# National Training Workshop on Disaster Risk Assessment and Management for the Coastal Zone of Sri Lanka

# Developing a knowledge base on Hazards, Vulnerabilities and Capacities for Disaster Risk Reduction

#### 21-25 June at Hotel Topaz, Kandy

Organized by UNDP Regional Centre in Bangkok- Crisis Prevention and Recovery, UNDP Country Office Sri Lanka, The Disaster Management Centre and Working Group on Risk Assessment (WG) of the Intergovernmental Coordination Group (ICG) for the establishment of the Indian Ocean Tsunami Warning System (IOTWS) under the framework of the Intergovernmental Oceanographic Commission (IOC) of UNESCO, Paris and the University of Moratuwa with financial support from Multi-Donor Trust Fund managed by UN-ESCAP.

This event follows the successful Regional Training Programme organized in November 2009 by the UNDP Regional Centre in Bangkok, UNESCO-IOC-ICG-IOTWS Secretariat, Perth and the Working Group on Risk Assessment of ICG-IOTWS. This Training Workshop will further strengthen the collaborative activities between UNDP and IOTWS.

#### Training Workshop Programme Section 1- Seminar

### Day 1---21<sup>st</sup> Monday June

#### **REGISTRATION (8.45-9.15)**

#### **1.0 INAUGURATION**

- 1.1 Address by Director General Disaster Management Centre (9.15-9.30) Major General Gamini Hettiarachchi
- 1.2 Address by the Assistant Resident Representative UNDP Colombo (9.30-9.45) Dr. Ananda Mallawatantri
- 1.3 Address by the representative from UNDP, Regional Centre Bangkok (9.45-10.00) Rajesh Sharma
- 1.4 Address by Chairman Working Group on Risk Assessment of ICG/IOTWS (10.00-10.15) Dr.S.S.L.Hettiarachchi, University of Moratuwa

TEA (10.30-11.00)

#### 2.0 INTRODUCTION TO RISK ASSESSMENT

2.1 National Approaches and Recent Initiatives adopted by the DMC (11.00-11.30) Mr. U.W.L.Chandradasa and Mr. Srimal Samansiri, DMC

2.2 Risk Assessment- Overall Summary of Definitions, Components of Risk and its Assessment: Coastal Hazards, Vulnerability and Capacity, RA in the context of Disaster Risk Reduction, Methods and tools for Risk Assessment and Management (11.30-12.15)

Dr.S.S.L.Hettiararchchi, University of Moratuwa

#### **3.0 COASTAL EROSION**

3.1 Sea Level Rise, Coastal Erosion (12.15-1.00) Mr.Bandula Wickramarachchi, Coast Conservation Department

LUNCH (1.00-2.00)

#### 4.0 TSUNAMI HAZARD

4.1 Storm Surges, Tsunami Hazard Assessment and Deterministic Approaches, Output from recent investigations on moddelling (2.00-2.45)

Dr. Janaka Wijetunga, University of Peradeniya

4.2 Tsunami Hazard Assessment, Probabilistic Approaches and Case Studies (Part 1) (2.45- 3.30)

Dr.Phil Cummins, GeoScience Australia

TEA (3.30-4.00)

4.3 Tsunami Hazard Assessment, Probabilistic Approaches and Case Studies (Part 2) (4.00- 4.45)

Dr.Phil Cummins,GeoScience Australia

#### 5.0 OIL SPILL HAZARD

5.1 **Investigating Oil Spill Hazards (4.45-5.30)** Dr. S.P.Samarawickrama, University of Moratuwa

#### **DISCUSSION ( 5.30-5.45)**

Day 2---22<sup>nd</sup> <sup>t</sup>Tuesday June

#### **6.0 COASTAL MAPPING**

6.1 **Coastal Mapping and Applications (9.00-9.45)** Dr. Hans Werner Schenke, AWI, Germany

#### 7.0 VULNERABILITY

#### 7.1 Introduction to Vulnerability in the context of Coastal Hazards (9.45-10.00)

Dr.S.S.L. Hettiarachchi, University of Moratuwa (with advise from Juan Carlos Villagran, UN-SPIDER, Vienna)

#### 7.2 Social Dimensions of Vulnerability (10.00 -10.30) Radhika Behuria, UNDP, Bangkok

TEA (10.30-11.00)

#### 8.0 RISK MANAGEMENT

- 8.1 **Disaster Preparedness (11.00-11.45)** Irina Rafliana, Indonesian Institute of Sciences
- 8.2 Mitigating the tsunami hazard using Artificial and Natural Methods (11.45-12.45) Dr.S.S.L.Hettiararchchi, University of Mortauwa

#### **DISCUSSION (12.45-1.00)**

LUNCH (1.00-2.00)

#### 9.0 RISK ASSESSMENT CASE STUDIES

9.1 **Tsunami Risk Assessment - Case Study for the Port City of Sri Lanka (2.00-2.45)** Dr.Nimal Wijeratne, University of Ruhuna

# 10.0 CAPACITY BUILDING FOR PRAPREDNESS AND RECONSTRUCTION, RISK and RESILIENCE

10.1 Knowledge management and best practice sharing in disaster risk management (2.45-3.30)

Dr Chaminda Pathirage, University of Salford, UK

TEA (3.30-4.00)

10.2 **Concept of empowerment (4.00-4.45)** Dr. Dilanthi Amaratunga, University of Salford, UK

# 10.3 Use of virtual networks and other mechanisms incapacity building and risk reduction (4.45-5.30)

Dr. Kaushal Keraminiyage, University of Salford, UK

10.4 **Resilient cities -making disaster risk reduction a reality (5.30-6.15)** Dr Richard Haigh, University of Salford, UK

#### **DISCUSSION** ( 6.15-6.30)

#### 11.0 DEVELOPING TSUNAMI RESILIENT INFRASTRUCTURE

11.1 **Physical Vulnerability and Tsunami Resilient Infrastructure (9.00-9.45)** Dr.W.P.S Dias, University of Moratuwa

#### **DISCUSSION ( 9.45-10.00)**

TEA (10.00-10.30)

# <u>Section 2- Training Sessions/Assignments (23<sup>rd</sup> Wednesday 10.30- 24<sup>th</sup> Thursday 5pm)</u>

Training Sessions and Presentations from participants where required will be conducted over 7 sessions on 23<sup>rd</sup> Wednesday, 24<sup>th</sup> Thursday, June. If necessary, Training Sessions will continue for a further hour and a half on Friday.

Training Sessions/Assignments will cover Tsunami Hazard

-Deterministic Tsunami Hazard Modelling-Dr.J.Wijethunga -Probabilistic Tsunami Hazard Modelling-Dr.Phil Cummins

**Vulnerability Early Warning, Preparedness and Evacuation** Irina Rafliana and Dr.S.S.L.Hettiararchchi

**Capacity building for disaster preparedness and reconstruction, Risk and resilience, Vulnerability and empowerment and risk** Dr.Dilanthi Amaratunga and Dr Richard Haigh

#### <u>Session 1</u>- 23<sup>rd</sup> Wed (10.30-1.00)

Concept of stake holders in disaster risk reduction and management (supplemented by a stakeholder mapping exercise) Dr. Richard Haigh, University of Salford, UK

Capacity building for disaster preparedness and reconstruction (with an exercise, work shop style) Dr. Dilanthi Amaratunga, University of Salford, UK

### <u>Session 2</u>- 23<sup>rd</sup> Wed (1.00-4.00)

Deterministic Tsunami Hazard Modelling-Dr.J.Wijethunga Probabilistic Tsunami Hazard Modelling-Dr.Phil Cummins

### <u>Session 3</u>- 23<sup>rd</sup> Wed (4.30-5.30)

Vulnerabilty Assessment Dr.Sam Hettiarachchi and Irina Rafliana

Discussion on Proposed National Approaches towards Vulnerability Assessment Srimal Samanasiri

### Session 4- 24<sup>th</sup> Thur (9.00-10.30)

Vulnerabilty Assessment (continued) Dr.Sam Hettiarachchi and Irina Rafliana

Preparedness Irina Rafliana and Radhika Behuria

### Session 5- 24<sup>th</sup> Thur (11.00-1.00)

Preparedness Irina Rafliana and Radhika Behuria

## <u>Session 6</u>- 24<sup>th</sup> Thur (2.00-3.00)

Preparedness Irina Rafliana and Radhika Behuria

## <u>Session 7</u>- 24<sup>th</sup> Thur (3.30-5.00)

Introduction to Mitigation Dr.Sam Hettiarachchi

Workshop Closure