

Capacity Development Strategy for Disaster Risk Management in Myanmar 2017-2030

TABLE OF CONTENTS

1. Background	2
1.1 Introduction	
1.2 Rationale	
2. Structure of Capacity Development Strategy	4
3. Conceptual Framework	4
3.1 Dimensions of Capacity Development	
3.2 Aspects of Capacity Development	
4. Policy Framework	9
4.1 Vision and Mission	
4.2 Goals and Objectives	
4.3 Strategic Plan	
5. Operational Framework	14
6. Road Map and Activities	17
6.1 Short Term	
6.2 Medium Term	
6.3 Long Term	
7. Monitoring and Evaluation	25

Capacity Development Strategy for
Disaster Management Training Centre, Myanmar
2017-2030

1. Background

1.1 Introduction

Myanmar is one of the most disaster prone countries of the world. The country regularly experiences natural hazards of cyclones, storm surges, floods, landslides, earthquakes, droughts and forest fires. Manmade hazards of transport related accidents, industrial and mining mishaps and urban and rural fires are recurring phenomenon in different parts of the country. Vulnerable housing and living conditions, aging infrastructure and degrading ecology and environment are constantly exposed to the risks of these multiple hazards, resulting in considerable damage and losses of lives, livelihoods and economy. Risks of disasters have been compounded by the worsening impacts of climate change and increasing density of population in urban and rural settlements.

Lack of capacities at various levels has been identified as one of the most critical factors that have impeded the process of prevention and mitigation of the risks of disasters, preparedness for effective response to impending disasters and recovery and reconstruction after disasters. Considering the importance of capacity building for disaster risk management the National Disaster Management Law of Myanmar stipulated that the capacities of the public shall be enhanced for building a disaster resilient community in the contexts of climate change for reducing damage and losses due to disasters.¹ The Myanmar Action Plan for Disaster Risk Reduction (MAPDRR) provided that a Disaster Management Training Centre (DMTC) shall be established with an overarching mandate for capacity development for disaster management at all levels.

In pursuance of this action plan the Union Government of Myanmar has set up the DMTC at Hinthada. The DMTC was opened in December 2015 and has organised several training programmes during the last one year. In order that the DMTC is able to discharge its responsibilities in a systematic, effective and sustainable manner it has been considered necessary that a Capacity Development Strategy is developed through a consultative process with clear vision, mission, goals, objectives, action plan and road map for implementation in a phased manner.

¹ Section 15(c) of National Disaster Management Law, 2013

1.2 Rationale

The rationale for development of capacity development strategy for DMTC is as follows.

- a) In the absence of a long term development plan DMTC is functioning largely in an ad hoc manner on a day-to-day basis. It is necessary to set up a Vision of the Centre, define its goals and objectives and chalk out well thought out strategies and action plan for achieving the objectives.
- b) Government of Myanmar has invested MMK 3.874 billion (equivalent to USD 3.9 million) for the development of physical infrastructure of the Centre and further providing budgetary support for running the Centre. Full benefits of the investment can be realised only if the Centre has a strategic plan to grow and develop into an excellent national training centre on disaster management.
- c) The Myanmar Consortium on Capacity Development for Disaster Management (MCCDDM) received grant of USD 2.9 million from USAID/OFDA to support DMTC to conduct the training programmes and other activities. The project would be coming to a close in March 2017, necessitating initiation of steps for mobilizing resources for continuation and upscaling of the activities of the Centre. The long term capacity development strategy of DMTC would provide a useful framework for mobilizing resources for the further development of the Centre.
- d) MAPDRR that proposed establishment of the DMTC as part of the component on ‘Public Awareness and Training’ is undergoing a process of revision for strengthening the disaster risk management system of Myanmar. This provides an opportunity for development of Capacity Development Strategy for DMTC that can be integrated with the revised MAPDRR.
- e) Myanmar has adopted three global frameworks and agreements of 2030 development agenda. Implementation of each of these frameworks would require development of national and local capacities for reducing risks and building resilience to disasters. The Sendai Framework for Disaster Risk Reduction 2015-2030 has emphasized the importance of capacity development for implementation of its four priorities of action: understanding disasters risks; strengthening disaster risk governance; investing on disaster risk reduction for resilience; and enhancing effective

response and reconstruction.² 8 out of 17 Sustainable Development Goals (SDG) of the United Nations has specific targets for building disaster resilience across different sectors of development.³ The Paris Agreement on Climate Change, which is a legally binding agreement, has provided that international cooperation and facilitation shall be strengthened to ‘enhance understanding, action and support’ for disaster reduction. All three frameworks and agreements have highlighted that technical and financial resources shall be provided to the developing countries for capacity development. A well designed capacity development strategy can provide a useful framework for international cooperation and assistance for the development of DMTC.

- f) At the regional level the ASEAN has launched its 2016-2020 Work Programme on Disaster Management⁴ that highlighted the importance of capacity development at local, national and regional levels for building resilient ASEAN community in accordance with the ASEAN Vision 2025 on Disaster Management.⁵ The ASEAN Coordinating Centre for Humanitarian Assistance (AHA Centre) has been assigned key responsibilities for regional capacity development through national level institutions. This provides opportunities for developing strategies for cooperation with the AHA Centre and counterpart institutions in other member countries.

2. Structure of Capacity Development Strategy

The Capacity Development Strategy for Disaster Management Training Centre is structured in three interrelated frameworks:

- a. Conceptual framework
- b. Policy framework
- c. Operational framework

Based on these frameworks a road map has been developed identifying the activities to be taken up at short, medium and long terms.

3. Conceptual Framework

UNISDR has defined *capacity* as ‘the combination of all the strengths, attributes and resources available within a community, society or organization

² Para 40, Sendai Framework for Disaster Risk Reduction 2015-2030

³ Transforming Our World: the 2030 Agenda for Sustainable Development

⁴ AADMER Work Programme 2016-2020, Jakarta, April 2016.

⁵ ASEAN Vision 2025 on Disaster Management

that can be used to achieve agreed goals’⁶. *Capacity development* is the process by which people, organizations and society systematically develop their capacities over time to achieve the desired social and economic goals. Therefore there are capacities already inherent in the country, its communities, institutions and people. The strength and limitations of the existing capacities must be assessed objectively in the contexts of evolving dynamics and complexities of the risks of disasters and the gaps in capacities shall be addressed through systematic process of education, research, training, and awareness generation. Therefore instead of ‘capacity building’ the focus would be on ‘capacity development’.

3.1 Dimensions of capacity development

Capacity development for disaster management is multi-dimensional. There are at least five important dimensions that shall be factored for development of strategic framework of capacity development for disaster management in Myanmar. This is presented in the following diagram.

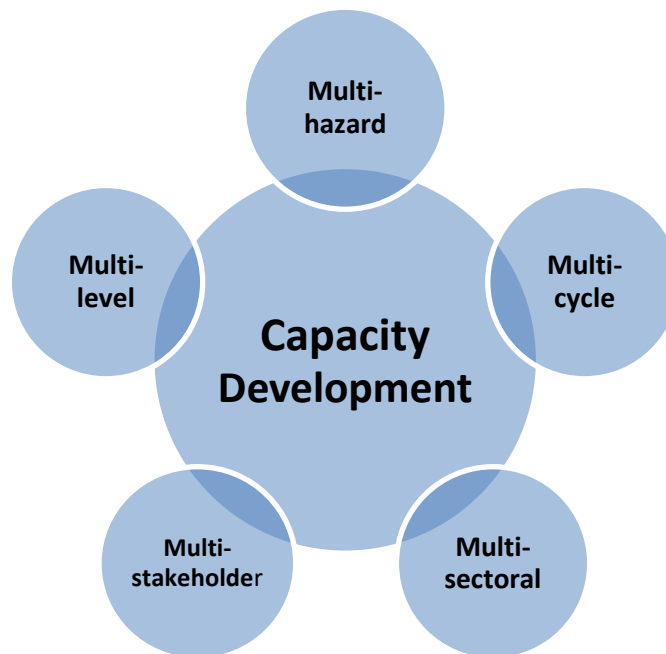


Figure-1: Five Dimensions of Capacity Development on Disaster Risk Management

Capacity development strategy of disaster management shall cover all the hazards – natural (earthquake, landslides, flood, drought, cyclones, tsunami, forest fires etc); manmade (road, aviation, marine and riverine accidents, industrial hazards, chemical, biological and environmental hazards, urban and

⁶ UNISDR Terminology on Disaster Risk reduction, 2009

rural fire etc) and complex hazards (combination of natural and manmade hazards). The strategy shall also address all the aspects of disaster risk management cycle covering pre-disaster risk assessment, prevention, mitigation and preparedness as well as post-disaster response, relief, rehabilitation, recovery and reconstruction;

Capacity development on disaster management cannot remain limited to a single sector; it must cover all the relevant sectors, organisations and institutions that are concerned with various aspects of disaster risk management. These sectors include social, economic, health, educational, infrastructure, productive, environmental, cultural and regulatory sectors both within and outside the government. This further implies that capacity development on disaster management shall involve all the stakeholders – government and non-government organisations, scientific and technical institutions, private and corporate sectors, media and community based organisations. Finally, the strategic framework for capacity development cannot remain the exclusive concern of Union Government alone; it shall address the capacity gaps and capacity needs at all levels – from national to regional, state and local down to the community level. The training and capacity development programmes of DMTC shall address all these five dimensions of capacity development in disaster management.

3.2 Aspects of capacity development

Capacity development is not training alone - training is just one aspect of capacity development. There are at least four aspects of capacity development: education, research, training and awareness, each contributing its role in developing capacities on disaster management across different sectors and at all levels.

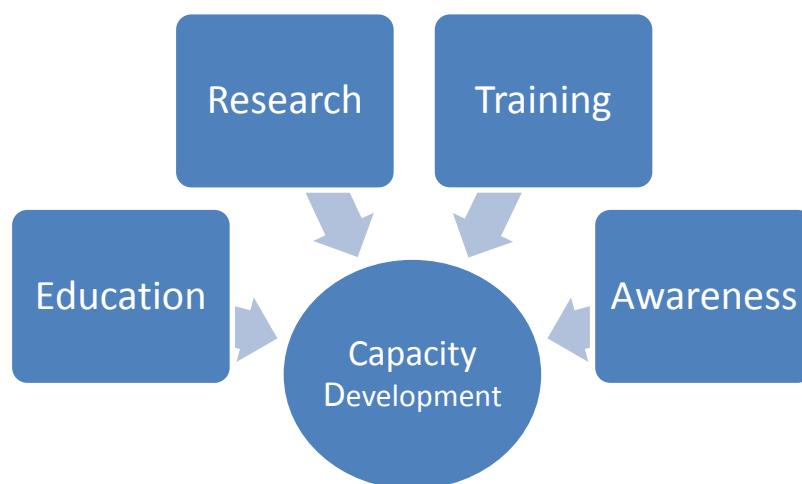


Figure-2: Four Aspects of Capacity Development

Education lays the foundation of capacity development in any country. Introduction of basic education on disaster management at the school level can be very effective in developing both short and long term capacity development. Disaster management drills in schools provide basic skills for protection of young lives during disasters, while knowledge of natural and manmade hazards, vulnerabilities and risks of disasters and ways and means of disaster prevention and preparedness inculcates scientific understanding of the process of disasters and promote a culture of preparedness.

There are number of subjects of higher education that are very deeply connected with disaster management. Universities around the world are either incorporating these subjects in existing courses or introducing new specialised courses. For example, civil engineering, architecture and town planning courses have papers that deal with subjects such as disaster resilient land use planning and designs, construction of disaster resistant infrastructure, building and houses, and retrofitting of structures. Courses on health education have subjects on emergency health management and courses on mental health teach post-disaster psycho-social stresses and management of these stresses. Courses on management include subjects like logistics and supply chain management during disasters, and business continuity practices after disasters. Courses on geography include subjects like application of Geographical Information System (GIS) for disaster management. Climate resilient agricultural practices are taught in many agricultural colleges and universities. Different branches of earth sciences like geology, seismology, hydrology, meteorology, oceanography etc. teach aspects of disaster risk management that are related to these fields of studies. Likewise subjects like media and mass communication, sociology, anthropology, economics, policy studies etc have introduced subjects on disaster management. Many universities have designed hybrid multi-disciplinary courses on disaster management and are offering masters degree and diploma on disaster management. In Myanmar the Department of Geography of Dagon University has started Post Graduate Diploma in Natural Disasters Studies (PGDNDS).

DMTC shall not enter into the domain of disaster management education, but it would facilitate disaster management education at every level by developing curriculum, resource materials and organising conferences and workshops on higher education on disaster management. DMTC can develop on-line and self-study courses on disaster management that can be useful to the students. Some countries provide credit to such online courses, particularly at the school level. In due course of time when DMTC develops such courses that prove useful to the students similar credit system can be considered for introduction in Myanmar.

Disaster risk management is also emerging as an important subject of multi-disciplinary research. Most of such researches are taking place in academic, scientific and technical institutions, but there are many areas of research particularly on various policy and management issues that remain largely unaddressed. In due course of time DMTC shall take up such policy research.

Training shall be the core function of DMTC. There are four different types of training: (a) sensitization programmes; (b) training programmes for development of functional capacities; (c) training programmes for development of technical capacities; and (d) awareness generation programmes. Sensitization programmes are not designed to impart skills for performance of functions; these are meant to provide knowledge, information and analysis that are useful for discharging functions or taking decisions. Such programmes are of three types: (a) basics of disaster management for every civil servant; (b) basics of disaster management for managers of NGOs working on disaster management; and (c) sensitization programmes for policy makers.

Basic of disaster management shall form part of entry level training of all civil servants, and further mid-career trainings. Basic course for NGO workers have different orientation and should ideally be different from the courses meant for civil servants, unless the sessions are specially designed for interactions between government and non-government workers. Sensitization programmes for policy makers are usually short-term programme of one or two days for senior policy makers across sectors, parliamentarians etc. Such programmes provide analytical inputs on matters of critical policy importance. Themes of such programmes are carefully chosen and delivered by experts or guest faculties who have in-depth knowledge and understandings of the subject.

Training programmes for development of functional skills on disaster management are meant for those cutting edge functionaries of government who would be actually handling different aspects of disaster management cycle. Courses can be designed for different functional areas of disaster management according to demands and needs of such training.

Training programmes on technical skills on disaster management can be of two types: (a) developing skills on core areas of disaster management, such as disaster modelling scenario and drills, emergency response, incident command system, management of humanitarian relief, post disaster need assessment etc; (b) developing skills on technical issues that pertain to diverse sectors of development, such as infrastructures (roadways, railways, seaports, airports, water supply, electricity, telecommunication), social sectors (education, health, social protection, women and child development etc.), productive sectors (agriculture, industry, business etc). Skill development on core areas of disaster

management shall be the exclusive domain of DMTC, while skill development on other technical areas across sectors shall be conceptualised, designed and delivered in collaboration with sectoral departments, agencies and specialized training institutes in respective sectors. This calls for networking with such specialized training institutes.

Awareness about disaster management can be generated through training programmes on community based disaster management in rural and urban areas, as well through mass awareness generation programmes through electronic, print and folk media as well as preparation and distribution of high quality and innovative Information, Education and Communication (IEC) materials.

4. Policy Framework

The policy framework of capacity development strategy addresses various policy issues of DMTC, such as its vision, mission, goals, and objectives and the strategies to be adopted for implementation of these vision, mission, goals, objectives and targets.

4.1 Vision and Mission

Visions are generally dreams for the future that motivates stakeholders to perform even though it may be a distant dream. Mission statement, on the other hand, focuses more on the present and reflects the broad contour of functions and responsibilities of an organisation. DMTC does not have any vision or mission statement. Discussions on the vision and mission of DMTC had taken place at the International Workshop on Capacity Development Strategy held in July 2013.⁷ Considering the inputs received at the international workshop and discussion with the stakeholders the following shall be the Vision and Mission Statement of DMTC:

Vision:

‘Building safe and resilient Myanmar by developing capacities on disaster risk management across all sectors and at all levels’

Mission:

‘Developing all-round capacities on disaster risk management in Myanmar through

⁷ Proceedings of the Consultation Workshop on Capacity Development Strategy on Establishment of Disaster Management Training Centre in Myanmar, Nyi Py Taw, 2-4 July 2013.

- a) Training and capacity development services to key government functionaries and other stakeholders, including community leaders;
- b) Research, documentation and development of national level information base on disasters;
- c) Promotion of disaster management education in schools, colleges, universities and other technical institutes;
- d) Fostering culture of safety through mass awareness programmes;
- e) Sharing knowledge, information and good practices by networking with training, academic, technical and other institutes at national, regional and global levels;

Considering this Vision and Mission Statement the DMTC may be renamed as ‘Myanmar National Institute of Disaster Management’ (MNIDM)’.

4.2 Goals and objectives

Goals are the generic outcome towards which the organisation is working, while objectives are the specific actions that support the goals. The Goals and Objectives of DMTC shall be as follows:

Goals:

To be recognised as a Centre for Excellence on Capacity Development in Disaster Risk Management in Myanmar.

Objectives:

The objectives of DMTC would be to:

- a) Create a corpus of disaster management professionals in Myanmar;
- b) Develop a core group of disaster management instructors in Myanmar;
- c) Promote disaster management training across all sectors at all levels;
- d) Enhance public awareness on disaster management;
- e) Promote disaster management education and research through collaboration with reputed national, regional and global institutes on disaster management.

4.3 Strategic Plan

In order that DMTC is able to work effectively towards realising its vision and mission and achieving its goals and objectives, the following strategic plans of action shall be considered for implemented.

a) Conduct Training Need Assessment

Capacity Gap Analysis (CGA) and Training Need Assessment (TNA) on disaster management are long overdue in Myanmar and shall be undertaken on a priority. Based on such assessments the training strategies and programmes can be drawn up according to the specific needs and demands for such training across different sectors and at various levels.

b) Strengthen training faculty of DMTC

The staffing pattern of DMTC shall be restructured with focus on qualified faculty members/trainers with domain knowledge and expertise on various aspects of disaster management. Ideally a national institute on disaster management should have 7 technical and 1 administrative divisions, each staffed with adequate faculty members. The details of these divisions and the domain areas of their expertise are provided in Annexure-I. This restructuring may be introduced progressively as and when new courses are introduced and work load of the institute increases. Some of the non essential services may be outsourced as these may be cost effective in the long run.

c) Develop Management structure of DMTC

For the time being the DMTC shall continue to be managed as a Unit/ Division of the Revenue and Rehabilitation Department. The Principal shall have full responsibility and accountability for the day-to-day management of the Centre and for the implementation of the designated functions, courses and training programmes.

There shall be a Management Committee of DMTC to not more than 10 members. The Committee shall be headed by Director General Relief & Rehabilitation Department and shall comprise of 5 senior officers of the rank of Directors of concerned departments (RRD, Meteorology, GAD, Public Health, and Fire Services), 2 representatives of Regional/State Governments, and 1 each from university and voluntary sector. Principal of DMTC shall be the ex-officio member Secretary of the Committee.

The Management Committee shall take all policy decisions regarding the management of the DMTC, except those requiring approval of government, for which reference shall be made to government. The Management Committee may constitute Technical Committee/ Sub-Committees to advise on specific technical issue that may be referred to them.

d) Augment infrastructure of DMTC

Although DMTC has significant physical infrastructure, it is lacking in some facilities that should be available to apex national institute on disaster management, such as Emergency Operation Centre, Remote Sensing & GIS Lab, Computer Centre, Disaster Simulation & Multimedia Lab, Video Conference Lab etc. These facilities shall be developed progressively to enhance the quality of learning experiences. Eventually the Centre should also have Exhibition Hall and Museum with models, replicas, exhibits of past disasters, storylines, highlighting best practices, etc.

The Emergency Operation Centre of DMTC shall be used as a model for the trainees to understand the functions of EOC. This shall not be used as a backup national EOC. However, in order that the infrastructure of the EOC of the DMTC is utilized optimally it may function as the EOC for the Hinthada district.

The IT infrastructure of DMTC shall be strengthened significantly to enable use of various electronic and web based tools for learning in class rooms and subsequent introduction of on-line training and self-study courses. Dedicated server supported by local V-SAT station with backup power facilities should be installed in the campus of the DMTC for high speed broadband connectivity. Dual purpose supporting staff may also be provided who would maintain the facilities and simultaneously work as domain experts on disaster communication of the institute.

e) Develop networking strategy

DMTC is a national institute on disaster management; it is not a sectoral institute of the Relief & Rehabilitation Department of the Union Government. Therefore the Centre shall reach out to all relevant knowledge based institutions across different sectors in Myanmar and progressively to globally reputed institutes on disaster management. The Centre shall also reach out to the regional, state and local government and develop networking strategies for developing capacities on disaster management at all levels. The networking strategy shall include collaboration for organising joint training programmes, training of trainers, faculty exchange, sharing of knowledge, experiences etc.

There are good numbers of such institutes under the Ministries/ Departments of Home, Defence, Agriculture, Livestock & Irrigation, Transport & Communication, Natural Resources & Environmental Conservation, Health, Education, Electricity & Energy, Construction etc. that may be interested to

collaborate with DMTC for developing national capacities for building resilience to disasters in the contexts of Sustainable Development Goals, Sendai Framework and Paris Agreement. DMTC may train the trainers of these institutes on disaster risk management and further seek their support for sector specific training courses on mainstreaming disaster risk reduction.

f) Promote International collaboration

DMTC shall reach out and collaborate with reputed institutes of disaster management in the region and the world and enter into Memorandum of Understanding/ Agreement for sharing of knowledge, experience, good practices, faculty exchange for education, research, training etc. Some of these institutes include UNISDR Global Education Training Institute (Incheon, South Korea), ASEAN Coordinating Centre for Humanitarian Assistance (Jakarta, Indonesia), Emergency Management Institute (Maryland, USA), Australian Emergency Management Institute (Melbourne, Australia), Disaster Reduction Learning Centre (Kansai, Japan), Civil Defence Academy (Singapore), National Institute of Disaster Management (Delhi, India), National Disaster Management Institute (Seoul, South Korea), Disaster Prevention and Mitigation Academy (Patumtani, Thailand) etc.

g) Develop business plan of DMTC

Initial capital investment for development of physical infrastructure of DMTC was made available by the Union Government of Myanmar which is providing further annual budgetary support for meeting the revenue expenditure of the Centre. This is not adequate for running the Centre. USAID supported development of DMTC with a grant of USD 2.9 million through MCCDDM. The project would be closing in March 2017. The goals and objectives of the Centre make it imperative that substantially higher resources are available on a continuing basis for a long term period.

The business plan of DMTC would continue to be a mix of budgetary support from the government and technical and financial support from the donors, as there is hardly any possibility of mobilising resources from the market for making the Centre self-financing. The Union Government of Myanmar shall provide appropriate budgetary support. The donor community shall be expected to provide technical and financial support either bi-laterally or through UNDP/UNH led consortium based projects on capacity development for disaster management. Possibilities of bi-lateral support from USA, European Commission, Japan, China, India and Republic of Korea shall be explored. There are several windows of opportunities available for international cooperation for implementation of post-2015

global development agenda. Ministry of Social Welfare, Relief & Resettlement shall explore these opportunities in consultation with the Ministry of Foreign Affairs.

5. Operational framework

The Principal of DMTC shall be responsible for the day-to-day operation and management of the DMTC with the approval of the Management Committee. The specific tasks of operational and management shall include the following:

a) Develop and improve Training Modules

So far only 3 training modules have been developed and 6 more modules are under development. These modules need considerable improvement with better pedagogy for learning. The modules shall be made more Myanmar specific and got technically vetted by experts. The modules shall be revised and improved based on the feedback received both from trainers and trainees.

b) Develop criteria for selection of trainees

The trainees shall be selected with care so that persons who are actually handling disaster management in different sectors are given priority for training. Appropriate criteria for selection of trainees shall be developed taking into account the educational background and work experiences of the trainees. Different criteria shall be applied for basic and specialized training programmes.

c) Diversify training activities

Training programmes on various aspects of disaster management shall be introduced in a phased manner. Such programmes shall include the following:

- i) **Basic training** on disaster management for the beginners or entry level civil servants.
- ii) **Community** based training programmes to train community based organisations, civil society and voluntary organisations etc.
- iii) **Hazard specific**, such risk management of earthquake, landslide, cyclone, tsunami, flood, drought, fire etc;
- iv) **Sector specific**, such as school safety, hospital safety, urban risk management, heritage risk management etc;

- v) **Cross-cutting issues** (issues of gender, children, aged, disabled in disasters etc); HVRA (hazard, vulnerability and risk analysis);
- vi) **Emerging issues**, such as climate change and disasters, integration of DRR with CCA etc;
- vii) **Risk prevention and mitigation**, such as cost benefit analysis, mainstreaming of DRR in development etc;
- viii) **Disaster preparedness**, such as end-to-end early warning system, mock drills for evacuation, search & rescue etc;
- ix) **Emergency management**, such as incident command system, emergency health management etc;
- x) **Disaster relief**, such as minimum standard of relief, relief camp management etc;
- xi) **Disaster recovery and reconstruction** (damage and loss assessment, post disaster need assessment, livelihood restoration, building back better etc).

These training programmes can be introduced in a phased manner.

d) Train the Trainers

Every trainer must be trained initially through ToT programmes organised at the Centre, and subsequently deputing them to other training institutes in the country and abroad for giving them exposure to advanced methodologies and pedagogy of teaching and learning.

e) Develop annual training calendar

Annual training calendar of DMTC shall be developed through a consultative process on the basis of the findings of the Training Need Assessment. The Calendar shall be circulated to all concerned Ministries and Departments for nomination of trainees for the programme.

f) Organise annual conference on capacity development

DMTC shall organize annual Conference on Capacity Development on Disaster Management. Institutions, organisations and individuals involved with education, research, training, and awareness generation on disaster management shall be invited to the conference to discuss issues for promotion of capacity development across all relevant sectors and at all levels.

g) Collaborate with training centres of sectoral departments

A preliminary resource mapping of capacity development institutions on disaster management in Myanmar has been prepared by MCCDDM. This shall be followed by a more comprehensive inventory of all training institutions under all relevant Ministries/ Departments, Regional/State Governments and Universities and other academic institutions. All these institutes shall be reached out to explore various areas of collaboration, such as organizing sector-specific training programmes, developing training modules, conducting Training of Trainers etc.

h) Collaborate with academic, scientific and professional institutions

An inventory of various academic, scientific, technical and professional institutions in Myanmar engaged in aspects of disaster management shall be prepared. Mechanisms for collaboration shall be developed for sharing of knowledge and resources and for using their services for conducting various programmes for education, research and training.

i) Develop website of DMTC

A website of DMTC shall be developed providing complete details of DMTC - its origin, growth, vision and mission, goals and objectives, faculty members, training calendar, training activities etc. Hazard, vulnerability and risk profile of Myanmar and its various regions, history of past disasters, reports on recent disasters, important policy documents, actions plans, frameworks, training and other resource materials on disaster management shall be uploaded in the website.

j) Introduce on-line training programme

On-line training programme on disaster management may be introduced in collaboration with World Bank Institute/ GFDRR who have developed a number of modules for on-line training. The programmes may be started in English as these are available at present. Subsequently these may be translated in Myanmar Language. At a later stage on-line Self-Study programmes may also be introduced.

k) Make training wholesome experience for trainers

All the training programmes of DMTC are residential, which opens up opportunities for engaging the trainees with various extra-curricular activities such as film shows, debates, symposiums, games, musical programmes etc. outside class rooms. This can enrich the overall experiences of the trainees during their two week long stay in the campus. Such activities

can enhance off-classroom bonding among the participants to promote in-classroom cohesion for better group work and practices. DMTC shall develop necessary facilities for such off-classroom programmes and activities for making training wholesome experience for the trainees.

I) Set up a translation cell

A translation cell/ unit in DMTC shall be set up in DMTC to translate into Myanmar language basic books and documents on disaster management. The cell may select the books/ documents to be translated, outsource the translation and check the quality of translation before these are accepted for printing. The on-line course materials may also be got translated in Myanmar language.

6. Road Map

The Capacity Development Strategy of Disaster Management Training Centre is has been developed for the time frame of 2017-2030, aligning with the Sendai Framework for Disaster Risk Reduction 2015-2030 and the ongoing revision of Myanmar Action Plan on Disaster Risk Reduction that has a similar time frame. In order that the vision, mission, goal and objectives of DMTC can be achieved in a phased manner a step by step approach shall be followed with a clearly defined road map with clear milestones for the short, medium and long term development of the Centre

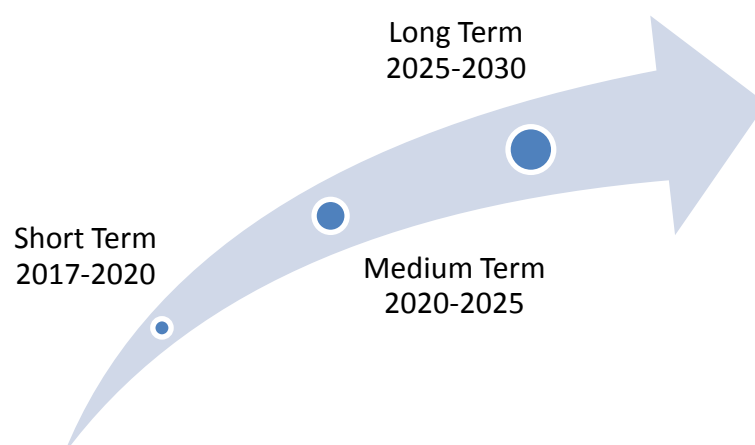


Figure 2: DMTC -Road Map towards Centre for Excellence

6.1 Short Term (2017-2020)

In the short term of next three years (2017-2020) the DMTC shall consolidate the achievements already made and strive to make the following progress.

a) Capacity Development Strategy

Capacity development strategy of DMTC shall be considered and approved by the Union Government of Myanmar with such modifications as may be considered necessary. With the approval of the strategy document the vision, mission, goals and objectives of DMTC along with conceptual, policy and operational frameworks and road maps shall be adopted for implementation.

b) Constitution of Management Committee

The Management Committee of DMTC shall be constituted under the chairmanship of Director General of Relief and Rehabilitation Department. The Committee shall meet once in three months and shall take policy decisions regarding the operation, management, growth and development of DMTC. The decisions requiring approval of the Union Government shall be referred to the government for approval.

c) Training Need Assessment

Training Need Assessment (TNA) on disaster management in Myanmar shall be conducted through an expert agency in consultation with all stakeholders. TNA shall review the existing institutional and community capacities, identify the gaps in capacities across all sectors and at all levels, and assess the needs of various types of training on disaster management in Myanmar. The TNA, as approved and adopted, shall form the basis for the development of training programmes of DMTC.

d) Strengthening of Training Faculty

Staffing pattern of DMTC shall be reorganised with focus on domain expertise on various thematic areas so that DMTC is able to run training programmes without excessive dependence on external faculties. During 2017-2020 reorganisation plan shall be approved and at least one faculty member in each of the proposed seven divisions shall be appointed.

e) Training of Trainers

The existing and newly recruited faculty shall undergo Training of Trainers (TOT) programmes to acquire necessary skills and expertise of disaster management trainers. Such TOT programmes shall be organised once in two years for every faculty member, preferably in collaboration with globally reputed institutes of disaster management.

f) Development of Training Modules

The training modules for the existing training courses shall be improved as per international standards and new training modules shall be developed for the new courses that are proposed to be introduced during 2017-2020. The tasks of development of training modules shall be entrusted to the professional trainers who have knowledge and expertise on training methodology and have thorough understanding of the local situations.

g) Augmenting infrastructure

During 2017-2020 the following essential training infrastructure shall be developed in DMTC:

- (i) Computer Centre
- (ii) Remote Sensing and GIS Laboratory
- (iii) Dedicated internet server supported by local V-SAT station with solar power back up facilities.

These will significantly augment the training infrastructure and make it possible to use on line resources for imparting training and other co-curricular activities.

Facilities for extra-curricular activities such as indoor and outdoor games, debates, film shows etc may also be developed to keep the participants engaged outside the class rooms.

h) Criteria for selection of trainees

Homogeneity in the profile of participants is important for the success of training programme. The trainees should ideally be of same age group and profession and, to the extent possible, same rank even though they may come with diverse experience in different sectors or departments. Based on these and other considerations the Union Government shall frame criteria for selection of trainers, which shall be adhered to in all training programmes.

Ideally the number of participants in a skill based training programmes should not exceed 30.

i) Diversification of training programmes

The following new training courses shall be introduced by the DMTC during 2017-2020, in addition to 3 courses that are being conducted at present:

- (i) Earthquake Risk Management
- (ii) Cyclone Risk Management
- (iii) Flood Risk Management
- (iv) Landslide Risk Management
- (v) Drought Risk Management
- (vi) Hazard Vulnerability and Risk Analysis
- (vii) End-to-end Early Warning of Disasters
- (viii) Application of GIS for Disaster Management
- (ix) Minimum Standards of Relief
- (x) Shelter Camp Coordination and Management
- (xi) Post Disaster Need Assessment
- (xii) Myanmar Action Plan for Disaster Risk Reduction

DMTC may organise at least 2 training programmes on each of these courses besides 6 programmes on Basic Disaster Management Course and 3 courses each on Community Based Disaster Management and Inclusive Disaster Management. Thus annually 36 training programmes shall be organised.

j) Development of Website of DMTC

The website of DMTC shall be developed and launched during 2017. The bi-lingual website shall provide complete information regarding DMTC and further upload the Training Modules, Training Calendar and other resources for information of all the stakeholders.

k) Annual Training Conference

DMTC shall organise Annual Training Conference every year starting from 2017. The conference shall be organised with lot of care and preparation as a flagship event of DMTC. All the stakeholders – concerned ministries and departments of Union Government, representative of regional and state governments, partners of MCCDDM, and organisations and individuals involved with capacity development on disaster management – shall be invited to attend the conference. The conference shall be structured in a manner that all relevant issues pertaining to education, research, training,

and awareness generation on disaster management in Myanmar are discussed and a set of recommendations made for collaboration among the stakeholder for developing all-round capacities on disaster management in the country.

These recommendations shall be taken into consideration while formulating annual training and activities calendar of DMTC. The annual training and activities calendar shall include not only the training programmes to be conducted but also other activities like development of training modules, workshops, research etc.

1) Collaboration with training centres of line Departments

DMTC shall enter into collaboration with the training centres of concerned line ministries and departments that have roles to play in disaster management as defined in MAPDRR. These include the training centres set up under the Ministries of Home Affairs, Transport and Communications, Constructions, Health, Education, Natural Resources and Environmental Conservation, Agriculture, Livestock and Irrigation, Science and Technology etc. The range of collaboration shall include development of sector specific training modules, exchange of faculty and resources, organisation of joint training programme, training of trainers etc. During 2017-2020 the priority departments for collaboration shall include the Departments of Meteorology and Hydrology, Public Health, Fire Services, etc. Based on the experiences gained collaboration shall be extended to other ministries and departments.

6.2 Medium Term (2020-2025)

In the medium term during 2020-2025 the DMTC shall consolidate the gains made during the short term, carry on with the programmes already taken up and further take up new programmes and activities. Simultaneously the faculty and infrastructure shall be further strengthened to enable it to discharge these responsibilities in a smooth and effective manner. The new programmes and activities during this phase may include the following.

a) On line training programme

DMTC shall introduce on-line training programme on disaster management for the general public. A number of online courses are presently available, such as the courses offered by the World Bank Institute, Global Facility for Disaster Recovery and Reconstruction, International Federation of the Red Cross etc. but all these courses are in English and none of these is related to the specific contexts of Myanmar.

Initially the programme may be started in English, but in order that on-line courses of DMTC are relevant to the people of Myanmar the programme may be eventually be conducted in local language and the course materials shall be developed according to the local contexts. This would require considerable spadework for which a time bound programme shall be taken up. First, locally relevant course materials that include reading materials, PPTs, video and audio clippings etc have to be developed. Secondly, the faculty members have to be trained to run the courses. Third, and probably the most important, 24x7 high speed broad connectivity has to be provided. This is challenging, but not impossible.

Initially the Basic Disaster Management Course may go online and subsequently other courses such as Community Based Disaster Risk Management, Risk Identification, Assessment and Analysis, Earthquake Risk Management, Cyclone Risk Management, Safe Cities, Climate Change and Disaster Risks etc. may be developed.

DMTC may seek technical assistance/ guidance of GFDRR/ IFRC for launching the courses. DMTC may also enter into collaboration with Technological Universities for developing the course materials and providing technical support.

b) Strengthening of Training Faculty

The training faculty of DMTC shall require further strengthening to be able to discharge additional responsibilities. At least one faculty member shall be added in each of 7 divisions of DMTC. Besides a Project Manager may be engaged for managing the online courses. DMTC may charge a small amount from the participants to cover the recurring cost of running the courses.

c) Augmenting infrastructure

The infrastructure of DMTC shall be further augmented with the addition of Emergency Operation Centre, Disaster Simulation & Multi-media Lab, and Video Conferencing Lab. The IT infrastructure shall also be strengthened for running the online courses.

d) Diversification of Training Activities

The existing training programmes shall be reviewed and new training programmes introduced keeping in view the demands and needs. The

following new training programmes may be considered for introduction during 2020-2025.

- (i) Tsunami Risk Management
- (ii) Urban Risk Management
- (iii) Incident Command System – Basic Courses
- (iv) Climate Change and Disasters
- (v) Mainstreaming of Disaster Risk Reduction in Development
- (vi) Integration of climate change adaptation with DRR
- (vii) Heritage Risk Management
- (viii) Emergency Health Management
- (ix) Gender Issues in Disaster Management
- (x) Children and Disasters
- (xi) Disasters and Disabilities
- (xii) Disaster Data, Analysis and Monitoring
- (xiii) Making Schools and Hospitals Safe in Disasters

e) Collaboration with Academic, Scientific, Professional Organisations

DMTC may enter into collaboration with selected universities, technological universities, scientific organisations, and professional bodies like Myanmar Engineering Society, Myanmar Earthquake Association etc. for development of technical resources, course curriculum, and undertaking policy research on some technical issues. Such collaboration may be institutionalised by signing Memorandum of Understanding between the organisations.

f) International Collaboration

DMTC shall seek collaboration with reputed institutes of disaster management in the region and the world, as mentioned in paragraph 4.3, and enter into Memorandum of Understanding/ Agreement for sharing of knowledge, experience, good practices, faculty exchange, study tours, and for capacity development on disaster management.

6.3 Long Term (2025-2030)

The long term road map of DMTC till 2030 shall be essentially to consolidate the gains made during the short and medium terms, critically assess the strengths, weaknesses, threats and opportunities and strive to fulfil the objective of getting recognised as Centre for Excellence on Disaster Management. The

following additional new tasks shall be added to the ongoing activities of the Centre.

a) Introduction of Self-Study Programme

Self-study programme is another powerful tool to promote disaster management education and awareness among the people, particularly among the younger generation. It differs from the on-line courses on number of aspects. On-line courses has a fixed time schedule when the participants have to register, do the course works under the guidance of the counsellors and submit projects that are evaluated and graded by the counsellors. Self-study is completely automated. Participants can register on line any time, learn the course materials as per his/her choice without the guidance of counsellors, appear or reappear in examinations any time and generated a certificate on line. In order that self-study courses are effective the courseware has to be developed in manners that it answers all possible questions and queries of the participants. Self-study courses can be effective if these are connected with formal education in schools and colleges by way of assigning credits for attending the courses.

The experiences gained by the DMTC on online courses during 2020-2025 shall be useful for introducing the Self-Study Programme during 2025-2030.

b) Strengthening of Training Faculty

The increased work load of DMTC shall be assessed and the faculty and staff strength of the Centre shall be suitably strengthened.

c) Augmenting infrastructure

The infrastructure of DMTC shall be reviewed and augmented as per needs.

d) Diversification of Training Activities

The existing training programmes of DMTC shall be reviewed and new training courses shall be introduced as per demands and needs. Some of the new courses that can be considered for inclusion are:

- (i) Incident Command System – Advanced Courses
- (ii) Disaster Risk Reduction in Coastal Regions
- (iii) Earthquake Resistant Building Designs and Practices
- (iv) Post-Disaster Psycho-Social Trauma Management
- (v) Disaster Communication Systems

- (vi) Role of NGOs in Disaster Management
- (vii) Media and Disasters
- (viii) Measuring Progress of Disaster Risk Reduction
- (ix) Building Back Better in Disaster Recovery and Reconstruction
- (x) Cost Benefit Analysis of Disaster Risk Mitigation Projects
- (xi) Risk Governance
- (xii) Public-Private Partnership for Disaster Risk Reduction

As the DMTC develops and gains recognition it may consider to start sensitization programmes for senior policy makers and parliamentarians. Such programmes may be conducted off-campus in national capitals, if so required.

e) Policy Research on Disaster Management

DMTC may, either on its own or in collaboration with partner organisations, engage in policy research on some of the aspects and issues on disaster management that would be useful for policy making.

7. Monitoring and Evaluation

The programmes and activities of DMTC shall be monitored and evaluated on a continuing basis. Such monitoring and evaluation shall take place at three levels. First, at the level of the Centre each training programme and each session of the training programme shall be evaluated by the participants. Participant's feedback on the training shall be useful for improving the programmes. DMTC shall develop a Management Information System for monitoring all the activities including the expenditure incurred on the activities on a monthly basis. The quarterly progress reports shall be submitted to the Management Committee of the Centre for its review.

Second, the Relief and Rehabilitation Department shall monitor the activities of DMTC on a continuing basis and issue necessary directions as may be considered necessary. Financial audit of DMTC shall be conducted every year and performance audit conducted once in five years. The findings of financial and performance audit shall be taken into consideration for improving the management of DMTC.

Thirdly, an independent evaluation of DMTC shall be conducted through a reputed external agency. Such evaluation shall focus on the overall impact of the activities of the Centre in developing the national and local capacities for disaster risk management in Myanmar. Such evaluation shall be conducted once

in ten years and the findings shall be considered for redesigning the strategic plans, programmes and activities of DMTC.

ANNEXURE-I

Proposed Divisions and Domain Areas

	Divisions	Domain Areas
1.	Policy and Planning	<ol style="list-style-type: none"> 1. Basic concepts of disaster risk management and cycles 2. Disaster risk management frameworks, policies, plans at global, regional, national, state and local levels 3. Mainstreaming disaster reduction in development 4. Financing disaster risk management 5. Risk transfer and risk insurance 6. Post disaster damage, loss and needs assessment 7. Disaster recovery and reconstruction
2.	Geological Disasters	<p>Assessment, mitigation and management, including case studies and good practices, on:</p> <ol style="list-style-type: none"> a. Earthquakes b. Landslides c. Tsunamis
3.	Hydro-Meteorological Disasters	<ol style="list-style-type: none"> 1. Assessment, mitigation and management, including case studies and good practices, on: <ol style="list-style-type: none"> a. Cyclones b. Floods c. Droughts 2. Environment and disasters 3. Climate change and disaster management
4.	Human-induced Disasters	<p>Assessment, mitigation and management, including case studies and good practices, on:</p> <ol style="list-style-type: none"> a. Chemical and industrial disasters b. Accident related disasters (rail, road, river, air) c. Terrorism related disasters
5.	Cross-cutting Issues	<ol style="list-style-type: none"> 1. Community based disaster preparedness 2. Gender issues in disaster management 3. Vulnerabilities (poverty, children, aged, disabilities etc) 4. Psycho-social issues in disaster management 5. Urban risk management 6. Heritage risk management
6.	Emergency Management	<ol style="list-style-type: none"> 1. Incident Response System (basic and advanced) 2. Minimum Standards of Relief 3. Humanitarian logistics 4. Emergency health management

		<ul style="list-style-type: none"> 5. Emergency support functions 6. Coordination with Army, UN, other agencies
7.	Technology Application and Outreach	<ul style="list-style-type: none"> 1. Early warning and communication technology 2. Application of remote sensing/ GIS 3. Knowledge management 4. Online Training Programme 5. Mass communication and awareness
8.	Administration and Finance	<ul style="list-style-type: none"> 1. Establishment 2. Training/ workshop logistics 3. Maintenance (civil, electrical, mechanical, electronic) 4. Finance, accounts and audit 5. Purchase and stores 6. Library 7. Printing and publication