Training Manual on Climate Change Monitoring/
Measuring, Reporting and Verification

A 13-module course (26 hours) held between Dec. 23, 2019 - Nov. 13, 2020
at the Environmental Conservation Department, Nay Pyi Taw

Jointly Prepared by

Environmental Conservation Department,
Australian Volunteers Program, and
Global Green Growth Institute

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Disclaimer: Training material has been prepared based on the CGE training materials on the national GHG inventories.
LESSON 1

INTRODUCTION, ORIENTATION, AND EVALUATION
GGGI MRV Support for Myanmar
Climate Change and Sustainable Development Goals

Lesson 1: Introduction, Orientation and Evaluation

November 2019

Who are we?

Australian Volunteers Programme (AVP)
Dr Andrew White is based at ECD in an AVP assignment Climate Change MRV Training Mentor, working with the ECD Climate Change Division and Global Green Growth Institute (GGGI).

Climate Change Division Trainers
1. Daw Thin Thuzar Win, Deputy Director
2. Dr San Win, Deputy Director
3. U Aung Thu Han, Assistant Director
4. Daw Thi Thi Soe Min, Assistant Director
5. U Khin Maung Soe, Staff Officer
6. U Kyaw Soe Win, Staff Officer
7. U Nay Linn Oo, Deputy Staff Officer

Why are we here?

The Australian Volunteer Programme is working with ECD and GGGI to support a capacity-building programme, initially within ECD and MoNREC and subsequently further afiel to other Departments.

Global Green Growth Institute is here to support ECD in their national climate change framework.

Why are you here and what are you going to learn?

You have been specially chosen to be part of this course.

Climate change is a social, environmental, and political issue that needs full government consideration and support.

You will learn about international and national climate change strategies, the Sustainable Development Goals and how to evaluate and prioritise climate change actions to take into account their REAL costs and benefits.

What we need you to do.....

• Be on time (email me if you cannot attend).
• When you are here, be involved and active! For example:
  - ask questions (please ask if something is not clear).
  - take notes, so you don’t forget, and to help answer the quiz.
  - join in with group discussions.

In return, we will..

• talk in English and Myanmar - feel free to ask questions in either
• email you the presentation and give you sources of information. If we can’t answer your question in class, we’ll find out and email you afterwards.
• give you a paper copy of the presentation and any other handouts so you can make notes.
• always be available on email or in the GGGI office if you want to ask questions.
Lesson 2
Climate change basics and Global Action
1) Understand the difference between weather and climate
2) Be familiar with key climate change terms
3) Describe the key sources of climate change
4) Understand the need for a global approach to address climate change
5) Explain the difference between mitigation and adaptation

Lesson 3
International Climate change framework
1) Appreciate the historical context of a global approach to climate change
2) Describe the aims of the UNFCCC
3) Describe the main aims of the Paris Agreement
4) Explain what the ETF (Enhanced Transparency Framework) includes
5) Describe the main reporting requirements for Myanmar

Lesson 4
Climate change in Myanmar
1) Describe the main climate impact projections for Myanmar
2) Understand the relation of Myanmar’s domestic policy to the international framework
3) Describe the domestic climate change institutional framework in Myanmar
4) Understand the main climate change institutional bodies in Myanmar

Lesson 5
MRV (Monitoring/Measuring, Reporting, Validation)
1) Understand the development of MRV under the UNFCCC
2) Describe what MRV is and its key principles
3) Describe current MRV activities in Myanmar
4) Discuss future MRV needs

Lesson 6
Paris Agreement Update
1) Understand the latest Paris Agreement recommendations
2) Be aware of any agreements still being finalised
3) Understand the affects for Myanmar

Lesson 7
SDGs (Sustainable Development Goals), Social and Environmental Risks
1) Sustainable Development Goals
2) The status of SDGs in Myanmar
3) The importance and benefits of linking SDGs to the Paris Agreement MRV
4) Key terms of risk assessment
5) A process to identify risks and impacts

Lesson 8
Myanmar’s INDC climate action risk assessment. UNDP MRV screening tool
1) Understand the relation of Myanmar’s domestic policy to the international framework
2) Describe the domestic climate change institutional framework in Myanmar
3) Understand the main climate change institutional bodies in Myanmar
4) Future plans and actions to address each sub-sector

Lesson 9
sub-sectors
a. Energy & Transport
b. IPPU
1) Overview of current situation for each sub-sector
2) Sub-sector requirements to satisfy the Paris Agreement MRV and for ETF
3) Current availability of information in Myanmar
4) Future plans and actions to address each sub-sector

c. AFOLU
d. waste

Lesson 10
Data collection and quality
1) Data requirements under the Paris agreement
2) Current data collection methods in Myanmar
3) Myanmar data adequacy and data deficiencies
4) Future needs

Lesson 11
Data time series
1) Historical data available for Myanmar
2) Current data availability for Myanmar and
3) Data adequacy and interpretation for reporting
4) Future, ongoing data requirements for Myanmar and support

Lesson 12
QAQC (Quality Assurance, Quality Control)
1) Current QAQC procedures
2) Sub-sector QAQC needs
3) International QAQC requirements

Lesson 13
Lesson 14
Recap and Final Evaluation
1) Review focus of each lesson and main messages
2) Feedback
3) Lessons Evaluation
4) GGGI Evaluation

Climate Change Lesson 1: Questionnaire

1. Can you name 3 greenhouse gases?
   1. 
   2. 
   3. 

2. What is the main difference between weather and climate?

3. What is the difference between mitigation and adaptation?

4. When was the first international meeting (UNFCCC) concerning climate change?
   a. 1900 - 1915
   b. 1950 - 1965
   c. 1980 - 1995

5. Measurements of CO\textsubscript{2} which support man-made climate change, have been made up to
   a. 100 years ago
   b. 1,000 years ago
   c. 10,000 years ago
   d. over 100,000 years ago

6. Can you name 3 causes of climate change?
   1. 
   2. 
   3. 

7. When did man-made (anthropogenic) increases in greenhouse gases first begin?
   a. before 1900
   b. between 1900 to 1950
   c. after 1950

8. Can you name 4 effects of climate change on Myanmar?
   1. 
   2. 
   3. 
   4. 

9. With a 2\textdegree{C} temperature increase, what is the sea level increase predicted for Myanmar?

10. What is the Kyoto Protocol?
What is the significance of the Paris Agreement for Myanmar and developing countries?

Is Myanmar an overall carbon emitter or a carbon sink?

What is the target temperature increase from the Paris Agreement?

What does INDC mean?

Can you name 3 of the INDC mitigation targets for Myanmar?

How often are the COP meetings and where was the last one held?

Why is it important that climate change is considered a global issue?

Which of these industries contribute to climate change?
   a. agriculture
   b. energy/electricity
   c. forestry/timber production
   d. all of the above

Which of these industries contribute to climate change?
   a. construction
   b. waste
   c. transport
   d. all of the above

At COP25 climate change was declared a crisis. Why?