

Session Seven: Plenary Session

Mr. E. Pelinck, Director General, ICIMOD, chaired this session. The final recommendations were presented by Professor Herrman, the chairperson of the previous session.

Presentation of Final Recommendations

Professor Hermann, who had chaired the previous session, summarised the presentations made by the three groups earlier in the day. He stressed that this was a very first step and hoped that further collaboration and activities would prove the workshop's success. He added that there was a broad agreement on the objective of the workshop and on the definition of a landslide which was to be outlined broadly. There was also agreement on the target group for the selection of trainers who were professional practitioners of landslide hazard management and control in order to support planning and decision-making. There was also broad agreement on the curricula with some amendments. The main components of the agreement concerned building and sharing a database and production of maps using GIS and remote sensing as well. In addition to production of maps, the available information should also be used for other usable products.

Professor Herrman highlighted the participants' recommendations that ICIMOD should be a coordinator for the different national focal points. ICIMOD's capacity to offer computer facilities for generating a database was also highlighted. He said that everybody agreed on the importance of national focal points for national inventories and landslide research.

He recommended that this working group collaborate under an international work such as the International Hydrological Programme (IHP) of UNESCO for the hydrological working group.

Discussions

Dr. Rengers felt that in all participating countries enough expertise was available, but ICIMOD could give guidance for the curriculum framework. The same course given at ICIMOD could be used in national agencies, and ICIMOD could ensure quality. ITC would like to support with training materials, if required.

Prof Chalise thanked Dr Rengers, Dr. Thakur, Dr. Anbalagan, Professor Li, and others for supplying training materials from their institutions.

Mr. Tiwari and Mr. Dixit both felt that, for Nepal, DPTC could be designated as the focal point.

Dr. Anbalagan said that the University of Roorkee had been conducting courses for the professionals and, recently, for administrators as well. For example, the magistrates from the hill districts were being trained for crisis management and planning. This was being organised at the National Academy of Administration at Mussoorie. Roorkee University has an infrastructure and facilities for conducting such courses and had already conducted courses in the past. Course training materials had already been made available to ICIMOD. The University also had over 40 computer programmes for various landside situations which could be used for academic and research purposes. About 15 to 20 such programmes were already available at ICIMOD. He added that they would welcome any further collaboration.

Professor Li mentioned that the Chinese Academy of Sciences had established a research foundation for the study of landslides and debris flow and substantial investments had been made. The project was currently in the second phase: and work on a database inventory, mechanics and dynamics of landslides, processes, and new techniques for landslide control was taking place. More than 10 institutions were involved in this project. He suggested that this could be the possible national landslide focal group for China.

As for training in ICIMOD member countries, Chengdu Institute for Mountain Hazards and Environment could be considered as a venue as it had facilities and the ongoing work could be a part of the training course. The institute also had simulation models and three observation sites for debris flow and landslides which could be used for training.

Dr Thakur said that Wadia Institute has already conducted training on structural geology for south Asia and that they had good infrastructural facilities and over 60 scientists. In addition to the work on landslides, the institute was also involved in the study of active faults. Although he thought that the focal point for India could be the Ministry of Science and Technology, he also offered to assist and collaborate.

Remarks on Behalf of the Participants -- Col Rahim

On behalf of the participants, **Colonel Rahim** from Bangladesh said that the workshop had clearly identified causes of landslides, and had looked into the need to look at landslide management and control as an interdisciplinary task with integration of field-level workers and theoreticians. Offers of training at international and national centres were very useful, he added. He thanked ICIMOD for organising the workshop and stated that he had benefitted enormously from the discussions.

Colonel Rahim said that the recommendations from the workshop should be made available to policy-makers and decision-makers.

Mr. Awan from Pakistan also thanked ICIMOD for the successful workshop.

Concluding Remarks by the Chairperson

Concluding from the Chair, **Mr Pelinck** said that the workshop had clearly defined what the term landslide meant, the target group for training, the curriculum, the need for a database and for sharing of data, the role of national agencies, and the importance of a regional working group.

He added that more awareness on a general level and at the decision-makers' level was also important. The training programme that was reviewed at the workshop focussed more on medium-level practitioners, but the need to involve policy-makers and more members of the general public was also felt. He hoped that, in future activities, they would also be included.

Talking about the national focal points, Mr. Pelinck stated that in countries without a clear focal point, a broader working group to incorporate all organisations might be a suitable approach. He assured the participants that the workshop proceedings would be published and sent to their governments and to partner institutions throughout the region.

He thanked the participants for their various offers to host the regional course. In preparing a two to three years' programme regional and national courses would be looked into. As for the course venue, Mr Pelinck said that the first course would be held at ICIMOD. A long-term programme focus would be planned. He suggested that courses could be repeated and rotated for regional and national training purposes, and could be held where the trainees were located with trainers coming from outside.

Mr Pelinck thanked all the resource persons and all participants for their active discussions and involvement.

ICIMOD's aim, Mr Pelinck said, was to maintain and restore the environment and work towards alleviating poverty. Capacity-building and training were also important tasks for ICIMOD. The proposed curriculum was such that it could be translated into national programmes.

He said, that ICIMOD's role was to act as an intermediary for partner institutions, and that intermediaries were necessary in order to get the message across to the governments and the people.

Mr Pelinck concluded by stating that all the objectives of the workshop had been met. He reiterated that ICIMOD would be looking forward to further collaboration with all.