### **Executive Summary**

# The Project on Enhancing the Capacity of Economists for Application of Sufficiency Economy Philosophy in Natural Resources and Environment Dimension

The objectives of the project are to increase capacities of Thai economists for better understanding of the philosophy of Sufficiency Economy in the context of natural resources and environment and to enhance ability of the economists to integrate the philosophy to the mainstream development approach. To achieve the objectives, the project has selected two local communities, widely accepted as "best practices" in sustainable natural resource management, as case studies. They are also considered as communities of which people have ways of lives in line with the Sufficiency Economy Philosophy. Lesson learnt from the communities and their local wise-persons will be drawn.

The project has reviewed literatures on Sufficiency Economy (SE) Philosophy in the context of natural resources and environment and has found that the number of studies is limited. The project, then makes a comparison between the SE concept and the economic concept of sustainable development (SD). By comparing their goals, both SE and SD approaches aim to achieve the sustainability of natural resources and environment. Economic interpretation of SD approach, however, is an anthropocentric approach under which human beings are considered as a center of development. As such, the economic value of natural resources and environment is determined by people in each society. Property right and market are two crucial institutions determining sustainability of natural capital. SE philosophy, however, considers the middle-path and inner wisdom as key value that determines a means to balance development and environment. Tradeoff between development and environment is not said in terms of benefits and costs. Rather, the balance has been realized through *inner wisdom*, enlightened that the environment has coexisted with human beings and should not be badly disturbed.

The two areas under study are the community forest of Ban Lahokkrasang, Khao Kok Subdistrict, Prakonchai District, Buriram Province and the coastal area of Palian Wetland, Ban Laem Subdistrict, Kantang District, Trang Province. In each area, a researcher had stayed in the village for a month (around April, 2007) to observe people's way of life and conservation activities. The

framework applied for an analysis at the communal level consists of (1) SE framework in the form of a system analysis under which *knowledge* and *ethical integrity* are inputs in the system; *reasonableness, moderation*, and *self-immunity* (here, the three factors are combined in terms of "the middle path") serve as the process; and balance and sustainability serves as outputs of the system (2) SE framework for an analysis of production, consumption, and exchange (3) SE framework in the context of natural resources and environmental management at the communal level. Both (2) and (3), as developed under this project, argue that environmental conservation activities relate closely with the level of exploitation and consumption underlined by the SE value (ethical integrity and the middle path). This value is formulated through continuous and various modes of *learning*. As a result of the learning process, *inner wisdom* of how to live own's life moderately with sustainable uses of resources has occurred. It also leads to the community's formation of norm and implementation of common rules under which natural resources and environment are used and managed by the community's members.

#### **Lesson Learnt from the Local Communities**

Community Forest of Ban Lahokkrasang, Khao Kok Subdistrict, Prakonchai District, Buriram Province

The community of Ban Lahokkrasang was formed in 1966. Villagers follows Buddhism and earn their livings mainly as farmers growing rice, jute, cassava, and recently -- sugarcane and rubber, or as daily workers. The community has formed a forest conservation group to manage the Lahokkrasang Community Forest covering an area of 2,700 *rais* (1 hectare = 6.25 rais)

The community forest has been a source of food, medicine, and a barrier to prevent natural disasters. In the past, the area was covered with dense forest. After the government offerred concession for logging, the forest had been rapidly destroyed by both capitalists from outside and by villagers without replantation or well-management. Loss of natural capital had been realized but not until 1997 when the conservation group was formed by Pramual Charoenying, a female leader of the village.

Since then, villagers have turned to traditional teaching of their ancestors and have accepted it as a common rule; that is, harvesting today should leave something for harvesting tomorrow. The teaching reflects the concept of moderate consumption and production. Reasonableness can be

found through the group's practices of planning for harvesting as well as conservation activities. Traditional knowledge in resource uses are applied appropriately. As for self-immunity, self-reliance and success in designing a resource management system are achieved through learning from trials and errors.

Major factors that enable the community to practice in the same line with the SE approach are the norm based on Buddhism and the learning process. Learning is derived from local experiences and networking with groups outside the community. Experiences from forest losses and threats from outsiders' demand for forest resources stimulate forest conservation, inducing participation, group formation, and trial-and-error practices for improving the management system. Exchanges of knowledge with members of Forest Network of Buriram and other networks enhance community's capacity to implement conservation activities more effectively. By participation in a local research project "The Study on People Participation in Lahokkrasang Community Forest Management" jointed with other communities in the subdistrict, the villagers have realized the value of traditional knowledge in natural resource management, encouraging self-esteem and local recognition for forest conservation. Villagers also learn from group discussion. Besides, a local school has launched activities that promote youth's learning and participation, leading to formation of a youth group that has initiated several constructive conservation activities.

It can be concluded that experiences from loss of forest, trials and errors, local research, public discussion, and networking are important sources of knowledge that enhance capacity of the community in resource management. Social capital derived from kinship and Buddhist culture brings about long-term cooperation and compliance to the community's rules. As a result, the community can accumulate its natural capital, social capital, human capital, and income derived from better environment and higher yield of agricultural production. Ban Lahokkrasang has received many awards for its best practice in community forest management and strong community.

# Coastal Resource Management in Palian Wetland, Ban Laem Subdistrict, Kantang District, Trang Province

Ban Laem is a Muslim village in Palian Wetland. The wetland is fertile with mangrove coastal forest and fishery resources. In the past, concession was offered and resources were depleted rapidly. Forest land was clear and, like paddy field growing rice for consumption, was changed into shrimp farming. Being forced to earn more money to support their lives, villagers had to adjust their

ways of life to relying more on monoculture of cash crop and on casual works,. Competition in resource uses worsened the relationship within the village. To people outside the village, the villagers were "nobody" but "destroyers" of the environment.

Consequently, villagers moved to revive the environment. At that time, the NGO "Yadfon Association" led by Pisit Charnsnoh had started a movement in a nearby area of Palian Wetland to encourage local people to conserve natural resource and formed a network comprising of many communities in Palian Wetland. Since then, Ban Laem village has successfully established a conservation group, targeting to revive the whole ecosystem of the coastal area including inland animal, plants, and fishery resources. Measures for conservation have been initiated through people participation process that enables sustainable livelihood of villagers.

Conditions encourage practices in the same line with SE approach in resource management is the past experience of natural resource deterioration, lessons learnt from conservation activities and exchange of ideas on sustainable development with Yadfon Association. Other factors are strict local regulations, devoted local leaders, and social capital that support people participation and cooperation. As the cooperation has expanded to other activities, natural capital is accumulated and average household income increases even more.

Reasonableness, moderation, and self-immunity is reflected by how villagers harvest fishery resources. At an individual level, resources are moderately extracted bases on availability of family labour and indigeneous knowledge on ecosystem and natural conditions with the concept not to destroy the existing resource stock. At the communal level, villagers take into account communal benefit as well as management capacity of the group. The concept of self-reliance at the communal level promotes community's self-immunity. Participation of adult and youth, a key element of activity implementation, is another process that leads to continuous and successful conservation.

As natural resources are replenished, villagers earn more income daily and can spend beyond a necessary level. While sustainable resource management is made possible through learning process in which knowledge is derived from past experiences and indigeneous knowledge on the ecosystem, the community does not emphasize on learning and constructing value of moderation in consumption and way of life in general. Thus, the village is at the risk of resource exploitation when there is a movement from outsiders to invest in an industrial estate development project at Ban Thoong Khai. If each household sells land for money regardless of a possible loss of fertile wetland and an increase in pollution from factories, the community will be adversely affected as the coastal area and natural capital will be destroyed.

## **Syntheses**

Although the two areas are of different religions and culture, they both have continuous learning and participation processes which induce *inner changes and wisdom* of the local people that are in line with the SE philosophy. *Inner wisdom*, composing of *knowledge* and *ethical integrity*, has transformed into social norm and communities' rules for sustainable management of natural resources. The learning process, has been continued intensively through various channels including direct experiences, participation in group activities and group discussion, teaching by religions, families and schools that transfer traditional knowledge and norm from generation to generation, and transferring of knowledge and information from networks. Particularly, the two areas have experienced the threat of resource depletion so that people realized the value of resource and started resource conservation. Continuous learning process is necessary to ensure the sustainability of SE practices.

From the study, we cannot reject the impacts of income and prices on consumption and production behavior of individuals. This project argues that SE philosophy is a holistic approach in which the middle path includes several dimensions of practices, not only for balance and sustainability of natural resources and environment. Apart from natural conservation, if the moderate consumption is not emphasized in the learning process, community is at risk to lose or deteriorate its natural capital at the end as there is always an incentive for each individual to sell their land and natural resources for income. Although monetary benefit is high for each individual, net benefit to the community as a whole may be lower or even be negative as the environment is destroyed by industrialization. Thus, bringing the philosophy of Sufficiency Economy into practice needs a holistic approach of learning in all aspects of livings, not only the environmental aspect.

Regarding the construction of indicators of Sufficiency Economy in the context of local environment, the project suggests that the evaluation should start with the indicators reflecting the moderate way of life in general. In case of communities of which people's livelihood relies on natural resources, a villager is both a consumer, producer, and conservationist and, thus, each individual or household should be taken as a unit of analysis.

A set of indicators proposed by the project is simply a pilot model that may be adjusted and applied by each community to evaluate its own level of being consistent with Sufficiency Economy framework. The indicators are constructed following the form of a SE system analysis as mentioned

earlier. The indicators for inputs in the system includes indicators that reflects *knowledge* and *ethical integrity*. The indicators for process includes *the middle path (reasonableness, moderation,* and *self-immunity)*. Indicators for *learning and participation processes* are added to the process index. Indicators for output indicate *balance and sustainability* where increment of human capital, social capital, natural capital, and physical capital is evaluated.

At the final stage, the project organized a meeting with economists. It is found that pictures, explanation and discussion are not adequate to make the participants understand ways of life, people's thought and practices. To visit and learn from the local people directly is the best way of understanding the philosophy of Sufficiency Economy.