

The Asian Urban Disaster Mitigation Program (AUDMP)

Monthly Activity Highlights

February & March, 1998

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- Results from the third annual Working Group Meeting
- Earthquake Scenario workshop in Nepal
- RADIUS Project selects Bandung as target city!
- Results of the Midterm Program Evaluation

1) National Demonstration Projects

During the months of February and March, project partners from all the projects busily prepared for their participation in the annual Working Group Meeting in February, as well as the subsequent visit by the Mid Term Monitoring and Evaluation Team. (See Project Management below.)

Philippines: Flood mitigation in Naga; multiple hazards in San Carlos

Disaster risk assessment and mitigation workshops -- During February and March, preparations were undertaken for the disaster hazard and risk assessment workshops for both cities. Expected outputs are concrete recommendations on mitigation policies, activities or programs which can fill the gaps in current city-level programs. PBSP is assisting the cities with course material preparations and technical support coordination. Both events will take place in April.

Indonesia: Earthquake mitigation in Bandung

RADIUS selects Bandung -- The IDNDR RADIUS project has announced that Bandung has been selected as an auxiliary case study, thanks to the hard preparatory work of the IUDMP team. The award amounts to US\$ 20,000. The IUDMP working group helped with the establishment of a RADIUS advisory board, a steering committee and a working group for the new activities. According to the plan, the RADIUS project will not duplicate what is being done under the IUDMP, but rather will complement the mitigation work by focusing on the assessment of emergency preparedness of lifeline infrastructure for an earthquake disaster. It is expected that both projects will work together to improve the mitigation planning capacity of the local government agencies and the community.

Focus on information technology -- Dr. Krishna Pribadi attended the International Symposium on Information Technology Tools for Natural Disaster Risk Management which was held at AIT February 3 - 7. In this event, which was organized by the United Nations University and INCEDE, Dr. Pribadi presented the case study of the earthquake mitigation project in Bandung (IUDMP) as an example of application of information technology (GIS and Internet). The presentation which was highly appreciated by the audience. Dr. Pribadi also facilitated an live video & Internet presentation of the project for ADPC's Disaster Management Course in March (see Training).

Project strategic workshop held -- The last week of March was dedicated to the preparation of a strategic workshop for the project working group and some local government organizations, focused on producing mitigation strategy and action plan for the demonstration project. The workshop is scheduled for April 4.

India: Technological hazard mitigation in Calcutta and Baroda

National Project Manager selected -- In March, the selection of the National Project Manager was completed. Several candidates, with both project management experience as well as technical expertise in technological hazards, were considered for the position. Mr. V.S. Sudhalkar was selected, and joined the BCC project team later in the month.

Baroda "catalogues" local industries -- In February Baroda focused on gathering critical information on the major industries with the city limits. Project partners are preparing detailed maps of all these industries as well as demographic maps of nearby areas. This information will also feed into a computerized database of all the 70 potentially hazardous industrial sites. Final follow up is also been done with industries which have not yet submitted their on-site emergency plans.

Upcoming meetings -- In April, the project will hold its first Interface Meeting between the Baroda and Calcutta staff, the 2nd Review Committee Meeting, and the Analytical Techniques Workshop.

Nepal: Earthquake mitigation in Kathmandu Valley

Kathmandu Earthquake Scenario Workshop -- The Nepal Society of Earthquake Technology (NSET) hosted the Kathmandu Earthquake Scenario and Action Plan Development Workshop on February 19-21 in Nepal. As one of the first key impacts of the project, NSET organized and ran the three day workshop for 30 senior level managers of lifeline/critical facilities and emergency response systems of Kathmandu Valley and another 40 observers from various national and international institutions. The workshop purpose was to 1) review the preliminary estimates of likely damage expected to be caused by a scenario earthquake (a repeat of the 1934 Earthquake when the Valley's population was

about 200,000), 2) describe the likely effects of that damage on the lifeline/critical facilities and emergency response organizations, and, most importantly, 3) to identify projects and an action plan to reduce those effects.

The preliminary estimation of the damage due to the scenario earthquake portrays a very high potential impact to the Kathmandu Valley (present population 1.2 million). It is estimated that there will be about 40,000 deaths and about 95 000 injured to the extent of requiring hospitalization. (Existing hospitals have a 2,200 bed capacity.) About 60% of the valley's building stock is expected to be damaged beyond repair leading to approximately 900,000 homeless people. Extensive damage to road networks, telephone, electricity and water supply systems is also projected. Moreover, the existing 7 fire trucks and 100 firefighters in the valley will have little capacity after an earthquake to fight the fires. Following the scenario presentation, the group identifies possible projects and action plans. Many suggestions related to the development of emergency response plans for the different organizations and systems. Others were more mitigation oriented. For example, the manager of Nepal Telecommunication Corporation, suggested that seismic resistance should be incorporated into the infrastructure for Nepal's first cellular mobile telephone system and that a certain number of telephone lines should be set aside as stand-by for use in emergency situation.

The most important outcome of the Workshop was that participants realized the severity of the problem and the need to undertake vulnerability reduction measures in their respective organizations, indicating a shift from a fatalistic approach to action. Also a new network was formed of senior managers who expressed the desire to continue to coordinate and cooperate on matters related to earthquake disaster reduction. NSET was identified as the nodal point for continued coordination and work on earthquake mitigation issues.

Institutional strengthening -- As a part of the planned assistance to build disaster management capacity in the Kathmandu Metropolitan City (KMC), KVERMP fielded Shirley Mattingley, a noted expert in Disaster Management from the US. From February 10-19, Shirley worked closely with the staff of the City's newly established Disaster Unit (DUKMC), providing on-the-job training. She also reviewed the program of the unit, and assessed the City's existing needs and capabilities in earthquake vulnerability reduction. Following her work, the consultant has provided a discussion paper with recommendations to the DUKMC. One of the highlights of Shirley's work was a seminar and interaction program conducted for municipal councilors from KMC and other municipalities in the Valleys as well as professionals and disaster management officials from different government and non-government institutions in Kathmandu Valley.

School survey methodology modified -- A slight change was introduced in the survey methodology for the vulnerability assessment of school buildings. Now a detailed survey (including dimension measurements) of ten typical school buildings will be conducted by a team of structural engineers and overseers, followed by prototype analysis, and exploration and design of possible retrofits.

This “trial run” will assist with the analysis for all the target schools. The engineering team has been recruited, the sample schools have been identified and the survey has started. In the mean time, contacts have been made with Professor Arya of Roorkee University (India) for possible review of the analysis. It is anticipated that the analysis of the ten schools will be completed in April 1998.

Radio appearances -- KVERMP project staff sought invitations from local FM radio channels to educate the public about earthquakes. Project Director Amod Dixit and Project Manager Mahesh Nakarmi were invited by two channels (Nepali and Newari languages) to answer listeners’ queries about earthquakes on live, phone-in programs. Following the radio and other programs, there is a considerable increase in the number of people and institutions, mainly schools, contacting the KVERMP office for advice regarding earthquake safety, retrofitting, earthquake-related training etc.

Sri Lanka: Multi-hazard mitigation in Ratnapura

Steering Committee in Ratnapura -- A steering committee has been set up for the Ratnapura Demonstration Project under the chairmanship of the Honorable Mayor of Ratnapura Municipal Council. The body includes heads from district/provincial branches of concerned government departments (e.g. Health, Education, Road Development Authority, Gem and Jewelry Authority), Police, service organizations (Telecom, Electricity Board, Water Supply and Drainage Board), in addition to municipal officials. The possibility of expanding the membership to include NGOs and CBOs has been discussed.

Progress of hazard mapping -- UDA has completed the maps for hazard analysis, including base maps, contour maps, infrastructure for power supply & water supply, public and local government institutions, service centers and locations of cultural and religious importance, flood prone areas and existing land distribution. NBRO has agreed to provide a complete set of digitized maps including the maps already completed by NBRO (slope maps, land use, geology, landslide hazard zoning maps). UDA has reported the non availability of flood data. A hydrologist has been hired to do the simulation studies based on rainfall data for Ratnapura and to establish flood level (annual, 10 year maximum and 100 year maximum).

Good news from the insurance industry -- A new insurance scheme for the benefit of victims of natural disasters was launched by the Ministry of Housing & Urban Development at an event commemorating the Golden Jubilee of Independence in February. The scheme will be launched initially in the Ratnapura MC area, Nawalapitiya TC and Kalutara TC area and Badulla-Haldumulle area which have been affected by the recent landslide incidents.

Cambodia: Flood mitigation for vulnerable areas

Grant agreement development -- David Hollister traveled to Phnom Penh in March to help develop the grant agreement for the Cambodia project. the Agreement will be will be signed in April.

2) Information and Networking

Update of I & N workplan -- In preparation of the annual Working Group Meeting, the program's Information and Networking Plan was updated to reflect recent accomplishments and relate new partner needs assessments. The component's workplan was presented to the group, and additional inputs were received from the participants.

Information showcase -- At the Working Group Meeting, Information Urban Manager Erika Lund set up a display table with new materials available to support project partners. The materials included a number of materials from FEMA, such as school safety guidebook, natural disaster mitigation guides. and a source book put out by Project Impact, a new disaster-resistant communities initiative. In addition were materials on hazardous materials from UNEP, and a list of conferences on urban disaster management. Demand was great for these materials, and the additional requested materials from a sign-up sheet have been sent from Bangkok following the meeting.

New Briefing Book -- a new project Briefing Book was produced in February in time for the Working Group Meeting. This book is the complete source book on the AUDMP, and is updated every six months.

3) Training, Resource Materials, and Continuing Education

ADPC's first Internet conference -- As part of ADPC's keystone course, the Disaster Management Course (DMC-23), the Learning and Professional Development section orchestrated a live video and Internet presentation of the IUDMP. Using an established satellite connection between AIT and ITB in Bandung, Indonesia, Dr. Krishna Pribadi narrated a real time power point presentation of the project. This was followed by a video question & answer session between course participants at ADPC and representatives of the IUDMP project team at ITB. Both groups could both hear and see each other in real time. Course participants benefited not just from the sharing of experience but also from the opportunity of participating in a pioneering use of the technology. This innovative experiment with information technology (the first done at AIT) holds great promise for the AUDMP both as a cutting-edge training tool as well as a less expensive ways for face-to-face project management meetings between countries.

Progress on the Selection of NPTIs -- Several rounds of discussions were held during the Working Group Meeting at Kathmandu with the Project Managers of the target countries with regard to their feedback on the capacity of potential National Partner Training Institutions (NPTIs), proposed institutional

arrangements for the regional and national courses, subjects for the conduct of national courses, and the possible involvement of ADPC/LPD in the local level training.

In Nepal in February, discussions were held with the Water Induced Disaster Prevention Technical Center (DPTC) and the National Administrative Staff College (NASC). The potential NPTIs met individually and jointly with the project manager in order to come to a consensus on institutional arrangements in Nepal and the preferred national course. The filled-in proforma for the two institutions were circulated among the review committee members for the finalization of the institutional arrangements for Nepal. Letters were sent to DPTC and NASC requesting them to provide more specific information on their willingness and capacity to institutionalize training after the completion of AUDMP.

In Sri Lanka, a joint meeting of SLIDA, NDMC and CHPB was held with SLUDMP on March 24. The proposed arrangement for the institutionalization of the National Level Training courses is as follows: All three institutions accepted the idea of institutionalization of the course for training of administrators in SLIDA and technical staff training component to be handled by CHPB. The NDMC, in keeping with its identified role as a facilitator for establishment/institutionalization of hazard mitigation practices, will consider the possibility of funding, totally or partially, both courses on regular basis in future. (The Director of NDMC has agreed to discuss the matter further with the Secretary of the Ministry of Social Services in order to include the funding requirements in the next year budget of the Ministry.) SLIDA and CHPB will obtain the permission from the respective ministries to establish and for conduct the courses beyond the life of the AUDMP.

4) Program Management and Administration

Working Group Meeting -- The third AUDMP Working Group Meeting was held in Kathmandu, Nepal, February 23 - 25. The purpose of the meeting was to bring together the Core Working Group to review the progress of the program and make decisions about future directions. Participants included the Core Working Group, representing the key USAID offices involved such as OFDA (Julie Klement and Tom Brennan) and the two Asian Regional Urban Development Offices (RUDOs) (Jim Stein and A.S. Dasgupta), as well as representatives from each relevant USAID Missions and project partner institutions. Coming mid-way in the life of the Program, the meeting also served as a kick-off introduction to the Mid-term Evaluation. (See below.)

This year, Kathmandu was chosen as the meeting site due to the exciting progress in one of the AUDMP projects, the Kathmandu Valley Earthquake Risk Mitigation Project (KVERMP). The National Society for Earthquake Technology (NSET), which conducted an earthquake scenario workshop in Dhulikhel during the three days prior to the meeting, was able to share recent KVERMP project accomplishments with their colleagues in the AUDMP program. As part of the

meeting program, NSET also took the group on an "earthquake vulnerability tour" to point out how vulnerable the city's buildings and critical facilities, such as schools and fire stations, are to earthquakes. Participants also had an opportunity to meet the mayors of two of the five Kathmandu Valley municipalities, Kathmandu and Lalitpur, who expressed their commitment to protecting the Valley from an earthquake disaster through mitigation and preparedness.

The meeting was a great success. Project partners gained a better understanding of the regional training, information & networking, and monitoring & evaluation components of the program. The meeting also provided them with a unique opportunity to learn from each others' experiences and take away new ideas on how to best manage their own demonstration projects. Impressed with the outcomes of the Program, the Core Working Group requested ADPC to submit a proposal to modify the program grant agreement in order to broaden the scope of the AUDMP. If approved, the modification will extend the life of the program, provide more technical support to the demonstration projects, provide additional follow-up activities in each country as well as a social marketing scheme to enhance the programs potential to replicate the methods used in the demonstration projects to other municipalities throughout each target country.

Midterm Evaluation -- The Midterm Evaluation of the Program took place over a four week period in March, directly following the Working Group Meeting. Team Leader Michael Lippe and Jennifer Worrell Campbell traveled to the five current project countries, where they spent several days meeting with project partners and reviewing the progress and impact of the national demonstration projects. The final week was spent with AUDMP project staff in Bangkok reviewing the Training and Information & Networking components, as well as the Program's management and administration at ADPC.

Although the final evaluation report will not be issued until April, the preliminary results of the evaluation were very positive. The evaluators felt that, especially given an ambitious task and a large and diverse territory covered, that the Program had made great progress and showed great promise for the future. They did, however, make a number of recommendations -- both at the project and program level -- which they felt would ensure the success of the program. In April, the AUDMP managers plan to undertake a rigorous review of the evaluation recommendations with the project managers. Representatives from each project will be invited to Bangkok to review the recommendations and prepare themselves to submit Phase II work plans which incorporate the findings.