



## CASITA II – Sustainable Capacity Building on Urban Disaster Mitigation in Asia using IT&C Learning Tools (CASITA)

### Minutes of the Midterm workshop of CASITA II 12<sup>th</sup> November 2005, Hanoi, Vietnam

#### 1. Opening Presentation and Orientation to Activities Under CASITA in the first year by Dr. Cees van Westen, Associate Professor, ITC Netherlands

- ⇒ Activities are on course till now
- ⇒ Next year focuses on the marketing and offer of the distance education course
- ⇒ Guidelines for research have been made- not very clear as was initially thought
- ⇒ Blackboard not very active in this phase
- ⇒ Distance education course requires a lot of discussions
- ⇒ Other activities:
  - a) Course at CMU
  - b) Short course for four universities
  - c) Tsunami Wave Modelling course
  - d) RECLAIM workshop- is there any added bonus for including RECLAIM in CASITA
  - e) Course on research guidelines took place in IIRS

#### **Activities by University of Ruhuna, Sri Lanka**

University of Ruhuna is planning to develop an MSc on Environmental Management, with specialization in Disaster Management and Coastal Management

#### **Activities in Sri Lanka**

- Workshop was held 27-28 June
- Short training (3 months) planned for Chandana Gunasena
- Currently Wijewickrama NBRO is at ITC for 3 months (joint paper on landslide risk)
- Start Postgraduate course in January

- Collaboration with PGIS (PG in DM)
- UN-OOSA call for proposals (failed)
- Asia Pro Eco Post Tsunami programme (proposal was submitted)

### **Gadjah Mada University (UGM), Faculty of Geography, Yogyakarta, Indonesia**

UGM is planning to develop an MSc programme on Geo-Information for Disaster Management, with the support of ITC, which is planned to result in a joint MSc.

#### **Activities in Indonesia**

- Course on tsunami hazard and damage mapping
- Workshop was held 4-6 July in UGM
- Discussion on joint Master course
- Research collaboration with ITC student (Amin Budiarto) on
- UGM students applied for NFP fellowship
- MOU signed between UGM and ITC
- Further visits planned (december & february)
- Possibilities for Training of Trainers

### **Chiang Mai University, Department of Geography, Chiang Mai, Thailand**

CMU is developing MSc courses in Geoinformatics with emphasis to Natural hazards

#### **Activities in Thailand**

- Visit to CMU 24-25 June (van Westen)
- Visit to CMU September (Shrestha & Alkema )
- Interest in joint courses also with Geology and Soils departments
- Ongoing research collaboration with LDD: CMU can be included

### **The Indian Institute of Remote Sensing (IIRS/NRSA), Dehradun, India**

With IIRS a joint MSc course on Geoinformation for Hazard and Risk Analysis has been developed, and the first group of MSc students recently graduated at IIRS

#### **Activities in India**

- Visit September to IIRS by D. Rossiter for midterm
- 3 months stay at ITC by 8 IIRS students
- 1 month stay later by 1 Msc
- New batch of 8 students, half of them applied for NFP fellowship
- Next visit planned in January (MSc exams)

### **Presentation on UNU-ITC programme on Capacity Building for Disaster Geo-Information Management (DGIM)**

Objective: “ *to strengthen the capacity of institutions at national and local level in developing countries to reduce the vulnerability to natural hazards*”

The main objective of the programme will be capacity building for the collection, management, analysis and dissemination of spatial information before, during and after disaster events. New initiatives with the UNU to work out projects with ITC on Disaster management. ITC director

would like to put a lot of focus on Capacity buildings- for use of spatial information in DM.

It was also informed that there has been **development of topographic maps after EQ in Pakistan which can be downloaded for FTP site at ITC**

### **Points for Discussion**

- ⇒ Links with other initiatives
- ⇒ What was CASITA over 1 year
- ⇒ Planning activities for next phase
- ⇒ Joint research
- ⇒ Distance education course
- ⇒ Short courses
- ⇒ Joint Postgraduate programs
- ⇒ Quality assurance

### **Discussion**

- ⇒ RECLAIM proposal has been expanded. There would be more opportunity to work and generate practical examples. This can also help to enlarge the CASITA network
- ⇒ More Universities want to join the CASITA network eg. - BRAC Universities and University of Peradeniya- need inputs like short credit courses etc
- ⇒ Received funding for a new programme- PROMISE and also SNV Netherlands- to develop cadre of specialists for damage assessment

## **2. Presentation by IIRS**

IIRS was already implementing the M.Sc. programme on Geo-Hazards jointly with ITC, The Netherlands since 2003. IIRS has expressed the relevance of M.Sc. course in Indian context. IIRS is conducting research in the field of Hazard & Risks as a part of the joint educational programmes. The topics research being carried out during 2005 are:

- Debris Effect of Vegetation on Debris Flow Initiation - Conceptualisation and Parameterisation of a Dynamic Model for Debris Flow Initiation in Tikoy River basin in Kerala, India, using PCRaster®
- Earthquake Risk Assessment for Building Structures – Applicability of HAZUS model, in Dehradun city, India.
- Reconstruction of the 2003 Daya River flood, using multi-resolution & multi-temporal satellite imagery
- Assessment and Modeling the impact of Tsunami waves in the Nagapattinam coast of India using Geoinformation and Tunami N2 model
- Satellite based Monitoring of the changes in Mangroves of South Eastern coast of India – A Tsunami Related Study
- Drought risk evaluation Using remote sensing and GIS : A Case Study of Gujarat, INDIA
- Estimating the severity and duration of agricultural drought stress on crop performance

- using MODIS satellite and meteorological data
- Evaluation of Fire Hazard and Risk Assessment for in Chilla Range and its surrounds of Rajaji National Park – A Remote Sensing and GIS Approach
- Tsunami workshop organized at ADPC, Bangkok during 28 March – April 1, 2005 was attended by Mr. D. Mitra and Mr. Sandeep Maithani of IIRS.
- ITC organized a course at IIRS, Dehradun in September 2005 on research skills.

### **Upcoming Activities**

- IIRS will conduct a 3 day workshop on Landslide Hazard Mitigation during March 2006 (back to back with workshop in Bhutan). Venue of the workshop is proposed in Garhwal Himalayas.
- Based on the experience of conducting M.Sc. Course for the past 2 years, IIRS would like to review its syllabus and broad research themes with an expert committee.
- IIRS would like to offer the distance education course on a trial basis to the alumni of IIRS.
- Based on the success of the first offer IIRS will implement the distance education course at IIRS.
- IIRS will provide full support to market the distance education course

### **3. Presentation by University of Ruhuna**

- Staff training at ITC short course on GIS and RS application for disaster management [14 Feb.- 14 May]
- Participated for RECLAIM project in Sri Lanka
- Joint Research Program: Developing Case studies:
  1. Flood Modeling of upper catchment of Kalu Ganga
- Basin
  2. Landslide Risk Mapping of Ratnapura DS Division
- Curriculum Development for post graduate program: MA in Disaster Management

The main objective of this program is to develop knowledge and skills of Disaster Managers, Policy Planners, Planning Officers, Engineers, Administrators, Graduate Teachers and as well as other professionals from diverse sectors that can integrate risk reduction appropriating in their practices. A possible outcome with wide reaching consequences would be the appreciation of the skilled professionals who can contribute to the effectiveness of disaster risk and its management

### **4. Presentation by Chiang Mai University**

Undergraduate Courses :

Introduction to Natural Disaster

Natural Hazard and Risk Assessment

Postgraduate Courses :

Introduction to Natural Disaster Management

Natural Hazard Assessment

Risk Assessment

Application of Geoinformatics in Disaster Management

## **Research related to Disaster Management**

Drought Risk Assessment and Zoning in Upper North Region, Thailand, 2004

Landslide Risk Assessment and Zoning in Upper North Region, Thailand, 2005

## **Further Development**

The Faculty of the Department initiates the Development of Disaster Management Program in Master level.

Two staff have been training in PhD. Program in Geoinformatics at AIT, Bangkok, Thailand and one in Master program in Physic Meteorology at Chiang Mai University, Thailand

## **Discussion**

- **Involvement of Dept of Soil Sciences and Geology in CASITA 2 will take place**
- **Joint research on drought and landslide will also be included Going to work with Dept of Geology for Epidemics and Social Health**
- It will get support from ADPC for Master program in Disaster Management

### **4. Presentation by UGM**

Masters Program in Geo-Information for Disaster management

In general, the objective of the program is to develop academic and professional skills in managing disasters with emphasis on the application of geo-information (RS/GIS) for Disaster Management (before, during, and after disaster). The management involves a combination of scientific knowledge development and technical skills with a multidisciplinary approach.

## **Course curriculum**

- The duration of the programme is 18 months.
- Courses will be given in English. Therefore English language skill is required. TOEFL score required upon entrance is minimum 500, and while engaged in the course students are expected to further improve their level.
- Credits that have to be accumulated by the student are 38 - 42 credit points for the entire course. These include core modules, specialization modules, elective modules as well as MSc research skills (at ITC) and a research project (with the option for field work) that will eventually lead to a Master's thesis

## **Research Activities**

- Research on Modelling of Risk Mapping in Indonesia (cooperation between Research Center for Disasters UGM – Bakosurtanal)
- Development of Coastal Hazards Assessment and Mapping of Parangtritis Coastal Zone
- Environmental Hazards Mapping in the Upper Bengawan Solo River Basin, Central Java
- Spatial Planning for Nabire and Alor (Earthquake vulnerable areas)- cooperation with Bappenas
- Research on the re-development of Tsunami in Meulaboh (cooperation RCDM UGM- Bappeda Meulaboh)
- Dissemination of “Panduan Mitigasi Bencana Alam : Gempabumi dan Tsunami) –

cooperation with Department of Social Affairs

Assistance needed for developing M.Sc Program

- Joint promotion
- Provide scholarships
- Curriculum development (international standard)- with local/national case studies
- Staff exchange and students
- Joint research and publications
- Development for e-learning and course materials

### **Latest Activities and future Programme**

- Joint course at ITC (3 months)
- Joint course on Tsunami Modelling at ADPC
- Joint RECLAIM Project in Sri Lanka
- Workshop M.Sc Gi4DM (UGM), ITC's staffs (4-6 July 2005)
- Assistance for field excursion of ITC student (Mr. Budi)
- Indonesian delegation on the Asian Conference on Disaster Reduction, Beijing 27-29 September 2005
- UGM's Education Fair at Hanoi (1-7 Nov 2005)
- The MoU between UGM – ITC was signed by Rector ITC (1 November 2005)
- Joint refresher course in Hanoi (Mr. Winaryo, research staff of RCDM-UGM)
- The ITC staffs will visit to UGM (Drs. Robert Voskuil and Dr Paul van Dijk)- 1-3 Dec 2005
- ITC's staff guest lecturer on the latest development of Geo-Info for DM? (1-3 Dec 2005)
- Attending workshop on Gi-net at ITC (Dr. Sudibyakto, 12-13 December 2005)
- Training of Trainers (ToT) – December 2005?
- National Training Course on RECLAIM Project (March, 2006) –ADPC-NGI

### **Proposed research in Indonesia**

Disaster Risk Management through Multi Hazards Assessment (adopted from ADRC Research Programme)

### **Discussion**

- MSc Program would be conducted by four departments in UGM. Would like to develop it like the collaboration between IIRS and ITC
- Development of appropriate curriculum and the curriculum contents should be of international standards
- 2000 strong alumni would be used to promote the course
- MSc Program is envisaged to develop academic and professional skills
- The issue that there are professionals from various backgrounds who have applied to the Masters course, needs to be addressed
- Need to develop also a short course on Hazard and Disaster management
- Assistance Required for Joint Promotion through ADPC website
- UGM was present at Education fair at Hanoi and Ho Chi Minh also to promote its Masters course on Geo-information for Disaster Management
- Proposed research in Indonesia-Disaster Risk management through Multi Hazards assessment

- IIRS campus has Centre for Space Research where people from Asia Pacific region can apply. Fellowships are also available for Diploma work. This opens a new area of collaboration between universities
- Possibility of getting funding from BAKORNAS should be explored for preparing the Disaster Law for Indonesia

##### 5. Presentation by Norman Kerle, ITC, Netherlands

###### **Problems with Distance Education courses**

- Difficult to run such a course successfully
- Students don't have time, therefore have to make it light
- Feedback not easy and there is redundancy- need some discussion among course participants
- Blackboard not used much
- Feedback very imp. Need to strike a balance as have to handle and look after atleast 20 students
- In the earlier course, charged only 500 Euros and had only 18/20 students. 25 students would be too much
- Need to maintain interest as most of the students dropped out earlier due to lack of proper management of this course.
- Proper assessment of the course was not done.
- Valuable lessons were not learnt
- Time for planning and good execution of the material and testing of the material
- 2 years in IT there have a lot of changes- Video conferencing, banquets etc so the session can be more interactive
- Have to keep the time zones in mind

##### 7. Joint Decisions Reached

- The distance-based course will not be totally Internet based. It would be partly web based and partly interactive. ADPC would be the core agency to operate and moderate the course. The course would be developed by ITC with inputs from ADPC and BU**
- The trial run of the course on "Multi-hazard risk assessment" will be made in ITC, from 25 April to 12 May 2006. In this course also participants from IIRS and Gadjah Mada are expected, and input is also expected from Falak Nawaz from ADPC.**
- Chandana Gunasena from University of Ruhuna is expected to come to ITC for three months in the period January-March.**
- Support to Master Programme on Disaster Management at (PGIS) in Peradaniya University, Sri Lanka will be provided**
- The marketing of the course would be done through the existing networks of ADPC, ITC and BU and also of the partner universities. Main lead for this activity would be ADPC**
- Two short courses each, one on Urban Disaster Mitigation and another one on Damage and Loss estimation, in all the four partner universities. The timings of these courses have been tentatively decided. ADPC will take the lead in conducting these courses**

- g) More emphasis has to be laid on research by Universities and production of research papers. The final output should show, at least one paper from each partner university**
- h) The Universities have to show more initiative and should be more proactive**
- i) The joint postgraduate programs in IIRS and UGM have already commenced. The other two universities have to take initiative for starting these specialized courses**
- j) The final workshop would be held in Bangkok. The core project team, and selected universities will review the outcome of the project during this workshop. ADPC will be responsible for conduct of this workshop**



**CASITA II – Sustainable Capacity Building on Urban Disaster Mitigation in Asia using  
IT&C Learning Tools (CASITA)**

**Agenda**

**Midterm Workshop for CASITA II  
12<sup>th</sup> November, Hanoi, Vietnam**

08.30– 9:00	Registration of participants
9.00 – 9.30	Opening remarks by Prof. Cees van Westen
9.30 – 11.00	Presentations by CASITA country partners (the presentations will include progress made so far on development of post graduate courses, progress of Research work by universities and assistance needed in future from the main partner institutions ITC, BU and ADPC)
11.00 – 12.00	Discussion on the future strategy (post graduate courses, progress of research work by universities, publications and technical papers etc.)
12.00 – 13.00	Lunch
13.00 – 14.00	Distance education program (curriculum, strategy for pilot testing and continuation of the distance education program)
14.00 – 15.00	Future programs by the main partners in the countries (ITC, ADPC and BU), which can support the initiatives of CASITA
15.00 – 15.15	Tea Break
15.15 – 16.00	Detailed Activity Planning for the remaining period for CASITA II
16.00 - 16.45	Meeting of main partners (ITC, BU and ADPC) on the financial progress of the project
16:45 – 17:00	Conclusion