The MICRODIS Project

Conference/Meeting Title:
Place and Date:
Presentation by:

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Presentation Outline

- Why MICRODIS?
- What is MICRODIS?
- Event and Regional Focus
- Objectives
- Thematic Group Information
- Guidelines
- Outputs
- Timeframe
- Partners
In the past two decades, more than 200 million people have been affected, on average, every year by extreme events.

- Disaster losses are increasing with great consequence to the survival, dignity and livelihoods of individuals and communities, particularly of the poor in developed and less developed countries.

- Disaster risk arises when hazards interact with physical, social, economic and environmental vulnerabilities.

- International acknowledgement that efforts to reduce disaster risks must be systematically integrated into policies, plans and programmes for sustainable development and poverty reduction.

The MICRODIS Project locates itself within this above framework.
What is MICRODIS?

A multidisciplinary consortium dedicated to a common goal

MICRODIS focuses on the micro level of disasters.

Health, Social and Economic impacts have been recognized as the key thematic areas in understanding extreme events and their relation to human populations.
In both Asia and Europe, three types of extreme events account for nearly 75% of the occurrence of all extreme events.

- Floods
- Earthquakes
- Windstorms

These three types of events will be the focus of the MICRODIS Project.
Regional Focus

The two regions which form the focus of the proposed work are:

- European Union, associated countries and new accession states
- South and Southeast Asia regions
Overall Goal of MICRODIS

To strengthen preparedness, mitigation and prevention strategies in order to reduce the health, social and economic impacts of extreme events on communities.
Broad Objectives

• Improve human resources and coping capacity in Asia and Europe through training and knowledge sharing

• Develop and integrate knowledge, concepts, methods, tools and databases towards a common global approach

• Strengthen the scientific and empirical foundation of the relationship between extreme events and their health, social and economic impacts
**Areas of Focus**

**SOCIAL**
- Cultural conditions
- Gender issues
- Relocated communities
- Socio-political structures
- Power relationships
- Psycho-social
- Traditional practices

**HEALTH**
- Health care systems
- Health and epidemiology
- Physical injuries
- Mental health
- Displacement-related disease

**ECONOMIC**
- Risk-reduction and management planning
- Micro-insurance and investment
- Cost and benefit assessments
- Damage and loss calculations
- Understanding real costs
- Incentives
- Population displacement

**INTEGRATION**
Develop strategies and methodologies to integrate aspects of each thematic group to appropriately assess and determine a more comprehensive definition and reality of vulnerabilities and the links between extreme events and sustainable development.
Conceptual Design

MICRODIS CONCEPTUAL DESIGN

Hazard/Disaster

Prevention  Mitigation  Preparedness

Community coping ability

Integrated Vulnerability to Extreme Events

Disaster Data & Characteristics  Evidence Base On Impacts  Methods & tools to assess impacts  Conceptual integrated models of impacts

Health Impacts  Social Impacts  Economic Impacts

Development of conceptual models (WP1)

Development of Assessment Protocols (WP2)

Field assessments (WP3)

Review of models & protocol calibration (WP4)

Integrated health, social & economic Impacts
## Thematic Tasks

**Example for Work Period 1 (18 months) – Development of Conceptual Models**

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>SOCIAL</th>
<th>ECONOMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic workshop on health impacts of natural disasters</td>
<td>Thematic workshop report on the social impacts of natural disasters</td>
<td>Thematic workshop report on the economic impacts of natural disasters</td>
</tr>
<tr>
<td>Annotated bibliography and review of prevalence of, and risk-factors for, mortality, injuries, trauma and diseases following extreme events</td>
<td>Analysis of psycho-social impacts, gender issues and community vulnerability and resilience</td>
<td>Literature Review of economic impacts related to extreme events (e.g. households, welfare, migration, health)</td>
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<tr>
<td>Report on industrial development in disaster prone areas</td>
<td>Preliminary conceptual model of social components that describe extreme event impact</td>
<td>Desk study on application of the impact pathway approach to valuation in different economic settings</td>
</tr>
<tr>
<td>Preliminary conceptual model of health components that describe extreme event impact</td>
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<td>Review of economic valuation of non-market goods</td>
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</tbody>
</table>

### INTEGRATION

**Workshop report on integration of thematic conceptual models**
Guidelines

• **Step 1** – Develop conceptual models – in this case in three thematic areas – and then integrate them into an interdisciplinary one

• **Step 2** – Develop prototype assessment methods (referred to as protocols until they are validated with field evidence) in the three thematic areas and then integrating them across themes

• **Step 3** – Test the prototype assessment protocol in multiple sites and generating comparable datasets on disaster impacts

• **Step 4** – Revise the conceptual models and calibrating the field assessment protocols in light of the field evidence

• **Step 5** – Create a database of survey datasets and improving global macro data for broader research use

• **Step 6** – Offer training opportunities and ensuring dissemination and awareness of the project’s outputs to the global research community
 Outputs

→ An evidence-base on impacts, field methodologies and tools for data compilation

→ Impact models for each thematic group

→ Integrated vulnerability assessments

The MICRODIS Project will also strengthen standardized data collection of extreme events and their impacts at local, regional and global levels.
Project Activities and Deliverables

- A project website
- A searchable survey database
- Peer-reviewed journal articles
- Policy briefings
- Meetings with EU officials
- Annual project workshops
- Participation in external conferences and seminars
- Press conferences
- An Asia-EU conference on Health, Social and Economic Impact of Extreme Events
- The publication of a technical series at end of the project
<table>
<thead>
<tr>
<th>Partner Name</th>
<th>Partner Country</th>
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<tbody>
<tr>
<td>Université catholique de Louvain</td>
<td>Belgium</td>
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<tr>
<td>University of Greenwich</td>
<td>United Kingdom</td>
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<td>University of Northumbria</td>
<td>United Kingdom</td>
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<td>Jadavpur University</td>
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<td>University of Delhi</td>
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<td>Hanoi School of Public Health</td>
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<td>University of Indonesia</td>
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<td>Xavier University</td>
<td>Philippines</td>
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<tr>
<td>United Nations Office for the Coordination of Humanitarian Affairs</td>
<td>U.S.A</td>
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<td>EVAPLAN - University of Heidelberg</td>
<td>Germany</td>
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<td>Sweco Groner</td>
<td>Norway</td>
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<td>Voluntary Health Association India</td>
<td>India</td>
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<td>Citizens' Disaster Response Center</td>
<td>Philippines</td>
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<td>HealthNet International</td>
<td>Netherlands</td>
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<td>Ferurbat</td>
<td>France</td>
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**Timeframe**

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<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>End</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Phase 1</td>
<td>Feb. 1, 2007</td>
<td>Jul. 30, 2008</td>
<td>18 months</td>
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<tr>
<td>Work Package Tasks</td>
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<tr>
<td>- Conceptual Model Development</td>
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<td>- Assessment Methods and Field Protocol</td>
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<tr>
<td>- Kickoff (Brussels) and Annual Meetings (Delhi)</td>
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<td>- Disaster Management</td>
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<td>- Promotion, Training and Dissemination</td>
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<td>Phase 2</td>
<td>Aug. 1, 2008</td>
<td>Jan. 31, 2010</td>
<td>18 months</td>
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<td>Work Package Tasks</td>
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<tr>
<td>- Empirical Surveys to Assess Impacts</td>
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<td>- Concepts and Calibration</td>
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<td>- Annual and Integration Meetings</td>
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Thank You for Your Attention!

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