



## DISASTER RISK ASSESSMENT AND MITIGATION TRAINING

Venue: Norwegian Geotechnical Institute, Oslo, Norway  
September 26-30, 2011

The Global Facility for Disaster Reduction and Recovery (GFDRR) in partnership with the Norwegian Geotechnical Institute (NGI) is offering a Disaster Risk Assessment and Mitigation training for World Bank staff.

### Objective:

The five days training aims at building basic understanding of the most common natural hazards, their occurrence and the risks they pose. It will familiarize participants with methods to assess and analyze risk, and tools to visualize and interpret the assessment results in order to develop appropriate mitigation strategy that can be supported by WB operations.

### Learning Outcomes:

- Familiarity of the role of Disaster Risk Management within the World Bank Group
- Understanding the strategic objectives and business lines of the Global Facility for Disaster Reduction and Recovery (GFDRR)
- Proficiency in the commonly used terminology of risk, vulnerability, capacity, resilience.
- Basic understanding of natural hazards and the effects of climate change.
- Knowledge of the methods used for assessing natural hazard risk
- Ability to interpret risk assessment results and develop mitigation programs and risk management strategies.
- Awareness of the socio-economic context affecting risk management strategies.

### Target Audience:

WB staff from country offices with responsibilities to support the implementation of the WB strategy and operations in disaster risk management.

### Format

The training comprises of lectures, group exercises, discussions and a field trip. It also includes pre- and post training assignments. During the training active involvement of all participants is expected in discussions and exercises to facilitate cross fertilization of good practices and experiences in risk reduction.

Additional background information on the training requirements and on specific arrangements can be found in Annex 1 and 2.

### Contact

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Agenda (Draft)

DISASTER RISK ASSESSMENT AND MITIGATION  
(September 26-30, 2011)

Monday, September 26, 2011	
9:00 am – 9:20 am	<p><b>Opening and Welcome</b></p> <ul style="list-style-type: none"> <li>Norwegian Geotechnical Institute</li> <li>World Bank/GFDRR</li> <li>Norwegian Ministry of Foreign Affairs</li> </ul>
9:20 am – 9:40 am	Participants Introduction and Their Expectations from the Training
9:40 am – 9:45 am	Overview of the First Day Agenda
9:45 am – 11:00 am	<p><b><u>DRM in the Bank</u></b>  <i>Presenter:</i> Mr. Christoph Pusch, Lead Disaster Risk Management Specialist, GFDRR</p> <ul style="list-style-type: none"> <li>Evolving DRM Strategy in the Bank</li> <li>Organizational Aspects of the Bank-wide DRM Work</li> <li>Objectives of DRM Interventions</li> <li>Main Policies and Products</li> </ul> <p><b><u>DRM from Regional Perspective</u></b>  <i>Presenter:</i> Mr. Doekle Geert Wielinga, Regional Coordinator, AFTWR</p> <p><b><u>Bank and GFDRR Response to Emergencies – Case of Pakistan</u></b>  <i>Presenter:</i> Mr. Raja Rehan Arshad, Lead Operations Officer, SASDU,</p> <p>Q&amp;A</p>
11:00 am – 11:15 am	Coffee Break
11:15 am – 12:00 pm	<p><b><u>Introducing GFDRR</u></b>  <i>Presenter:</i> Mr. Prashant, Team Leader, GFDRR</p> <ul style="list-style-type: none"> <li>GFDRR Governance Structure</li> <li>External and Internal Partnerships</li> <li>Strategic Relevance of the Unit</li> <li>Business Lines <ul style="list-style-type: none"> <li>Global and Regional Partnerships</li> <li>Mainstreaming Disaster Risk Reduction</li> <li>Sustainable Recovery Financing Facility</li> </ul> </li> </ul> <p>Q&amp;A</p>
12:00 pm – 1:00 pm	<p><b>Global Programs</b></p> <p><b><u>Open Data for Resilience Initiative (OpenDRI)</u></b> (OpenDRI.org)  <i>Presenter:</i> Mr. Robert John Soden, Open DRR Lead, GFDRR</p> <ul style="list-style-type: none"> <li>An overview: Utilizing risk data for decision support</li> <li>Country Implementations</li> <li>OpenDRI Partnerships</li> </ul>



1:00 pm – 2:00 pm	Lunch
2:00 pm – 2:30 pm	Global Programs (cont): <a href="#">Results Framework</a> <i>Presenter:</i> Mr. Ayaz Parvez, Disaster Risk Management Specialist, GFDRR
2:30 pm – 4:30 pm	Global Programs (cont.) Through Video Conference with Washington DC <ul style="list-style-type: none"> <li>Greetings from Washington DC <i>Presenter:</i> Mr. Saroj Kumar Jha, Manager, GFDRR</li> <li><a href="#">Disaster Risk Financing and Insurance (DRFI)</a> <i>Presenter:</i> Mr. Olivier Mahul, Program Coordinator, WB</li> <li><a href="#">The Role of Improved Weather, Climate and Hydrological Services in DRM</a> <i>Presenter:</i> Mr. Vladimir V. Tsirkunov, Team Leader, GFDRR</li> </ul> <p>Roundtable Discussion What the Bank Could Do More or Different <i>Facilitator:</i> Mr. Saroj Kumar Jha, Program Manager, GFDRR/WB</p>
4:30 pm – 5:30 pm	Presentation of Pre-Workshop Assignments
<b>Tuesday, September 27, 2011</b>	
9:00 am – 09:30 am	<a href="#">Hazard and Risk Terminology</a> <i>Presenter:</i> Dr. Farrokh Nadim, International Center for Geohazards/NGI <ul style="list-style-type: none"> <li>Main terms in hazard and risk assessments</li> <li>Understanding vulnerability</li> <li>Methods in qualitative and quantitative risk assessment.</li> </ul>
09:30 am – 10:45 am	Introduction to Natural Hazards. The following will be covered: <ul style="list-style-type: none"> <li>Types of hazards and their historical impact.</li> <li>Geological and/or climatic background of hazards, their occurrence, impact on society and development,</li> <li>Measures to reduce the risk by types of hazards</li> <li>International statistics on the impact hazards by types in different regions</li> <li>Importance of vulnerability</li> </ul> <p><i>Presenters:</i> <a href="#">Earthquakes</a> (Dr. Amir M. Kaynia, NGI) <a href="#">Volcanic hazards</a> (Dr. Farrokh Nadim, International Center for Geohazards / NGI) <a href="#">Storms</a> (Dr. Rasmus Benestad, Norwegian Meteorological Institute, Oslo) <a href="#">Landslides</a> (Dr. José M. Cepeda, NGI) <a href="#">Tsunamis</a> (Dr. Carl B. Harbitz, International Center for Geohazards / NGI) <a href="#">Floods</a> (Mr. Oeyvind A. Hoeydal, NGI and Dr. Gunilla Kaiser, International Center for Geohazards / NGI) <a href="#">Storm surge</a> (Dr. Gunilla Kaiser, International Center for Geohazards / NGI)</p>
10:45 am – 11:00 am	Coffee Break
11:00 am – 12:30 pm	Introduction to Natural Hazards (cont.)



12:30 pm – 1:30 pm	Lunch
1:30 pm – 2:30 pm 2:30 pm – 3:15 pm	<p>Introduction to Natural Hazards (cont.)</p> <p><a href="#">Economic tools for risk management</a> (Dr. Reza Lahidji, HEC school of management (Paris) and OECD).</p> <ul style="list-style-type: none"> <li>• How risk management is considered in economics</li> <li>• Standard economic tools (e.g. cost-benefit analysis) and their advantages and limitations.</li> </ul>
3:15 pm – 3:30 pm	Coffee Break
3:30 pm – 4:15 pm	<p><a href="#">Climate and Climate Change</a>, Past, Present, and Future <i>Presenter:</i> Dr. Asgeir Sorteberg, University of Bergen, Norway</p> <ul style="list-style-type: none"> <li>• Main elements of the global climate systems</li> <li>• Factors controlling climate at long and short timescales</li> <li>• Evolution of global climate as of today and future outlook</li> <li>• Latest trends in projected weather patterns for the different region</li> </ul>
4:15 pm – 5:00 pm	<p><a href="#">Tools Used in Hazard and Risk Assessment</a> <i>Presenters:</i> Mr. Egil Syre, Dr. Bjoern Vidar Vangelsten, International Center for Geohazards / NGI</p> <ul style="list-style-type: none"> <li>• Data mining for risk assessment</li> <li>• Use of GIS techniques on global, regional and local scales</li> </ul>
5:00 pm – 6:00 pm	Launching of the DRM Mentoring Program
<b>Wednesday, September 28, 2011</b>	
9:00 am – 9:45 am	<p><a href="#">Introduction</a> to Exercise 1 on Storm Surges, Floods and Land Slides</p> <p><a href="#">Exercise 1A on Storm Surges, Floods and Landslides – Local</a> <a href="#">Exercise 1B on Storm Surges, Floods and Landslides – Regional</a></p> <ul style="list-style-type: none"> <li>• Information and data are needed to assess the hazard situation and their sources</li> <li>• The socio-economic, institutional, and cultural aspects of regional/local vulnerability.</li> <li>• Available risk-reduction measures (both physical and non-physical). Use of Cost-benefit analysis to evaluate the different options. Interpretation of result for developing risk management plans.</li> </ul>
9:45 am – 1:00 pm	<p><a href="#">Exercise 1C on Cyclone-regional (National) Scale Group I</a> <a href="#">Exercise 1D on Cyclone-local Scale Group II</a></p> <p><a href="#">Group work</a> <i>Facilitators:</i> Gunilla Kaiser, Oeyvind Hoeydal, Jose Cepeda, Bjoern Kalsnes, Bjorn Vidar Vangelsten, (NGI / International Center for Geohazards)</p>
1:00 pm – 2:00 pm	Lunch





12:30 pm – 1:30 pm	Lunch
1:30 pm – 3:15 pm	Roundtable Discussion <i>Facilitator:</i> Christoph Pusch <ul style="list-style-type: none"> <li>• What did work and what did not during the workshop</li> <li>• How the new knowledge can be utilized in everyday work</li> </ul>
3:15 pm – 3:45 pm	Guidance on post-workshop assignment in developing improved national risk reduction and mitigation strategy
3:45 pm – 4:00 pm	Coffee Break
4:00 pm – 4:45 pm	Review and Evaluation
4:45 pm – 5:00 pm	Closing and Certificates

### Annex 1

The training requires pre and post training activities to be completed. Below is the preliminary information about these activities. More detailed information will be provided to you on the first week of September.

#### Pre-Training Tasks

Prior to the training, all participants need to prepare short reports from their own country (or region) and bring these to the training. The reports should be in a form which can be posted in the lecture room, e.g. a poster or a printed Powerpoint presentation (max. 5 slides). The reports should include for the selected country or region:

- A hazard and risk profile. (template to be provided)
- A risk assessment (to the extent available)
- A risk management strategy (to the extent available)
- The GFDRR country strategy (if exists)

The materials will be used during the training

#### Post-Training Tasks

Within 4 weeks after the training, participants should submit a risk management strategy for the selected country/region based on the newly acquired knowledge. This strategy should be linked to the GFDRR country program and will be presented and discussed during videoconference sessions organized in November, 2011.