

AID/NPS Cooperative Program in Natural Resource Management

By Joanne Michalovic

In 1979, the National Park Service, Office of International Affairs, entered into a cooperative agreement with the U.S. Agency for International Development (AID) – a government donor organization providing financial assistance and expertise to developing countries in such areas as food, agriculture, forestry, science, and technology. The AID/NPS cooperative program focuses on transferring information to lesser developed countries (LDCs) on how to integrate natural resource management concerns into the development process.

The National Park Service was selected to participate in this program because it has had long experience in managing a wide variety of habitats, takes an ecosystem approach to management, has many links with experts in the environmental fields, and strives to balance development with environmental protection. The project is funded through the AID Office of Science and Technology in Washington.

The growing populations of most developing countries are using up their renewable natural resources at unprecedented rates. Proper management of these resources on a sustainable basis is critical

to the long-term economic and social well-being of these nations. For the most part though, developing countries do not have the internal, infra-structural capability or support to plan, fund, and execute projects designed to manage natural resources. In attempting to satisfy their immediate needs for food, fuel, and shelter, the long-term consequences of resource degradation frequently are overlooked. The result too often is deforestation, desertification and soil erosion, silted-up reservoirs, water pollution, saline soils, pesticide-resistant insects, and loss of valuable species of flora and fauna. The aim of the project is to assist LDC's to improve their capability to conserve and manage their natural resources and environment.

The AID/NPS cooperative program consists of a six phase project activity, and concentrates on three bio-geographic regions – coastal zones, arid and semi-arid lands, and the humid tropics. Phases I through IV of the project, currently nearing completion, deal with production and dissemination of information. Over the past five years, AID and the NPS have engaged some 200 scientists and international experts to develop publications that will enable host country personnel to integrate natural resource concerns as an equally-weighted element with social, economic, and institutional factors in development strategies and project planning. Each document translates scientific or technical information into practical applications for development.

The first of these AID/NPS publications is an informative quarterly – the "Natural Resource Technical Bulletin" (NRTB), which is prepared in cooperation with the Sierra Club International Earthcare Center, with special assistance from the Yale University Library of Forestry and Environmental Studies. The NRTB covers a different aspect of natural resource management in each issue. It also contains book reviews, and an annotated bibliography of publications available in the field.

In line with the need for current information about natural resource management, three generic AID/NPS documents were produced. They review regional development planning experience, methods for conducting natural resource inventories and environmen-

tal baseline studies, and approaches to developing internal administrative and support infrastructures. In addition, specific publications were produced for each of the three bio-geographical areas and include case studies, review papers, development guidelines, and project design aids.

Most recently, the project entered Phases V and VI of implementation. Phase V, the design and implementation phase of training, is intended to train host country personnel, from universities or government, who have the capability to train others – a training-of-trainers concept. This phase envisions the transformation of information, methodologies, and technologies developed under Phases I through IV of the project into course materials to be used in three workshops on planning and managing natural resources – in coastal areas, in arid and semi-arid lands, and in the humid tropics.

The first of the three workshops – "Training of Trainers in Coastal Zone Management" – was held in Bangkok, Thailand in March. It was hosted by the Faculty of Environment and Resource Studies of Mahidol University. This faculty was chosen because of its integrated approach to resource management issues, its energetic and enthusiastic staff, and the recognition of it as Thailand's leading environmental and research center.

The workshop goals were to (1) stimulate coastal zone management and planning in as many LDCs as practicable; (2) have the participants develop training curricula at the workshop that incorporated an integrated systems approach to managing coastal zones; (3) facilitate establishing a coastal zone management network of trainers, government officials, and donors; (4) introduce coastal resource management issues into schools of law, business, and public administration; and (5) increase the number of natural resource management courses at the university level and insure they are designed and taught in an inter-disciplinary, integrated manner.

Fifteen participants from Indonesia, Thailand, Sri Lanka, Kenya, and Mozambique spent three weeks intensively studying the major elements of coastal area management planning – resource uses, planning and information management, legal context, institu-



Portion of one research site showing three transplant study plots. Foreground and background plots demonstrate furrowing used for moisture retention.

tions and administrative arrangements, economic context, and social context.

A week long field exercise to Songkhla and Phuket in southern Thailand demonstrated many of the principles and techniques by utilizing an actual development proposal on the coast as a case study. Each participant was from either a university or a government training center, and was expected to institute training curricula developed at the workshop upon returning home.

Participants had received instructions prior to the workshop from high level government decision-makers in their respective countries on the target audiences toward which their training programs were to be directed. This helped to define specific country training priorities and built commitment to support the training courses developed by the workshop participants.

Similar workshops are planned for arid and semi-arid land management in June at the University of Zimbabwe in Harare, and for management of humid tropic resources in November at a presently undetermined institution in Latin America.

Workshops and training, however, accomplish little unless implementation and institutionalization of the knowledge is transferred to a benefitting audience. Phase VI of the AID/NPS cooperative program does just that. Follow-up activities are planned with the three host country institutions after the workshops to assist them in institutionalizing the training by incorporating the training materials within their curricula.

Currently, the NPS is continuing its work with the Faculty of Environment and Resource Studies at Mahidol University, helping them design and sponsor their own coastal zone management training-of-trainers course for Thai participants. The target for this proposed training is teacher training college students, who eventually will be teaching courses at the high school level. At this level, the training and dissemination of coastal zone management information will have a high multiplier effect, perhaps a ratio of 1:50 per year. Influencing students at the high school level will help instill a conservation ethic in a segment of the population that soon will be entering universities and choosing professions and careers. Since there are 23 coastal provinces in Thailand, each with at least one teacher training college, the amplifying effects could be enormous.

This short course will serve as a model and a pilot. The experience and data gained from it will be passed on regionally, to assist other Southeast Asian nations in establishing their own training programs, and to participants from the first world-wide training-of-trainers course held at Mahidol in March. This will help in establishing and maintaining a network of professionals concerned with coastal zone management issues.

In addition, the development of a Thai language textbook (presently non-existent) for university students, on coastal zone management will be forthcoming as a result of follow-up activities between the NPS and Mahidol University. Again, similar types of follow-up activities are planned for the institutions hosting the arid and semi-arid lands and the humid tropics workshops in designing training strategies for their countries.

Further information on NPS/AID publications, on workshop substance, or on follow-up activities can be obtained by writing the National Park Service, Office of Internal Affairs, P.O. Box 37127, Washington, D.C. 20013-7127, or by calling (202) 343-7063.

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