

Ecosystem Approach for Disaster Risk Reduction

Rationale Of The Course:

This course is about understanding the public health consequences and the need for medical emergencies in disaster situation

Objectives Of The Course:

- 1. To help students understand importance of integrating ecosystem-based disaster risk reduction into development planning
- 2. To understand the need and preparedness for ecosystem management, disaster risk reduction and climate change and development

Course Description

The course will touch upon disaster risk reduction, climate change adaptation, environment and the evolution in the paradigms of concept and framework from 'Response and Relief' to 'Mitigation and Preparedness'. It will briefly touch upon the introductory concepts of (i) engineering based solutions; (ii) community based disaster risk reduction; (iii) ecosystem approach to disaster risk reduction, and (iv) externality based response and relief approach. In the introductory module, the course will also discuss UN-PEDRR (Partnership for Environment and Disaster Risk Reduction), Strategic Environmental Assessment (SEA) and its linkages with ecosystem approach to disaster risk reduction (EcoDRR).

The second module of the course will deal with introduction to EcoDRR, natural resource management strategies, and traditional environmental wisdom and disasters. With the case studies and examples from different part of the country in particular and the world in general, the necessities of EcoDRR will be established. The course will further strengthen ecological approaches for mountain hazards: landslides, debris flow, rock fall and avalanches; coastal hazards: storms, flooding, rising sea level; urbanization: heat island effect, flooding, urban resilience; forest: fires, health and pest management, agriculture and water resources management and climate change.

Finally the course will deal with the tools and approaches for EcoDRR and CCA. It will discuss the Millennium Ecosystem Assessment and the importance of the ecosystem services (provisioning, regulating, supporting and cultural) and human well being. The integrated ecosystem management, water resources management, coastal zone management, fire management, protected area management and community based ecosystem and disaster risk management. The course will demonstrate the ecosystem based DRR and CCA provide many opportunities for improving the prevention and recovery from disasters while buffering disaster and changing climate.

Reading List

In progress