



summary

Asian Urban Disaster Mitigation Program

**M&E: Initial Program Performance Report
for 1-Oct-95 to 30-Sept 96-Period**

I. OVERVIEW

1. PROGRAM DESCRIPTION

Asia is the most disaster-prone region in the world, claiming nearly 60% of natural disasters worldwide. With population and economic activity rapidly concentrating in urban areas, cities in the region are particularly vulnerable to hazards of all kinds.

The Asian Urban Disaster Mitigation Program (AUDMP) is a four year program designed to respond to the need for safer cities in Asia. The ultimate goal of the program is to reduce the natural disaster vulnerability of urban populations, infrastructure, lifeline facilities, and shelter in targeted cities in the region. The purpose of the program is to:

- establish sustainable public and private sector mechanisms for disaster mitigation that will measurably lessen loss of life, reduce the amount of physical and economic damage, and shorten the post-disaster recovery time;
- promote replication and adaptation of successful mitigation measures within target countries and throughout the region.

The AUDMP was initiated in October of 1995 with funding from USAID's Office of Foreign Disaster Assistance (OFDA) to the implementing organization, the Asian Disaster Preparedness Center (ADPC), in Bangkok, Thailand. The program is managed by the USAID's Regional Housing and Urban Development Office in Jakarta, Indonesia (RHUDO/Jakarta). A Working Group, including representatives of OFDA, the RHUDOs in Indonesia and India, the Office of Environment and Urban Programs, provide periodic oversight and advice on the progress of the program.

2. PROGRAM STRATEGIES

Working in conjunction with collaborating institutions in each target country, the program takes a three-pronged approach towards making cities safer:

- 1) **National demonstration projects** in each of the target countries will serve to provide a working example of urban hazard mitigation. In a selected city, a hazard or set of hazards will be assessed, resulting in mitigation recommendations which are then implemented. Current project countries and target hazards include: Philippines (Floods, Volcanoes, and Earthquakes); Indonesia (Earthquakes); India (Technological

and Industrial Hazards); Sri Lanka (Landslides); and Laos (Fires and related Urban Hazards);.

2) The **Information dissemination and networking** component aims to help build public and private networks as a forum for exchanging information and experience on urban disaster management, with the goal of replicating successful hazard mitigation practices from the demonstration projects within each country and throughout the region.

3) **Policy seminars and training** provide an opportunity to further institutionalize hazard mitigation practices through seminars for national-level decision makers, as well as by using an in-country and regional “train the trainers” approach to passing on technical skills via a core curriculum in hazard assessment and mitigation. Courses will be offered by in-country partner institutions.

II. PROGRAM ACCOMPLISHMENTS

Accomplishments since Program's inception

1) Program Management and Administration

Activities offer critical support to progress on the Program Objective and all three Results. [See *monitoring and evaluation matrix attached (Table 1) for long-term performance indicators.*]

a. Office Set Up

The program office is fully established. The physical office space has been arranged and computer and other technical support systems set up. Computerized financial and program management systems have been established and are operational.

b. Personnel

AUDMP staffing is nearly complete. In December of 1995, an Executive Assistant was hired and has helped to set up program office systems. In May of 1996, an Urban Information Manager was hired to oversee the information and networking components of the program. After networking with disaster management organizations in the U.S., she arrived at ADPC in late June. The final staff position, for a GIS/Mitigation specialist, is scheduled to be advertised in November of 1996, with the goal of having that person at ADPC by December.

c. Working Group Meetings

The initial Working Group Meeting for the AUDMP was held at the Asian Institute of Technology (AIT) in April of 1996. The members clarified roles and responsibilities of this advisory body, and gave valuable input into the design of national demonstration projects as well as other program sub-components. They were enthusiastic about the direction of the program and pledged their support. The next Working Group meeting is tentatively scheduled for February of 1997 and will be held in one of the project locations.

d. Monitoring and Evaluation

Ms. Jean Parker, a monitoring and evaluation specialist, recently came to ADPC to finalize the AUDMP Monitoring and Evaluation Plan. She consulted with staff and is currently redesigning the monitoring and evaluation protocol and indicators system. The final report is expected by the end of October. The system is now being established and will be fully operational by December of 1996.

e. Cooperative Agreements and Administrative/Financial Procedures

With the help of a privately-hired accounting consultant, Anthony Princese from the Philippines, AUDMP management has developed a model Cooperative Agreement to use with program Sub-Grantees. This will significantly ease future negotiations in establishing National Demonstration Projects. In addition, the administrative and financial procedures were analyzed and areas to be strengthened identified. An action plan is now underway to finalize financial and administrative sub-grant agreement systems which fully meet USAID regulations.

2) National Demonstration Projects

Activities lead specifically towards progress on:

- **Program Objective -- Establishment of sustainable public and private sector mechanisms for disaster mitigation in Asia; and**
- **Result No. 1 -- Improved capacity of municipal officials to manage risk and apply mitigation skills and technologies;**

National Demonstration activities have been initiated in five countries, which involved extensive collaboration with cooperating individuals and organizations. Following is an overview of the project scopes and a status review. A sixth project, in Nepal, will be initiated in early November of 1996.

PHILIPPINES

Overview:

Many natural hazards, including cyclones, floods, and earthquakes, seriously threaten urban areas of the Philippines. The objective of the Philippines project is to reduce vulnerability to natural hazards in two cities, beginning with flood mitigation in Naga City and followed by volcano and earthquake hazard mitigation in San Carlos. In addition to hazard mapping and mitigation planning, the project will emphasize land use planning, the formation of disaster management standards, and the training of urban professionals. A Cascade City component will promote the replication of lessons learned to other Philippine municipalities. The lead project institutions will be the League of Cities (LOC) and the Philippine Business for Social Progress (PBSP).

Status:

The project proposal has been finalized and ADPC has begun negotiating a Cooperative Agreement with the lead institution, LOC/PBSP. The Agreement is expected to be signed by mid-November.

INDONESIA

Overview:

Although the City of Bandung in West Java is subject to numerous natural hazards, it is considered to be at especially high risk to earthquakes; not only does the city sit on sedimentary soils close to an active fault, but it also has the highest population density of any urban area in Indonesia. The objective of the Indonesia project is to reduce the vulnerability to natural disasters of the urban population, infrastructure, critical facilities, and shelter in the city of Bandung, with an emphasis on earthquake hazards. Special attention will be paid to critical facilities such as schools and hospitals, which typically suffer from poor construction and have a history of seismic vulnerability. (As a result of the last four earthquakes in Indonesia, 70% of such facilities in affected areas sustained extensive damage.) The first phase will consist of hazard mapping and vulnerability assessment of the city. During the second phase, development and implementation of mitigation strategies, a specific school building or health facility will be selected for retrofit. The lead institution will be the Institute for Research of the Institute of Technology, Bandung (ITB), through a collaboration between the Center for Earthquake Study (CEES) and the Center for Urban and Regional Planning Study (CURDS). ITB will coordinate on the training component with the Urban Management Training Program (UMTP) within the Ministry of Finance.

Status:

Negotiations have been completed with the City of Bandung, which has given full support for the proposed project. With this endorsement, the project proposal was circulated to the Working Group. The sub-grant agreement and initial funding should be finalized by the end of November.

INDIA

Overview:

The Indian government has identified numerous manufacturing and hazardous materials storage sites in densely populated urban areas. The objective of the India project is to reduce the vulnerability to technological/industrial hazards of the population and infrastructure of selected municipalities or district within the Calcutta and Baroda Metropolitan Areas. The first phase of the project consists of hazard mapping and vulnerability assessment in three or four municipalities in the project areas. During the second phase, a full-scale mitigation strategy and off-site emergency preparedness plan will be prepared and implemented for one of these cities. The main technical institution proposed is an NGO called the Centre for the Study of Man and the Environment (CSME). Possible collaborators on the training aspects are the National Safety Council/West Bengal Chapter and the All-India Institute of Hygiene and Public Health, which has a Disaster Management Centre.

Status:

The project design consultants have submitted a preliminary draft proposal to ADPC. The final draft will be submitted by 31 October. This document will be circulated among the Working Group for review and comment. Negotiations have secured a commitment from the Urban Studies Centre within the Times Research Foundation to serve as the lead project institution.

SRI LANKA

Overview:

With its mountainous terrain, the interior hill country of Sri Lanka is very vulnerable to landslides. The objective of the Sri Lanka project is to reduce the vulnerability to landslides in selected municipalities. The project will assist municipal officials in developing improved tools and skills for development planning and risk management in a rapidly urbanizing area, Ratnapura, which is subject to landslides. Demonstration activity elements will include the development of a "rapid assessment methodology" for preliminary landslide hazard mapping, risk analysis, and prioritized options for reducing vulnerability. The project will capitalize on extensive landslide hazard mapping currently being undertaken by the National Building Research Organization under a UN funded project. The proposed lead institution is the Local Government Management Unit (within the Ministry of Cooperatives, Provincial Councils, Local Government and Indigenous Medicine).

Status:

The Project Design Team has gone on mission to Sri Lanka and a draft project proposal is expected by the end of October.

Note: In the three furthest developed projects, those in India, Indonesia and the Philippines, participating organizations have already far exceeded the required in-kind contribution of 15% of total project funding, offering nearly double the minimum expected amount.

LAO PDR

Overview:

Fires have been identified as the largest cause of loss of life and property in the capital city of Vientiane. The objective of the Laos project is to reduce the vulnerability to fires and related man-made urban hazards of the population and built environment of Vientiane. To accomplish this, the project will focus on building capacity for prevention and response within the City's emergency services departments, establishing a community outreach program, and improving the regulatory environment and incentives system for fire mitigation and accident prevention. The lead institution proposed is the Lao Red Cross Society, in collaboration with key government ministries.

Status:

An initial visit was made by ADPC and USAID staff to Laos in February, 1996. A draft concept proposal was produced and is being circulated within the Government of Laos to obtain their required initial agreement to the project concept. A follow-up visit with the Government of Laos is being planned for November or December. A project design team is tentatively scheduled to be fielded in January or February of 1997.

NEPAL

Overview:

Nepal has a long history of destructive earthquakes. With a burgeoning population of almost a million people, uncontrolled development, and building construction techniques which have changed little in the past century, Kathmandu Valley becomes increasingly vulnerable to catastrophic earthquakes with each passing year. The objective of the project is to reduce the vulnerability of Kathmandu Valley by creating mechanisms to incorporate earthquake hazard information into the urban development process. Towards this end, the purposes of the project would be to generate 1) an earthquake vulnerability assessment; 2) a survey of the urban environment resulting in an earthquake scenario; and 3) earthquake risk reduction recommendations. The project would be designed to complement other donor activities in areas such as GIS mapping and urban infrastructure provision. (Discussion has already taken place on the possibility of connecting such a demonstration project with a \$30 million World Bank/ADB urban infrastructure project.) The lead institution proposed is the Nepal Society for Earthquake Technology (NSET).

Status:

An initial visit to the USAID Mission to discuss the proposed project and initiate the project design process will be undertaken by ADPC, RHUDO/South Asia and OFDA's Senior Regional Disaster Advisor early in November. A project design team from Geohazards International and ADPC is tentatively scheduled to be fielded in February or March of 1997.

3) Information and Networking

Activities lead specifically towards progress on:

- **Result No. 2 -- Improved access to hazard mitigation information and skills (e.g. techniques, methodologies, experience throughout the region)**

a. Information and Networking Plan

Mr. Robert Stephenson, an expert on information systems, spent three weeks in September at ADPC consulting with AUDMP staff on the design and implementation of an Information and Networking Strategy. As part of his work, he updated staff on the state of information technology, advised on the provision of technical information support and recommended software for information database management. The strategy will be drafted by the end of October, circulated to Working Group Members, and finalized by mid-November. From this, the Information and Networking Work Plan will be produced and finalized by the end of November.

b. Networking trip

Prior to arrival in Thailand, the Urban Information Manager made contact with various U.S. organizations with interests and activities related to those of the AUDMP, including the Organization of American States, the Pan American Health Organization, and the National Board on Natural Disasters. In addition, she visited and exchanged information with two key U.S. disaster institutions which may collaborate with the AUDMP in the future: the Disaster Management Center at the University of Wisconsin, Madison and the Natural Hazards Center at the University of Colorado, Boulder.

c. Other activities

- Submission and acceptance of a paper entitled “The Asian Urban Disaster Mitigation Program: Reducing the Impact of Disaster” for the International Conference on Urban Engineering in Asian Cities in the 21st Century to be held in Bangkok, Thailand in November;
- Application and acceptance of the AUDMP as an official sub-project under the UN’s Global Emergency Management and Information Networking Initiative (GEMINI);
- Participation in the International Decade for Natural Disaster Reduction (IDNDR) Internet Conference “Solutions for Cities at Risk”; and
- Assistance with design of ADPC’s Internet homepage.

4) Policy Seminars and Training

Activities lead specifically towards progress on:

- **Result No. 2 -- Improved access to hazard mitigation information and skills (e.g. techniques, methodologies, experience throughout the region); and**
- **Result No. 3 -- Improved policy environment for disaster mitigation**

ADPC’s Learning and Professional Development Section is devising a new strategy for institutionalizing professional development courses in target country training organizations, which will be tested as part of the AUDMP. The strategy shifts emphasis from training at ADPC to an in-country, “train the trainers” approach to working with collaborating national institutions that provide disaster management training to community level professionals. The program will also incorporate distance learning techniques and will result in a mitigation reference manual for Asia. ADPC also plans to collaborate with AIT, Swinburne University (Australia) and the University of Wisconsin (USA) to incorporate the training modules into academic degree programs.

The next step is to formalize and circulate the strategy, and to identify and consult with the lead training institutions of the National Demonstration Projects. This process should be completed by the end of December.

III. CONCLUSIONS AND RECOMMENDATIONS

This initial design phase of the AUDMP has been very successful. Working in an extremely large and diverse region with widely varying levels of institutional capacity, program management has succeeded in moving several of the national demonstration projects from the concept stage to readiness to begin operation. Projects in the Philippines and Indonesia, in fact, should both be launched by November and the India project by January. The other overarching program elements, namely Information and Networking and Policy Seminars and Training, will be finalizing their strategy plans as the in-country collaborating institutions come on line. The Monitoring and Evaluation system is in place and is ready to be integrated into each project. Overall, much of the important positioning has occurred to begin active implementation of the AUDMP.