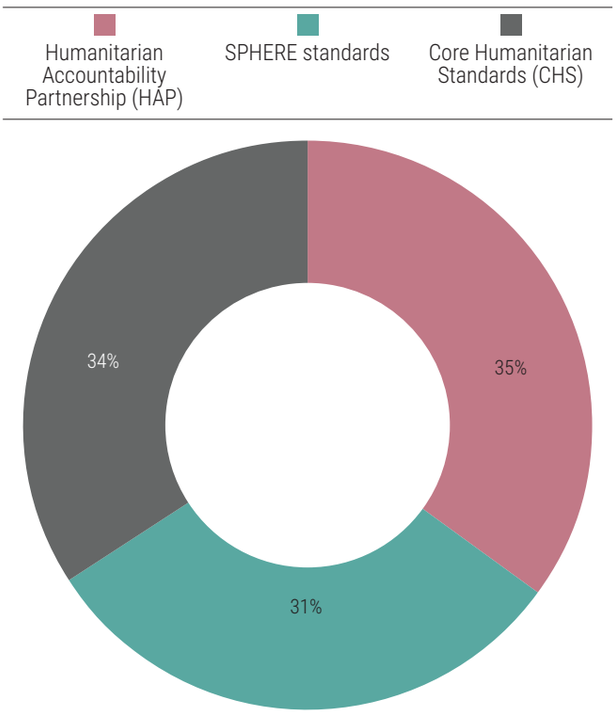
## Humanitarian Standards

Affiliation with humanitarian standards were assessed using three criteria:

1. Member of the Humanitarian Accountability Partnership (HAP)
2. Acknowledgement of SPHERE Standards
3. Acknowledgement of Core Humanitarian Standards (CHS)

Responses are depicted in Figure 34.

Figure 34 Affiliation with Humanitarian Standards




A total of 35% of the NGOs express that they comply with the HAP. Acknowledgement of SPHERE standards is at 31%, and 34% comply with CHS. The program provides an opportunity to enhance the affiliation of NGOs to relevant Humanitarian Standards existing.

Important observations from Key Informant Interviews (KIIs) with the NGO sector are given below.

Extract from KIIs

*Colonel Madugalle,*
*Sri Lanka Red Cross Society (SLRCS)*
"The new MoU to mobilize the armed forces for the responsibility of cooked food distribution is a positive development. However, coordination with stakeholders should improve and the coping capacity at the grassroots level must be enhanced".

*Jeevan Thiagaraja,*
*Consortium of Humanitarian Agencies (CHA)*
"The District and Divisional Secretaries and the Local Authorities make commendable contributions during emergencies. However, the local community capacity should be strengthened to complement such contributions. Focusing on response is not sufficient. The lessons learnt must be harnessed to implement mitigation to reduce impact from future disasters".

Findings from KIIs with INGOs

- Absence of a central data base for emergency response is a significant constraint for operations.

- Lack of a national platform for information sharing hampers effective coordination.
- Coordination between government organizations requires significant improvement.
- Leadership for operational activities and line of command should be more effective.
- The work of DMC and NDRSC should not overlap.
  - Lessons learnt are not compiled and integrated to improve future planning.
  - Networking and communication between stakeholders should be enhanced.
  - Resources for District Disaster Management Units are inadequate.
  - Community inclusiveness in planning should improve. - Armed forces should be provided with training on
- humanitarian action as they now play a major role in emergency response

## Perceptions of the INGOs

INGOs were assessed only using Key Informant Interviews (KIIs). Child Fund, Oxfam, UNICEF, WFP, and World Vision are included. Central observations of these KIIs are given below. Many of these observations have echoed through other KIIs and FGDs.

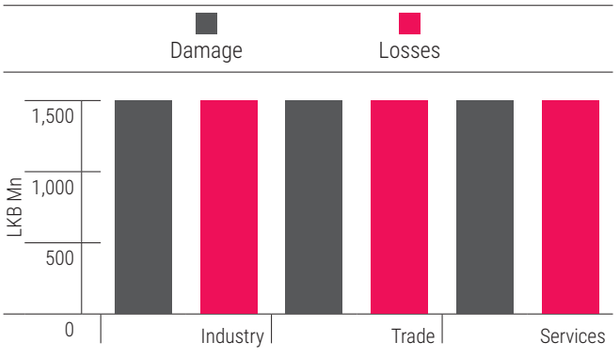
## Perceptions of the Private Sector and Media

### Disaster impact on Private Sector and Media

Analysis of the Flood PDNA 2016 and 2017, Sri Lanka[71] shows the exposure levels of private businesses including the informal sector, and

71 UNDP, Sri Lanka.

Figure 35 Impacts of 2017 Flood Disaster on the Private Sector




the impacts of flood disaster in Millions of Sri Lanka Rupees (see Figure 35).

Low levels of disaster preparedness in the business sector is a concern. 80% of the affected business establishments are falling in to Micro and SME sectors. Even though, the government's National Natural Disaster Insurance Policy (NNDIP) covers all SMEs with an annual turnover less than LKR 10 Million, the lack of a systematic approach to conduct damage assessments and reporting has significantly delayed the compensation process. Delays in government compensation delays the recovery, as most are without private insurance coverage.

Consultations with the Chamber of Commerce, Sri Lanka, reveal that emergency plans are virtually non-existent, and that very few large enterprises have developed SOPs. The 2017 PDNA re-iterates the importance of business continuity planning and sustainability of value chains for resilience building and sustainability.

Training for business continuity planning for the private sector appears to be an urgent concern.

The media sector in Sri Lanka constitutes both government and private establishments. Private media channels for press, radio, and TV outnumber government owned enterprises.

Data on licenses issued to private media channels since 1991 are given in Table 5.

Table 5

TV and Radio License Issued 1991 -2015

| Type of Media | No of Institutions |
|---|---|
| Radio | 24 |
| Terrestrial TV | 28 |
| Cable TV | 09 |
| Satellite TV | 08 |
| IPTV | 02 |
| Mobile TV | 01 |

There are no reported impacts suffered by media institutes in recent disasters

## Emergency Response Activities Undertaken by the Private Sector

The study team requested the private sector and media organizations to list the types of activities they undertake during emergencies. Responses from the private sector are depicted in Figure 36.

Distribution of medicines, food items, and non-food items take the lead. Provision of shelter, livelihood recovery, and provision of financial support to the affected follow. Funding INGO/NGO activities also appear to be reasonably high priorities.

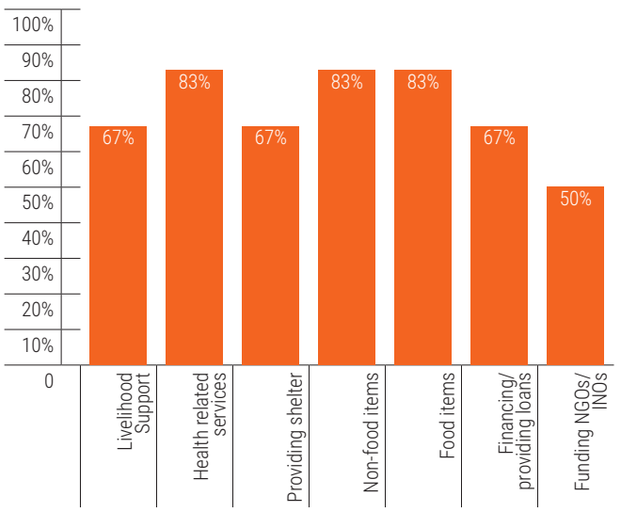
In 2016, the Dialog mobile company held a national campaign for customer donations, and generated LKR 16.53 million. They tripled this amount contributing with LKR 33.47 million, achieving a total amount of LKR 50million (USD 330,000 approx.). The funds collected were used for building houses for the displaced. Other private companies and volunteer organizations gave support through relief transportation, or relief provision.[72]

In 2017, the Ministry of Disaster Management opened a bank account for relief donations, and

72 Some of them can be seen in: http://www.readme.lk/flood-relief-tech-2017/

received LKR 27.5 million (as at 24 July 2017) from private companies and individuals.

Figure 36 Emergency Response Activities Undertaken by the Private Sector




## Private Public Partnership Initiatives

The Disaster and Emergency Warning Network (DEWN) was developed by mobile vendor Dialog in collaboration with University of Moratuwa (UoM) Mobile Communications Research Laboratory and Microimage, under a research and development project. It was undertaken immediately after the 2004 tsunami, and uses GSM communication technologies and devices. It is compliant with the internationally accepted alerting protocol – CAP. When information is received by the DMC, the information is verified, and customized alerts, with text message and recipients specified, are issued. Messages can be received by mobile phones or specially developed DEWN alarm devices. These devices contain a loud siren, a flashing lamp, a LCD display to show the trilingual message, a radio, and an inbuilt call-back facility. On January 30, 2009, the DMC together with Dialog and other partners launched DEWN as Sri Lanka's first mass alert early warning system, after completing a successful pilot period. It is currently in operation.

## Emergency Response Activities Undertaken by the Media

Emergency response activities undertaken by media organizations are provided in Table 6.

Table 6

Emergency Response Activities Undertaken by Media

| Criteria | Total response | Percentage % |
|---|---|---|
| Supply and disseminate information | 5 | 83.33% |
| Resource movilization | 5 | 83.33% |
| Sensitizing for volunteerism | 5 | 83.33% |
| Give voice for communities/ public | 5 | 83.33% |
| Others, please specify | 1 | 16.67% |

Media organizations have played a significant role in collecting and distributing relief items during recent emergencies.

During recent floods and landslides, almost every privately-owned media channel visited the affected areas to provide updates on the incident. Information on how many were affected, the rescue efforts by the armed forces, and where victims were taken for temporary shelter were duly provided. However, instead of providing impartial information, the main focus of some privately-owned TV channels was disseminating information on aid distribution carried out by their own channels. These attempts to boost their brand image in a time of crisis were criticized as unethical.[73]

One KII suggested that these activities must be brought under control of the DMC.

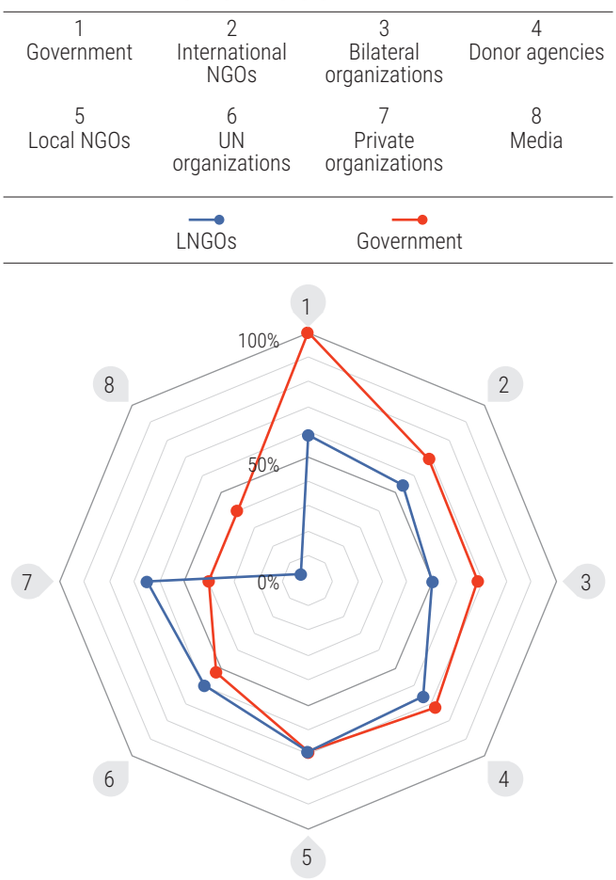
73 http://www.hirunews.lk/hirutvnews/4293 ; https://www.youtube.com/watch?v=QEB-W0sO-Vw

## Coordination with Stakeholders

Figure 37 depicts the level of coordination between media organizations and private organizations, compared to other stakeholders such s government organizations and NGOs.

Government organizations show a higher level of coordination with the media compared to NGOs. On the other hand, NGOs appear to have higher coordination with the private sector compared to government organizations. Overall, the levels of coordination require considerable improvement, particularly coordination with the media.

Figure 37 Coordination between Media Organizations and Private Organizations, Compared to Government Organizations and NGOs




### Extract from KII

***Chandraratne D. Vithanage, Senior Assistant Director, Ceylon Chamber of Commerce***

The Ceylon Chamber of Commerce (CCC) as the leading private sector organization has been actively involved in disaster relief and reconstruction efforts since the 2004 tsunami. It has also worked in close collaboration with the government, UN agencies, INGOs, and NGOs. Based on previous experience, we feel strongly that the private sector can respond to disasters in a much more organized manner, if there is stronger coordination among the public and private sectors, and civil society.

In the past, the main focus of the private sector has been facilitating emergency relief. With the frequency and severity of disasters increasing at a rapid pace, the private sector will have to focus more on improving disaster preparedness to ensure sustainability of their businesses as well as their supply chains. The Chamber believes that the Asian Preparedness Partnership will help Sri Lanka to improve its disaster preparedness through sharing experiences and best practices of member organizations of APP

## Conclusions

The Common Country Assessment (CCA), conducted in 2016 was the first step to development of the UNSDF 2018-2022, and took stock of the economic, political, social, cultural, and environmental context of Sri Lanka, and impacts on human development. The CCA identified four causes common to the development challenges faced by Sri Lanka.

- **Institutional and governance causes**, focused on key gaps in the policy and legislative framework as well as an acute need for systems and institutional strengthening, at national and sub-national levels alike.

- **Persistent inequities arising from economic and socio-cultural causes**, including significant challenges with regard to gender despite notable progress;

- **Environmental and geographic causes**, including the country's extreme heightened vulnerability to disaster and the negative impacts of climate change; and the

- **Capacity causes**, the acute need to strengthen Sri Lanka's capacities related to data generation, collection and effective analysis, all of which could be used for evidence-based policymaking.[74]

The assessment of the proxy indicators detailed earlier, should also reflect on the vulnerability and risk assessment to capture sub-national disparities that contribute to vulnerability trends, and should inform area-specific DRR interventions.

Recurrent natural disasters and climate change have continued to impact public health, human settlements, food security, availability of drinking water, agriculture and aquaculture, and infrastructure development including hydropower[75]. The 2015 Vulnerability Programme Assessment found that 53 percent of households surveyed in nine disaster-prone districts in Sri Lanka were categorized as 'highly vulnerable'. All districts surveyed were also found to be vulnerable to reduced income levels because of loss of agricultural production as a result of severe weather events[76].

# Conclusions of the Baseline Sample Survey

## Caveat

The conclusion and the recommendations that follow focus on the objective of the survey to assess the humanitarian capacity to manage the humanitarian crisis at the institutional, organizational, strategical, and operational levels. Both the conclusion and recommendations made are within the scope of the project objectives, and therefore do not cover a holistic DRM outlook.

## Legal and Institutional Framework

Sri Lanka has an adequate legal and institutional framework in the government sector for DRM. Its Disaster Management Act has undergone review and amendment, although not yet enacted, in Parliament. NGO activity is also under the purview of government regulations and guidelines.

## Organizational Purpose, Institutional capacity and Financial Management

These areas have been assessed based on criteria explained earlier for government organizations and NGOs. The assessment reveals that they are adequate and controlled by legal enactment and policy. The reason for low responses in the NGO sector for financial auditing requires further investigation as existing regulations will not permit such a lapse.

Monitoring and Evaluation processes are adequate at the organizational level, however specific assessments on M&E processes and frameworks on Emergency Response mechanisms need to be further assessed.

74 Common Country Analysis – Sri Lanka 2016, UNCT, Colombo, 2016
75 Country%20Reports/Sri%20Lanka/Final_UNSDF_2018-2022.pdf
76 Edirisinghe, J. et al. Vulnerability Programme Assessment 2015. Colombo, 2015

## Staff Security

An area of concern that has surfaced is insurance coverage for staff that undertake emergency response activities. There is no special coverage in the government sector, and only 58% of NGOs have insurance coverage for their staff.

## Technical Capacity for Emergency Response

Staff adequacy to perform emergency response functions in the government sector is low.

However, addressing this issue is difficult as cadre increases in government sector is a complicated process, and there are also budgetary constraints.

The responses from the NGO sector reveal a higher adequacy of staff. The current MoU between the NDRSC and the Armed Forces addresses this dearth of human resources in areas such as cooked food distribution, search and rescue, and security.

Capacity building for emergency response in the government sector is inadequate both in types of training undertaken and numbers of staff exposed to capacity building initiatives. Outcomes are higher within the NGO sector, but even there, the numbers and types of trainings could improve.

Capacity building carried out and the identified needs have been synthesized into Table 8. The responses demonstrate the need for immediate attention to address the low technical capacities and gaps identified in the report. Responses also show an alarming lack of empathy, which is necessary during emergencies.

Responses also demonstrated that recovery needs have been overlooked. Some of these remarks align with KIIs and FGD findings.

### Table 7

ER Capacity Building Done and Identified Needs

| Pre-Disaster | | | | | |
|---|---|---|---|---|---|
| Desirable Capacities for ER | Govt. Done | Govt. Need | LNGO Done | LNGO Need | Remark |
| Contingency planning | | | ✓ | | Climate Change scenarios not apparent |
| Disaster mitigation | | ✓ | | ✗ | |
| Disaster Preparedness | | | | ✗ | Very weak |
| Database management | | | | ✗ | Current capacity for ER low |
| Early warning / dissemination | ✓ | ✗ | ✓ | ✗ | Inadequacy revealed in PDNA 2016, 2017 |
| Preparedness planning | | ✗ | | | KIIs point for lack of proactive planning |
| Research | | ✗ | | | Very scarce |
| Risk awareness | ✓ | ✗ | ✓ | ✗ | Adequate / effectiveness not assessed |
| SOPs | | ✗ | | | Capacity to formulate appear low |
| Warehouse management | | | ✓ | | Few activists |
| **During Disaster** | | | | | |
| Camp Management | | ✗ | | ✗ | Inadequacies reported in Flood PDNAs |
| Collecting relief material | | | | | Uncoordinated |
| Communication for Information | | ✗ | | ✗ | Should enhance |
| Coordination with stakeholders | | ✗ | | ✗ | Need enhancement |

| Desirable Capacities for ER | Govt. Done | Govt. Need | LNGO Done | LNGO Need | Remark |
|---|---|---|---|---|---|
| CBDRM | | | ✓ | | Prevalent but effectiveness not visible |
| Distribution of relief | ✓ | | | | Uncoordinated |
| ER Management | ✓ | ✗ | ✓ | ✗ | Inadequacy revealed in PDNA 2016, 2017 |
| Incident Command System | ✓ | | | | Not properly implemented |
| Evacuation assistance | ✓ | ✗ | ✓ | ✗ | Spearheaded now by Armed Forces |
| Evacuation Drills conduct | ✓ | | ✓ | ✗ | May need enhancement |
| First Aid | | ✗ | ✓ | ✗ | High competency needed to do no harm |
| Leadership for coordination | | | | | Reportedly poor in PDNAs 2016, 2017 |
| Life saving | ✓ | ✗ | | | |
| Mass casualty management | High competency needed to do no harm | | | | |
| Provision of cooked food | Currently mandated to the armed Forces | | | | |
| Provision of heavy equipment | | | | | Few activists |
| Provision of health care | | ✗ | ✓ | | Best left for competent institutions |
| Provision of NFRIs | | | | | Matching needs is an issue |
| Provision of WASH | | | | | |
| Psycho-social counseling | | | | ✗ | |
| Search and Rescue | | ✗ | ✓ | ✗ | Best depend on Armed Forces |
| Rapid Needs Assessment | | | | ✗ | |
| **Post-Disaster** | | | | | |
| Clearing debris | | | | | |
| Dead body management | | | | | |
| Disaster victim identification | | | | | |
| Early recovery | | | | | |
| Educational continuity | | | | | |
| Livelihood recovery | | | | | |
| Rapid needs assessment | | | | | |

## Stakeholder Coordination

Perceptions of both the government sector and NGO sector seem optimistic in comparison to findings from the Flood PDNAs 2016 and 2017. There appears to be an urgent need to address enhancement of coordination between stakeholders.

According to the 2017 Flood PDNA, limited coordination among government agencies and between the government and external partners (UN, NGOs, private sector) was a major gap in emergency operations at the national level. Many humanitarian agencies have begun direct collaboration with district authorities.

As a result, national level coordination authorities are unaware of contributions made by humanitarian agencies and the private sector collaborating with relevant stakeholders and district authorities.

National level coordination platforms such as the National Disaster Management Coordination Committee (NDMCC) or Emergency Response Committee (ERC) do not regularly convene for situational updates, which weakens collaboration in emergency response.

# Recommendations

## Awareness on Humanitarian Coordination

It is recommended that a short course on Humanitarian Coordination be formulated and a Training of Trainers (ToT) be conducted to replicate the training at the district level for government, non-government and Armed Forces personnel earmarked for response work. It is recommended to hold trainings with multiple stakeholders to also provide an opportunity for informal networking.

## Coordinating Platforms at National and Local Levels

It is recommended to implement the SFDRR call for National and Local Coordinating Platforms as called for in SFDRR: *"To establish and strengthen government coordination forums composed of relevant stakeholders at the national and local levels, such as national and local platforms for disaster risk reduction..."*

## Re-establish Cluster Approach

It is recommended to re-establish the Cluster Approach by formalizing the current Emergency Response Plan of the HCT.

## Development of a Comprehensive Emergency Response Database

It is recommended to establish a national to local comprehensive Emergency Response Database aligned with the call from SFDRR: *"To promote realtime access to reliable data, make use of space and in situ information, including geographic information systems (GIS), and use information and communications technology innovations to enhance measurement tools and the collection, analysis and dissemination of data."*

## Enhance Capacity Building of All Stakeholders

It is recommended to reach consensus with all stakeholders on the curriculum needed to improve preparedness for response, and compile standardized capacity building and training manuals to be used by all stakeholders. A series of Provincial ToTs should be implemented as relevant.

## Knowledge Management

It is recommended to enhance the capacity of stakeholders in the compilation of knowledge products to share lessons learnt in order to enhance disaster preparedness through the Asian Preparedness Partnership Web Portal.

## Enrich Secondary and Tertiary Education Curriculum for DRM

It is recommended to convene a Forum of the National Institute of Education, Colleges of Education and Universities engaged in promoting the DRM knowledge base to establish a clear path forward for enriching the curriculum and implementation. Doing so will prepare future generations on DRM.

## Indicators for Monitoring and Evaluation

Monitoring and Evaluation is an important process in the program planning to make sure the implementation of the program is on track and in line with the set objectives. It is important to use the information derived through the baseline assessment to design project activities in each country with set targets within the program framework.

A results framework has been developed at the regional level to measure the progress of the project and achievements. Each country will

contribute towards achieving the set objectives indicated in the results framework. For achieving that purpose, baseline data from each country will be used to define activities in their road maps towards strengthening emergency response capacities of local actors at national and local level which will be aggregated at the regional level for the program.

Program outcomes/impacts in each of the country is to be measured using three (3) common key measurement indicators (KMI) identified below:

| **KMI 1: Number of agencies with improved operational systems (admin processes, financial reporting system, KM, M&E, etc.), technical capacity and access to information to act effectively in disaster response and recovery phases** | | | |
|---|---|---|---|
| Unit of Measure | Number of agencies | Disaggregated by | • Type of agency -<br>• Govt./LNGO/ Private Sector<br>• Level of the agency - National/Sub-national |
| Definition: | This indicator measures the agencies that have new or increased ability to respond to disasters effectively.<br><br>***Measuring institutional capacity in terms of administrative, financial, technical expertise, networks, etc. are important elements of enabling environment for ensuring effective response by those agencies.***<br><br>Indications with improved capacity to act effectively in disaster response and recovery include, but are not limited to:<br>• Improving operational systems (proper administration policy guidelines, financial systems, knowledge management systems, M&E systems, etc.) of humanitarian agencies which are transparent and accountable<br>• Building in-house relevant technical expertise which can be utilized during disaster response and recovery<br>• Improving the participation of the agencies in disaster management coordination networks/ committees with identified role<br>• Engaging with related stakeholders and building networks for sharing of information<br>• Devoting greater resources (human/financial) for Disaster Risk Management activities | | |
| Baseline as of 2017: | The baseline assessment conducted through the program showed the following level of capacities among local actors in Sri Lanka:<br>• Lower level of proper operational systems in LNGOs as compared to the government entities<br>• Lack of adequacy to perform emergency response functions in the government sector as compared to the LNGO<br>• Inadequate capacity for emergency response for the stakeholders both in types of trainings undertaken and number of staff exposed to capacity building initiatives | | |
| Target 2019: | Through the program interventions, it is expected to have at least 3 institutions with improved capacity in terms of operational, technical abilities as well as access to information to act effectively in disaster response and recovery phases | | |
| Data Source | • Baseline report, Organizational Capacity Assessment survey results, evaluation reports | | |

| **KMI 2: Number of local rapid deployment teams established/strengthened with necessary capacity for better response** | | | |
|---|---|---|---|
| Unit of Measure | Number of teams | Disaggregated by | N/A |
| Definition: | This indicator measures the established/strengthened local rapid deployment teams which can be utilized in disaster response quickly. Strengthening capacities includes imparting skill trainings, networking, identifying roles and responsibilities, and rapid access in case of an emergency.<br><br>Rapid deployment teams can assist disaster affected communities within hours which is a key in effective emergency response.<br><br>Rapid deployment teams consist of professionals such as search and rescue experts, fire fighters, medical staff, troops, etc. and/or volunteers who can help communities during first 48 hours of a disaster | | |
| Baseline as of 2017: | The baseline assessment conducted through the program showed the need for a well-organized team of professionals who are technically qualified to carry out response functions within first 48 hours. | | |
| Target 2019: | Through the program interventions, it is expected that a team of group of professionals and volunteers attached with the government will be formed their technical capacity to carry out functions in first 48 hours after a disaster, will be built. | | |
| Data Source | • Country reports | | • Media reports |

| **KMI 2: Number of active emergency coordination committees/forums comprising of actors such as govt., LNGO and private sector with identified roles for each** | | | |
|---|---|---|---|
| Unit of Measure | Number of committees/ forums | Disaggregated by | • Level of the committee/forum - National / Sub-National |
| Definition: | This indicator measures the engagement of different stakeholders in emergency coordination, which is important for effective response.<br><br>Emergency coordination committees can be at national as well as at the sub-national level and comprise of local actors such as government, LNGO, private sector with identified role for each.<br><br>An active emergency coordination committee is a one which meets at least once in 3 months bringing all members to discuss about preparedness for response activities in countries | | |
| Baseline as of 2017: | The baseline assessment conducted through the program showed low level of involvement of LNGO and private sector entities in preparedness activities and government led emergency response coordination mechanisms. Also apparent is the the low level of functional effectiveness of coordination in case of a disaster. | | |
| Target 2019: | Through the program interventions, it is expected to improve the emergency coordination by engaging LNGOs as well as the private sector to the existing coordination mechanism with identified role for each actor/stakeholder. | | |
| Data Source | • Government records<br>• Media reports | | • Coordination meeting minutes<br>• Interviews |

In order to monitor the activity progress in Sri Lanka a monitoring framework (Table 9) was developed, guided by the baseline data and the regional program results framework. It is expected that the country program team together with concerned stakeholders define targets considering short term, medium term and long term time frame for these indicators within the program framework. This framework will be a tool for monitoring the progress of activities and achievements towards set objectives while ensuring accountability and transparency of the progress of the country program.

## Table 8

### Indicators to measure progress

| No. | Expected result/ Outcome | Baseline status | Recommendations | Indicators to measure the progress and impact |
|---|---|---|---|---|
| 1 | Strengthened emergency response coordination mechanisms and partnerships | • Low level of involvement of LNGO and private sector entities in preparedness and government led emergency response coordination mechanisms<br>• Low level of functional effectiveness of the coordination in case of a disaster | • Establish/re-activate national and local coordination platforms involving all concern stakeholders with an identified role<br>• Re-establish the cluster approach for emergency | • Regular coordination meetings organized by national/local platforms involving all concern stakeholders<br>• % of LNGOs and Private sector entities in government led coordination platforms<br>• SoPs for emergency response coordination reviewed/ updated<br>• National/Sub-National Emergency Operations/ Response Plans developed/ updated |
| 2 | Improved capacities on emergency response through priority training and learning actions | • Lower level of operational systems in LNGOs as compared to the government entities<br>• Lack of adequacy to perform emergency response functions in the government sector as compared to the LNGOs<br>• Inadequate capacity building for emergency response both in types of training undertaken and numbers of staff exposed to capacity building initiatives.<br>• Overlooking of the Recovery needs | • Identify priority needs and develop training curriculum needed to improve preparedness for response, and compile standardized capacity building and training manuals to be used by all stakeholders<br>• Carry out series of Training of Trainers which can be replicated throughout the country | • Priority training programs (ToTs) conducted<br>• Number of people trained<br>• Learning events, drills, simulations, and field visits/ study tours facilitated |
| 3 | Learning and knowledge management systems on emergency response initiated and institutionalized | • Lack of dedicated databases for emergency response coordination and sharing of information<br>• Lack of sharing among actors though all actors develop knowledge products | • Establish a national to local comprehensive Emergency Response Database<br>• Promote development and dissemination of knowledge products | • Online platform at the national level for knowledge and information sharing<br>• Databases for managing emergency response data from national to local level<br>• Experts/volunteers registered in a roster which can be accessed for emergency response<br>• Knowledge products developed and available for public access |

**ASIAN DISASTER PREPAREDNESS CENTER (ADPC)**
**Head Office**
SM Tower, 24th Floor, 979/69 Paholyothin Road,
Samsen Nai Phayathai, Bangkok 10400 Thailand
Tel: + 66 2 298 0681 Fax: + 66 2 298 0012
Email: app@adpc.net

https://app.adpc.net

@AsiaPrepared

Asian Preparedness Partnership