

# **REPORT**

**On**

## **ICA WORKING GROUP ON EARLY WARNING AND RISK MANAGEMENT FOR THE PERIOD 2005 - 2007**

**By**

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### **INTRODUCTION**

All natural disasters or hazards are of multi-disciplinary in nature and they cause loss of life, property and social and economic disruption. They range from the predictable to unpredictable and are classified by origin. They can be either exogenous (floods, drought, storms, landslides and avalanches), endogenous (volcanism and earthquakes) or anthropogenic (collapse of structures, desertification, fires). Natural disasters are associated with global change and this is especially so as far as the two largest disaster types- floods and droughts are concerned, and least obvious for the spatially and quantitatively more limited volcanic and earthquake disasters.

The damages which include human life and economic losses that arise from natural and man made-hazards are increasing world-wide. For this reason disaster management is increasingly becoming very important. Traditionally disaster management was predominately regarded as the protection of hazards, where the main focus was on the technical protection against natural hazards, like building dikes against flood. However, the limitation of this concept is that a complete protection against hazards is rather impossible. The new or current concept about disaster management focuses on risk management. An effective risk management entails a comprehensive analysis, assessment and mitigation of risks caused by different hazards.. Therefore Risk management requires maps that depict information about spatial patterns of hazards, of vulnerability, and of risks at different regional levels and for different societal groups. Maps are important information means in the whole risk management process to get knowledge, to make decisions, to communicate information, and to raise awareness. For that reason the creation of risk maps is increasingly becoming a topic of research in many disciplines that have to deal with natural and man made-hazards.

Due to the increasing importance disaster management in the world, the Management Board of ICA decided during its 2005 annual meeting to form a Working Group on, Early Warning and Risk Management. The broad objective of the group is to explore and coordinate how cartography can be used to rapidly prepare and produce simple, standardized and informative maps for use in early warning and risk management of

natural and man made hazards. The Board appointed Dr. Wilber K. Ottichilo to be the Chair and Dr. Ute J. Dymon the Co-chair of the Group.

## **THE ACTIVITIES OF THE WORKING GROUP**

The first meeting of the Group was held on 15<sup>th</sup> July 2005 in Corunna, Spain during the ICA Conference. During the meeting Bengt Rystedt explained the reason for establishing the working group on Early Warning and Risk Management and its Terms of Reference were discussed and agreed as follows:

1. Provide leadership in the development of concepts and standardization of early warning for hazard, risk and vulnerability mapping and cartographic modelling.
2. Promote the use of remotely sensed and other geospatial data and various analysis techniques for early warning and risk management by organizing workshops.
3. Promote capacity building and quality mapping, and cartographic modelling including modern technology for early warning and risk management through topic related publications.
4. Participate and contribute to global initiatives in early warning and risk management for instance through the maintenance of a Website.
5. Promote hazard, risk and vulnerability mapping for risk management and communication.
6. Develop mechanisms and networks for exchange of information among stakeholders on risk management and early warning.

The meeting also discussed and agreed the implementation of the following activities:

1. Development of a Website.
2. Funding Mechanisms to provide resources for workshops and publications.
3. Organize a workshop on risk and vulnerability mapping and modelling for Emergency Managers in Nairobi.
4. Prepare a publication on risk and vulnerability mapping and modelling. Outline to be ready for presentation and review at Moscow ICA Conference in 2007.
5. Promote membership and participation from all continents.

## Achievements to Date

Most of the activities proposed for were not implemented largely because of lack of funding and difficult experienced in keeping the members of the team together without working together on particular activities. Also due to the increasing importance of disasters world-wide particularly after the Tsunami, there are numerous organizations and websites addressing the issue.

However, despite of the above the Working Group has been able undertake significant activities particularly in Africa: The activities are:

- The convening of one day workshop on the use of Remote Sensing in Disaster Management during the 6<sup>th</sup> AFRICAGIS Conference which was held in Pretoria, South Africa in September 2005. The Workshop was organized and funded by GEOSS, UNOOSA and RCMRD.
- The establishment of the University Network for Disaster Risk reduction in Africa (UNEDRA) which was formed during a workshop which was held at Makerere University, Kampala, Uganda from 12 to 13 September 2005. The workshop was organized by International Institute for Geo-Information Science and Earth Observation (ITC), the Netherlands and the Department of Geography, Makerere University. The Workshop was organized in the framework of United Nations University Programme on Disaster Risk Information Management and it focused on the establishment of a University Network for Disaster Risk Reduction in Africa. The main objective of the network is to forge interaction amongst universities in Africa with interest in capacity building in disaster risk reduction through teaching, seminars and workshops, sharing information and collaborative research with emphasis on the use of geo-information. For more details about the network, visit the website: <http://www.itc.nl/unu/dgim/unedra/default.asp>. RCMRD was appointed to act as the overall coordinator of UNEDRA while University College of Architecture and Surveying (UCLAS), Dar es salaam was appointed to act as the Secretariat as well the coordinator of e-mail list, Makerere University was tasked with the responsibility of organizing regional training courses and ITC was requested to provide website support and help in the formulation and organization of training courses. In December 2006, representatives of the network coordination held a meeting at ITC in the Netherlands where activities for the year 2006 were discussed and agreed.
- During the period 13-23 June 2006, RCMRD in collaboration with ITC, Makerere University and UCLAS organized a Workshop on, “Geo-Information for Environmental Risk management in Africa. The workshop was attended by 30 professors/lecturers from 15 African universities. The first week of the workshop focused on the development of training programmes (curricula) in environmental risk management, research skills and sharing of information. The second week focused on training of the participants on various topics related to disaster risk management. The training entailed the collection, sharing, handling of spatial data, and its application to assess the hazard, vulnerability and risk of the most

- important hazard types in the east African region, which include drought, floods, land degradation, pests, diseases and humanitarian crises, besides geological hazards, such as landslide and earthquakes.
- During the period 24-30 June 2006 I attended ISPRS Symposium on Education and Outreach in Tokyo, Japan where I presented a paper on status of disaster education and outreach in Africa.
  - During the African Association of Remote Sensing of the Environment (AARSE) Conference in Cairo, Egypt in October/November 2006, there was half day session on Disaster Management. Papers were presented on the on-going research and management activities on disasters- particularly in Africa.
  - During the period 14-20 July 2007 I attended Cambridge Conference where there was half day session on disaster management.

### **Planned Activities**

The following are the planned activities for the remaining period of 2007.

- During the 7<sup>th</sup> AFRICAGIS Conference which will be held in Burkina Faso in September 2007, UNEDRA will hold one week pre-conference workshop on use of remote sensing in disaster management.
- During the last week of September, the Secretariat of International Charter on Disasters will hold one week training course for RCMRD staff on the Charter and how it is invoked. After the training RCMRD will be responsible for the Charter's activities including its invoking in Africa.

### **THE WAY FORWARD**

Due to various reasons the Working Group has not performed well globally as it expected. However, there are many opportunities for the expansion of its membership of the WG and activities. I wish to inform the ICA Board that I wish to relinquish my chairmanship because my contract at RCMRD will come to an end in December 2007 and I have decided to contest for Member of Parliament during the Kenyan national elections in December 2007. If I am luck to win the election, then I will have no time to devote on the activities of the WG. I am sorry to note that my Vice-Chair also resigned recently due to her increased work load. It is therefore imperative that the Board has to appoint a new chair and the vice.

Lastly, I wish to take this opportunity to thank the Board for appointing me to chair the WG. I also wish the Board success in all its civilities.

**THANK YOU.**