MICRODIS Annual Meeting Report

February 17-19, 2008

University of Delhi, India

Prepared by:

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Executive Summary

The MICRODIS partners met in Delhi, India to discuss progress from the first reporting period and to plan for the following year. Each thematic group (Health, Social and Economic) held meetings on Day 0 to discuss their achievements and challenges over the first year. These meetings facilitated discussions about the following year, where site selection and empirical work will commence.

During Day 1 of the Annual Meeting, after introductions of and presentations by respected delegates from national and EU bodies, each thematic group leader presented the progress of their thematic group over the first reporting period. This included achievements, challenges, draft conceptual models, literature reviews and the first workshop session held in the past year. The Health and Social working group presented conceptual models that were advanced while the Economic working group presented its pilot study work and draft questionnaire. The Integration working group also presented the outputs of their meetings and collaborations with the other thematic groups in the past year.

Following this session the focus shifted to methodology. Presentations were given on the pilot studies done in India by the Economic working group, examples of the Participatory Rapid Appraisal methodology and defining/measuring effects. These methodologies were analyzed by the consortium in a healthy discussion about the aims and objectives of the MICRODIS project.

On Day 2, each country team gave presentations on their suggested sites for the MICRODIS surveys. These presentations included contextual backgrounds, disaster profiles, negative and positive aspects of the site, and the application of the site to the goals of the MICRODIS project (including specifically the three thematic areas). These suggestions were then discussed within the thematic working groups, where the output was a selection of 2-3 sites per country from each thematic group. These initial choices will be circulated to partners and the final say will be left to the country teams to make.

To conclude, a presentation on the next 18 months of the project was given by Prof. Guha-Sapir, project Director. The composition of the country teams and the timeline was outlined. Many questions were addressed and the fundamental structure and goals of the project were reemphasized. Following this was a presentation the deliverables due in the next 18 months and an explanation of what tangible results are expected by each. These were drawn from the implementation plan in the draft periodic activity report. The Annual meeting was both productive and successful. Communication was fluent and positive, as many decisions and plans were made for the next year of the project by each partner, thematic group and the entire consortium. Following the meeting was a steering committee meeting where more details were discussed with relation to finance, changes to the consortium, personnel and other important issues.

This was no doubt a fantastic start to the second year of the MICRODIS project, which could not have been accomplished without the hard work and dedication of each partner in the consortium.
## List of Participants

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Session 1 - Introductory ceremonies

Co-Chairs: Prof. S.K. Tandon, University of Delhi and Prof. Debarati Guha-Sapir, Universite catholique de Louvain/CRED

Introductory speeches by:
- Prof. PC Joshi as host coordinator and Asian coordinator
- Prof. Guha-Sapir as MICRODIS coordinator
- Prof. Santosh Kumar, National Institute of Disaster Management
  - Prof. Kumar presents NIDM
- EU delegation (Dr. Robert Donkers, First Counsellor, Environment)
  - Presents EU responses to natural/man-made disasters
- Dr. Alexandre Borde as European coordinator
- Prof. S.K. Tandon, Pro-Vice Chancellor, University of Delhi
  - Issues of climate change, information sharing between disciplines,

Roundtable introductions of Project Partners and their teams

Session 2 – Thematic Group Presentations

Chair – Dr. Michel Marx, EVAP

Social Working Group
Presented by SWG Leader – Dr. Maureen Fordham, UoN

- slow start but rapid progress during the last part of the year
- variables of interest developed before kickoff meeting by UoD and then revised based on that by the other group members
- worked on conceptual framework and the literature review
  - will be around 200 pages already
- working on research questions, have discussed a lot in their main meeting, will work on Friday
- many methodological issues, multi-method (community based, PRA, etc) and integrated methods which will work for all thematic areas (the SHE model)
- networking and creating partnerships (such as UK Envt), promotional material
- gathered social intervention tools to widen resource base
- unofficial website to locate materials for sharing
- presented variables of interest at different scales, and specific variables
- presented the pressure and release model and the revised social conceptual model
- Tim Wind, HNI, gives presentation on example of the impacts of mental health

Discussions
- Debby mentions the similarities in the health group, uses the meso but calls it the “community level” as the term, and as soon as the terms get together there will be more similarities
- Stale points out that the economic group can use the conceptual model too, can present things as separate… as in presenting a social view of the economic data, etc.
- JU – asks about the qualitative aspects, Maureen explains there is not a huge distinction between qualitative and quantitative, but more detailed modelling needs to take place to look into qualitative.
- Tim explains and gives examples about quantifying qualitative data.
M. Marx – question on literature review, should the groups be making it more concise or expansive? Maureen answers they have two to satisfy both expansive and concise. One annotated bibliography (200 p) and one paper (35 p).

Maqo – the psycho-social model can be a good bridge between social and health groups

Debby – questions of what is a normal psychological response. There are ways of calculating this, as research has been done on what ‘normal’ responses are vs. prolonged psychological disorders/symptoms.

Health Working Group
Presented by HWG Leader Dr. Valerie Louis

- literature review in progress
- chemicals and floods report by FIOH
- conceptual model completed but in need of revisions
- looking at methods and field protocols – have 2 teams: health care service assessments using health methodological draft, and a draft of household questionnaire team
- policy paper on integrated impacts after the tsunami and published paper by VHAI plus their field studies; HSPH contributed to lit review and conceptual framework and organized the health working group meeting – contribute sites and methodology and have been doing 2 pilot studies in the Mekong delta at the community health centres; EVAP – lit review, methodologies, workshop to brainstorm methodologies, communication between the groups and with PhD students; UoI led the Jakarta flood study focusing on leptospirosis and dengue fever during/after floods, seminar on study’s preliminary results, study prepared in east java near the Mt. Kelud volcano. UCL also involved in all UoI studies, and EVAP participated in the Jakarta study.
- Presentation of the conceptual model by Dr. Nhu with the PAR model, the health impact assessment, and the specific health conceptual model outside the PAR model

Discussion
- Terry suggests respiratory diseases caused by fungal spores, and food contamination
- Debby talks about setting a time span to measure impacts. Maureen adds it depends on the site and when the disaster happened, Ivan adds the minimum for mental health is one month but there is no maximum.

Tim continues his presentation on mental health example for the social working group

- Model of qualitative which can be quantitatively studied
- Relations to the health and economic working group
- Questions about indicators and cross-cultural application

Lunch

Economic Working Group
Presented by EWG Leader Alexandre Borde

- literature review completed but still evolving
- questionnaire has been developed and tested, and now extensive revisions are taking place
- pilot studies that JU has done in Orissa and West Bengal are presented
- SWECO has worked on the conceptual model paper
- Another paper is also included

Discussion
- Q: Why have sites been piloted when site selection has not been done yet?
- A: To test the questionnaire that has been developed by the EWG and the methodologies discussed, as a learning tool for the economic group for the revision of its previous work

Integration Working Group
Presented by IWG Leader Terry Cannon

- looked at integration issues between the groups and the different methodologies and approaches
- integration group members were at other thematic group meetings to explore integration ideas
- presentation of model from individual groups to integrated analysis
integration matrix presented
discussed levels of information collection, and the SHE model

Alok – discusses reducing the distance between theory and action
- states the importance of capturing local and community knowledge and not being top-down, community must be in the centre of things
- wants to include the area of the environment, politics of disasters
- incorporating the government in the process and other organizations in dialogues
- importance of engaging the EU in the discussions and going beyond the deliverables

Debby – our research involves peoples’ lives, we are/must be aware of this and what the outcomes may be
- environment – we have identified the areas in which we will work, we centre our work around acute climate events but we have to put limits to what can be done in three years
- politics of disasters is very interesting, we can look into it but it’s not implicitly or explicitly included in the project
- involving and mobilizing politicians is important but only when we have results
- deliverables are formulated in a way that they are easy to be fulfilled
- knowledge dimension at different levels – making it available for the scientific community as well as the community level, we will need to have a solid contribution to the knowledge basis

Session 3 – Methodologies
Chair: Dr. Maureen Fordham

Stale Navrud – presentation about quantitative methods for economics
- easy to collect data on things with market prices
- what about the impacts on health and public health? How can we measure this through economic studies?
  - loss in productivity
  - how people behave in the market
  - look at jobs and the risk of dying in these jobs, what is the amount in increased wages (hedonic wage risk studies)
  - value of preventing a premature death
  - willingness to pay – then you can deduce it to the risks and values of life (example of the motorcycle helmets)
  - replacement cost method
  - land purchase, higher land is more expensive, so we can deduce the willingness to pay – how much are you willing to pay for your safety and risk?
  - Willingness to pay also transfers as willingness to work or contributing land or produce (choice modelling)

Discussion
- Revati points out economic capabilities determining the ability to pay for risks, this must be factored in.
  Stale responds that these are considered in the economic analysis.

Debesh Chakraborty – presentation on the pilot study done by JU
- Propensity to score method
- Draft questionnaire
- Levels accessed for information: households, government officials, insurance companies perception by civil society, Observations of the field workers
- explain the project and what they are going to do
- preliminary visits
- picked dates
- organization of the focus groups
- used manual notes and audio recording
- pre-testing of the questionnaire
- revisions of the questionnaire based on the preliminary findings
Discussion
- Chona, XU, asks for clarification that the focus group led to the revision of the questionnaire, not to specifically collect qualitative information. Yes, confirmed Stale, however, it can still provide a lot of qualitative data.
- HSPH – how are the households chosen? Sometimes people have migrated and they aren’t the ones affected by the disaster. A: Random sampling for the test. The actual survey would be stratified.

Ivan Komproe – presents definitions of effects
- Looking at the relationships between causes and effects
- Context variables – availability of resources and mitigation impacts the effects of the context on the individual (through the black box of factors)

Clarification discussions

Terry Cannon – presents the Participatory Rapid Appraisal (PRA) Methodology
- outline of the way the surveys will be conducted
- looking at quantitative data
- sometimes it can be distorted – sometimes people lie, sometimes people react in different ways depending on who asks the questions or who is funding the surveys
- using both qualitative and quantitative can help verify the data on both sides
- looking at the value of qualitative work (ie do you have access to a latrine, yes… but perhaps they don’t use it)
- both types of methods are useful and compliment each other
- responses in a group may be different than with individuals, must understand the incentive you give you information

Discussion
- PC – a questionnaire is the outcome of this work, we need a specific guideline to know what methodologies to use, but the specific questions should be developed by the people are there.

Participatory Process
Presented by Maureen Fordham
- using local civil society groups, but be careful of who you align yourself with
- use the local populations, in all their diversity
- entry into the fieldwork is facilitated by all types of people, they indicate what they feel is their level of risk, or what risks they face

- people aren’t just affected but they also show tremendous level of capacities within the community
- benefit from community organizations
- sometimes there are risks of the jobs people hold and the power status of community meeting members (ie. The mayor, police, etc.)
- community mapping
- one challenge is extracting data and then leaving the community with nothing
- we need to disseminate knowledge of risk and vulnerabilities through the project
- using a holistic approach is good, using both qualitative and quantitative to compliment each other, multi-method
- key informant interviews
- transect walk
- resource mapping
- focus groups
Discussion

- Maureen and Terry clarify what a transect walk is.
- Patrick adds the importance of mapping in the process.
- Alex asks if triangulation can be used in Europe and Asia, and looks at the region or urban/rural differences based on the methodologies collected. Terry states that these triangulation methods can be used everywhere and are not limited to one or another. Maureen says it adds value to data that may already be available even. Stale suggests citizen juries and this is discussed.

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**DAY 2 – MICRODIS ANNUAL MEETING**  
**FEBRUARY 19th, 2008**

**MEETING MINUTES**

*Introduction and start of Country Study Discussions*

*Chair: Dr. Sharon Linog, Xavier University*

The general outline is given for this session. Each country group will present their sites, followed by 5 minutes to ask questions of clarification. Each presenter will advise what main two sites they recommend specifically. Afterwards there will be a general discussion. Then the thematic groups will separate and decide what sites are interesting to them. They will then rank them based on discussions and make comments. This ranking for each group will be given to Laura (UCL). Then a short list will be created and posted on the website and disseminated. There will be until the end of March for comments and suggestions but we ask that no changes will be made after this for respect of the country teams and preparation (this will be sent in reminder emails to all partners). In the end the country’s principle investigator and their local team will have the final say on the sites based on this short list and thematic group comments.

*Survey Site Presentations*

For summary tables of each presentation please refer to Appendix 1

**India** – Prof PC Joshi presents UoD sites
- Kachalla Tehsil (Uttar Pradesh), Uri Tehsil (Jammu and Kashmir), Jagatsinghpur (Orissa), Kutch (Gujarat)
  - links with VHAI on the Kashmir site

- VHAI - Saulina presents Tamil Nadu – social impacts
  - Cudallore, Nagapattinam and Chennai, Kanyakumari; Jagatsinghpur and Kendrapar in Orissa, Shishir presents

- JU – Ivy Das Gupta
  - West Bengal and Orissa (pilot studies have been done by EWG)

*Discussion*

- Supriya mentions many different issues about cultural analysis and vulnerability.
- Revati mentions that the Gujarat site has changed the policies in India and also there are languages advantages, health – 60% of Kutch health care centres were shut down – Kutch sees itself as a separate state so there are interesting social and health aspects there with regards to access. High levels of injuries, lifelong pensions, awareness is there.

**Philippines** – XU presents Surigao del Norte (CARAGA Region, Mindanao) and Southern Leyte (VISAYAS Region 8)
- CDRC presents Daraga, Albay (Region V) and Butuan City, Agusan del Norte (CARAGA Region XIII)

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Indonesia – Maqo presents (2 for side projects and 2 for main microdis studies)
- Jakarta, East Java
- Yogyakarta (earthquake), Nias and West Sumatera (earthquake)
- 2 annex studies (Mt. Kelud volcano and Jakarta flood study)

Discussion
- bureaucracy is mentioned as normal and not necessarily a negative aspect,
- access to records are a difficult thing for health care centres
- why present the Kelud as an annex? Because volcano is not a project focused disaster.

Break

Vietnam – Nhu recommends #2 (Thua Thien Hue – urban site) and #3 (Quang Nam)
- floods happen often after the typhoon, sometimes hard to separate
- proposes to select one district within the provinces suggested, look the highest risk or affected district when selecting this district
- all sites have a good political environment

UK - Maureen presents
- Site 2 (South Yorkshire) and Site 3 (Gloucestershire) are the top two recommended
- Site 1 (Yorkshire and Hull) is ranked 3rd,
- People have refused flood defence because of environmental and aesthetical reasons

Discussion
- what is the situation now? People are still in temp homes and also some have returned.
- Big differences in access to insurance. Those who have paid complain that they get no help from the government when those without insurance get some help from the government. Maureen has a meeting with the environmental agency, Stale says that the environmental agency often funds economic assessments so we should try to coordinate where there are also studies being funded.
- Not all floods were river floods. Major flooding happens often in the winter months, but some of these have happened in the summer which is rare. Local areas don’t have the funds to do research so there is not a lot known.
- Revati asks about the structures of the homes, are there wooden houses? Maureen says structural damage is not that large and most houses are not wooden.
- Social impacts – how social networks deal with floods and how different groups deal with floods. Also psychosocial affects and the health impacts of flooding.
- Insurance – since 1961 flood insurance would be rolled into house structural insurance in the UK. But those who don’t have this insurance are those who need it the most. Social homes not necessarily buying insurance for homes but just for household items.

France – Patrick Pigeon, UPS
- Armon (Gard), Sommieres (Gard) and Durban-Corbieres (Aude)
- general information about France and the thematic areas
- extra price to insure for floods for households and cars
- partnerships F. Vinnet in PACA

Discussion
- Patrick will look at the connections between the landslides/snowslides in Europe also, will give one pager to the coordination team. Discussions about not comparing the European sites with the Asian contexts (ie, looking at number of deaths). We will compare what we can but also have to be true to the interesting research questions for each country or area.
- Stale mentions that the across European sites can connect for comparisons specifically. Also that landslides will be a side area to the floods anyways, as they are relevant.
PC emphasizes that storms would be good to study in Europe so that we can compare these in Asia, so that there can be something to compare. Even if floods are the most important, other disasters are important if they are involved in the Asian studies, to support the disaster research and idea of comparisons.

Maureen and Patrick admit that windstorms are not a big problem on a global scale and the floods are the major problems.

Debby says it would be good to draw on the MICRODIS results for other studies.

Maqo says it would be good for all country teams to do a main MICRODIS study and also an annex study on something else that is relevant to the project.

Terry suggests climate change as an important aspect for other annexes.

Stale says it’s not our job to look at the link between climate change and events, but more to look at the impacts that others can use to find that link if needed.

**Italy** – Patrick presents
- Assisi (Umbria), Nocera Umbra (Umbria) and Salo (Lombardia)
- colleagues in Italy (we need and we have links)
- lots of older buildings, therefore susceptible to more damages

**Discussion**
- Alex, issues related to displaced people and the government had problems dealing with these people living in temporary shelters
  - insurance systems are very different
  - many decide not to buy insurance
  - the damage costs for buildings is the cost of repairing them – but there is also another cost that isn’t measured because of the historical aspect of the building
- debate because to change the building would be to damage the historical authenticity/nature of it, but then not to would mean leaving it more susceptible to disasters (stale mentions the estimates of the originality aspect of economic assessments of buildings)
- cultural economists in Italy who do this
- Debby mentions it’s important to have the earthquake sites

**Lunch Break**

**Thematic groups meet and decide the rankings for site selection**
*(to be disseminated by the end of March)*

**Presentation by Dr. Guha-Sapir on the fundamentals of the project in the second year**
*Chair: Dr. Ståle Navrud, Sweco Groner*

- outline of basic timeline and how country teams are formed
- country team discussions will produce who is the principle investigator for each specific survey site (this person will be the survey coordinator who will attend the training)
- each country team uses the big box of methodologies
- country teams consist of 6-7 people
- max 1-2 international, which are requested by the country team based on their needs for that survey in their particular group (where they are weaker, what skills they lack, etc)
- question about budgets – who pays for the outside people? A: always the home institution who pays. If you travel, you pay. Reserved budget for third country travel.
- Bernadette will work with the country teams about budgets to have international people be part of their survey team
- Main goal is to keep travel costs at minimum – 1 international travel and 2 domestic travels
- Resubmit a budget for 2008 to account for this
- Must apply for the budget for 2008 and justify why you want the money
- When are these proposals due? Soon but dates will be sent out when finalized.
- Asia can have national experts contribute
All who are in addition to the country team are in a supportive role
Technical and specialist support counted under the additional technical support in the diagram of what a
country team consists of
  o This support can be requested to the coordinator and we will identify the appropriate person for the
    needs defined by that country team
data analysis – can be on your own in the country or each team can ask for help
data exchange – SPS, SDATA – need inputs and support (standardization), perhaps decided upon at the
  training workshop for survey coordinators
will bring data sets to next annual meeting then set up a joint analysis plan, if not earlier
pre-coding can be done for many questionnaires for the thematic groups
must look at data needs and the practical issues of the thematic groups
devote time for a proposition
Terry suggests the integration group be involved in each survey
This can be done as an overseas consultant, they are not needed at each survey site
Maureen suggests integration group is included in their Social Working Group meeting on Friday

Break

Presentation on the Deliverables and Description of work for the next 18 months by Ms. Laura
Irvine, UCL

  • each workpackage is discussed one-by-one, with all deliverables due in the next 18 months by each
    partner
  • codes and titles for the deliverables and workpackage tables are clarified
  • the allotment of person-months for each workpackage is not specifically devoted to the leader of that
    workpackage, but it is the total number of person-months for all partners involved in that workpackage
  • Further breakdowns of how many person-months are allotted to each partner can be found in the more
detaled description of work in the implementation plan for the next 18 months
  • The workpackage leader is responsible for monitoring, advising and contributing to the work done in
    the workpackage. Then are the ones responsible for either reporting or sending the final outputs to the
    coordinator. This is important in reporting, as each workpackage leader must submit all the
    contributions by each partner involved in the workpackage. Each partner DOES NOT submit this work
    separately.
  • This applies also to deliverables if there are more than one partner who has person-months in that
    workpackage which are needed to contribute to the deliverable
  • Mention of the revision and modification meetings
  • Clarification that each person meeting for the Asian group will be those who have worked in Asian
    surveys

Project Steering Committee Meeting
  • Agenda and Minutes of this meeting can be found in Appendix 2
Appendix 1

Survey Site Summary Tables
### MICRODIS Proposed Survey Site Summary Tables

**February 19, 2008 – Delhi, India**

<table>
<thead>
<tr>
<th>Country</th>
<th>Potential Site</th>
<th>Contextual background</th>
<th>Disaster Profile</th>
<th>Positive Aspects</th>
<th>Negative Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>Kachalla Tehsil in Badaun District of Uttar Pradesh.</td>
<td>Badaun is located 197 km (122 miles) east of Delhi in a well-watered, almost level section of the upper Gangetic Plain. Badaun was founded about AD 900 and developed around a fort, now in ruins.</td>
<td>Site is ravaged by floods every year. Major cause of floods is heavy rainfall and release of water from dams.</td>
<td>Easily accessible from Delhi. Villages are to an extent connected with the city. City is not very expensive.</td>
<td>Not only to the site, but the accessibility to the people also diminishes. This comes as a temporal limitation in data collection.</td>
</tr>
<tr>
<td>India</td>
<td>Uri Tehsil of Baramulla district of Jammu and Kashmir</td>
<td>the northernmost state of Indian subcontinent. Baramulla District is the largest District in entire valley both with reference to the population and area.</td>
<td>A devastating earthquake occurred in the western Himalayas in the morning of 8 October 2005 at about 09.20 hrs IST. There has been a record of few earthquakes in the area.</td>
<td>It will provide an opportunity to integrate the data with other research agencies working on the site, since lot many are engaged in such studies.</td>
<td>There is persistent problem of insurgency in the area.</td>
</tr>
<tr>
<td>India</td>
<td>Jagatsinghpur District in Orissa.</td>
<td>Jagatsinghpur district is an administrative district of Orissa, India. Covering an area of 1668 sq km, has a dense population of 10,58,894.</td>
<td>Jagatsinghpur is prone to disasters like earthquakes, tornadoes, flood, cyclones, and epidemics. Being a coastal area, especially prone to cyclones and flood. Worst hit district in 1999 cyclone.</td>
<td>Site is disaster prone, several work has been done by national and international NGOs like WHO, UNDP, UNICEF, UNESCO, CMP, TRC in corroboration with government agencies.</td>
<td>Being a coastal district area is severely affected, making many of the areas inaccessible.</td>
</tr>
<tr>
<td>India</td>
<td>Kutch District of Gujarat</td>
<td>Kutch is also the largest district in Gujarat. Highly tectonically active.</td>
<td>Major earthquakes: Jan, 1819, Kutch July, 1956, Anjar March, 23, 1970, Borouch January, 26, 2001, Bhuj</td>
<td>Site is multi-disaster prone and can provide good data on integrated impact of disaster.</td>
<td>Hot climatic conditions in the area can decreases the work potential especially during summer season.</td>
</tr>
</tbody>
</table>

UoD
<table>
<thead>
<tr>
<th>Country</th>
<th>Potential Site</th>
<th>Contextual background</th>
<th>Disaster Profile</th>
<th>Positive Aspects</th>
<th>Negative Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>West Bengal :</td>
<td>Surrounded by Assam,</td>
<td>• Over 4.7 million</td>
<td>• Easy accessible;</td>
<td>• Monsoon season</td>
</tr>
<tr>
<td></td>
<td>(Medinipur &amp;</td>
<td>Sikkim, Bhutan, Orissa,</td>
<td>people were</td>
<td>• Cost of survey is</td>
<td>from Mid of June to</td>
</tr>
<tr>
<td></td>
<td>Murshidabad</td>
<td>Jharkhand, Bihar, Nepal,</td>
<td>affected by</td>
<td>reasonable; • Equally</td>
<td>the end of</td>
</tr>
<tr>
<td></td>
<td>Districts)</td>
<td>Bangladesh and Bay of</td>
<td>flood; 38</td>
<td>vocal female</td>
<td>September; • Panchayat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bengal</td>
<td>people died in West</td>
<td>respondents; • Literacy</td>
<td>election to be held in</td>
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<td>Medinipur; 6</td>
<td>rate high enough</td>
<td>May 2008.</td>
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<td>human deaths in</td>
<td>(69.22%, 2001 Census)</td>
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<td>Murshidabad; 15000</td>
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<td></td>
<td>people were affected</td>
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<td>by cyclone</td>
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<td>In North 24 Pargana</td>
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<td>1 person died;</td>
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<td>Crops across 7,500</td>
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<td>hectares</td>
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<td>destroyed in the</td>
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<td>coastal areas.</td>
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<td>India</td>
<td>Orissa:</td>
<td>Surrounded by West Bengal,</td>
<td>• 500,000 people</td>
<td>• Easy accessible</td>
<td>Monsoon season</td>
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<td></td>
<td>(Balasore and</td>
<td>Jharkhand, Chattisgarh,</td>
<td>and 415 villages</td>
<td>• Cost of survey is</td>
<td>stays from Mid of</td>
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<td></td>
<td>Kendrapara</td>
<td>Andhra Pradesh and Bay of</td>
<td>were affected by</td>
<td>not very high; •</td>
<td>June to the end of</td>
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<td></td>
<td>Districts)</td>
<td>Bengal</td>
<td>floods in Balasore</td>
<td>Political situation</td>
<td>September.</td>
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<td>district; 611</td>
<td>is more or less stable.</td>
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<td>families in</td>
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<td>Kendrapara</td>
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<td>district and 50</td>
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<td>meters of sea</td>
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<td>Paradeep port</td>
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<td>was washed</td>
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<td>away; 15 million</td>
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<td>affected and</td>
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<td>10,000 deaths</td>
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<td>were reported</td>
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<td>in the five</td>
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<td>districts in</td>
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<td>Orissa in</td>
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<td>1999 super</td>
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<td></td>
<td>cyclone.</td>
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<tr>
<td>India</td>
<td>Jagatsinghpur</td>
<td>Total Area: 1668 Sq. Km.</td>
<td>• On last 100 years the</td>
<td>• Well connected by road</td>
<td>Different vernacular/</td>
</tr>
<tr>
<td></td>
<td>and Kendrapar districts</td>
<td>No. of House Hold: 2,21,783</td>
<td>state has been disaster</td>
<td>and very close to port</td>
<td>Local language “Oriya”.</td>
</tr>
<tr>
<td></td>
<td>in Orissa</td>
<td>Total Population: 10,57,629</td>
<td>affected by 90 years.</td>
<td>town Paradeep</td>
<td>• Road conditions are</td>
</tr>
<tr>
<td></td>
<td>Jagatsinghpur</td>
<td>Total Male: 5,38,881</td>
<td>• Floods 49 Years, Cyclone</td>
<td>• Many literatures on</td>
<td>not good in the rural</td>
</tr>
<tr>
<td></td>
<td>District, Orissa</td>
<td>Total Female: 5,18,748</td>
<td>hit 11 Years and Drought for 30</td>
<td>disaster issues and</td>
<td>villages.</td>
</tr>
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<td>Sex Ratio: 962</td>
<td>years.</td>
<td>community resilience are</td>
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<td></td>
<td>Jagatsinghpur</td>
<td></td>
<td>• Flood: Between 1834 and</td>
<td>available on the area</td>
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</tr>
<tr>
<td></td>
<td>District, Orissa</td>
<td></td>
<td>1926 the state experienced</td>
<td>• Disaster mitigation task</td>
<td></td>
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<td></td>
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<td>flood in 4 years. After 1926 it</td>
<td>forces are formed in each</td>
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<td></td>
<td>rose to once in two years and</td>
<td>panchayat by OSDMA,</td>
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<td></td>
<td>since 2001 almost every year.</td>
<td>UNDP and VHAI</td>
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<td></td>
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<td></td>
<td>• Every year about five to six</td>
<td>• Strong presence of VHAI</td>
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<td></td>
<td>tropical cyclones form in Bay</td>
<td>in both the districts and</td>
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<tr>
<td>Kendrapara District, Orissa</td>
<td>Literacy Rate</td>
<td>79.08%</td>
<td></td>
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<tr>
<td>Total Area</td>
<td>2644 Sq. Km.</td>
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<tr>
<td>No. of House Hold</td>
<td>2,71,475</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total Population</td>
<td>13,02,005</td>
<td></td>
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</tr>
<tr>
<td>Total Male</td>
<td>6,46,438</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total Female</td>
<td>6,55,567</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Sex Ratio</td>
<td>1014</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Literacy Rate</td>
<td>76.81%</td>
<td></td>
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</tr>
</tbody>
</table>

- Super Cyclone 1999 has affected both the districts severely.

| Cudallore, Nagappattinam and Chennai Kanyakumari | Tsunami | Population affected 196,184 |
|-------------------------------------------|---------------------------------|
| Total Area (sq. Km) | 2715.83 |
| Population – Total | 1,488,839 |
| Male | 739,074 |
| Female | 749,765 |
| Sex Ratio | 1014 |
| 0 – 6 Population | 183,346 |
| Male | 93,396 |
| Female | 89,950 |
| Sex Ratio | 963 |
| SC Population | 441,231 |
| Male | 219,933 |
| Female | 221,298 |
| SC Sex Ratio | 1006 |

- Population affected
- Houses/ huts damaged 39,941
- No. of Human Lives Lost 6,065
- No. injured 1,922
- Total Village habitation Affected 73

- Most affected in Tsunami and later floods
- All aspects of MICRODIS – is dealt in these areas – Physical, Social and Health impact
- A religious tourist place of three religions
- Many resources and people / organizations were involved in relief and reconstruction.

- Too many areas affected and still not fully recovered
- Social exclusion and vulnerable present more
- Health department is often in short of staff
- Death toll ratio of women to men 3 : 2
### France

<table>
<thead>
<tr>
<th>Country</th>
<th>Potential Site</th>
<th>Contextual background</th>
<th>Disaster Profile</th>
<th>Positive Aspects</th>
<th>Negative Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Aramon (Gard)</td>
<td>September 2002 floods, 5 dead. Lower Rhône river valley, Gardon river valley.</td>
<td>Flash floods and floods related with dike breaking</td>
<td>One of the major recent disasters in France. Information already available.</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>Sommières (Gard)</td>
<td>September 2002 floods. Vidourle river.</td>
<td>Flash floods.</td>
<td></td>
<td>The University of Montpellier has already worked on this site, which is urban.</td>
</tr>
<tr>
<td>France</td>
<td>Durban-Corbières (Aude)</td>
<td>1999 major floods. Economic losses in a rural area, in relation with new village equipment in flood-prone area. Agricultural losses (vineyards).</td>
<td>Flash floods.</td>
<td></td>
<td>F. Vinet has valuable information on this site, and close links with municipality, as well with supra-municipal institutions. Problematic linked with agricultural occupation of flood-prone areas.</td>
</tr>
</tbody>
</table>

### Italy

<table>
<thead>
<tr>
<th>Country</th>
<th>Potential Site</th>
<th>Contextual background</th>
<th>Disaster Profile</th>
<th>Positive Aspects</th>
<th>Negative Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>Assisi, Umbria</td>
<td>Umbria 1997 &amp; 1998 earthquakes.</td>
<td>Disasters related with earthquakes. Urban site, with a major historical centre.</td>
<td>Though rather old, these events represent the most recent major disasters related with earthquakes in Italy. Publications on these events available.</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>Nocera Umbra, Umbria</td>
<td>Umbria 1997 &amp; 1998 earthquakes.</td>
<td>Disasters related with earthquakes. Rural site, with numerous historical buildings.</td>
<td>Though rather old, these events represent the most recent major disasters related with earthquakes in Italy. Publications on these events available.</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>Salo, Lombardia</td>
<td>24 November 2004 earthquake. 200 public buildings damaged, 300 churches …</td>
<td>Urban site, once again with strong discrepancies of damages according to settlement types.</td>
<td>Politecnico di Milano published studies concerning this event (Menoni et al, 2007).</td>
<td></td>
</tr>
</tbody>
</table>
## United Kingdom

<table>
<thead>
<tr>
<th>Country</th>
<th>Potential Site</th>
<th>Contextual background</th>
<th>Disaster Profile</th>
<th>Positive Aspects</th>
<th>Negative Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>General</td>
<td>Highly developed</td>
<td>Prone to flooding – main risk – but also storm (high damage costs). Small earthquake risk but causes very few damages</td>
<td>All UK flood sites are easily accessible</td>
<td>There are no negative aspects to the UK sites generally</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Socially diverse</td>
<td>Floods:</td>
<td>A contribution of £20,000 (£26,700) from the Environment Agency is linked to a study of these floods</td>
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<tr>
<td></td>
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<td></td>
<td>The average annual damage cost of flooding in England and Wales is £1billion per year</td>
<td>None of the sites represent exceptional (European) costs for carrying out the research</td>
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<td></td>
<td>There are more than two million homes currently at risk from coastal or inland flooding in the UK</td>
<td>The Environment Agency will provide support other than financial</td>
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<td></td>
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<td>There are plans to build three million new homes by 2020 - including a significant number on known floodplains</td>
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<td>Likely climate change impacts mean the level of flood risk in the UK is set to increase</td>
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<td></td>
<td></td>
<td></td>
<td>Floods:</td>
<td></td>
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</tr>
<tr>
<td>UK</td>
<td>Yorkshire and Hull</td>
<td>Urban and rural</td>
<td>Much of the area is low-lying and vulnerable to flooding.</td>
<td>This site represents one where much of the cause was from surface water flooding. It has theoretical interest because of that as there is less research on this hazard</td>
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<tr>
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<td>Social diversity</td>
<td>Almost 15,500 properties were affected in the Humber area, including an estimated 2,336 social housing. There were also a significant number – over 3,000 – of uninsured properties.</td>
<td>Mixed social group but particularly lower social class interest</td>
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<td>About 400 households required alternative accommodation for up to a week – over 200 households will need alternative accommodation for &gt;six months.</td>
<td>There is possibility of collaboration with another group from Lancaster University</td>
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<td>The estimated cost of damage to regional roads stands at £28 million plus further costs associated with damage to bridges (£4–5 million) and street lighting (£500,000).</td>
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<td>More than 90 schools were damaged and over 650 businesses were affected, disrupting food supplies and other aspects of daily life for many residents.</td>
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</tr>
<tr>
<td>UK</td>
<td>South Yorkshire</td>
<td>Highly urbanised</td>
<td>Two people died – unusual in UK floods</td>
<td>Less familiarity with flooding and therefore less well prepared, putting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>and industrialized</td>
<td>Floods described as &quot;the greatest natural disaster Sheffield has ever had to deal with&quot;</td>
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<td></td>
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<td>Lower social class,</td>
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</tbody>
</table>


| UK | Gloucestershire | Largely rural. More middle class and better resourced represented | Over 6,000 properties affected by the floods. Roads and transport links were affected. The M5 flooded and left 10,000 vehicles and their occupants stranded on the motorway. Over 30 schools were damaged. There were problems with warning systems. Mythe water treatment works was flooded and had to be shut down. This left 350,000 people without drinking water for up to 17 days – the largest loss of essential services since the Second World War. Electricity supplies were also threatened, and shut down, leaving over 40,000 people without electricity. Rough estimates suggest about 1 per cent of the road infrastructure was damaged, with a potential cost in the order of £20–30 million. This gives us a different social profile and risk landscape. More people with resources. Historic environment where people have refused flood defences. Organized groups against flood risks. |

| | impoverished, particularly represented | Approximately 6,000 homes and businesses flooded. The cost of damage to local infrastructure is estimated at £10m and the clean-up would cost £2m. Ulley Reservoir risk of collapse could have led to a catastrophic failure and put lives, property and other infrastructure assets at risk. Loss of power to 40,000 people. Significant damage to the local highway infrastructure. Several bridges were washed away. Rotherham train station was closed for almost a month. In Doncaster, shelter was provided for flood victims in 50 caravans which may be needed for up to 18 months. |

| | people at greater risk | Some flooding caused by overtopping of defences – also of theoretical interest. The indirect economic impacts are significant here. |

| | None |
### Philippines

<table>
<thead>
<tr>
<th>Country</th>
<th>Potential Site</th>
<th>Contextual background</th>
<th>Disaster Profile</th>
<th>Positive Aspects</th>
<th>Negative Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines</td>
<td>General</td>
<td>Located in Mindanao and Visayas relatively not so developed areas in the country. Belong to the top three provinces most prone to hydrologic hazard</td>
<td>Yearly the country experiences 20 tropical cyclones a year, half of these are destructive, including other weather hazards such as thunderstorms, heavy rainfall, southeast and northwest monsoons, cold-fronts; it is a host of 300 volcanoes, 22 of which aren active, together with active faults and trenches they are potential sources of earthquakes</td>
<td>Greater awareness of the government (planning bodies and government and NGOS)</td>
<td>Needs more capability building and resource from within and outside</td>
</tr>
<tr>
<td>Philippines</td>
<td>Carragaq Region MINDANAO</td>
<td>Situated in the CARAGA region in Mindanao. The northernmost of the Mindanao provinces; an important transportation route linking Visayas and Mindanao islands. Has 20 municipalities and 1 city. Capital city: Surigao</td>
<td>8 of the 10 worst typhoons of Mindanao (1947-2002) made landfall in Surigao del Norte and its outlying islands. Typhoon Nitang (Ike) – Aug 31-Sept 4 1984, highest wind speed recorded 220kph. NDCC declared Surigao City “a total devastation”. as described in TIME Magazine (2nd issue September 1984). Total deaths 1,363 -3,000, Damage in Billions Php 4.1. Typhoon Puring (Nell) – Dec 25-28 1993, highest wind speed recorded 150 kph. Total death – 45, Damage in Billions Php 0.152. Typhoon Nanang – Nov 6-9 2001.</td>
<td>Being in the typhoon belt this area can provide data on policies at the LGU level and public sector climate, and community-based efforts for disaster preparedness, mitigation and prevention. Frequency of disaster in the province. An area to test methods for integrated analysis on impacts. Location – 5-6 hours travel to Surigao City. 95% of the population speak Surigaonon – major influence of Cebuano and Boholano languages; can be easily understood (survey instrument). Cost effective. No present study done on disasters in this area.</td>
<td>Strong and highly influential religious groups – political and religious conflict</td>
</tr>
</tbody>
</table>
Philippines VISAYAS/Region 8

- An important part of the inter-island transportation system of the country, with ferries transporting people and goods between Liloan and Durigao del Norte in Mindanao
- St. Bernard, So Leyte
- High risk area prone to seismicities, earthquakes, heavy rains, flooding and landslides
- Natural hazard zone
- Continuous rains in the areas of Southern Leyte to Northern Mindanao
- Earthquake with a magnitude of 2.4 was felt at the time of the landslide
- Affected population: 34,850 families or 18,862 persons
- Casualties: 154 dead (57 identified; 82 unidentified and 15 fragmented bodies)
- Data-rich in experience of natural disasters
- Is an out-migration area – may be of interest particularly for social and economic impacts

<table>
<thead>
<tr>
<th>Country</th>
<th>Potential Site</th>
<th>Contextual background</th>
<th>Disaster Profile</th>
<th>Positive Aspects</th>
<th>Negative Aspects</th>
</tr>
</thead>
</table>
| Philippines | Daraga, Albay (Region V) | - Located in the SW portion of Albay Province
- Landlocked by other towns
- 10 hours by land from Manila
- Lies at the foot of Mayon Volcano
- Population: 101,031 people (20,082 hh)
- 1st class town: Ave. annual income of 1.2M USD (841t EUR)
- Main industry: agriculture, handicraft | 2004 Typhoon Muifa, Tropical Storm Merbok, Tropical Depression Winnie, and Super Typhoon Nanmadol all occurred within a space of two weeks, bringing torrential rains, deadly flashfloods and landslides.
2005 Typhoon Damrey flooded 30 villages, making Albay the hardest-hit province.
2006 Typhoon Durian created mudslides of volcanic ash and boulders off Mayon Volcano, making Albay the most damaged province. Villages were buried.
- 518 dead; 648 missing, 1,423 injured in Albay
- Affected: 114,805 fam. (669,895 persons)
- Evacuees: 6,194 fam. (30,318 persons)
- 68,617 houses destroyed | - Accessible by land and air; 24-hr transpo
- Strong presence of RC; rich baseline data
- Strong POs
- Functional DPCs
- Good relations with LGUs
- Resiliency to disasters
- Advance experience: indigenous warning systems, disaster resilient crops
- Can speak both Filipino and English
- Open to strangers | - Entry/exit point of almost all typhoons
- Receptacle of Mt. Mayon debris |
<table>
<thead>
<tr>
<th>Location</th>
<th>Damage and Events</th>
<th>Additional Information</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines, Butuan City,</td>
<td>8.6M USD (5.9M EUR) agri. products destroyed</td>
<td>Accessible by air, land and sea</td>
<td>Volatile peace and order situation</td>
</tr>
<tr>
<td>Agusan del Norte (CARAGA</td>
<td>512M USD (352M EUR) poultry/livestock destroyed</td>
<td>Presence of RC; available baseline data</td>
<td></td>
</tr>
<tr>
<td>Region XIII)</td>
<td>6.3M USD (4.3M EUR) infra. destroyed</td>
<td>Strong presence of POs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 other major typhoons: Tropical Storm Chanchu, Typhoon Xangsane, and Typhoon Utor</td>
<td>Basic understanding of Filipino and English</td>
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<tr>
<td></td>
<td>2007 Typhoons Hagibis and Mitag affected 69,465 families. Both typhoons caused flashfloods and landslides</td>
<td>Relatively high literacy and numeracy rate</td>
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<td></td>
<td>2007</td>
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<td></td>
<td>Urban center: in the middle of the Agusan River Delta</td>
<td>Urban center: in the middle of the Agusan River Delta</td>
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<td></td>
<td>Constantly flooded every time the water level rises</td>
<td>Constantly flooded every time the water level rises</td>
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<td></td>
<td>Runoff water from forests and watersheds cause flashfloods</td>
<td>Runoff water from forests and watersheds cause flashfloods</td>
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<tr>
<td></td>
<td>2003</td>
<td>Runoff water from forests and watersheds cause flashfloods</td>
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<td></td>
<td>Weeklong of heavy rains submerged 215 villages in the region and affected 24,000 families (101,000 persons)</td>
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<td></td>
<td>2006</td>
<td>2006 Monsoon rains affected 62,954 families in the region</td>
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<td>Monsoon rains affected 62,954 families in the region</td>
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<td></td>
<td>13,000 families forced to evacuate</td>
<td>13,000 families forced to evacuate</td>
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<td></td>
<td>Butuan City was the most affected area</td>
<td>Butuan City was the most affected area</td>
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<td></td>
<td>1,400 families were forced to evacuate</td>
<td>1,400 families were forced to evacuate</td>
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<td>2007</td>
<td>2007 Heavy rains inundated schools and town centers with floodwaters; reaching half of the ground floor of school buildings</td>
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<td></td>
<td>Heavy rains inundated schools and town centers with floodwaters; reaching half of the ground floor of school buildings</td>
<td>5,424 families (29,832 persons) were affected in the region</td>
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<td>1,000 families in Butuan City were evacuated</td>
<td>1,000 families in Butuan City were evacuated</td>
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<tr>
<td>Country</td>
<td>Potential Site</td>
<td>Contextual background</td>
<td>Disaster Profile</td>
</tr>
<tr>
<td>---------</td>
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<td>-----------------------</td>
<td>------------------</td>
</tr>
</tbody>
</table>
| Vietnam | Nghe An (HSPH) | - Poor province, 300KM from Hanoi.  
- Transportation: car, train and plane | Floods 2007 | - Policy support from the Ministry of health and local authorise  
- HSPH’s MPH alumni can be mobilized | - Language of minority groups may be a barrier  
- Transportation to the remote areas may be another barrier |
| Vietnam | Thua Thien Hue (HSPH) | - Famous tourist city of Vietnam, 600KM from Ha Noi  
- 126 KM coastal line  
- Poor province but developing  
- Easy to come to the central of the city  
- Affected by flood every year | Floods 2007 | - Policy support from the Ministry of health and local authorise  
- Hue University will be an active partner  
- HSPH’s MPH alumni can be mobilized  
- International airport  
- Integration study is possible as there are various positive aspects | - Language of minority groups may be a barrier  
- Transportation to the remote areas may be another barrier |
| Vietnam | Quang Nam (HSPH) | - Poor province, 1,100KM from Ha Noi  
- Affected by flood every year  
- Easy to come to the city by international and domestic flight, train, car | Floods 2007 | - Policy support from the Ministry of health and local authorise  
- Study on flood disaster management conducted in the province  
- HSPH’s MPH alumni can be mobilized | - Language of minority groups may be a barrier  
- Transportation to the remote areas may be another barrier |
| Vietnam | Quang Ngai (HSPH) | - Poor province, 1,300 KM from Ha Noi  
- Affected by floods every year | Floods 2007 | - Policy support from the Ministry of health and local authorise  
- Secondary Medical School will be a good partner for conducting the research  
- HSPH’s MPH alumni can be mobilized | - Language of minority groups may be a barrier  
- Transportation to the remote areas may be another barrier  
- Far from Ha Noi (1,300KM) |
<table>
<thead>
<tr>
<th>Country</th>
<th>Potential Site</th>
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<th>Disaster Profile</th>
<th>Positive Aspects</th>
<th>Negative Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>Jakarta (UoI)</td>
<td>Jakarta is the Indonesian capital, 40% of Jakarta is located under the sea level. Jakarta is flood-prone due to poor city drainage, water retention areas and heavy rainfall. Regular urban flood in 2002, 2003, 2004, 2006, 2007. Major, most severe flood in 2002 and 2007.</td>
<td>Affected 38 out of the 43 sub-sub districts. 300,000 people were displaced. Water level reached 4 meters in some areas. Electricity and telephone lines were down in some parts of the city, as well as the supply of clean water. Most severe vs. less (e.g. Sub-district South Jakarta vs. North Jakarta).</td>
<td>Experience is already obtained based on previous facility based Jakarta flood study. Good networks and cooperation with relevant institution had been developed. Representative region for urban flood. No transportation barrier.</td>
<td>Uneasy access to hospitals. Problems of interview time.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>East Java (UoI)</td>
<td>Floods (several districts recently affected). Other disaster: landslide and windstorm (small scale). Volcanic activities – Mt. Kelud – Mt. Semeru.</td>
<td>FLOODS DEC 26, 2007- JAN 10, 2008. 13 district affected: e.g. Bojonegoro, Malang, Gresik, Madiun, Ponorogo, Ngawi, Jombang, Sreagen, and Sukahardjo. Worst floods in the last 22 years. 1-3 m height. 112 deaths. &gt;60 000 IDPs.</td>
<td>Preliminary assessment and preparation have been conducted. In general, cooperative response from the local authority. Many option of disaster type and site. Representative region for rural flood.</td>
<td>Large area, some are quite remote. Transportation to the remote areas may be a barrier and give cost and time consequences. Acute condition quite short time of displacement, and quickly recovered. Problem recalling of retrospective event or condition if the study is not started earlier.</td>
</tr>
<tr>
<td>Country</td>
<td>Region (UoI)</td>
<td>Details</td>
<td>Impact</td>
<td>Community Type</td>
<td>Recovery</td>
</tr>
<tr>
<td>---------</td>
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<td>----------</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Nias (UoI)</td>
<td>A tectonic 8.7 richter earthquake attacked Nias Island and its area on March 28, 2005 and followed with small scale earthquakes. The episentrum was 30 km below the sea, between Simeuleu and Nias Island (2,093 LU, 97,016 BT)</td>
<td>633 people killed, 3488 injured, and 50 people reported missing 25-30% physic infrastructure was collapse or destroyed 4 main community health centers and two sub community health center was severely damaged</td>
<td>Isolated community → slower recovery? Network had been developed Cooperative community</td>
<td>Occurred 3 years ago (2005) Difficulty with language problem</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Yogyakarta (UoI)</td>
<td>A powerful earthquake measuring 6.3 on the Richter scale struck Indonesia’s Yogyakarta and Central Java provinces on the island of Java on May 27 at 5:53 AM local time (Friday, May 26 at 22:53 UTC) 2006</td>
<td>Around 6,000 people lost their lives, about 50,000 were injured, and more than 200,000 were displaced. Between 60 and 80 percent of the buildings in the affected area were damaged; this includes government buildings, schools, hospitals and railway stations.</td>
<td>high impacts &amp; slow recovery ♦ not easy to be forgotten ♦ reducing recall bias Cooperative community</td>
<td>Difficulty with language problem</td>
</tr>
<tr>
<td>Indonesia</td>
<td>West Sumatera (UoI)</td>
<td>On March 6, 2007, a 6.3 magnitude earthquake hit West Sumatera Province at 10.49 am local time. September 2007, The 6.4-magnitude earthquake follows an 8.4-magnitude quake off of Sumatra that was followed by a series of aftershocks that ranged in intensity from 4.9 to 7.8. West sumatra and Bengkulu Province were affected</td>
<td>Out of a total of 11 districts that were affected, the 4 districts that were most affected were: Solok, Tanah Datar, Padang Pariman and Agam</td>
<td>The earthquake is recent (less than 1 year) with high impacts ♦ not easy to be forgotten ♦ reducing recall bias Cooperative community</td>
<td>Difficulty with language problem Far scattered affected area</td>
</tr>
</tbody>
</table>
Appendix 2

MICRODIS

STEERING COMMITTEE MEETING
Steering Committee Meeting
February 19th, 2008

Agenda

Chair: Project Director Prof. Debarati Guha-Sapir, UCL

1. Changes and amendments to the MICRODIS project during the first year
2. Comments on the technical report
3. Approval of the MICRODIS scientific poster
4. Evaluation of the project
5. Website
6. Conference attended by each partners in order to advertise MICRODIS project – Promotion by Scientific Paper
7. Personnel for MICRODIS
8. Audits
9. Balance between person-months and outputs
10. Clarify status of each institution (AC, FC, FCF)
11. Reporting

Participants

Debarati Guha-Sapir, UCL
Laura Irvine, UCL
Bernadette Dubus, UCL
PC Joshi, UoD
Patrick Pigeon, UPS
Alexandre Borde, UPS
Ståle Navrud, SWECO
Valerie Louis, EVAP
Sharon Linog, XU

Lou Escandor, CDRC
Maureen Fordham, UoN
Mondastri Korib Sudaryo, UoI
Ha Van Nhu, HSPH
Debesh Chakraborty, JU
Shishir R. Dash, VHAI
Ivan Komproe, HNI
Terry Cannon, UoG
1. Changes and amendments to the MICRODIS project during the first year
   - Table of changes presented, also reference page 67 in the draft Periodic Report
   - SWECO – discrepancy between person-months and budget, this should be changed

2. Comments on the technical report
   - Comments on the report should be in to Laura by the end of February

3. Approval of the MICRODIS scientific poster
   - Issues with gender/sex placement
   - Poster to be sent to all thematic group leaders the following Monday
   - Feedback on the poster will be given to Laura by the end of February
   - This poster will be present at the Launch on Thursday

4. Evaluation of the project
   - FP6 Reviewer document that UCL will be circulated to partners the following week
   - Review done based on deliverables met

5. Website
   - Apologies for the delays, a new prototype is being created by UCL
   - Explanation of technical problems and transfer of website operation
   - Suggestions are welcome

6. Conference attended by each partners in order to advertise MICRODIS project – Promotion by Scientific Paper
   - Template for scientific papers will be disseminated the following week

7. Personnel for MICRODIS
   - Each institution with a full time equivalent dedicated to the project
   - Each person working for the project must have a contract with the institution
   - Statement from UoI is fine
   - This also applies to PhD students
   - UPS cannot comment on this as Guy is not present
   - Consultancies can only be allowed through the signed and approved permission of the institution

8. Audits
   - Each institution will be audited locally and also by either the Commission or UCL
   - Audits must be done by independent firms
   - Cash payments – absolutely no large cash payments, all cash payments made will be to people who have contracts with the institution and terms of reference
   - Sub-contracting – must have an open call, in three journals, offers, etc. This is for firms and not for survey staff or training students (unless an agency is used to
find these), if it’s not stated that you will have subcontractors, you will have to go through the process of getting subcontractors (ask coordinator)

- expenses that don’t meet international standards will be deducted from the next year’s budget

9. Balance between person-months and outputs
   - Evaluators check person-months and the outputs
   - Document as much as possible to show the outputs of your person-months (papers, research, mission reports, etc.)

10. Clarify status of each institution (AC, FC, FCF)
    - Each institution was informed what they are and exactly what that status means
    - See cost model on the following page

11. Reporting
    - Progress was relatively painless and punctual for the Activities report, needs much improvement on the financial reporting
    - Economic working group was speedy with their workpackages and very detailed with their documentation which was annexed in their reports (JU, UPS, SWECO)
    - University of Delhi and University of Indonesia did a good job on the financial report
    - Workpackage leaders are responsible for collecting and monitoring work done in their workpackage, then reporting or submitting it to the coordinator
<table>
<thead>
<tr>
<th><strong>COST MODELS</strong></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td><strong>Definition</strong></td>
<td><strong>Who?</strong></td>
<td><strong>Maximum Reimbursement</strong></td>
<td><strong>Partners</strong></td>
</tr>
<tr>
<td><strong>Full Cost with Actual Indirect Costs (FC)</strong></td>
<td>All eligible direct and indirect cost are charged by the contractors</td>
<td>All legal entities but not physical person</td>
<td>50% 100%</td>
<td>FIOH, Sweco</td>
</tr>
<tr>
<td><strong>Full Cost with Indirect Flat Rate Costs (FCF)</strong></td>
<td>All eligible DIRECT costs and a flate rate for indirect costs are charged. The flate rate is 20% of all direct eligible cost minus the cost of sub-contracts</td>
<td>SME Non-commercial organisation Non-profit organisation</td>
<td>50% 100%</td>
<td>UPS, EVAP</td>
</tr>
<tr>
<td><strong>Additional Costs with Indirect Flat Rate Costs (AC)</strong></td>
<td>All eligible direct additional costs and a flate rate for indirect costs are charged. The flate rate is 20% of all direct additional costs minus the cost of sub-contract</td>
<td>Non-commercial or non-profit organisations established either under public law or private law and international organisations which do no have an accounting system that allows the share of their direct and indirect costs relating to the project to be distinguished</td>
<td>100% 100%</td>
<td>UCL, UoG*, UoN, JU, UoD, HSPH, UoI, XU, ISDR, VHAI, CDRC, HNI</td>
</tr>
</tbody>
</table>

* Flate rate : 16%
Appendix 3

MICRODIS

Social Working Group Meeting Minutes
Minutes of the Social Impact Group Meeting on 17th February

Members: UoN, UoD, XU, CDRC and HealthNetTPO

Agenda for Discussion

1) Sharing of the contributions of individual members of social impact group
2) Review of the progress made by the social impact group as against the deliverables

Agenda 1: Sharing of the contribution of individual members of social impact group

University of Northumbria (UoN), Newcastle: A consolidated literature review of 151 pages has been circulated by the University of Northumbria – in which all social group members have contributed. Inventory of Social Intervention tools has also been circulated. Further a preliminary conceptual model and research questions have also been circulated based on the contributions of other team members and the meeting held in September 2007 hosted in UoN. Links with relevant institutions such as Environment Agency in UK have also been made.

University of Delhi: University of Delhi has made two field visits to possible sites to identify which variables should be selected for social impacts assessment. They have also contributed to the literature review and building of preliminary conceptual model through paper on the social impact assessment issues in extreme events. Links with relevant ministries and National Disaster Management Authority have been made.

Xavier University, Philippines: They have contributed to the literature review and building of the preliminary conceptual model – through a paper on experience of Philippines and its ethical and right based institutions. Another paper looked into aspects that need to be considered in the building of conceptual framework.

CDRC: They are also looking into sites for MICRODIS studies and linking with different institutions for the same. On that basis they are prioritizing areas and sites for research. They have also contributed to the literature review and building of the conceptual model – and have contributed a paper reflecting on CDRC experience on the importance of building organizational capacity of vulnerable sectors.

VHAI: They have contributed to the literature review and building of the preliminary conceptual model – through a paper on community based social impact assessments and have sent summary of impact issues in Tamil Nadu, Jammu and Kashmir and Orissa. They have developed links with Orissa State Mitigation Authority. They discussed the Orissa as well as Tamil Nadu sites and suggested that social exclusion is a big issue in Tamil Nadu.
HealthNetTPO: They have contributed to the literature review on psychological issues in disasters and the conceptual model – by sharing a paper on the impact of natural disasters on mental health. They have also written a chapter on quantitative research methodology.

2) Review of the Progress made by the Social impact group against the deliverables

Objectives of WP1.2: Development of Conceptual model – Social Impact

- Inventory of social intervention tools and experiences after extreme events:
- Establishment of thematic contact group of persons exterior to the Consortium but involved in social impacts of extreme events
- Literature review of scientific studies on social impacts and on the nature and type of social data available (e.g. gender, age, ethnicity, etc.)
- Preparation and implementation of social impact thematic workshop session

Progress to date:

The above objectives have been delivered – inputs on the same given by all social impact group partners – the details of which are in the following matrix.

Inventory of social intervention tools and experiences (an excel file of more than 80 pages is developed).

Consolidated literature review so far (151 pages with 56,000 words)

Social group impact partners have contributed to the ideas for development of conceptual framework. UoD has researched on understanding of the economic and social fabric of disaster affected communities, and issues of governance, leadership and accountability. XU has researched on ethical and rights based approaches to disaster policies as they relate to relief, recovery and rehabilitation and CDRC on use of complex theories in understanding disasters.

Draft conceptual framework document (35 pages) – an extract from which has been presented to the larger social impact group for discussion. The dependent variables of interests – vulnerability reduction and resilience building have been conceptualized by developing a ‘social impact’ model against the larger backdrop of Pressure and Release Model as a point of macro reference.
<table>
<thead>
<tr>
<th>Institutions</th>
<th>Work package</th>
<th>Deliverable</th>
<th>Start month</th>
<th>End month</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>UoN</td>
<td>WP 1.2</td>
<td>Development of conceptual model – social impacts</td>
<td>3</td>
<td>15</td>
<td>Preliminary conceptual model is ready, presented within the social impact group – based on contributions of all members.</td>
</tr>
<tr>
<td>UoN</td>
<td>WP 1</td>
<td>Technical thematic workshop session conclusions on social impacts of natural disasters (D1.2.1)</td>
<td>6</td>
<td></td>
<td>Session held in sept 2007 and its output fed into the conceptual model and the research process</td>
</tr>
<tr>
<td>UoN</td>
<td>WP1</td>
<td>Analyses of psychosocial impacts, gender issues and community vulnerability and resilience (D1.2.2)</td>
<td>9</td>
<td></td>
<td>A comprehensive literature review of 151 pages covering these as well as other variables identified by the Sept workshop session were reviewed and analyzed.</td>
</tr>
<tr>
<td></td>
<td>WP1</td>
<td>Preliminary conceptual model of social components that describe extreme event impact (D1.2.3)</td>
<td>15</td>
<td></td>
<td>A preliminary conceptual model based on the literature review has been prepared (35 pages) and its main extract circulated to the social impact group based on contribution of all members</td>
</tr>
</tbody>
</table>

**Achievements in terms of Milestones:**
M1.2.1 - Workshop session on social impacts (Month 2): completed
M1.2.2- Selection of issues for analyses of social impacts and relevant legislation and policies (Month 6): Done, and detailing continues
M1.2.3 - Identification of components of conceptual model on the social impacts of extreme events (Month 12): Done and detailing continues

**WP2.2: Development of Assessment protocols social impacts**

**Objectives**

- Identify contextual information required for social impact analyses
- Review existing social assessment protocols
- Identify variables and indicators for social impact measurement
- Review coding, error check and other social data validation issues
Progress till date:
The variables of interest have been identified and three already existing social assessment methodologies have been tested in sites in India – with the preliminary variables of interest identified by the social impact group. The current methods have not been able to produce satisfactory results. Detailing of the social impact assessment protocol is currently on within the social impact group and will be finalised in discussion with the other thematic and integration group. The details are as follows:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Work package</th>
<th>Deliverable</th>
<th>Start month</th>
<th>End month</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>UoD</td>
<td>WP 2.2</td>
<td>Development of assessment protocol</td>
<td>7</td>
<td>15</td>
<td>Available methods field tested and development of assessment protocol in progress</td>
</tr>
<tr>
<td>D2.2.1</td>
<td>Field protocol for social impact assessment</td>
<td>15</td>
<td></td>
<td></td>
<td>Available Assessment methods have been field tested and were found to be inadequate to study the variables of interest to microdis. Current discussions are on within the social impact team to detail out the field protocol.</td>
</tr>
</tbody>
</table>

Milestones:
M2.2.1: Identification of social assessment methodologies to be analyzed (Month 7): completed
M2.2.2: Selection of assessment methodologies and tools (Month 12): currently in progress.

WP 2.5: Development of survey site selection methodology

Objectives:
- Identify user-needs through consultation with EU and other policy institutions
- Determine priority disasters and their impact potential in a region using EMDIAT data
- Determine survey sites, sampling design, and cluster selection
- Redefine tasks, timings, field arrangements, clearance approvals, recruitments
- Establish data entry procedures and standardization guidelines

**Progress till date:**

The social impact group has made an input into this broader process – which is being coordinated by CDRC and UCL.

The UoD, UoN, XU, VHAI is supporting the development of the survey design and relevant sampling by discussion on methodologies from social perspective – which will inform the larger integrated assessment protocol.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Work Package</th>
<th>Deliverable</th>
<th>Start month</th>
<th>End month</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDRC</td>
<td>WP2.5</td>
<td>Site selection, sampling and survey methodology (D2.5.1)</td>
<td>7</td>
<td>16</td>
<td>Site selection framework has been prepared.</td>
</tr>
<tr>
<td>CDRC</td>
<td>WP2.5</td>
<td>Contextual reports on survey sites (D2.5.2)</td>
<td>14</td>
<td></td>
<td>Sites are being finalized – in discussion with other MICRODIS partners after which the reports will be created.</td>
</tr>
</tbody>
</table>

**WP 6.2: user needs, civil society awareness and policy promotion**

**Objectives:**

User Identification and relevant promotion strategies
Identification and study of policy needs and decision making
Training and awareness for community and civil society groups
Lecture series

**Progress so far:**

This task is being coordinated by CDRC.

To this end, linkages have been made with grassroots communities – particularly by groups who have a grassroots presence – VHAI, XU and CDRC. Efforts have been made to promote awareness of risks – by discussions with the community on notions of ‘risks’ through focus group discussions with women and men in different disaster affected areas – example, Tsunami in Tamil Nadu. CDRC and VHAI given their base in the communities are building organization capacity of vulnerable sectors through for eg, formation of grassroot disaster response organizations of vulnerable sectors and groups. XU has held trainings a report of which has been disseminated.
Linkages are also made with policymaking institutions in all the countries – and to engage with larger civil society, project website has now been created; and MICRODIS information flyer developed. CDRC also held a national meeting with different stakeholders in Philippines to share about the MICRODIS project. Other national level partnerships include those with the government of Orissa, India; UK flood research centre, and UNDP in Sri Lanka. UoD along with other partners in India are launching the MICRODIS sharing of objectives to the civil society on 21st February.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Work package</th>
<th>Deliverable</th>
<th>Start month</th>
<th>End month</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDRC</td>
<td>WP6</td>
<td>Creation of project website (D6.2.1)</td>
<td>2</td>
<td></td>
<td>The website has been created now by XU</td>
</tr>
<tr>
<td>CDRC</td>
<td>WP6</td>
<td>Standard power point MICRODIS presentation package (D6.2.2)</td>
<td>6</td>
<td>Done</td>
<td></td>
</tr>
<tr>
<td>CDRC</td>
<td>WP6</td>
<td>MICRODIS Information flyer (D6.2.3)</td>
<td>2</td>
<td>Information flyers disseminated</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4

MICRODIS

Economic Working Group Meeting Minutes
Participants: Alexandre Borde (Chairman), Sabari Bandyopadhyay, Debesh Chakraborty, Ståle Navrud, Biswajit Chatterjee, Ivy Das Gupta, Debabrata Mitra, Sayanti Sen,

The participants met before the MICRODIS Annual Meeting, on Sunday 17 February 2008, to i) review the work programmed and undertaken since the EWG meeting in Kolkata in November 2007, ii) prepare the MICRODIS Annual Meeting, especially with regards to the questionnaire for the field surveys and the pretesting of two Indian sites, and iii) criteria for sites selection.

Alexandre Borde open the session by summarizing the activities completed since November 2007. He indicated that all the deliverables planed for the first year of the project had been submitted in time with respect to the project agenda. The deliverables are the:

a. Economic conceptual model (the impact pathway approach) – lead: SWECO
b. Review of economic valuation of non marketed goods – lead: SWECO – (this deliverable has been be merged with the previous one, as the issues raised in both documents are similar)
c. Assessment protocols – lead: JU
d. Literature review – lead: UPS

Back in Kolkata (November 2007), the EWG decided to focus on the following inputs to contribute to the MICRODIS Annual Meeting. These inputs were prepared by the different partners of the EWG and final discussion took place during the session to agree on the approach the group should have. The EWG prepared the following inputs:

a. Economic part of the field survey questionnaire – all the EWG partners
b. Pretesting of two potential Indian sites
c. Identification of criteria for the sites selection that took place during the Annual Meeting (using among others the vulnerability index developed by JU)

Sabari Bandyopadhyay presented the draft questionnaire divided in two parts, one for the households’ survey and other for the additional information (secondary data collection and perceptions by stakeholders). The questionnaire was discussed in length by the participants, with in-depth comments by Stale Navrud, especially for the households’
questionnaire, and by Alexandre Borde, for the additional information (secondary data collection and perceptions by stakeholders).

Professor Debesh Chakraborty presented the methodology adopted for pre-testing the Questionnaire during Annual Meeting.

Ivy Das Gupta presented during the Annual Meeting the sites chosen for India that allowed undertaking a pretesting, the first in West Bengal (floods and cyclones prone area), the second in Orissa (floods prone area).

Sayanti Sen, Debabrata Mitra and Ivy Das Gupta summarized their experience in the field using the questionnaire. They did focus groups in the two sites (separated men and women focus groups) and tested the questionnaire with a few households (15).

The questionnaire was presented during the closed group meeting by Sabari Bandyopadhyay and the two sites proposed for India was West Bengal and Orissa.

Sites Selection of the EWG (February 19, 2008)

**United Kingdom**
- Yorkshire and Hull: Both rural and urban issues
- Any of the two other sites: Depending on the existence of studies on economic valuation

**France**
- Durban Corbières: Interest in the socioeconomic impacts related to the presence of vineyards (agricultural losses); rural area
- Aramon: Urban area, significant health related impacts

**Italy**
- Salo: Recent event (2004 earthquake); potential comparability with Asian similar case studies
- Assisi: Cultural heritage site: significant social, economic and health impacts; comparability with other sites having cultural heritage interest

**Philippines**
- Southern Leyte: Interesting migration issues
- Daraga, Albay: Strong profile in terms of ND

**Indonesia**
- East Java: Recent flood (January 2008); Interest in undertaking a survey in the coming weeks/months to measure the short term economic, social and health impacts
- Jakarta: Typical urban flooding
- Jojakarta: Earthquake, comparability with other sites (eg Salo, Italy)

Vietnam
- Thua Thiem Hue: Costal zone with urban settlements, flood and storm: significant social, economic and health related impacts (eg on fishermen communities)
- Quangnam: Coastal zone, rural area, affected by storms
- Suggestion to identify a site in the Mekong River Delta

India
- Orissa: Balasore and Kendrapara: flooding affecting rural population on a regular basis; selection made following vulnerability measurement process; pre testing (Focus Group and Questionnaire testing) already done; interest in comparing two sites (other being West Bengale) affected in a similar way (annual flooding) with potentially different types of impacts
- West Bengal: Flooding affecting rural population on a regular basis; selection made following vulnerability measurement process; pre testing (Focus Group and Questionnaire testing) already done; interest in comparing two sites (other being Balasore and Kendrapara in Orissa) affected in a similar way (annual flooding) with potentially different types of impacts
- Gujarat: Earthquake site; comparability with other Asian and European sites (Salo and Jojakarta)
Appendix 5

MICRODIS

Health Working Group Meeting Minutes
HWG Day 0- 17.02.2008 Meeting Minutes:

The health thematic group preparatory meeting was attended by representatives of the partner institutions from Belgium, Germany, India, Indonesia, and Vietnam and was moderated by VL (health group co-ordinator). A review of the agenda for the day was followed by a round of introduction by each of the members.

1. List of participants:

Belgium:
DGS- Debarati Guha- Sapir, CRED, UCL, Belgium
OLPW- Olivier Le Polain, CRED, UCL, Belgium

Germany:
MM- Michael Marx, Evaplan/University of Heidelberg, Germany
VL- Valerie Louis, Evaplan/University of Heidelberg, Germany
RP- Revati Phalkey, Evaplan/University of Heidelberg, Germany

India:
MMS- MM Singh, Delhi University, India
SU- S. Udhaykumar, VHAI, India
AG- Anjali Gupta, VHAI, India

Indonesia:
MKS- Mondastri Korib Sundaryo, HRCCD, University of Indonesia
MFP- Meidy Farenti Prameswari, HRCCD, University of Indonesia
ESP- Eko Setyo Pambudi, HRCCD, University of Indonesia

Vietnam:
HVN- Ha Van Nhu, Hanoi School of Public Health, Vietnam
NTTN- Nguyen Thi Trang Nhung, Hanoi School of Public Health, Vietnam
NNT- Nguyen Nuu Thang, Hanoi School of Public Health, Vietnam

2. The main points discussed were:

- MICRODIS related and associated activities and deliverables: achieved vs. planned
- Update on the literature review and publication thereof
- Tools and methods for field work- Questionnaire responsibilities identified and standardized indexing to be used to allow data comparability
- Website issues
- Conceptual framework and conceptual model: health finalized
3. Partner activities and deliverables:

DGS spoke about the Annex studies carried out and the possibility to duplicate them at other sites. Deliverables 1.1.1, 1.1.2, 1.1.3, 1.1.4 were discussed in detail. It was agreed that published thematic workshop reports could be considered as an output. However MM expressed his concern about the extent to which these reports were publishable and proposed the use of MICRODIS website as a possible alternative.

DGS commented that although not all deliverables may eventually be achieved, the possibility of achieving more deliverables (extra) than those listed should not be excluded. Secondly, work activities that are not directly related to MICRODIS but fall within the overall scope of the project may be optimized to contribute as deliverables and that the MICRODIS label could be used in international conference presentations to disseminate information internationally.

HVN described two community studies that they carried out in 2 districts of a province in Southern Vietnam. They conducted 5 different interviews with same households over a period of 5 months and are currently analyzing the data obtained. However, they face difficulties in analyzing data per household and are in the process of resolving key issues. He was a bit skeptical about the scope of the study and in his opinion it was rather limited. DGS agreed to comment on the first draft of the expected paper and asked HVH to identify the issues of concerns with the data analysis. It was agreed that the report from Hanoi School of Public Health was public and hence could be posted on the MICRODIS website for open access to the members.

Similar activities at CRED are the compilation of chapters towards the Economic Impacts of Disasters that is to be published with a commercial publisher and the State of the World Report a definitive environmental report with the World Watch Institute. DGS also proposed a book that could be published by the health group in line with the economic group. VHAI was asked to contribute with their expertise towards the editing of such a book. The literature review of the health group was one such possibility to be edited and published.

VL suggested a list to be maintained for tracking working documents and conferences attended by the members. It was agreed that MKS would provide the template.

<table>
<thead>
<tr>
<th>List of planned and currently involved activities by partners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planned:</strong></td>
</tr>
<tr>
<td>Edited book with input from partners edited by VHAI</td>
</tr>
<tr>
<td>Literature Review</td>
</tr>
<tr>
<td>Conference presentations</td>
</tr>
<tr>
<td><strong>Currently involved in:</strong></td>
</tr>
<tr>
<td>State of the World Report</td>
</tr>
<tr>
<td>Economic Impacts of Disasters</td>
</tr>
<tr>
<td>Health and Floods Encyclopedia book chapter for Elsevier (OLPW and VL)</td>
</tr>
</tbody>
</table>

43
3-4 publications expected from the University of Indonesia by Dr. Mako et.al.
3 working papers:
- Dengue Hemorrhagic Fever incidence and climate variability in Jakarta over the last 10 years
- Clinical and demographic characteristics of leptospirosis during the 2007 floods in Jakarta
- An environmental analysis of leptospirosis during the 2007 floods in Jakarta

4. Bibliographic listing and literature review:

It was agreed that the literature review was rather general and missed country specific focus. A clear task allocation was identified as the next step and the literature review is expected to be completed in the next 3-4 weeks. VHAI has circulated their draft literature list last week and would re-circulate it to all members for comments and additional inputs. This will also be integrated into the main literature study.

An update on the literature review was provided by VL. It was stressed that the focus should be sharply placed on ‘health impacts’ and not cover the multiple factors that closely affect health status.

It was agreed:
A single format should be followed for each of the 3 disasters and crystal clear summary to be drawn. The literature review should be summarized into 10-15 pages of comprehensive material that can then be considered for publication.

DGS insisted that the literature review should be completed in the next 3-4 weeks and to be reviewed by CRED, HVN et al., and MM. It should primarily be:

- Evidence based
- Be a detailed analysis of not more than 50-60 publications
- Identify strongly confirmed points for health impacts
- Highlight gaps in data availability and hence assist in identifying areas where research is absent and is urgently required (Evidence in literature, Myths without evidence, No Myth No Evidence)
- Cover impacts in terms of injuries/morbidity, mortality, chronic diseases, infectious diseases and impacts related to health systems breakdown.
- Country specific literature review should cover three major areas: Disease impacts, Public Health impacts (for example specially EPI and Nutritional status) and Health Systems impacts.
- Contain a summary of 15-20 important points to highlight the key findings

The schematic diagram in the draft literature review for the summary health impacts was closely reviewed and following conclusions drawn:

- For fear of misclassification the classification of Long-term/ Short-term, chronic acute etc. the labels be withdrawn and just a list maintained.
At the end of the project in 2009 a comprehensive effective classification and definitions for standardization of data collection to be proposed by the MICRODIS project.

5. Website issues:

The website management was transferred to the CRED in early February 2008 and the IT manager and Ms. Irvine are looking into resolving issues around the setting up and functioning of the website. It was debated as who would have complete administrative rights to the website and its sections. It was agreed that all members should have access to all sections of the website. However the rights for uploading documents will be limited to the thematic group leaders or chosen website managers. It would be useful to have complete reader access for all members to all folders and specified password protected modification access for members to their respective thematic group folders. The website should be used as an interactive tool between the three thematic groups as well as within each group. Till then the skype chat currently used for health group interaction to be continued to ensure communication and review discussion of documents circulated within the groups in a structured way.

6. Tools and methods for field work- Questionnaires:

W.P. 2.1 Development of assessment protocol – health impacts
Field Methods and Protocol for health impact assessments were discussed and it was emphasized that the use of each methodology was to be understood for their importance. The health service system questionnaire and the household survey questionnaire will be used to assess impacts and vulnerabilities. FGD and Key informant interviews will assist in obtaining background factors and baseline information. Participatory approaches to be used as a complimentary strategy (e.g. Grid and the GPS methodology).

MKS et al., Indonesia presented their plan for the field protocol and assessment methodologies. MKS requested additional support for the survey methodology. CRED agreed to assist with survey methodologies in complex situations.

It was mutually agreed that MKS et al. and RP to be responsible for the household questionnaire. MKS proposed to review the various questionnaires (to be received from various partners) and provide an initial draft for comments. Tim Wind and Ivan Komproe from HNI, Netherlands were invited to provide additional inputs for questionnaire design. Tim Wind agreed to support University of Indonesia and University of Heidelberg in designing the household survey questionnaire. University of Delhi and VHAI along with the HSPH, Vietnam accepted the responsibility for the Health services questionnaire. VHAI agreed to provide sample questionnaires for assistance. MM stressed the importance of involving a statistician in the study design from the initial stages of the study plan. ESP from the University of Indonesia agreed to provide both the groups with guidelines for use of qualitative methods.
VL agreed to circulate the standardized data formats for country specific data collection.

HVN expressed concern about the research questions being too broad and asked for review. DGS responded that not all questions may be relevant to all sites and therefore we need to develop a comprehensive list that should be referred to at all times and only relevant questions addressed as per site requirements. Specificity for each site to be maximized by contributions from local partner institutions.

**Standardized Indexing for data:**
DGS strongly suggested *standardized Indexing* of every item on the health service system data and the household questionnaire to ensure data comparability across study sites. Consistency to be maintained across both questionnaires by sequencing each section as well as questions within. The applicability will vary across countries but the method will allow linking up of datasets across countries. ESP agreed to send the guidelines to both the groups for questionnaire designing.

7. Conceptual Framework:

DGS propagated an independent health group conceptual model and finalization of the conceptual framework in due course of the annual meeting. Later in the day the conceptual framework based on the PAR model proposed by Terry and the health conceptual model were finalized through mutual consensus. The need for identifying inter-linkages within the model was stressed. HVN model of conceptual framework and the PAR model suggested by Terry Cannon were discussed. It was agreed that the health group will provide the integration group with their conceptual framework and then the integration team would analyze it against the PAR model and fit it accordingly.

8. Tasks due by the end of March 2008

<table>
<thead>
<tr>
<th>Who</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td>VHAI</td>
<td>Copy of their literature review to all partners</td>
</tr>
<tr>
<td>VL</td>
<td>Standard compilation format for country data</td>
</tr>
<tr>
<td>ESP</td>
<td>Guidelines for Questionnaire standard coding</td>
</tr>
<tr>
<td>University of Heidelberg</td>
<td>Literature Review</td>
</tr>
<tr>
<td>University of Heidelberg and University</td>
<td>Household questionnaire</td>
</tr>
<tr>
<td>of Indonesia</td>
<td></td>
</tr>
<tr>
<td>VHAI and HSPH</td>
<td>Health service system assessment questionnaire</td>
</tr>
</tbody>
</table>