

CLIMATE CHANGE ADAPTATION IN MYANMAR

(Facilitator Guide)















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Acronyms and abbreviations

AR5 Fifth Assessment Report
CCA climate change adaptation

CH4 methane

CO2 carbon dioxide

DRM disaster risk management
DRR disaster risk reduction

ECD Environmental Conservation Department

ENSO El Niño-Southern Oscillation

GAD General Administration Department

H2O water vapour

IPCC Intergovernmental Panel on Climate Change

MCCA Myanmar Climate Change Alliance

MCCSAP Myanmar Climate Change Strategy and Action Plan 2016-2030

MIMU Myanmar Information Management Unit

MNREC Ministry of Natural Resources and Environmental Conservation

MSWRR Ministry of Social Welfare, Relief and Resettlement

N2O nitrous oxide

NAPA National Adaptation Programme of Action

O3 ozone

ppb parts per billion ppm parts per million

RCPs Representative Concentration Pathways
RRD Relief and Resettlement Department

SWOT strengths, weaknesses, opportunities and threats

UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate Change

UN-Habitat United Nations Human Settlements Programme

INTRODUCTION

Background

The Myanmar Climate Change Alliance (MCCA) was launched in 2013 with the joint efforts of the United Nations Human Settlements Programme (UN-Habitat), the United Nations Environment Programme (UNEP), the Ministry of Natural Resources and Environmental Conservation (MNREC) and its Environmental Conservation Department (ECD). The programme also works closely with several other ministries and government agencies, including the Ministry of Social Welfare, Relief and Resettlement (MSWRR) and its Relief and Resettlement Department (RRD). The overall objective of MCCA is to mainstream climate change into the policy development and reform agenda of Myanmar.

The country is highly vulnerable to climate change and hazards. At a local level, climate change is already resulting in more frequent and severe disasters such as devastating cyclones, frequently recurring floods and storm surges, droughts and consequent climate driven migration, and loss of productivity in the agriculture sector, among others. In the context of increasing climate-induced risks, local administrations need to enhance their capacities for climate change adaptation (CCA) and disaster risk reduction (DRR). In response, MCCA and ECD designed a training course entitled "Building Local Level Resilience to Climate Change in Myanmar".

Aim and objectives of the course

The overall aim of the training course is to build the capacity of national and local governments for integrating CCA and DRR measures into local development plans. The course modules are tailored to equip government officials with robust knowledge on climate change and its impacts in Myanmar, as well as with analytical and technical skills on how to develop local CCA and DRR strategies and plans based upon vulnerability assessments.

The course pursues the following specific objectives:

- to improve the knowledge on climate change including on approaches and frameworks for CCA;
- to understand characteristics and identify impacts of observed and projected climate changes in Myanmar and linkages with sustainable development of townships;
- · to identify, assess and integrate suitable CCA measures into township development plans;
- to understand and address key cross-cutting issues in CCA, such as gender and DRR.

The training is intended for:

- Selected township-level administrators, including General Administration and members of Townships Development Committees;
- District and townships representatives from various sectoral ministries/departments;
- National and regional representatives of ECD, RRD, and the Meteorology and Hydrology Department;
- GIS specialists from various ministerial units such as those from MNREC.

Course overview and modules

The course consists of four modules. Each module is comprised of theoretical part and group exercises that lead participants step-by-step through the process of developing local climate resilience action plans based upon vulnerability assessment. The course outline is provided below.

Module 1: Understanding climate change

The development and implementation of climate change policies in Myanmar necessitates strengthening the knowledge and expertise of government officials in this field. Recognizing that climate change is a complex notion the first module of the training course is aimed at introducing participants to the basic terms and concepts used in the climate change science. The module further aims at enhancing practitioner's knowledge on the anthropogenic factors associated with climate change, as well as on the current and projected climatic changes at the global and national levels.

Module 2: Addressing current and future impacts of climate change in Myanmar

Myanmar is highly exposed to rapid- and slow-onset climate-related hazards. The country's economy is largely dependent on climate-sensitive sectors such as agriculture, water and energy, and on depleting natural resources. Therefore, national and local governments should have the capacity to understand and address present and future impacts of climate change in Myanmar. With this objective, Module 2 of the course focuses on the impact of climate change on key sectors, and informs participants on various CCA measures applicable at the local level with reference to the Myanmar Climate Change Strategy and Action Plan 2016-2030 (MCCSAP). In addition, the module teaches on techniques for analysis of climate change impacts at the local level, which is an essential element of climate change vulnerability assessment.

Module 3: Assessing vulnerability to climate change and hazards at a local level

This module introduces participants to the process of, and methods/tools for conducting climate change vulnerability assessments at a township level. The module consists of a theoretical part and practical work (simulation exercise and a filed visit).

Module 4: Preparing local climate resilience action plans

The module builds upon the results of the vulnerability assessment conducted in Module 3. The aim of the sessions within this module is to enable participants to prioritize adaptation measures and develop local resilience plans. More specifically, the focus of the training is on: (i) discussing the objectives, purpose and structure of an action plan; (ii) providing guidance on the whole planning process, such as where to start from (forming a team; setting objectives, budget and time-frame; identifying key stakeholders, etc.); (iii) introducing methods for analysis of strengths, weaknesses, opportunities and threats (SWOT) in the context of adaptation planning and setting clear CCA objectives; (iv) identifying a short list of adaptation measures and prioritizing adaptation options.

The course is designed to provide flexibility in terms of content and duration (minimum 3 days and maximum 7 days). It is recommended that participants should not exceed 30 people to ensure good quality training. Suggested methods of teaching include lectures (30%), group exercises (60%), and a field survey (10%). Assessment of the effectiveness of teaching will be conducted through question-answer sessions and group exercises.

The training course applies Adult Learning principles and uses various tools such as PowerPoint presentations and lectures, case studies from Myanmar, group and open discussions aimed at sharing experience and knowledge, as well as simulation exercise and a field work.

Planning on-the-job exercise and field visit

A real case study, including a filed visit, are foreseen as part of the training with the objective to train participants on how to analyse secondary data and use participatory tools for vulnerability analysis. Therefore, while planning the course, facilitators should consider the following issues:

- Select a case study, e.g. a town, village or small community located in the area where this course takes place. Ensure that field visit work is realistic in terms of time and planned activities.
- Request basic secondary data for the selected case study necessary to develop town/village profile (sources of data are listed in Module 3/Session 3.1). If possible, collect the following data and create a spreadsheet table (e.g. in Microsoft Excel): population data disaggregated by sex and age, level of education completed, income per capita, employment rate, type of housing units, household access to drinking and irrigation water.
- Where possible, work with different social groups and engage women and youth. Women's groups might be better facilitated by women.
- Ensure to prepare all materials necessary for the field visit (e.g. maps, flip charts, transparent paper, markers, sticky notes). Refer to Module 3/Session 3.2 for more details.

How to use this Training User Manual

This Training User Manual is intended to guide trainers/course facilitators step-by-step throughout the course "Building Local Level Resilience to Climate Change in Myanmar". The following sections provide detailed guidance on the course content presented in the following format:

- Introduction to session, which is intended to introduce the trainer to the content and objectives of each thematic session, and provide overall guidance and recommendations.
- Training content for each session in line with the PowerPoint slides and notes.
- References for further information if needed by Facilitator.
- Supplementary materials for each module such as quiz questions and answers, and materials for group activities and simulation exercises.



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