## PUPARN ROYAL DEVELOPMENT STUDY CENTRE

#### **PURPOSE**

This case study examines collaborative environmental management and development projects being under the auspices of the Thai Royal Development Study Centres (RDSC). Particular attention will be given to illustrating the creative application of available environmental management theory to provide practical responses to

#### **ETP1 COURSE TOPIC COVERAGE:**

- SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL AWARENESS
- INTEGRATED RESOURCE AND ENVIRONMENTAL MANAGEMENT (IREM) CONCEPTS AND BENEFITS
- **BARRIERS TO IREM**
- IREM PRACTICAL TOOLS FOR IMPLEMENTATION
- ► DEVELOPING EFFECTIVE IREM IN THE MRB

development challenges in rural areas of Thailand using the Puparn Centre as an example. Emphasis is given to unique features of the RDSC development model being applied in Thailand and to opportunities and necessary conditions for similar projects to be implemented in other Mekong River Basin (MRB) countries.

#### **ISSUES**

Specific issues highlighted by this case study are:

- 1. Potential for innovatory application of existing environmental management theory to create practical and sustainable development initiatives in rural communities
- 2. Impediments to sustainable development such as institutional barriers and knowledge gaps
- 3. Importance of involvement and commitment by government and local communities in project conception and implementation
- 4. Instigating factors for major sustainable management initiatives (e.g., legal and regulatory reforms, donor pressure, community leaders as social agents for change)

#### LEARNING OBJECTIVES

On completion of this case study, participants will be able to:

- Provide examples of environmental management and development projects undertaken by the RDSC
- Discuss why royal patronage to RDSC has been a necessary ingredient of the success attained in development work in Thailand

- Recognize the importance of a community focus for and involvement in sustainable development initiatives
- Detail steps to ensure effect knowledge transfer to communities involved in RDSC projects
- List stakeholders in RDSC and detail their respective roles and responsibilities
- Identify strengths and limitations of the RDSC concept and organization
- Suggest how aspects of the RDSC model could be applied in other MRB countries
- Discuss impediments to the adoption of the RDSC approach in their own country

#### **PROJECT SUMMARY**

#### Introduction

His Majesty the King of Thailand has been dedicated to development work since the mid-1950's when he became familiar with the problems faced by people in rural areas. During visits to rural areas, His Majesty realized the need to initiate development projects that would directly benefit people at the grassroots level and at the same time be consistent with local natural and social environmental conditions. In addition, His Majesty desired that the rural population should be encouraged to be self-reliant. To this end, His Majesty has consistently stressed the need for dissemination of knowledge on occupational and agricultural techniques to villagers.

Since the establishment of the first RDSC in 1979, a total of six centers have been established in Thailand, covering every major region of the country. The Centres established to date are:

- Khao Hin Sorn RDSC, Phanon Sarakham district, Chachoengsao province
- Kung Krabaen Bay RDSC, Tha Mai district, Chanthaburi province
- Pikun Thong RDSC, Muang district, Narathiwat province
- Puparn RDSC, Muang district, Sakon Nakhon province
- Huai Hong Khrai RDSC, Doi Saket district, Chiang Mai province
- Huai Sai RDSC, Cha-am district, Phetchaburi province

## The Royal Development Study Centres

## Characteristics of Royal Development Activities

While the many projects undertaken by the individual RDSC deal with diverse fields and have a variety of purposes, they all share common characteristics consistent with His Majesty's concepts and theories on development. Most of the Royal projects aim to help rural people to make a better living. Since the majority of the

Thai population still depends on agriculture for their living, projects usually involve the improvement of production inputs such as soil, water, farmland, agricultural knowledge, and the conservation of natural resources and the environment. The key ingredient to all these projects is that they involve simple concepts and technology which can be applied quickly and solve problems effectively.

His Majesty also emphasizes the need for all projects to be consistent with sustainable development precepts. In this regard, achieving harmony and mutal support between development and conservation of natural resources and the environment is considered fundamental. In meeting this challenge, Royal projects seek to understand nature and the relationship between people and the environment in determining how best to respond to environmental issues. For example, His Majesty's concept of "3 forests, 4 benefits" involves integrating the need to conserve and to rehabilitate forest resources with socio-economic imperatives. To prevent forest destruction by farmers in search of wood, it was suggested that three types of forest be planted to create four benefits; one type provides wood for household use, one produces fruits, and the other fuel, while as a whole the forest plantation provides a fourth benefit in enhancing soil and water conservation.

In addition to occupational development to increase household income in rural areas, all Royal projects include components dealing with social development and improvement of people's quality of life. This is based on the principle that the members of the community should participate as an "explostion from within". In this way, people whose lives will be affected by a project can directly influence the direction and outcomes of the project. This grassroots participatory approach helps ensure the commitment of local communities to successful project implementation.

Another characteristic of Royal projects is that they are often assigned a variety of objectives simultaneously. Besides aiming for economic development and the people's higher income, projects are also expected to promote social development, build community security and strength, and improve the overall quality of life. They also embody social psychology and the Thai way of life and culture. For example, a Royal project at Mongkhon Chaipattana temple in Saraburi province aimed to revive an aspect of the traditional Thai way of life by encouraging interaction among all members of the community. To achieve this goal, the project included construction of a small multi-purpose open pavilion where monks, villagers, and government officials can meet informally, exchange information, and together solve problems of the community.

#### Objectives and Goals of the RDSC

The RDSC were intended to function as follows:

• Each Centre will undertake research, experiments and studies to develop guidelines and development methods suitable for the different conditions in each part of its region.

- Each Centre will promote communication and exchange of experiences among academics, development workers and the local people, to develop a consensus on how best to use new technical knowledge (i.e. the output from the completed research, experiments, and studies) in practical initiatives which respond to local development issues. In this way, the Centres will serve as a venue where stakeholders can determine how best to apply technical knowledge as practical responses to local development issues.
- Each Centre will emphasize integrated management, where many different but complimentary fields of knowledge are brought together to systematically understand development issues and to determine optimal responses.
- Each Centre will encourage coordination within the government sector (i.e., various government agencies and departments) in the planning and implementation of projects to increase efficiency and to ensure that project benefits are fully realized.
- Each Centre will provide a one-stop service, combining research, experimentation and study by scientists and managers, information and training to local people, and transfer of knowledge to the community through demonstration projects. In this way, the Centres will function as "living natural museums".

Each of the RDSC are actively involved in responding to the development problems of the regions in which they are located. Each Centre conducts research studies to determine the most appropriate development strategies for their locality. Once strategies have been shown to be successful through completion of demonstration projects, results are disseminated to local people to apply in their communities. Local people have the opportunity to participate in training or alternatively can observe activities at the Centres and learn how best to apply concepts. In some instances, Centre staff are dispatched directly into the community to offer advice to satellite villages and villages further afield. This dissemination strategy of transferring knowledge to the broadest area possible often gives rise to the establishment of branch Centres which focus on specific issues and problems in their immediate area. The Branch Centres operate in a similar manner to the RDSC, conducting research and studies on local issues and transferring of this knowledge for the benefit of local people.

## Organization and Administration of the RDSC

The underlying philosophy of the RDSC is that they should enable different organizations (e.g., government agencies, academia, non government organizations) to work together in support of the Centres. To achieve the necessary collaboration, an organizational structure was adopted for the RDSC which ensures representation by all interested parties while seeking to avoid any one organization from dominating. The organization of the RDSC at both central and regional levels is summarized below to provide an understanding of the major actors involved and the operational links which have been established to ensure the efficient function of the organization.

This central organization constitutes an Executive Committee and a Master Planning and Monitoring Subcommittee. Initially, the RDSC were operated by a separate executive committee and subcommittee, each of which had different administrative structures – resulting in a lack of consistency and unity in activities being implemented by the Centres. Subsequently, a revised administration was created by dissolving the existing committees and replacing them with the above-noted simplified organizational structure.

The RDSC Executive Committee comprises the twelve Director-Generals from concerned government agencies, at both central and regional levels, and the six Governors from the provinces whether the individual Centres are located. The Committee is chaired by His Majesty's Privy Councilor with the Secretary-General of the Office of Royal Development Projects Board (RDPB) serving as Vice-Chairman.

#### **Museum for Life**

"...It provides a demonstration of integrated development work, covering everything and every aspect to help people earn a living in their environs. They will be able to observe the models of modern knowledge and technology, and an effective course for making a living..."

"On one aspect, the Royal Development Study Centre serves as a venue for carrying out study and research of different areas, because each area differs considerably in terms of precipitation, climate, and the people themselves..."

"Various departments and divisions which concern every different aspect of the people's life can exchange ideas, work together and coordinate to have the work done. Normally, there should be a center which gathers in one place officials and experts from all departments and divisions in various fields: agricultural, social and related educational promotion. This means the people can obtain different fields of knowledge at the same time. It is like two poles. One is the officials who work together in one place. The other is the general public who acquire benefits..."

The Royal Speech of His Majesty the King

The Committee is responsible for formulating policy and operation guidelines to facilitate, manage, and monitor project implementation and to troubleshoot solutions to day-to-day obstacles to operation of the Centres. The Committee is supported as necessary by specifically formed subcommittees and working teams.

The Master Planning and Monitoring Subcommittee consists of deputy Director-Generals from nine of the concerned agencies and is headed by the Secretary-General of the RDPB. The Subcommittee is authorized to conduct studies and compile data in support of master plan implementation. In addition, the Subcommittee monitors Centre operations to ensure that activities are completed on time and within the allocated budgets.

Regional organization of the RDSC involves one subcommittee and one working team consisting of representatives from government agencies working at the central and regional levels as follows:

- Department of Land Development
- Department of Agriculture
- Royal Forestry Department
- Department of Livestock Development
- Department of Fisheries
- The Royal Irrigation Department
- The Royal Thai Police Department
- Department of Agriculture Extension
- Office of the Accelerated Rural Development
- Department of Cooperatives Promotion
- Department of Public Welfare
- Department of Community Development
- Department of Local Administration

The subcommittees and working teams are responsible for monitoring, guiding and coordinating the activities of the regions' Centre. The post of Centre Director is filled by a representative from the major government agency involved in each of the regions.

# Puparn Royal Development Study Centre

# Background

Puparn Royal Development Study Centre was established in November 1982 to study and promote appropriate development methods which particularly suit the development needs of the northeastern region of Thailand. The Centre covers an area of approximately 368 hectares with an adjacent natural forest area of approximately 1,760 ha. The Centre provides a complete service where people can acquire knowledge, adopt new and appropriate development methods, and receive occupational training in order to improve their livelihood. The Centre also seeks to conserve and protect the forest in the surrounding area which is an important watershed resource.

#### **Objectives**

Specific objectives of the Puparn RDSC are as follows:

1. To study and experiment on appropriate agricultural techniques as models for farmers to use and apply for their own livelihood

- 2. To restore, conserve and develop forestry through the use of simple irrigation systems
- 3. To cultivate economic crops and to process agricultural products for agroindustry
- 4. To promote occupational development to provide a steady income for farming households

## **Project Activities**

Examples of major project activities initiated to date by the Puparn RDSC include:

**Soil Erosion Control** – The Centre is researching methods to prevent or reduce soil erosion in the area by investigating the potential of vetiver grass; an indigenous Thai species with the specific properties of helping prevent soil erosion and conserving soil moisture. Centre researchers are experimenting with planting vetiver grass in combination with fruit trees and planting the grass along water embankments to prevent soil erosion and loss of topsoil in run-off.

Study and Development of Agriculture – Ongoing agricultural research and experimentation includes: (i) development of new methods of rice cultivation, study of rice varieties and experimentation with mixed cultivation of rice with other crops; (ii) investigating opportunities for improving field crop cultivation by adding lime to change acid soil conditions and identification of appropriate field crop varieties (e.g., cassava and baby corn); (iii) horticulture studies to determine how to produce high quality and high-yielding fruit crop varieties (e.g., mango, lychee, papaya); (iv) studies on mushroom, rubber plant and silk worm cultivation methods; (v) improving methods of food preservation and processing to increase the market value of agricultural products; and (vi) development of appropriate farm systems for both rain-fed and irrigated areas.

**Fisheries** – Demonstration work is being undertaken to promote the development of appropriate fisheries aquaculture methods including fish culture in ponds and rice fields as part of an integrated farm system.

**Forestry** – Study, research and development work on various aspects of forestry is being undertaken including: promotion of planting of fruit trees by farmers; conservation of forest resources through fire control and reforestation; promotion of agro-forestry (e.g., bamboo, rattan, coffee); conservation of watersheds through data collection on forest ecosystems and construction of check dams; and promotion of forest products (e.g., cultivation of the lac insect to produce sealing wax, demonstration of appropriate methods of producing charcoal).

## Community Outreach

Once studies, research and experimentation have been completed, results are then disseminated to the fifteen local villages in the immediate vicinity of the Puparn RDSC by means of community presentations, transfer of technical knowledge,

demonstration examples, and provision of training to villagers to allow them to apply project outputs for their own benefit.

Results are also being disseminated to throughout the northeastern region through a network of Branch Centres as follows:

- Huai Bang Sai Upper Basin Development Project, Dong Laung district, Mukdahan province
- Kam Basin Development Project, Sakon Nakhon and Nakhon Phanom provinces
- Baan Dan Samakkee Kasert Nam Fon Area Development Project, Khoa Wong district, Kalasin province

## SITE VISIT METHODOLOGY

Course participants will have the opportunity to visit the Puparn RDSC to discuss the Centre's functions with staff and to collect information from villagers on projects currently underway. The expected duration of the site visit is 2-3 days. Prior to the site visit, participants will be organized into small groups with each group being asked to work together in assessing the RDSC initiative. All of the groups will be asked to consider the following questions:

- What is unique about the project?
- Can the project be replicated in other MRB countries?
- Who are the core target group for project activities?
- What are the project's underlying principles?
- What aspects of the project's structure and organization are critical to its success?
- How are specific project activities selected?
- Who is involved in the conception and implementation of project activities?
- How is knowledge transfer to the local community achieved?
- Is the project successful in meeting its stated objectives?
- How could the RDSC model be improved?

On completion of the site visit, the class will discuss their findings with emphasis on the practical lessons learned by participants which reinforce sustainable development and IREM theory taught in the course.

## TAKE HOME MESSAGES

Anticipated lessons learned by course participants in completing the case study and site visit might include:

- 1. Royal patronage for the RDSC stands out as a critical aspect of the project. His Majesty the King of Thailand has provided leadership in seeking solutions to sustainable development challenges facing his country. The emergence of comparable agents of change is seen as fundamental to the successful adaptation of the Thai model to other MRB countries.
- 2. Willingness to embrace appropriate technologies may be the key to effectively responding to environmental and social challenges in developing countries. It is apparent that high technology is not necessarily better in attempting to address development issues at the community level. Instead researchers and managers should focus on technologies which are practical and simple to apply, and which meet the immediate needs of local communities.
- 3. The ultimate success of integrated management initiatives is contingent on removing obstacles to effective cooperation and coordination among stakeholders and in securing a commitment to project implementation by all parties involved. To this end, measures should be taken to identify and break down barriers among government agencies involved in environmental development and management, and to actively engage local communities in project conception and development.

## REFERENCE READING

- RDPB. 2000. His Majesty King Bhumibol Adulyadej of Thailand The Developer King. The Office of the Royal Development Project Board, Bangkok.
- RDPB. 1999. Museum for Life. The Office of the Royal Development Centre, Bangkok.
- RDPB. 1997. Concepts and Theories of His Majesty the King on Development. The Office of Royal Development Projects Board, Bangkok.
- RDPB. 1997. Puparn Royal Development Study Centre. Office of the Royal Development Centre, Bangkok.
- RDPB. 1996. 50 Years of Development Work According to the Initiatives of His Majesty King Bhumibol Adulyadey of Thailand. The Office of the Royal Development Projects Board, Bangkok.