KINGDOM OF CAMBODIA

NATION RELIGION KING

MINISTRY OF HEALTH

NATIONAL STRATEGIC PLAN ON DISASTER RISK MANAGEMENT FOR HEALTH

PREVENTIVE MEDICINE DEPARTMENT

2020-2024

Foreword

This National Strategic Plan on Disaster Risk Management for Health (2020-2024) outlines the ways by which the Royal Government of Cambodia's intends to improve and enhance the emergency management of the health risks due to natural hazard.

Cambodia is considered one of the most hazard-prone countries in South-East Asia and floods are one of the major hazards that affect it. In recent years, the country has become more vulnerable to floods that occur almost yearly, cause widespread damage and affect the lives and livelihoods of hundreds of thousands of Cambodians. Infectious and food-borne diseases such as acute respiratory infections, diarrhea, food poisoning and dengue fever, injuries remain the leading causes of morbidity and mortality.

Strong leadership, organization and coordination, clear lines of accountability and communication will be key in improving the national capacities across the four phases of prevention, preparedness, response and recovery to better manage health emergencies and disasters.

The Ministry of Health, in collaboration with relevant ministries and institutions and partnership has updated the "National Strategic Plan on Disaster Risk Management for Health 2014 to 2018" for all stakeholders to accept as a cross-sectorial issue in disaster risk reduction for Health In order to strengthen the national capacity to reduce health risks caused by natural and human disasters at all levels of the health system and community.

The Ministry of Health strongly hopes that there will be active support and participation from all stakeholders in implementing and monitoring of the National Strategic Plan on Disaster Risk Management for Health to make this National Strategic Plan effective and efficient.

I would like to thank all the participants who efforts in preparing and achieve this important national strategic plan.

Phnom Penh, 14 July 2020

For Minister of Health

Prof. ENG HUOT
SECRETARY OF STATE

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Abbreviations and Acronyms

AOP	*Annual Operation Plan*
AADMER	*ASEAN Agreement on Disaster Management and Emergency Response*
ACDM	*ASEAN Disaster Management Committee*
APSED	*Asia Pacific Strategy for Emerging Diseases*
ASEAN	*Association of South-east Nations*
CamDi	*Cambodia Disaster Loss and Damage Database*
CCA	*Common country assessment*
CDC	*Communicable Disease Control*
CRC	*Cambodia Red Cross*
DCDM	*District Committee for Disaster Management*
DMEH	*Disaster Management and Environmental Health*
DRM	*Disaster Risk Management*
DRMH	*Disaster Risk Management for Health*
ERM	*Emergency Risk Management*
HERM	*Health Emergency Risk Management (framework)*
HRF	*Humanitarian Response Forum*
HSSP2	*Health Sector Support Programme 2*
IHR	*International Health Regulation*
INGOs	*International Non-Governmental Organisations*
IREC	*International Relations and External Cooperation*
MISP	*Minimum Initial Service Package for Reproductive Health in Crisis Settings*
MoH	*Ministry of Health*
PFERNA	*Post-Flood Early Recovery Need Assessment*
RGC	*Royal Government of Cambodia*
ToR	*Terms of Reference*
TWGH	*Technical Working Group for Health*
UN	*United Nations*
UNFPA	*United Nations Population Fund*
UNDAF	*United Nations Development Assistance Framework (**UNDAF**)*
WHA	*World Health Assembly*
WHO	*World Health Organisation*
WHO CCS	*WHO Country Cooperation Strategy*

Acknowledgements

The National Strategic Plan for the Disaster Risk Management for Health has been updated, led and coordinated by the Department of Preventive Medicine with the relevant institutions - ministries and focal points, with actively participation, their effort and commitment, making this strategic plan be more tailored to the context of disaster management.

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Thanks to the United Nations Population Fund (UNFPA) for technical and financial assistance and technical assistance provided by UNFPA's Asia-Pacific Regional Office in Bangkok, Thailand for the update of the "National Strategic Plan Health Disaster Risk Management 2020-2024". As well as the World Health Organization (WHO) supported both the technical and the funding for the development of the " National Strategic Plan for the Disaster Risk Management for Health 2014-2018" and the Western Pacific Regional Office (December 2012) (1).

Executive Summary

This National Strategic Plan on Disaster Risk Management (DRM) for Health outlines the Royal Government of Cambodia's response to the growing challenge of the risks arising from natural hazards, communicable diseases and pandemics. All disasters have a cost in terms of deaths and suffering, and have additional impacts on public health due to poverty, hunger, unemployment, displacement and migration, that in turn increase the people's, and the Country's, vulnerability to renewed disasters.

Health emergency risk management requires an all hazards, multidimensional approach. The entire Ministry of Health needs to work together with all other ministries and institutions, humanitarian development partners, and donor agencies, in order to address the specific challenges of each phase of the emergency risk management cycle.

This National Plan demonstrates the commitment of the Government of Cambodia to improve the national capacities for Prevention, Preparedness, Response and Recovery and thus better manage health emergencies and disasters.

This Plan adopts an "All-Hazards Approach" to health emergency risk management and aims at integrating the National Development Strategy. Another objective is to build synergies and complementarities with the existing national, regional and international agreements.

1. Introduction

Disasters and other emergencies have significant impacts on people's health with the loss of many lives, but also with a number of other challenges to individual and collective wellbeing: loss of habitat, loss of income, of infrastructures, services, etc. Deaths, injuries, diseases, disabilities, psychosocial problems and other negative health outcomes can be avoided or reduced by disaster risk management measures: Health must engage together with the other sectors.

1.1 Cambodia background

Cambodia is a largely rural country of 15.7 million people[2], with a long and rich history. While still emerging from decades of war and internal political instability, the country has made great strides and is now peaceful, with economic and human development indicators showing steady improvement. Parliamentary elections are held every five years, most recently in 2018. Poverty alleviation and governance are increasingly important items on the Royal Government's agenda. However, despite economic progress, 13.5% of Cambodians are living below the national poverty line[3] (NSDP 2019 - 2023) and poverty increases the vulnerability of communities to any natural and/or man-made shock.

1.2 Climate Change, natural hazards and general vulnerability

Cambodia is considered one of the most disaster-prone countries in South-East Asia. The Country is highly vulnerable to the effects of climate change. The major disasters Cambodians face, in order of prevalence, are droughts, floods, typhoons, storms and sea level rise, which affect people and their assets almost every year[4]. Another hazard that cannot be underestimated is represented by emerging diseases.

Eighty percent of the population live in rural areas and depend on subsistence agriculture for survival, and this makes them extremely vulnerable to climate hazards. The floods and storms of 2013 have shown again that the poor are most vulnerable to disasters: in Siem Reap and Battambang provinces for instance, entire informal settlements were destroyed by the floods. Farmers throughout the country lost their crops; and are still struggling to recover. Also other economic sectors (e.g. garment companies) and infrastructure (e.g. roads), suffered from the floods, leading to significant economic losses[5].

1.3 Human and economic cost of natural disaster

It is estimated that in the past ten years, an average of 95,000 households have been affected by natural disasters every year. In 2009, the Ketsana storm hit 14 provinces, and caused 43 deaths. Two years later, in 2011, 18 provinces were flooded, causing 247 casualties and affecting 350,000 households, over 1,64 million people (including 700,000 children) were evacuated. In 2012, flash floods affected 11,700 households and more than 3,500 households were displaced in one province.

The 2013 monsoon rainy season (May – October 2013) saw large-scale flooding return to South-East Asia after a calmer 2012. A combination of successive typhoons, a significant rise in the level of Mekong River, trans-boundary flash floods in the western provinces and heavier-than-average monsoon rains caused extensive flooding across Cambodia. On 18 October, the NCDM reported that the floods affected 377,354 households and 1.8 million individuals living in 20 provinces. Some 1,242 schools and 78 health centres and hospitals were flooded. The floods killed 168 people, the majority of whom were children[6].

The total damage and loss caused by the 2013 floods is estimated to be 356 million US$, of which 153 million represented the destruction of physical assets and 203 million US$ represented estimated losses in production and economic flows. Many of the provinces affected by the 2013 floods are among the poorest in the country. While rural Cambodian people are highly vulnerable to risks and shocks, the flooding was another blow to the current livelihoods[7].

1.4 Global and regional developments

In the Aftermath of Earthquake and Tsunami Disaster on 26 December 2004, the Special ASEAN Leaders' Meeting on Aftermath of Earthquake and Tsunami held on 6 January 2005 adopted the Declaration on Action to Strengthen Emergency Relief, Rehabilitation, Reconstruction and Prevention.

The ASEAN Committee on Disaster Management (ACDM) is consisted of the respective national disaster management offices of each ASEAN member state and executes the ASEAN Agreement on Disaster Management and Emergency Response (AADMER), which is a legally binding agreement.

The International Health Regulation (IHR - 2005), entered into force in 2007: the IHR identifies public health emergency planning, preparedness and response as core capacities. In order to achieve IHR core capacity, the Asia Pacific Strategy for Emerging Diseases (APSED) have been adopted and implemented in member states including in Cambodia.

In 2011, the World Health Assembly adopted WHA Resolution 64.10 (2011) which "urges Member States to strengthen all-hazards health emergency and disaster risk-management programmes as part of national and sub-national health systems, to improve health outcomes, reduce mortality and morbidity, protect health infrastructure and strengthen the resilience of the health system and society at large". Following this Resolution, WHO Western Pacific Regional Office developed a Regional Framework for Action for Disaster Risk Management for Health (2014), to guide member states. References are in Annex 5.

Sexual and reproductive health (SRH) is part of human right and an essential component of the humanitarian response. Efforts to meet SRH needs of affected population during disasters have been initiated by governments, United Nations, NGOs, academic, and other stakeholders by developing a global guideline namely: the Inter-Agency Field Manual on Reproductive Health in Humanitarian Settings (IAFM) and Minimum Initial Service Package (MISP) for Reproductive Health in Crisis Settings. The Minimum Initial Service Package (MISP) is a series of crucial actions required to respond to reproductive health needs at the onset of every humanitarian crisis. The MISP is not just kits of equipment and supplies; it is a set of activities that must be implemented in a coordinated manner by appropriately trained staff.

At the regional level, the UNFPA Asia and Pacific Regional Office has been working with governments in translating these guidelines into countries contexts and ensuring implementation of MISP in different disaster settings by providing lifesaving basic SRH services to affected people, including women, adolescents, and girls.

1.5 National developments

The National Committee for Disaster Management (NCDM):

The National Committee Disaster Management (NCDM) in Cambodia was established in 1995 and is continuously updated to meet the scope of work for disaster management. The **National Committee Disaster Management** has a structural mechanism from the national level down to grassroots level,

under the Leadership of **SamdechAkkaMohaSenaPadeiTecho Prime Minister** and all Ministers of the Royal Government are members and functioning as the chief of staff for the Government to lead, manage and coordinate disaster management work in the Kingdom of Cambodia. There is a General Secretariat with six Departments: Department of Finance and Administration, Department of Research and Planning, Department of Cooperation and ASEAN, Department of Disaster Management Information, Department of Education and Training and Department of Emergency Response and Rehabilitation. Disaster Management Committees are available at the central, provincial, district, commune and village levels. The National Committee Disaster Management focuses on strengthening the capacity at the national, sub-national and community levels on Disaster Risk Reduction in conjunction with climate change adaptation to reduce the loss of lives and assets, aimed at building disaster resilience of people and communities.

a) The Humanitarian Response Forum– HRF

The Humanitarian Response Forum (HRF) was established in 2011 in response to the demand for increased coordination between development partners to address the demands of humanitarian disasters, primarily floods and drought. The objective of the HRF is to ensure sound coordination and communication on emergency preparedness, and humanitarian response between the United Nations (UN), international non-governmental organizations (INGOs) and international organizations (IOs). The HRF works in close collaboration with the Government and most notably the National Committee for Disaster Management (NCDM). WHO is a member of the Humanitarian Response Forum and is the Sector Lead agency for Health.

b) The National Health Strategic Plan

Disaster Management and Preparedness are among the stated objectives of the National Health Strategic Plan 2020-2024, that provide enough elements to frame a Disaster Risk Management strategy for Health – with special focus on environmental (I.e. “natural”) hazards and road injuries - under the heading of Non-Communicable Diseases.

c) Disaster Management within the Ministry of Health

There is a “Coordinating Group for Emergency Response and Recovers” in the Ministry that is chaired by a Secretary of State. The Group brings together the Directors of all departments and programs of MOH (14 members). The Group is serviced by a Secretariat chaired by the Deputy Director of the Department of Preventive Medicine and including the Chiefs of Communicable Disease Control, Planning, Legal, Food Safety, Public Health laboratory (10 members). Six of the officers above, under the guidance of the Secretary of State, are members of the Health Sector sub-working group of the NCDM.

d) The Disaster Management and Environmental Health Bureau (DMEH Bureau)

The Disaster Management and Environment Health Bureau, with a staff of four officers in the Depart ment of Preventive Medicine is tasked with running the Secretariat, with developing policies, plans and guidelines, maintaining liaisons with NCDM, and coordinating with other departments within MOH and the Provincial Health Departments.

2. Vision

To ensure that disaster risk pose to people’s health is managed effectively and efficiently.

3. Mission

To strengthen, support to, and lead all health actors in disaster risk management.

4. Goals and Objectives

The goal of this 'National Strategic Plan on Disaster Risk Management for Health' is that the lives and wellbeing of the population in Cambodia be protected from the impact of disasters by appropriate public health activities of primary (Mitigation), secondary (Response) and tertiary (Recovery) prevention,

The **strategic objective** of this Plan is that the Cambodia's Health sector has sufficient capacities for disaster risk reduction, so to limit the population's exposure to some hazards, to increase the resilience of communities' and health care delivery systems, and to buffer, and recover from any adverse consequences of emergencies or disasters.

For this purpose, this Plan deals with increasing the capacity of the Ministry of Health (MoH) in terms of all phases of disaster risk management cycle i.e. prevention, preparedness, response and recovery. Starting from an analysis of the current situation, the Plan sets a number of critical, measurable **operational objectives** distributed along 2020-2024) timeframe.

5. Strategic Framework

The Plan focuses on natural hazards, with special focus on Floods, Drought and Storms as indicated by the NCDM. In the spirit of a "All-Hazard approach", though, the Plan recognizes complementarities and synergies with other initiatives aimed at detecting and responding to other events and emergencies of public health interest, primarily epidemics of infectious diseases, as required and established under IHR. The guiding principles used to develop this strategic framework are listed in Annex 6.

5.1 Strategic analysis

Strategic analysis of national capacities in the Health Sector was made based on the WHO Framework for Action (December 2012), that identifies four components managing the management of health emergencies and disasters.

1. Strong governance and leadership, and effective coordination mechanisms
2. Effective Information and Knowledge Management
3. Readiness of Health Service Delivery
4. Adequate resources (Human resources, Supplies, and Finance) capacity.

The elements of this Regional Framework fit well with the pillars of the National Health Strategic Plan: see Figure 1

Figure 1- WPRO DRM –H framework and Cambodia's National Health Strategy

	Health services delivery	Health care financing	Human resources for Health	Health information system	Health System Governance
Leadership and coordination					**X**
Information and Knowledge management	**X**			**X**	
Delivery of Health					

services					
Resources		**X**	**X**		

Based on the analysis using the four components mentioned above, the four necessary actions are set for 2020-2024 during the National Disaster Risk Management planning workshop from January 28-29, 2020 and further developed during the "Mekong Sub-region Disaster Risk Management Planning Workshop" March 19-21, 2014 in Manila.

Table 1 below summarizes the priority actions identified for the four components and according to each stage of the risk management cycle. The activities in Bold are priorities to be applied for 2016-2019.

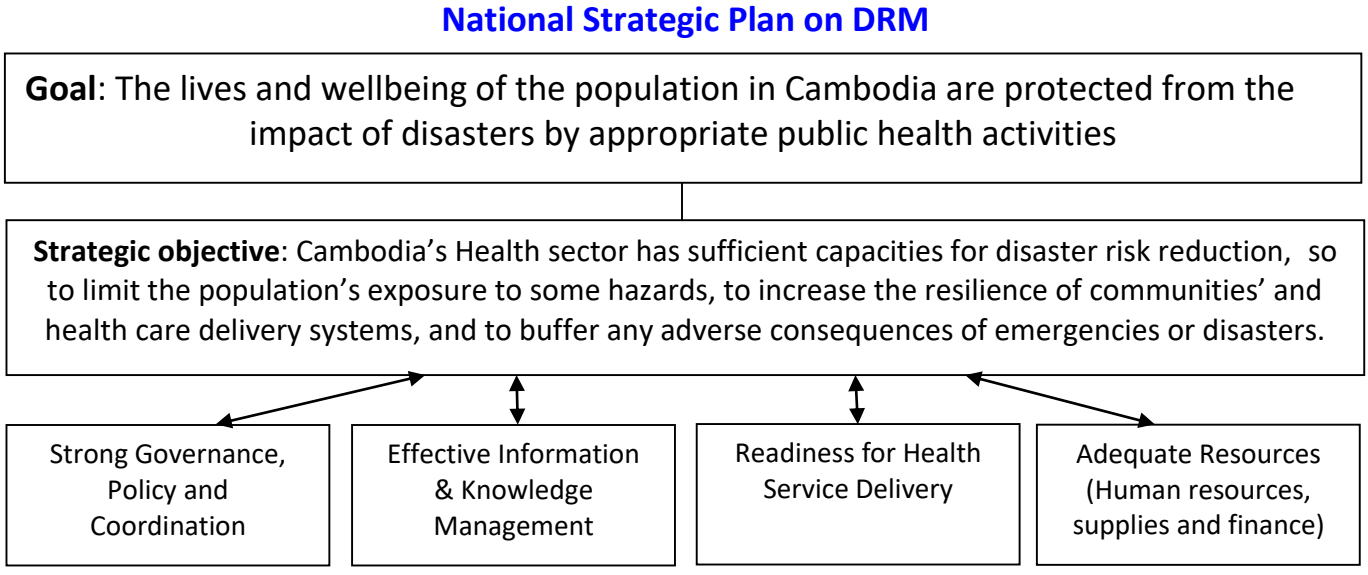
Table 1 – Priority Strategy

DRM Cycle	Governance, Policy and Coordination	Information, Knowledge, Management	Health Service Delivery	Resources
Preventing exposure and reducing susceptibility	• Strengthen Disaster Management Mechanisms in the health sector • Endorse and implement the National Strategic Plan for Disaster Risk Management for Health Sector 2020-2024 • Develop a National Policy on Disaster Risk Management for health • Prepare the National Financial Schemes for Disaster and ensuring consistent standards across the country • Develop Guidelines for Developing a Sub-national Disaster Response plan	• Enhance the official exchange of weekly health information between DMEH (Disaster Management and Environmental Health), CDC (Communicable Disease Control) and the DPHI (Department of Planning and Health Information) • Update of the map of public health facilities • Identify the high-risk areas and areas with low coverage access to health services • Bring weekly Health briefs ("0-reporting") NCDM and HRF meetings • Use health data to mobilize support and to inform stakeholders and development partners for the response	• Re-functioning the " Safety Hospital " Program which focusing on high risk areas • Repair, build, strengthen or relocate a health facility in the location at high risk	• Request for funding for Disaster Risk Management in the health sector • Provide Disaster Risk Management training to health staff at all levels • Identify high-risk areas for risk reduction support in collaboration with communities, NGOs and the private sector

Preparedness	• Prepare for Preparedness and Response Plan at National and Sub-national levels • Prepare the Standard of Procedures for communicating with donors and International Partners	• Mainstreaming training topics on Disaster Risk Management in the National Curriculum for Public and Private health schools/institutes • Strengthen the Early Warning System (EWS) on Hazard in the Health Sector • Assess and monitor vulnerabilities and population dynamics with using a Standard Assessment Tools • Develop MISP Training Curriculum on Sexual Reproductive Health, including Prevention of Gender-Based Violence • Train to National and sub-national disaster risk focal points on MISP on Reproductive and sexual health, including prevention of Gender Based Violence (GBV)	• Re-define the Referral and Readiness Systems in all Capital and Provinces • Enhance cooperation between health and related entities (Police, army, fire unit, CRC, etc.) • Develop strategies for continuous "Surge" in National and Sub-National Disaster Risk Management Plan with participation from different health service components to disseminate and train relevant health officials.	• Plan a contingency budget for emergency response which is integrated in the Annual Operational Plans • Update training on data on Disaster Risk Management to technical staff in concerned departments/units • Develop existing rescue mechanisms for staff mobility, from capital to provinces and from provinces to provinces and within the province during the surge of high risk. • Identify the required materials and equipment through risk assessment and analysis • Identify the Minimum Initial Service (MISP) on SRH requirement to respond to Emergency and Disaster to appeal for assistance from the Royal Government of Cambodia • Repair the Emergency Tools/equipment if necessary • Ensure proper storage in appropriate facilities • Quality and safety monitoring on equipment and supplies
	• Promote close coordination mechanisms with partners (organizations and charities) in	• Strengthen the Early Warning System (EWS) on Hazard in the Health Sector • Use health data to mobilize support and	• Provide the provisional health services and deployment of mobile and multidisciplinary	• Response to Risk analysis • Store the stock of Essential minimum medical equipment and supplies

Response	disaster areas ● Concentrate emergency assistance on the major causes of death and the most vulnerable groups	to inform stakeholders and development partners for the response	teams in areas where health services that are not yet functioning ● Provide basic health services and health promotion for disaster victims (vaccination, primary health care, trauma, mental health and reproductive health (MISP), etc.)	● Ensure sufficient funding for response to affected capital, provinces / towns / districts ● Monitoring and planning to ensure sustainability of staff, supply and cash flow
Recovery	● Coordinate with stakeholders for rehabilitation and development	● Immediately after the disaster, have a Rapid assessment for the impact and health needs and information dissemination ● Strengthen the disease surveillance system ● Provide health data for information of other sector rehabilitation	● Assess and strengthen health facilities that provide health services ● Replace the old or damage equipment and materials to upgrade Health facilities ● Provide psychological counselling, ● Restart the Vaccination program etc.	● Estimate the staff needs after disaster ● Mobilize resources

Fig. 2 - Overview of the National Strategic Plan on DRM for Health 2020-2024



5.2 Activities

A priority step is to strengthen the MOH Bureau of Disaster Management and Environmental Health with specific Terms of Reference (see proposed TOR in the annexes) and the necessary - even if limited) -delegation of authority, so that it can provide impulse and stewardship to this Strategic Plan.

Due to Cambodia's financial and human resource limitations, the implementation strategy must be cost-effective and prioritized. Table 2, below, carries a detailed plan of activities, with tentative targets for the years 2020-2024.

Table 2 – Table of 2020-2024 Activities

Activities	Year				
	2020	2021	2022	2023	2024
1. Governance, Policy and Coordination					
1.1. Strengthen Disaster Management Mechanisms in the health sector	- Prepare the Ministry of Health's Disaster Management Secretariat - Strengthen Disaster Management and Environmental Health Office - Strengthen sub-national disaster management mechanisms in the health sector	- Strengthen the Ministry of Health's Disaster Management Secretariat - Strengthen Disaster Management and Environmental Health Office - Strengthen Sub-national Disaster Management Mechanisms in the health sector	- Strengthen the Ministry of Health's Disaster Management Secretariat - Strengthen Disaster Management and Environmental Health Office - Strengthen Sub-national Disaster Management Mechanisms in the health sector	- Strengthen the Ministry of Health's Disaster Management Secretariat - Strengthen Disaster Management and Environmental Health Office - Strengthen Sub-national Disaster Management Mechanisms in the health sector	- Strengthen the Ministry of Health's Disaster Management Secretariat - Strengthen Disaster Management and Environmental Health Office - Strengthen Sub-national Disaster Management Mechanisms in the health sector
1.2 Endorse and implement the National Strategic Plan for Disaster Risk Management for Health Sector 2020-2024	The National Strategic Plan will be approved, disseminated and implemented	Implement, Monitor & Evaluate	Implement, Monitor & Evaluate	Implement, Monitor & Evaluate	Review and evaluate the results
1.3. Develop a National Policy on Disaster Risk Management for health	Develop a National Policy on Disaster Risk Management for health	Continue to develop the National Disaster Management policy for health	Continue to develop the National Disaster Management policy for health, approve and publish and disseminate	National Disaster Management implemented	National Disaster Management policy implemented
1.4 Prepare the National Financial Schemes for Disaster and ensuring consistent standards across the country		Develop clear budget plans and standards to respond in a timely manner	Implement budget plans and clear standards to respond in a timely manner	Implement budget plans and clear standards to respond in a timely manner	Implement budget plans and clear standards to respond in a timely manner
1.5 Develop Guidelines for Developing a Sub-national Disaster Response plan		▪ Develop guidelines for developing a Sub-National Disaster Preparedness and Response plan	Disseminate the Sub-National Disaster Preparedness and Response plan	Review and evaluate the Sub-National Disaster Preparedness and Response plan	Review and evaluate the Sub-National Disaster Preparedness and Response plan

		▪ Endorse Sub-national Disaster Preparedness and Response Guidelines			
1.6 Prepare for Preparedness and Response Plan at National and Sub-national levels		The Preventive Medicine Department has National and Sub-national Preparedness plans in place	Update the National and Sub-national Preparedness plans for National and Sub-national levels	Update the National and Sub-national Preparedness plans for National and Sub-national levels	Update the National and Sub-national Preparedness plans for National and Sub-national levels
1.7 Review and Implement the National Standards of Essential Health Care provision at all levels		Review, Revise, Develop, and Endorse the health service packages Guidelines for disaster victims	Implement health care service package Guidelines for disaster victims	Implement health care service package Guidelines for disaster victims	Implement health care service package Guidelines for disaster victims
1.8 Prepare the Standard of Procedures for communicating with donors and International Partners		Develop the Standard of procedures for communications with national and international partners	The Standard of procedures for communications with national and international partners is in place	The Standard of procedures for communications with national and international partners is in place	The Standard of procedures for communications with national and international partners is in place
1.9 Promote close coordination mechanisms with partners (organizations and charities) in disaster areas		Examine and strengthen this coordination mechanism to be effective	Strengthen this coordination mechanism to be effective	Strengthen this coordination mechanism to be effective	Strengthen this coordination mechanism to be effective
1.10 Coordinate with stakeholders for rehabilitation and development			▪ Establish a team to estimate damage and needs for rehabilitation ▪ Strengthen capacity of the team to cooperate with stakeholders	Strengthen capacity of the team to cooperate with stakeholders	Strengthen capacity of the team to cooperate with stakeholders
2. Information and knowledge management					
2.1-Enhance the official exchange of weekly health information between DMEH (Disaster Management and Environmental Health), CDC (Communicable Disease Control) and the	Establish quarterly meetings between DMEH, CDC and DPHI	Establish quarterly meetings between DMEH, CDC and DPHI	Establish quarterly meetings between DMEH, CDC and DPHI	Establish quarterly meetings between DMEH , CDC and DPHI	Establish quarterly meetings between DMEH , CDC and DPHI

DPHI Department of Planning and Health Information (full term)					
2.2 - Update of the map of public health facilities	Health Facility mapping was updated 100%	Health Facility mapping was updated 100%	Health Facility mapping was updated 100%	Health Facility mapping was updated 100%	Health Facility mapping was updated 100%
2.3 Identify the high-risk areas and areas with low coverage access to health services	Evaluate and Analyze the high-risk areas and areas with low health service coverage	Estimate (count) the population living in the high-risk areas and areas with low health service coverage	Assess the need for preparedness and response and recovery	Assess the need for preparedness and response and recovery	Assess the need for preparedness and response and recovery
2.4 - Assess and monitor vulnerabilities and population dynamics with using a Standard Assessment Tools		Starting discussions between the PMD and the training institute	Assessment Tool was prepared	Tools made and tested	- The survey begins in four provinces - Disseminate the survey results
2.5-Mainsteaming training topics on Disaster Risk Management in the National Curriculum for Public and Private health schools/institutes	Integrate the DRM curriculum into public and private training institutes	Start a discussion between the PMD and the Universities	Curriculum was developed and approved	The training course begins	- Evaluate the training course - Review the curriculum If necessary
2.6. Establish and train a working-team (focal point) for the quick assessment for Health		Select a Provincial Assessment Team and provide training	Continue Training and Coaching	Continue Training and Coaching	Continue Training and Coaching
2.7- Immediately after the disaster, have a Rapid assessment for the impact and health needs and information dissemination	All Provincial Health Departments conduct assessments using the Assessment Tools	All Provincial Health Departments conduct assessments using the Assessment Tools	All Provincial Health Departments conduct assessments using the Assessment Tools	All Provincial Health Departments conduct assessments using the Assessment Tools	All Provincial Health Departments conduct assessments using the Assessment Tools
2.8- Use health data to mobilize support and to inform stakeholders and development partners for the response	Follow-up through NCDM and disseminate health data	Follow-up through NCDM and disseminate health data	Follow-up through NCDM and disseminate health data	Follow-up through NCDM and disseminate health data	Follow-up through NCDM and disseminate health data
2.9-Develop MISP Training Curriculum on Sexual Reproductive Health, including Prevention of Gender-Based Violence	MISP training curriculum has been approved				Update the MISP training curriculum if necessary
2.10 Train to National and sub-national disaster risk focal points on MISP on Reproductive and sexual health, including prevention of Gender Based Violence (GBV)	Train to Provincial disaster risk focal points on MISP Reproductive and sexual health,	Train health officers at OD, health centers on MISP Reproductive and sexual health, including	Train health officers at OD, health centers on MISP Reproductive and sexual health,	Train health officers at OD, health centers on MISP Reproductive and sexual health, including prevention of Gender	Train health officers at OD, health centers on MISP Reproductive and sexual health, including prevention of Gender

	including prevention of Gender Based Violence (GBV)	prevention of Gender Based Violence (GBV)	including prevention of Gender Based Violence (GBV)	Based Violence (GBV)	Based Violence (GBV)
2.11 Strengthen the Early Warning System (EWS) on Hazard in the Health Sector	Review the Early Warning System and disaster management officers	Prepares the Early Warning System and trains the focal point persons	Oversee the Early Warning System and trains the focal point persons	Oversee the Early Warning System and trains the focal point persons	Oversee the Early Warning System and trains the focal point persons
3. Delivery of preparedness and response on Health Services and Minimum Initial Service Package (MISP)					
3.1 Re-functioning the " Safety Hospital " Program which focusing on high risk areas	PMD proposes to revise the " Safety Hospital " program to the Ministry for approval	Re-function " Safety Hospital " At health facilities	Continue the process and review	Continue the process and review	Continue the process and review
3.2. Repair, build, strengthen or relocate a health facility in the location At high risk	Identify the number of high-risk locations and locations to be repaired	Select priority locations, pre-build, and construction and renovation	Select priority locations, pre-build, and construction and renovation	Select priority locations, pre-build, and construction and renovation	Review
3.3. Re-define the Referral and Readiness Systems in all Capital and Provinces	- Monitor quality of Referral System - Improve and renovate	Monitor quality of Referral System -Strengthen, complement and repair	- Monitor quality of Referral System - Improve and renovate	- Monitor quality of Referral System - Improve and renovate	- Monitor quality of Referral System - Improve and renovate - **Review**
3.4 Enhance cooperation between health and related entities (Police, army, fire unit, CRC, etc.)	- Monitor the cooperation mechanism - Enhance the cooperation of relevant agencies in all activities	- Monitor the cooperation mechanism - Enhance the cooperation of relevant agencies in all activities	- Monitor the cooperation mechanism - Enhance the cooperation of relevant agencies in all activities	- Monitor the cooperation mechanism - Enhance the cooperation of relevant agencies in all activities	**Review**
3.5. Develop strategies for continuous "Surge" in National and Sub-National Disaster Risk Management Plan with participation from different health service components to disseminate and train relevant health officials.	The PMD holds a discussion with Department of Human Resource and Development (HRD), for updating the Surge Strategic Plan, and seeking the approval from the Ministry	Continue to disseminate and train relevant health officers	Continue to disseminate and train relevant health officers	Continue to disseminate and train relevant health officers	Review
3.6. Strengthen the coordination mechanism	Quarterly meeting	Quarterly meeting	Quarterly meeting	Quarterly meeting	Review

between CDC with the Emergency Operations Center (EOC = Emergency Operations Center) at the Ministry of Health	between PMD and CDC and as required	between PMD and CDC and as required	between PMD and CDC and as required	between PMD and CDC and as required	
3.7. Establish and strengthen Coordination Mechanisms at national and sub national levels in MISP-SRH, including the prevention of sexual violence.	Establish and strengthen coordination mechanism in preparation through 5-day MISP training	Disseminate and further train in cooperation with the Human Resource Department	Disseminate and further train in cooperation with the Human Resource Department	Disseminate and further train in cooperation with the Human Resource Department	Review
3.8. Provide the provisional health services and deployment of mobile and multidisciplinary teams in areas where health services that are not yet functioning	Establish a rescue team and train them	Update the rescue team and continue strengthening team capacity and training	Update the rescue team and continue strengthening team capacity and training	Update the rescue team and continue strengthening team capacity and training	Review
3.9. Eliminate barriers for accessing and provide health care services to disaster victims; Eg. Free of charge and extend the provision of basic services	Define the principle of providing and receiving health services for disaster victims	Disseminate and Implement	Disseminate and Implement	Disseminate and Implement	Review
3.10. Provide basic health services and health promotion for disaster victims (vaccination, primary health care, trauma, mental health and reproductive health (MISP), etc.)	Follow the Guidelines of related National Programs	Follow the Guidelines of related National Programs	Follow the Guidelines of related National Programs	Follow the Guidelines of related National Programs	Review
3.11. Assess and strengthen health facilities that provide health services	Assess for the needs at health facilities	- Assess the needs at health facilities - Meet the needs based on the results of the assessment	- Assess the needs at health facilities - Meet the needs based on the results of the assessment	- Assess the needs at health facilities - Meet the needs based on the results of the assessment	Review
3.12 - Replace the old or damage equipment and materials to upgrade Health facilities	Assess and estimate the existing health facilities and materials	Plan to respond to demand for the Implementation of the plan	Review the plan to respond to demand for the implementation of the plan	Review the plan to respond to demand for the implementation of the plan	Review
3.13. Restart the Vaccination program etc.	Follow National Program Guidelines	Follow National Program Guidelines	Follow National Program Guidelines	Follow National Program Guidelines	Review
4. Resources					

4- 1. Request for funding for Disaster Risk Management in the health sector	Propose annual contingency budget plan to national budget and/or from development partners and request for approval from relevant ministries	Propose annual contingency budget plan to national budget and/or from development partners and request for approval from relevant ministries	Propose annual contingency budget plan to national budget and/or from development partners and request for approval from relevant ministries	Propose annual contingency budget plan to national budget and/or from development partners and request for approval from relevant ministries	Propose annual contingency budget plan to national budget and/or from development partners and request for approval from relevant ministries
4.2- Provide Disaster Risk Management training to health staff at all levels	- Review the Disaster Risk Management training curriculum - Develop a training plan - Provide training to 10% of total training plan	Provide additional 25% of total training plan	Provide additional 25% of total training plan	Provide additional 25% of total training plan	- Provide 15% of total training plan - Review
4.3 Identify high-risk areas for risk reduction support in collaboration with communities, NGOs and the private sector	- Identify high risk areas - Map out the high risk areas - Disseminate the plans	Continue to disseminate the plans to high risk provinces and seek cooperation from communities, NGOs and the private sector	Continue to disseminate the plans to high risk provinces and seek cooperation from communities, NGOs and the private sector	Continue to disseminate the plans to high risk provinces and seek cooperation from communities, NGOs and the private sector	- Continue to disseminate the plans to high risk provinces and seek cooperation from communities, NGOs and the private sector - Review
4.4 Plan a contingency budget for emergency response which is integrated in the Annual Operational Plans	- Estimate contingency budget - Plan contingency budget into the Annual Operational Plans	- Estimate contingency budget - Plan contingency budget into the Annual Operational Plans	- Estimate contingency budget - Plan contingency budget into the Annual Operational Plans	- Estimate contingency budget - Plan contingency budget into the Annual Operational Plans	- Estimate contingency budget - Plan contingency budget into the Annual Operational Plans - Review
4.5 - Update training on data on Disaster Risk Management to technical staff in concerned departments/units	- Train to Disaster Risk Management officers - Update data quarterly	- Train to Disaster Risk Management officers - Update data quarterly	- Train to Disaster Risk Management officers - Update data quarterly	- Train to Disaster Risk Management officers - Update data quarterly	- Train to Disaster Risk Management officers - Update data quarterly - Review
4.6. Develop existing rescue mechanisms for staff mobility, from capital to provinces and from provinces to provinces and within the province during the surge of high risk.	- Strengthen existing Rescue Mechanisms for staff mobility, from capital to provinces and from provinces to	- Strengthen existing Rescue Mechanisms for staff mobility, from capital to provinces and from	- Strengthen existing Rescue Mechanisms for staff mobility, from capital to provinces	- Strengthen existing Rescue Mechanisms for staff mobility, from capital to provinces and from provinces to	- Strengthen existing Rescue Mechanisms for staff mobility, from capital to provinces and from provinces to

	provinces and within the province during the surge of disasters. - Develop a standard regulation to strengthen the staff mobility mechanism	provinces to provinces and within the province during the surge of disasters. - Develop a standard regulation to strengthen the staff mobility mechanism	and from provinces to provinces and within the province during the surge of disasters. - Develop a standard regulation to strengthen the staff mobility mechanism	provinces and within the province during the surge of disasters. - Develop a standard regulation to strengthen the staff mobility mechanism	provinces and within the province during the surge of disasters. - Develop a standard regulation to strengthen the staff mobility mechanism
4.7. Identify the required materials and equipment through risk assessment and analysis	Determine the needs for disaster response materials and equipment by consultation between the PMD and the Central Medical Store (CMS)	Determine the needs for disaster response materials and equipment by consultation between the PMD and the Central Medical Store (CMS)	Determine the needs for disaster response materials and equipment by consultation between the PMD and the Central Medical Store (CMS)	Determine the needs for disaster response materials and equipment by consultation between the PMD and the Central Medical Store (CMS)	Determine the needs for disaster response materials and equipment by consultation between the PMD and the Central Medical Store (CMS)
4.8. Identify the Minimum Initial Service (MISP) on SRH requirement to respond to Emergency and Disaster to appeal for assistance from the Royal Government of Cambodia	Identify the need through MISP training to the emergency / disaster prone provinces	Identify the need through MISP training to the emergency / disaster prone provinces	Identify the need through MISP training to the emergency / disaster prone provinces	Identify the need through MISP training to the emergency / disaster prone provinces	Identify the need through MISP training to the emergency / disaster prone provinces
4.9- Repair the Emergency Tools/equipment if necessary	- Assess and evaluate the emergency equipment according to context/situation - Update the emergency kits	- Assess and evaluate the emergency equipment according to context/situation - Update the emergency kits	- Assess and evaluate the emergency equipment according to context/situation - Update the emergency kits	- Assess and evaluate the emergency equipment according to context/situation - Update the emergency kits	- Assess and evaluate the emergency equipment according to context/situation - Update the emergency kits
4.10 - Ensure proper storage in appropriate facilities	Store equipment and supplies in: - Central level at CMS - Provincial level at OD	Store equipment and supplies in: - Central level at CMS - Provincial level at OD	Store equipment and supplies in: - Central level at CMS - Provincial level at OD	Store equipment and supplies in: - Central level at CMS - Provincial level at OD	Store equipment and supplies in: - Central level at CMS - Provincial level at OD - Review
4.11- Quality and safety monitoring on	- Check inventory - Check the overall	- Check inventory - Check the overall	- Check inventory - Check the overall	- Check inventory - Check the overall	- Check inventory - Check the overall

equipment and supplies	checklist every quarter	checklist every quarter	checklist every quarter	checklist every quarter	checklist every quarter
4.12 - Response to Risk analysis	See above Strategy # 1	See above Strategy # 1	See above Strategy # 1	See above Strategy # 1	See above Strategy # 1
4.13. Store the stock of Essential minimum medical equipment and supplies	See above 4.10	See above 4.10	See above 4.10	See above 4.10	See above 4.10
4.14 - Ensure sufficient funding for response to affected capital, provinces / towns / districts	See above 4.3	See above 4.3	See above 4.3	See above 4.3	See above 4.3
4.15 - Monitoring and planning to ensure sustainability of staff, supply and cash flow	- Check the checklist annually - Plan and governance	- Check the checklist annually - Plan and governance	- Check the checklist annually - Plan and governance	- Check the checklist annually - Plan and governance	- Check the checklist annually - Plan and governance - Review
4.16 Estimate the staff needs after disaster	Prepare estimates tools by specifying the responsibilities	Make an estimation by clearly identifying their responsibilities	Make an estimation by clearly identifying their responsibilities	Make an estimation by clearly identifying their responsibilities	- Make an estimation by clearly identifying their responsibilities - Review

6. Financial Resources and Implementation

6.1 Financial Resources

Financial resources to implement this strategic plan will come from three possible funding sources, as outlined in the Table 3.

Table 3 – Funding sources

Source	Purpose/priority use for funding	Tentative estimate, USD
Government budget	To support core operation costs at national and subnational levels, to strengthen necessary capacities for implementation of the risk management cycle, which includes prevention, preparedness, response and recovery	
Donor funding	To support the strengthening of DRM for Health structure/policy and the implementation of the National Strategic Plan on DRM for Health	
Emergency funds, with Humanitarian Response Forum support	To support short-term actions in very critical situations, there are three existing possibilities: ● Emergency Cash Grant ● CERF Rapid Response Window ● Flash Appeal For more details, see HRF Emergency funding guidelines, in HRF Contingency Plan	

The pooled donor funding offers great potential to use donor assistance to more closely support government priorities. Until now, there has been a disproportionate use of pooled donor funding on training and purchase of equipment, with poor follow-up/linkage to changes in activities. Additionally, guidelines for disbursement of expenditures will be developed to facilitate their uses during emergency period.

6.2 Implementation

Implementing the National Strategic Plan on DRM for Health requires the cooperation of multiple departments of Ministry of Health. The Minister of Health will ultimately be responsible for ensuring that the activities outlined in the strategy are implemented. A responsible department or government agency for specific activities should be further defined as the priority activities in Annex 6. Where multiple departments are responsible for a particular activity, this activity will be coordinated through inter-departmental meetings on this activity.

The DRM for Health taskforce will ensure that resources are allocated (at national and sub-national levels) according to the priorities outlined in this national strategy. Secretariat support will be made available for the DRM for Health taskforce to assist them in their work. Each department will be responsible for reporting on the progress of their respective activities to the DRM for Health taskforce.

There is a necessity of alignment of this National Plan with other National Plans in DRM, such as the National Pandemic Plan.

7. Monitoring and Evaluation

The monitoring of the National Strategic Plan will take place through:

- Mid-term review of the National Strategic Plan on DRM for Health, which will be conducted in 2016 and the results will be used to make any necessary adjustments to the activities planned

for the remainder of the strategy's duration

- Annual review of IHR Minimum Core Capacities including public health emergency.
- Annual reports, which will be compiled and written by the Bureau and the Task Force, to MoH Committee.

Annex 1 Proposed Terms of Reference for the Disaster Management and Environmental Health Bureau

The Disaster Management and Environmental Health Bureau (DMEH Bureau)

The Disaster Management and Environment Health Bureau, in the Department of Preventive Medicine, is tasked with running the Secretariat of the Coordinating Group for Emergency Response and Recovery in the Ministry of Health. The Bureau assists the Ministry in developing policies, plans and guidelines. It coordinates with other departments and programs within MOH and the Provincial Health Departments, and maintains liaisons with NCDM and national and international partners in Disaster Risk Management. The mandate of the Bureau covers all the phases of the DRM cycle. The purpose of the Bureau is to maximize the use of the Health Sector resources for Disaster Risk Management by improving coordination and collaboration at national and international levels.

Terms of Reference

1. Coordination

- Ensure follow-up on, and evaluation of the deliberations of MOH Coordinating Group for Emergency Response and Recovery
- Assist in developing national health policies across the four phases of the DRM cycle
- Advise MOH Department of Planning and Health information on matters related to Disaster Risk Management
- Contribute to strengthening MOH Emergency Operations Centre and participate in MOH coordinated response to emergency events
- Maintain operational links with NCDM, focusing on the health component of early warning alerts, evacuation plans and campaigns to reduce existing risks or avoid new risks.
- Maintain operational links with the UN Country Humanitarian fora or bodies, etc., for joint strategy development and planning as related to DRM-H supported by international agencies, NGOs and other partners.
- Coordinate with other departments and programmes in MOH and with the Provincial Health Departments to promote community resilience through partnerships with civil society, NGOs and CBOs, with a priority focus on preventive and curative health care.

2. Information management

- Ensure that health information and health perspectives are integrated in multi-sectoral risk assessments at national, subnational and local levels
- Coordinate with department and programs in MOH to establish procedures for the management and utilization of information and knowledge from risk assessments among partners of health and other sectors
- Coordinate with departments and programs in MOH to develop policies, mechanisms and procedures for risk communication for public, media and responders

3. Support to the delivery of Health services in emergencies

- Coordinate with MOH departments and programs and with PHDs in order to match health services with the profiles of hazards and risk, as assessed and monitored at the national and subnational levels
- Coordinate with MOH departments and programs in order to adapt existing health services packages for disaster response
- Develop strategies for continuity of health service delivery and mechanisms for **response and recovery** operations:
    - Define standards, mechanisms and operating procedures to preposition and set up temporary (tents) and/or transitional health infrastructure.
    - Develop national and subnational surge mechanisms to deploy multipurpose mobile medical teams where local health systems are non-functional
    - Develop contingency plans, based on gap analyses and assessments of local hazards and vulnerabilities, by levels of care.
- Advise the relevant Departments in MOH in order to **develop and enhance the Safe Hospitals Initiative**, and cover not only hospitals, but also all critical health facilities in hazard-prone areas.
- Develop **mechanism to rapidly assess** the capacity of health facilities impacted by a disaster to continue delivering services.
- Identify locations for **new hospitals and health centres** through risk assessment, and build any new facility according to the risk-specific building codes.

4. Resource management

- Coordinate with MOH Department of Human Resources to develop the skills and experiences in disaster risk management for health that are available at national, subnational and local levels
- Advise on national and subnational plans and mechanisms to meet staffing needs for surge requirements
- Identify needs and advise on critical medical supplies and equipment through risk assessment and analysis to ensure a minimum stocking level in appropriate locations
- Advise on procedures for emergency contracting of health supplies and services
- Formulate and propose policies for funding to cover all components of DRM for health
- Advise and advocate for contingency funding for disaster.

Annex 2 Proposed Standard Template for Provincial Health Contingency Planning

Province of…….

Element		
1. Scenario	1.1. What will/may happen ?	Floods will isolate part of the population and force others to seek refuge and/or be evacuated to safe areas. Health centres may be flooded and become non-functional. People may move with some food, and will take domestic animals with them.
	1.2. How many people will be affected? Where ?	
	1.3. What will be the main cause(s) of death and illness,	Drowning, Snake bites, Traumas, Diarrhoeal diseases, ARI, Malaria, x will be the main causes of death and illness. More death and illness will be caused by lack of access to health care for pregnant women and chronic patients.
6. Response Strategy	W**hat are the main risk factors that need addressing**?	● Ensuring first aid for cases of drowning, snake bites and trauma ● Ensuring prompt treatment to news cases of diarrhoea, ARI and malaria ● Ensuring continuation of treatment for chronic patients ● Ensuring appropriate care for pregnant women, malnourished children and any complicated case ● Limit the risk for diarrhoeas, ARI and malaria by ensuring that clean water, sanitation and hygiene, proper shelter and mosquito nets are available for all the affected population
3.Implementation Plan	How can we achieve this? What do we need to do to reduce the risk factors ?	● Bring basic curative health care to isolated villages/households and to people in “safe areas” ● Provide information to the population on the status of health centres (open/closed; accessible/not accessible, etc.) ● Identify and register high risk individuals (i.e. pregnant women, malnourished children, disabled people, people with HIV, TB, other chronic cases on treatment, etc.); provide evacuation and referral for those in need of special care. ● Ensure disease control: establish diarrhoea treatment units, malaria prevention and vector control measures. ● Support dissemination of hygiene messages in coordination with UNICEF and other relevant partners ● Provide public health response to any communicable disease outbreaks
4.Operational support Plan	What do we need to do to be able	**FIRST 72 HOURS** ● Contact MoH/Department of preventive medicine,

	to implement the plan ?	District health, health centre and other sources (e.g. IOs, NGOs, CBOs) to gather sector-specific information, share with PCDM ● Convene coordination meeting with all the partners to gather additional information on the events and on their plans, if information insufficient organise or participate in joint assessments in coordination with MOH in the affected areas. ● Mobilize the Provincial Rapid Response Teams (RRT) to assess the situation and the health risks ● Share assessments results and consolidated information with all involved actors, WING DAYS/WEEKS ● Mobilize and support mobile health teams that bring care to the population ● Provide health kits to mobile teams and to health centres affected by floods or storms or receiving increased numbers of patients ● Set in place means and mechanisms for medical evacuation to the closet CAP-3 Hospital ● Monitor health needs in "safe areas" or elevated areas where families are displaced especially if there is limited or no access to safe water and to sanitation facilities ● Support partners to ensure that minimum health standards (e.g. Sphere) are reached and if possible exceeded ● Monitor early warning sources and disease surveillance for infectious diseases in affected population; surveillance bulletins/information with relevant actors, particularly WASH sector ● Maintain a routine of coordination and information, meetings, according to the urgency of the situation. ● All to provide information on activities, plans and monitoring data to PCDM; copy to MOH ● Monitor and share information on health sector performance and funding, and assess and find solutions to services delivery gaps every week ● Prepare appeal / proposals to meet funding gaps ensuring sharing proposals within sector/PCDM to ensure coordination ● Prepare for early recovery
5.Preparedness Plan	What do we need to do NOW? Do we have enough	● Participate/organize a meeting with PCDM and health partners and analyse the lessons learnt from the past floods ● Monitor the flow of disease surveillance and health

	information? Do we have enough authority? Do we have enough resources? Do we have systems on place? Do we have enough partners?	information coming from the Operational Districts ● Assess the vulnerability of the health facilities and identify back-up solutions for primary access and referral in “safe areas” ● Preposition/organize space for shelter, health care, tanker for water, latrines, etc in designated “safe areas”: use Sphere standards to estimate needs ● Update and share contact list of health partners; update mapping of NGOs that can engage in health response during emergencies ● Estimate initial needs for supplies and personnel in affected health centres in coordination with the MOH ● Quantify resources available for emergency response (financial resources, human resources, medicines and equipment) ● Ask all health partners to share organizational plans through 3 ways (as specific as possible on location - down to commune/village; duration of assistance provided; targeting criteria; capture longer-term plans; resource availability ● Share feedback to OD: e.g. HIS-HC, catchment area, type of facilities, type of services, etc. ● Identify provincial focal points for health assessment and ensure that they know how to use MOH standard form and methods for assessment ● Procure and provide essential vaccines, essential medical and nutrition supplies. Ensure adequate stock of ORS and Ringers Lactate, other required medicines and equipment ● Establish of lines of replenishment for medical supplies as and when necessary ● Monitor early warning sources and disease surveillance for infectious diseases in the areas at higher risk.
6. Budget	How much will N°. 4 cost ?	Personnel…….. Equipment …… Supplies…… Cash……

Annex 3 – Definitions and Concepts

Some definitions and concepts[1],[2]
There is no clear-cut way to define the key concepts in the field of emergency risk management; however, several terms and definitions are available with the focus on their common usage and understanding within the humanitarian context, particularly related to natural disasters, complex emergencies, and disaster risk reduction. The following definitions are quite relevant to health sector emergency risk management.

Crisis:

Is an event or series of events representing a critical threat to the health, safety, security or wellbeing of a community, usually over a wide area; armed conflicts, epidemics, famine, natural disasters, environmental emergencies and other major harmful events may involve or lead to a humanitarian crisis.

Disaster:

A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses that exceed the ability of the affected community or society to cope using its own resources. A disaster is a function of the risk process. It results from the combination of hazards, conditions of vulnerability and insufficient capacity or measures to reduce the potential negative consequences of risk.
Any occurrence that causes damage, ecological disruption, loss of human life or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area.

Emergency

A sudden occurrence demanding immediate action that may be due to epidemics, to natural, to technological catastrophes, to strife or to other man-made causes.

Hazard

"A dangerous phenomenon, substance, human activity or condition that may cause **loss of life, injury or other health impacts,** property damage, loss of livelihoods and services, social and economic disruption, or environmental damage"
Any phenomenon that has the potential to cause disruption or damage to people and their environment.

Vulnerability

"The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effect of a hazard"
The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards.
The degree, to which a population or an individual is unable to anticipate, cope with, resist and recover from the impact of a disaster.

[1] http://www.unisdr.org/eng/terminology/terminology-2009-eng.html
[2] http://reliefweb.int/report/world/reliefweb-glossary-humanitarian-terms

Risk

The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihood, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerabilities.

Risk is a function of the hazards to which a community is exposed and the vulnerabilities of that community. However, that risk is modified by the level of the local preparedness of the community at risk. It is expressed by the following notation:

Risk is proportional to Hazard X Vulnerability / Level of Preparedness

Risk Reduction

The Risks reduction involves measures designed either to prevent hazards from creating risks or to lessen the distribution, intensity or severity of hazards. These measures include flood mitigation works and appropriate land-use planning. They also include vulnerability reduction measures such as awareness raising, improving community health security, and relocation or protection of vulnerable populations or structures.

Elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.

Prevention

Activities to provide outright avoidance of the adverse impacts of hazards and means to minimize related environmental, technological and biological disasters.

The activities are structural or non-structural measures, public awareness and education including legislative measures.

Mitigation

It is the structural and non-structural measures undertaken to limit the adverse impacts of natural hazards, environmental degradation and technological hazards

A set of measures to reduce or neutralize the impact of natural hazards by reducing social, functional, or physical vulnerability.

Preparedness

Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations

The long-term activities whose goals are to strengthen the overall capacity and capability of a country or a community to manage efficiently all types of emergencies and bring about an orderly transition from relief through recovery, and back to sustained development. It requires that emergency plans be developed, personnel at all levels and in all sectors be trained, and communities at risk be educated, and that these measures be monitored and evaluated regularly.

Response:

A sum of decisions and actions taken during and after disaster, including immediate relief, rehabilitation, and reconstruction.

Recovery:

Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk

Longer-term effort to (a) reconstruct and restore the disaster-stricken area, e.g. through repairing or replacing homes, businesses, public works, and other structures; (b) deal with the disruption that the disaster has caused in community life and meet the recovery-related needs of victims; and (c) mitigate future hazards.

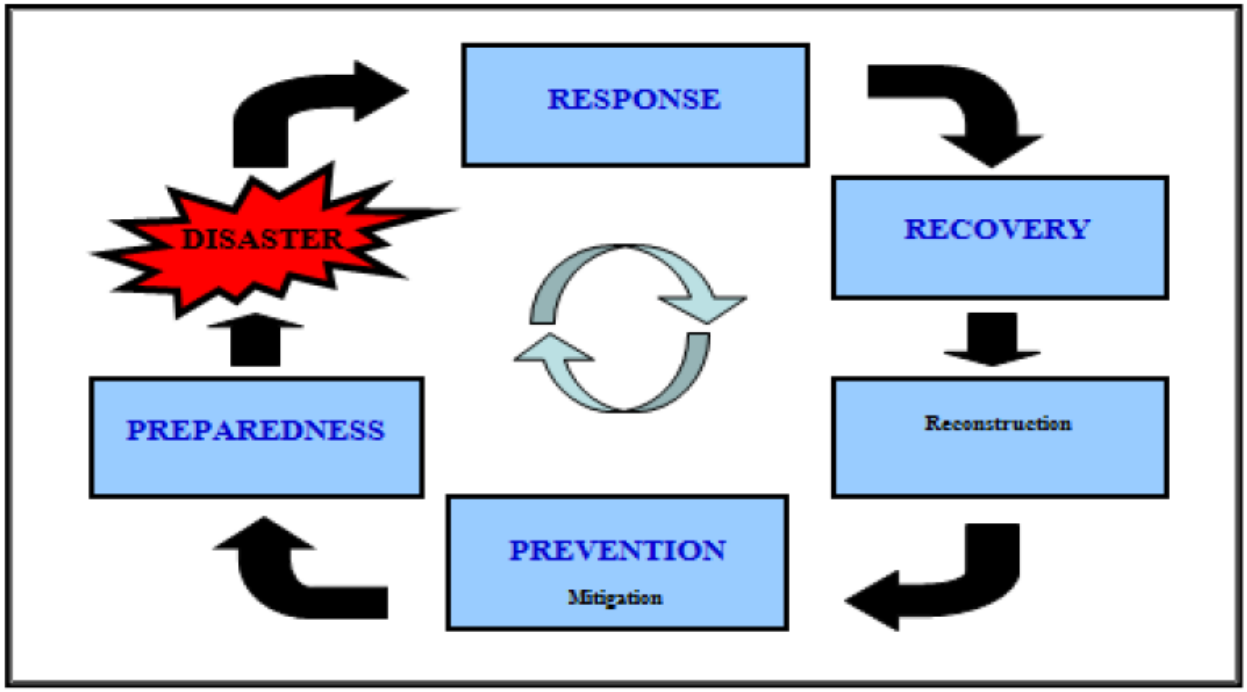
Disaster Risk Management:

The systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards.

The systematic approach and practice of managing uncertainty to minimise harm and loss.

Disaster Risk Management Cycle:

Fig.3: Overview of four Phases of the Disaster Risk Management Cycle



The Disaster Risk Management cycle explain the linkages between the four phases of emergency and disaster risk management i.e. prevention, preparedness, response and recovery (Figure3). The Disaster Risk Management includes both pre-impact disaster risk reduction through prevention, preparedness and mitigation as well as 'response and recovery' post-impact crises management activities. Therefore, health sector required to focus on various measures related to prevention, mitigation, and preparedness before the disaster struck, and emergency response and early recovery after the disaster struck.

Adaptive capacity:
'Long-term strategies for change within a society' mostly for future hazards and climate change.

Coping capacity:
Refers to 'resources for a direct response to the impact of a given hazard event, this would include disaster preparedness and early warning.

Exposure:
"People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses".
Countries or other 'entities' affected by natural hazards such as floods, earthquakes, droughts, storms, floods and sea level rise.

Susceptibility:
"The state of being at risk, if exposed to a hazard".
Susceptibility refers to selected structural characteristics of a society and the framework conditions in which communities face potential natural hazards and climate phenomena.
Resilience:
"The ability of a system, community or society exposed to hazards to **resist, absorb, accommodate to and recover from** the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions"

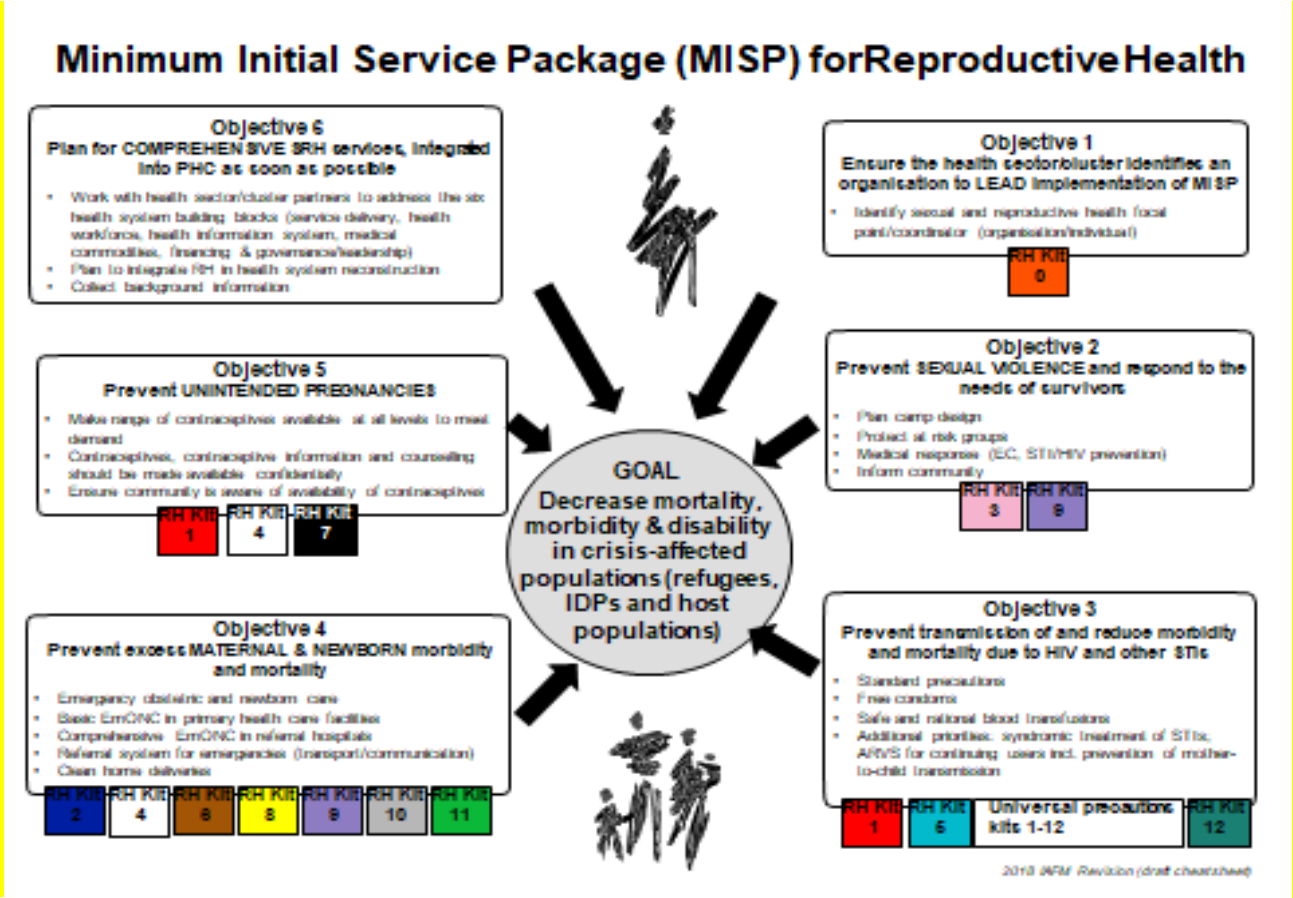
Annex 4 – Minimum Initiate Service Package (MISP)

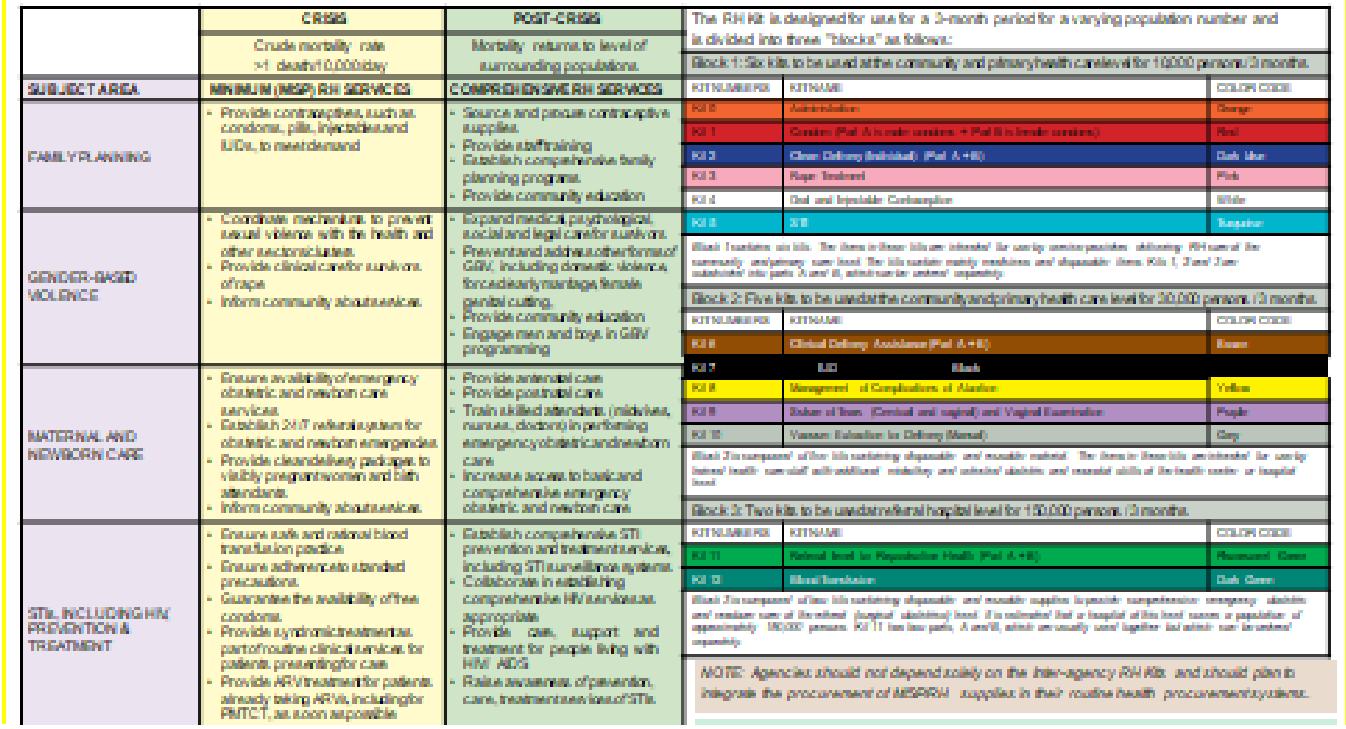
What is the MISP?

The Minimum Initial Service Package (MISP) for Reproductive Health (RH) is a coordinated set of priority activities designed to: prevent and manage the consequences of sexual violence; prevent excess maternal and newborn morbidity and mortality; reduce HIV transmission; and plan for comprehensive RH services beginning in the early days and weeks of an emergency. See “About the Distance Learning Module” on page 3 for further information. This set of activities must be implemented at the onset of an emergency in a coordinated manner by trained staff. The MISP can be implemented without an in-depth RH needs assessment because documented evidence already justifies its use. The MISP is a standard in the 2011 revision of the Sphere Minimum Standards in Disaster Response as well as in Inter-Agency Standing Committee (IASC) Health Cluster tools and guidance.10 The MISP also meets the life-saving criteria for the Central Emergency Response Fund (CERF).11 The components of the MISP form a minimum requirement and it is expected that scale-up and an expansion to comprehensive RH services will occur as soon as the situation stabilizes.

The five objectives of the MISP are to:

1. Ensure an organization is identified to lead the implementation of the MISP;
2. Prevent and manage the consequences of sexual violence;
3. Reduce HIV transmission;
4. Prevent maternal and newborn death and illness;
5. MISP Plan for preparedness and response on sexual and reproductive health care





1. Coordination is identified to lead the implementation of the MIS:

Coordination of MISP activities as part of the overall health sector/cluster response is necessary at multiple levels, including within each agency responding to the emergency as well as at sub-national, national and international levels. Coordination within and among these various levels and across sectors is crucial to ensure effectiveness of the RH response as it helps to identify and fill gaps in service delivery, prevent overlapping programming, strengthen advocacy and support accountability and application of standards. At the beginning of the response in each humanitarian setting, the health sector or health cluster must identify an organization to lead the RH response. This can be a national or international NGO, the Ministry of Health (MoH) or a UN agency. The nominated organization, which is the one identified as having the most capacity to fulfil this role, immediately dedicates a full-time RH Officer for a minimum of three months to provide operational and technical support to the health partners and to ensure the prioritization of RH and achieve good coverage of MISP services. It is important that this individual has sufficient technical knowledge of all MISP components to provide this support.

- The RH officer is responsible for supporting health sector/cluster partners to implement the MISP and plan for comprehensive RH service delivery. The RH officer's role is to:
- Coordinate, communicate and collaborate with the health sector or health cluster coordinator and actively participate in health coordination meetings, providing information and raising strategic and technical issues and concerns;
- Support the coordinated procurement of reference materials and supplies;
- Host regular RH stakeholder meetings at relevant (national, sub-national/regional, local) levels to problem solve and strategize the implementation of the MISP and to provide MISP resource materials;
- Ensure regular communication among all levels and report back on key conclusions, challenges requiring resolution (e.g. policy or other barriers that restrict the population's

access to RH services) to the overall health coordination mechanism. Identify synergies and gaps and avoid duplication of efforts and parallel structures;

- Provide technical and operational guidance on MISP implementation and audience-specific orientation sessions when and where feasible (e.g. for service providers, community health workers, programme staff and the affected population, including adolescents)
- Liaise with other sectors (protection, water and sanitation, community services, camp coordination, etc.) addressing RH-related concerns;
- Support health partners to seek RH funding through humanitarian planning processes and appeals in coordination with the health sector/cluster.

2. Prevent sexual violence:

Sexual violence has been reported from most humanitarian settings, including those caused by natural disasters. All actors in humanitarian settings must be aware of the risk of sexual violence and coordinate multi-sectoral activities to prevent it and protect the affected population, in particular women and girls. The RH officer must discuss the issue of sexual violence in health coordination meetings. In collaboration with the overall health sector/cluster mechanism, the RH officer and RH programme staff must:

- Ensure women, men, adolescents and children have access to basic health services, including sexual and RH services;
- Design and locate health facilities to enhance physical security, in consultation with the population, in particular women and adolescents;
- Consult with service providers and patients about security in the health facilities;
- Locate separate male and female latrines and washing areas in the health facility in a secure location with adequate path lighting at night, and ensure doors lock from the inside;
- Ensure all ethnic subgroup languages are represented among service providers or interpreters are available;
- Hire female service providers, community health workers, programme staff and interpreters;
- Inform service providers of the importance of maintaining confidentiality and have them sign and abide by a code of conduct against sexual exploitation and abuse (SEA);
- Ensure that codes of conduct and reporting mechanisms on SEA by health staff are in place, as well as relevant punitive measures to enforce them.

In order to prevent and manage possible health consequences, rape survivors must have access to clinical care, including supportive counselling, as soon as possible after the incident. Ensure health-care services can provide such care at the onset of a humanitarian response. Survivors may also need protection and psychosocial and legal support. As soon as possible, support a process to identify clear division of roles and responsibilities among health partners and between all sector/cluster programmes responding to needs of survivors (health, protection, and security and community services) in order to ensure a coordinated, survivor-cantered, confidential referral mechanism for survivors. Treatment can be started without examination if that is the survivor's choice. Treat life-threatening complications first and refer to higher-level health facilities if appropriate.

3. Reduce the transmission of HIV:

To reduce the transmission of HIV from the onset of the humanitarian response, the RH officer must work with the health sector/cluster partners to:

- Establish safe and rational blood transfusion practice;
- Ensure application of standard precautions;
- Guarantee the availability of free condoms.

Although not a component of the MISP, it is important to make antiretroviral (ARV) available to continue treatment for people who were enrolled in an ART programme prior to the emergency, including women who were enrolled in PMTCT programmes.

4. Ensure availability of EmONC and new born care services:

According to the UN Process Indicators of Emergency Obstetric Services, an estimated 15% of women will develop a potentially life-threatening complication during pregnancy or at the time of delivery and 5% to 15% of all deliveries will require a caesarean section. WHO estimates that 9% to 15% of new born will require lifesaving emergency care. In order to prevent maternal and new born morbidity and mortality resulting from complications, RH officers must ensure that basic and comprehensive EmONC and new born care services are available 24 hours per day, seven days per week.

Basic EmONC and new-born care

While skilled attendance at all births in a health facility is ideal because it can help reduce maternal morbidity and mortality associated with pregnancy and childbirth, it may not be feasible at the start of a humanitarian response. However, at a minimum, ensure that at each health facility basic EmONC and new-born care interventions (as outlined in Box 9), as well as capacity to refer to the hospital if needed, are available 24 hours per day, seven days per week.

Comprehensive EmONC and new born care

Where feasible, support host-country hospitals with skilled staff, infrastructure, medical commodities, including medicines and surgical equipment, as needed to provide comprehensive EmONC and new born care (see Box 9). If this is not feasible because of the host-country hospital's location or inability to meet the increased demand, the RH officer should work with the health sector/cluster and an agency such as ICRC or IFRC to resolve the problem, such as establishing a referral hospital close to the affected population

Establish a referral system to manage obstetric and new-born emergencies

Coordinate with the health sector/cluster and host-country authorities to ensure a referral system (including means of communication and transport) as soon as possible in a humanitarian setting. Such a referral system must support the management of obstetric and new-born complications 24 hours a day, seven days a week. It should ensure that women, girls and new-bornswho require emergency care are referred from the community to a health centre where basic EmONC and new born care is available. Patients with obstetric complications and new-born emergencies that cannot be managed at the health centre must be stabilized and transported to a hospital with comprehensive EmONC and new born care services.

Clean delivery kit

In all humanitarian settings there are women and girls who are in the later stages of pregnancy and who will therefore deliver during the emergency. At the onset of a humanitarian response, births will often take place outside of a health center without the assistance of skilled birth attendants. Make a clean delivery package available to all visibly pregnant women to promote clean home deliveries when access to a health facility is not possible.

5. MISP Plan for preparedness and response on sexual and reproductive health care:

The preparedness and response plan to be ready to expand RH services when all the components of the MISP have been implemented. It is important to ensure that supplies or RH medicines and other commodities are available and ordered in a rational and sustainable manner so that the affected population can have access to comprehensive RH services as soon as possible.

The aims for MISP in SRH services, integrated into primary health care, as the situation permits. This includes, as part of and in coordination with the health sector/cluster, the following:

- Collecting existing background data on maternal and new-born mortality; STI and HIV prevalence; contraceptive prevalence and preferred methods; and RH knowledge, attitudes and behaviour of the affected population, if available;
- Health sector focal points and local authorities, including responsible agents at sub-national and communities level.
- Identifying suitable sites for future service delivery of comprehensive RH services;
- Assessing staff capacity to provide comprehensive RH services and a plan for training/ retraining staff; and
- Ordering equipment and supplies through routine supply lines, based on estimated and observed consumption.

Annex 5 – References

1. Western Pacific regional framework for action, Health Emergency Risk Management of Natural Hazards, December 2012, WPRO
2. Estimation of General Population Census of Cambodia 2010, National Institute of Statistics, http://www.nis.gov.kh/index.php/en/
3. Poverty in Cambodia, redefining the poverty line, Ministry of Planning, April 2013
4. Technology Needs Assessment and Technology Action Plan for Climate Change Adaptation, Ministry of Environment, March 2013
5. Post-Flood Early Recovery Need Assessment Report, Cambodia 2013, National Committee for Disaster Management.
6. Humanitarian Forum Response (HRF) Contingency Plan, Cambodia, February 2014.
7. Post-Flood Early Recovery Need Assessment Report, Cambodia 2013, National Committee for Disaster Management.
8. Minimum Initiate Service Package (MISP) Inter-Agency Working Group (IAWG) on Reproductive Health in Crisis situation, https://www.ncbi.nlm.nih.gov/books/NBK305157/
9. Minimum Standards for Prevention and Response To Gender-based Violence in Emergencies,https://www.unfpa.org/featured-publication/gbvie-standards

Annex 6–Global and Regional Developments

References
International Developments:

International Health Regulations (2005)[3]
The Inter Agency Standing Committee Humanitarian Reform (2005)
'Hospitals Safe from Disasters' 2008-2009 World Disaster Reduction Campaign (2008-2009)[4]
The Inter Agency Standing Committee Transformative Agenda (2012)[5]
Health and the Post-2015 Framework for Reducing Risks of Disasters (2013)[6]
WHO Emergency Response Framework (2013)[7]

Regional Developments:

Association of Southeast Asian Nations Agreement on Disaster Management and Emergency Response (2005)[8]
The WHO Southeast Asia Region Office Benchmarks, Standards and Indicators for Emergency Preparedness and Response (2005)[9]
WHO Western Pacific Regional Office Regional Framework for Action on Emergency Risk Management on Health related to Natural Hazards (2013)
WHO Western Pacific Regional Office Regional Framework for Action on Emergency Risk Management on Health related to Natural Hazards (2013)

[3] http://www.who.int/topics/international_health_regulations/en/
[4] http://www.unisdr.org/2009/campaign/wdrc-2008-2009.html
[5] http://www.humanitarianinfo.org/iasc/pageloader.aspx?page=content-template-default&bd=87
[6] http://www.who.int/hac/events/2013/en/
[7] http://who.int/hac/about/erf/en/
[8] http://www.asean.org/communities/asean-socio-cultural-community/item/the-asean-agreement-on-disaster-management-and-emergency-response
[9] *http://www.searo.who.int/entity/emergencies/topics/benchmarkstool/en/*

Annex 7 - Guiding Principles

- Considering health security an essential part of human security, and not a stand-alone public good,
- Focusing natural and human-induced disasters a first essential step to achieve an all hazard disasters risk management,
- Build on existing national mechanisms and frameworks, hazards specific.
- Emphasising comprehensive emergency management involves addressing hazards and disasters through a balance of mitigation, preparedness, response, and recovery activities.
- Adopting a 'Whole-Health' concept[10] considering not only to death or injury but to include other health issues such as environmental health (including water, sanitation and hygiene); management of chronic diseases (including mental health); maternal, new-born and child health; communicable diseases control; nutrition; pharmaceuticals and biological and health care delivery services (including health infrastructure); through various approach i.e. (i) multi-agency: facilitate partnerships among agencies, institutions and individuals which contribute to health risk reduction; (ii) multi-sectoral: reflect that health and other sectors work together to manage the health emergency risks caused by the interaction of the vulnerability and resilience of people, hazards or agents, and their social, cultural, natural and built environments; and (iii) multi-disciplinary: take account of the contributions of many disciplines in health and other fields required to manage the risks to health.

[10] http://www.who.int/hac/techguidance/preparedness/emergency_preparedness_eng.pdf

Annex 8 - Checklist on 'Emergency Risk Management for Health related to Natural Hazards'

Component 1 - Governance, Policy and Coordination

Priority Actions/Activities	Current Status		
	Achieved	Partially	Not yet
1. **National policy on Emergency Risk Management (ERM) for Health**			
1.1 The **ERM** for Health **Committee exists**, with clear structure	x		
Remarks: ● The institution is established and is chaired by the Minister of Health and the vice-chair is the Secretary of State. ● The Department of Preventive Medicine is the secretariat ● A revision is needed to make clear TOR			
1.2 Terms of Reference (ToR) of ERM for Health Committee available	x		
Remarks: ● The ToR needs to be updated in order for the TOR of MOH Disaster Management Committee to be in line with ERM framework ● Could we have subcommittee for prepare, respond to be better again and prevention or not?			
1.3 **Chair**, of ERM for Health Committee **sit**s in the national disaster management committee (NCDM)	x		
Remarks: ● The Minister of Health is a member of NCDM			
1.4 **Roles and responsibilities of key partners in** ERM for Health Committee **are outlined** to improve intersectoral coordination and collaboration at national and international levels.			x
Remarks: ● Technical working group for health (TWGH) is to be used as forum to discuss if the international support/donors are needed ● If donors donate directly to MOH the IREC is responsible for the arrangement but in case of emergency, it will be IREC and target recipient. There is no written mechanism for ERM ● Only exist in the NCDM			
1.5 A national accreditation and **regulation system** for Foreign Medical Teams (FMTs) and international NGOs is **defined**			x
Remarks: ● What are the criteria of the FMTs to be implemented in Cambodia? ● Ministry of Health needs to think and discuss about that issue.			
1.6 **Complimented the relevant national and international policies**, frameworks, and plans including compliance with IHR and the IASC*		x	
Remarks: ● The administration of a global pandemic of bird flu			
1.7 The ERM activities **are planned in synergy with other sectors** and, where possible, are embedded in the WHO CCS document, and in the CCA/ (UNDAF)process.		x	

Remarks:Actually, the activities are not planned in synergy with other sectors.			
1.8 **Designated a unit within the MoH** and responsible for facilitating, coordinating, and monitoring and evaluating all activities on ERM for Health related to disasters	x		
Remarks: ● Revise structure and TOR of Disaster and Environmental Health Management Bureau of Preventive Medicine Department to be in line with the ERM framework			
2. **Enhance function of the MoH Unit at the central and sub-national level, responsible for health ERM of natural hazards**			
2.1 **The MoH unit is represented in the MoH organigram** and has sufficient authorities and resources to carry out their duties and responsibilities for all phases of the HERM cycle (prevention, preparedness, response and recovery) in collaboration with the NDMO and other stakeholders. x		x	
Remarks: ● The structure is in place; but the authority is not give to the bureau. Decision should be submitted for approval from at least Director General level. ● Financial resources are still limited. ● There is a need to advocate for more support of the Bureau after agreed on TOR .			
2.2 **The MoH Unit maintains information management system** in collaboration with NCDM and key partners for collecting, consolidating, sharing, integrating and maintaining health information relevant to HERM.			x
Remarks: ● The information management system is developed by the NCDM, so called “CAMDI”, but it is not specifically for the HERM. ● There is a need to develop an information management system for the HERM within MOH and to link it to CAMDI			
2.3 **Disseminates standards and guidelines** to develop and exercise HERM plans at the sub national level that are in harmony with national plans.			x
Remarks: ● The HERM plan needs to be developed ● Emergency drill exercises should be planned and implemented regularly			
2.4 **Adopts, develops or adapts and disseminates** national standards of essential health services, grouped by health response domain, and by level of care.	x		
Remarks: ● Review existing national standards of essential health services, grouped by health response domain, and by level of care			
2.5 **Provides support to an Event Management** Team convened to coordinate a response. Contributes to further strengthening of the existing EOC in the MOH and utilises it during an event.		x	
Remarks: ● The ECO is being developed, as well as SOP. The unit is under CDC department but will be operated by an Assigned Event Management Team			
2.6 **The MoH Unit regularly organise liaison/planning meetings** with the health sector/cluster partners and the UN Country Team.			x

Remarks ● Currently MOH Unit plays most of the coordination and preparedness role, such as organizing planning meeting with health sector and participating in the planning meeting of cluster partner and WHO			

Component 2 - Information and Knowledge Management

Priority Actions/Activities	**Current Status**		
	Achieved	Partially	Not yet
3. **Conduct multisectoral risk mapping and assessments regularly to determine the likelihood and consequences of natural hazards**			
3.1. **Defined responsible officials** within MoH for leading or coordinating the health sector assessment	x		
Remarks: ● The leader of this group is the Department of Preventive Medicine – coordinator for central level ● Hospital Services Department – at the central level - member ● Provincial Health Department – at the provincial level			
3.2 **All potential natural hazards** such as earthquake, typhoons, flooding, landsides, droughts **are identified and mapped** by geographical and administrative areas			x
Remarks: Usually hazard mapping is done by NCDM and MOWRM ● Lead by Department of Preventive Medicine ● Information is collected after flooding (assessment) but there is not mapping done ● Prov. Health Department sent a team to assess the impact of the flood ● There is knowledge about flooding (regular) but the mapping is not done ● Check with Mekong River Commission or other institutions if they have mapping			
3.3 **The vulnerabilities and the capacities of the population** groups exposed to each hazard are assessed using available data			x
Remarks: ● The information about vulnerability are gathered by the Provincial NCDM, for different disasters ● Information related to human is from Provincial Health Department in collaboration with MOH ● PHD would know where to go and what to do, one focal point for disaster ● Probably, the ministry of meteorology is aware of the vulnerable regions. ● The group said also that the population know – local knowledge ● The Ministry of Meteorology informs when there is a storm or possible flood coming, then the Ministry of Health will inform their Provincial Health Departments			
3.4 **National and local risk maps created** showing vulnerable areas and to identify areas most at risk. Maps are created with disaggregated data on risk, hazard and vulnerability.			x

Remarks: ● Review the risk map			
3.5 **Public and private health facilities** and health services are catalogued by geographical location, administrative areas, type of health facility,health services availability, and by level of care		x	
Remarks: ● They have the information for public health, not for private ● GIS maps are available for all the provinces but now in the process of updating ● Last GIS maps were done in 2004 and now updating in 2014			
4. **Procedure for the collection, management, synthesis, analysis and sharing of information from assessment are established between partners in the health sector**			
4.1 **Develop an agreed system to gather, store and use information** for assessment and emergency response according to phases of emergencies: pre-event information, preliminary scenario definition and MIRA etc.xx			x
Remarks: ● There is not a system to collect info on health and to share it ● It is only existing for CDC for 10 diseases ● There is no existing system for disaster ● No prevention and preparation system in place but good response when disaster ● When huge disaster, the Prime Minister is the one leading for action ● Nobody knows MIRA ● Develop system like WHO			
4.2 **Key MoH staff has received training** in using the Health Resources Availability Mapping System (HeRAMS) as a tool to be used in support of needs assessment during response.			x
Remarks: ● Training health professional and staff responsible for disaster management by the Provincial Department of Health and Hospitals ● Record of Training (Department of Preventive Medicine)			
4.3 **The health sector/cluster partners** have adopted the Common Operational Datasets (COD), and, on these data sets, agreed to produce, maintain and share the Health Operational Datasets (HOD).			x
Remarks: .The arrangements of data sheet for operating times of disaster / emergency			
4.4 **Mechanism exists with the Health sector/cluster** to analyse the information and data coming from assessments and monitoring, produce and share knowledge, which can be used by decision-makers to define the priorities at each stage of the Health Emergency Risk Management cycle and contribute to the overall intersectoral strategic planning.		x	
Remarks: ● They have a mechanism in place when there is a disaster to respond – Response system ● When there is a disaster, they send the team for an impact assessment, the info is sent to the central level, the minister takes decision.			
4.5 **Roster of staff trained and equipped for assessments and with guidelines** for investigation and reporting exists		x	

Remarks: ● There is not a full roster. They have trained staff and some lists existing but not compiled. ● No training actually - lack of funding			
5. **Procedures, mechanisms and policies for Risk Communication for public, media and responders developed**			
5.1 **A system in place** for the development, dissemination and evaluation of messages (hazard appropriate) based on assessments of impact of the event etc.		x	
Remarks: ● There is a system in place but not formalised ● The messages are developed and disseminated by the responsible Bureau (depending on the disaster, it is oriented towards the specific department) ● The messages are authorised/approved by the minister ● There is no evaluation of messages			
5.2 The HERM Unit pre-formulate, test and evaluate risk **communication message templates** so they can be released immediately in the case of an event.			x
Remarks: ● There are some ● Support by UNICEF			
5.3 **Procedures and mechanisms exist** to disseminate massages through the media and other channels must be tested and validated.		x	
Remarks: ● The messages are approved and signed by the minister ● The messages are not tested or validated ● The channels are TV, newspaper, radio and website			

Component 3 - Health Service Delivery

Priority Actions/Activities	**Current Status**		
	Achieved	Partially	Not yet
6. **Match available health services with hazards and risk assessment at national and subnational level.**			
6.1 **Identified the areas of high risk of hazards and with low coverage** of key preventative services and programmes.	X		
Remarks: ● **High risk areas are identified along Mekong river, PHD knows the high risk areas** ● PHD knows the **coverage** of key preventative services and programmes in respective areas, ● Every province conducts assessment after flood every year, ● HC level is more vulnerable and requires assistance, ● **The information of key preventative services and programmes are available under HMIS,**			
6.2 **Identified the health services that needs to be strengthened**		X	
Remarks: ● Before flood: o MCH need to be strengthened, e.g. midwives' skills,			

○ First aid skills and materials, e.g. snake bites, anti-venom serum ○ Raising awareness on basic health issues, e.g. safe drinking water ○ Specific medicines such as HIV/AIDS, antivirals are not stored at HC level ● During flood: ○ **Hospital preparedness for emergency exist at national and provincial level including mobile health teams with specific functions (pre-hospital service)** ○ Hospital incidence command system exists at national and provincial level ○ To handle mental trauma, PTSD (post traumatic stress disorder) of populations and mobile health teams, needs to be strengthened.			
6.3 **Documented the readiness of health services** at national and sub-national levels by level of care			X
Remarks: ● Provincial and district hospitals have structures for emergency, ● No document to respond to a disaster, Need a guideline or SOPs who should do what			
7. Develop "surge" health service delivery strategies as a subset of the national and sub-national HERM plans by the different health service delivery components			
7.1 Developed the Scenario-based health sector contingency plans (CP)			
Remarks: ● No scenario-based contingency plan exists, there is a need to develop Flood Drought Storm and MCM contingency plan for health sector			X
7.2 Established a mechanisms and procedures to set up temporary health infrastructure and deploy mobile or multipurpose teams where local health systems are non-functional			X
Remarks: ● Prof.ChhangYav Yen (Prof. on disaster management), trained all the focal points for disaster from PHD and provincial hospitals on disaster risk management (DRM), however, the preparedness of DRM is not a priority in many provinces. ● No budget ● Need to develop **a mechanisms and procedures** to set up temporary health infrastructure and deploy mobile or multipurpose teams as above			
7.3 **Exists surge mechanisms**, based on risk analysis, availability of human resources, and stockpiling of pre-determined supplies and equipment etc.			
Remarks: ● No such mechanism is existing, a surge mechanism needs to developed			X
8. **Develop or scale up the Safe Hospitals Initiative to cover all critical health facilities in hazard prone areas**			
8.1.**Developed policies, guidelines, standards and procedures** at national and sub-national levels for the Safe Hospitals Initiative		X	

Remarks: ● Provincial hospital staffs were trained for Safe Hospital, 1 staff from each province. ● Training package (20 modules) is available in Khmer ● Guidelines to be developed and need a budget to support Safe Hospital implementation			
8.2**Identified Critical health facilities in high risk areas** and mapped though assessments (structural, non-structural and functional)			
Remarks: ● PHD know the high risk areas and the location of health facilities ● High risk areas and health facilities need to be mapped together			
8.3 **Developed a mechanism to rapidly assess** the health facilities and retrofit the critical health facilities			
Remarks: ● Due to experience with stampede accident, there is a written procedure for corpse (KSF hospital) ● **A mechanism and a tool to rapidly assess** the health facilities need to be developed. Available WHO tools translated in Khmer version adopted in Cambodian context			X
8.4 **Build new hospitals in line** with Safe Hospital standards			X
Remarks: ● No mechanism and no standard ● Both need to be developed			

Component 4 - Resource (Human skills, finance, equipment and supplies)

Priority Actions/Activities	**Current Status**		
	Achieved	Partially	Not Yet
9. **Audit of health emergency risk management skill sets and experience available and/or needed by administrative location completed**			
9.1 **Exists a database on trained and skilled staffs** (including: Red Cross, NGOs, civil society, international organizations, military, police, and civil defence, etc.)		x	
Remarks: ● There is no specific database compiling trained and skilled staffs for DRM ● There are lists of trained staff in the DPM but there are not compiled ● A database on all types of trained and skilled staff for health exists at HRD. There is a need to develop a specific one for DRM			
9.2. **Conducted the training needs** analysis on HERM, etc.			x
Remarks: ● There was one done before training of NPHEMAP in 2004 ● No mapping for risk area ● PHD had team to evaluation on impact of flooding ● Work with NCDM , MORAM and NGO for Risk Mapping			
9.3 **Created a national programme for HERM education and training**			x
Remarks: ● Vulnerability information is collected by the Provincial Disaster Management Committee by type of disaster. ● Health information collected by the Department of Health, with the			

support of the Ministry and the liaison officer ● Hazards and vulnerabilities other than health are the responsibility of the National Committee for Disaster Management and the Ministry of Water Resources and Meteorology ● The Ministry of Water Resources and Meteorology issued a warning if there are any potential danger is under process)			
9.4 **Provided Training and education** to the communities based on risk assessments			x
Remarks: ● NCDM and CRC conducted training on risk assessments ● MOH used to do it 10 years ago ● Training and education need to be provided to the communities based on risk assessments			
9.5 **Public and private health facilities, including services, are geographically documented on a state-by-state basis** **Types of health facilities, available health services and levels of treatment**		x	
Remarks: ● This information is sufficient for public services but limited to private services ● The GIS Public Health Base Map is available at the Ministry of Health and is being updated ● The last GIS public health base map, made in 2004 and updated in 2014			
10. **Developed national and sub-national plans and mechanisms to meet staffing needs for surge** requirements			
10.1 Rapid deployment mechanisms **exist**			x
Remarks: ● It exists but only for pandemic. All staff emergencies deployments are under the commandment of the Minister for Health who is responsible for leading emergency response for health. ● A mechanism for rapid deployment of staffs needs to be developed			
10.2 **Mechanism exists** for acceptance of additional staff as per health priority and mechanism to register and manage Foreign Medical Teams			x
Remarks: ● There is no mechanism for health sector. There is mechanism of NCDM for foreign teams?			
10.3 **Conducted Simulation exercise** regularly to check Standard Operating Procedures (SOPs)			x
Remarks: ● There exist table top exercises for pandemic but not regularly implemented ● There exist Fire fighter exercises for hospitals (KSFH) but not regularly implemented ● There exists a Hospital response (Calmette hospital) but not regularly implemented ● Must prepare when planning the Ministry's advance preparation			
10.4 **Conducted regular** in-service training courses			x
Remarks: ● Not regular because it depends on the budget available ● Some has be done			

11. **Identify critical medical supplies and equipment through risk assessment and analyses to ensure a minimum stocking level in appropriate locations.**			
11.1. **Stockpiled the minimum critical medical supplies and equipment** including emergency kits in appropriatelocations national and sub-national level	x		
Remarks: ● There is stockpiled available at national and sub national level			
11.2 **Exists mechanism in monitoring <u>of</u>** <u>quality and safe storage</u> is critical supplies and equipment.	x		
Remarks: ● Central Medical Store and Drug Department are in charge			
11.3 Developed t**he MISP and emergency kit** and stored by different health programmes		x	
Remarks: ● Kits related to MISP are not stored by different programs ● There is Safe delivery ● There is no MISP kit in specific programmes ● Trained EmOC and CmOC and set up health centers and referral hospitals for these services			
12. Develop procedures for emergency contracting of health supplies and services			
12.1 **Exists mechanism for speedy procurement** and delivery of health supplies at national and sub national levels.	x		
Remarks: ● Documentation is existing. ● Procurement for normal and emergency is in charge by the procurement Unit of Department of Budget and Finance.			
12.2 Mechanism includes the pre-identified technical specifications of goods, prices, delivery times and reliability.	x		
Remarks: ● Have normal mechanism			
12.3 **Exist clearly defined authority and procedures within MoH**for requesting, and accepting or refusing medicines, personnel, field hospitals and other services provided by international partners.		x	
Remarks: ● There exist procedures for refusing medicines, but not personnel. ● DIC responded			
12.4 **Exists provision for tax exemption and speedy** clearance procedures for the importation of medical supplies	x		
Remarks: ● There is exemption, but it is under the responsibility of the Government			
13. **Ensure <u>policies for funding mechanism</u> (s) exists to cover all components of the HERM cycle (prevention, preparedness, response and recovery)**			
13.1 Percentage of national health **budget is allocated** to health ERM.			x
Remarks: ● A plan needs first to be developed			
13.2 **Funding is available** for multisectoral risk mapping and assessment.			x
Remarks:			

● Discus when make plan			
13.3 All HERM project budgets include a provision for monitoring and evaluation			x
Remarks: ● Only for response, but not for risk management. A disaster law is not yet been adopted.			
14. **Establish or enhance contingency funding for disasters**			
14.1 **Fast track procedures are in place** to access contingency funds when needed.			x
Remarks: ● Not yet			
14.2 **Authority is clearly defined** for allocation and expenditure of contingency fund			x
Remarks: ● The national budget for contingency fund is under the authority of the Prime Minister			
14.3 **Developed policies, procedures** and mechanisms for accepting, disbursing and accounting for international funds (e.g. CAP and Flash Appeals)			x
Remarks: ● These are under NCDM			