

GLOBE and “Royal Development Projects Regarding Environment

By Assoc. Prof. Charlie Navanugraha, Ph.D.
Faculty of Environment and Natural Resource Studies,
Mahidol University
Salaya, Puthamonthon, Nakhonpathom 73170, Thailand
Email: encnv@mahidol.ac.th

Introduction

His Majesty the King of Thailand has been dedicated to development work over since His Majesty returned to Thailand in 1951. His Majesty has become familiar with the problems and real conditions of the people through constantly visiting every region of the country often accompanied by Her Majesty Queen Sirikit and members of Royal family. It is during these many Royal visits to the rural areas that His Majesty has realized the need to initiate development projects that would direct the people at the grassroots and at the same time be consistent with the local physical, climatic and social environmental conditions. Another central principle in His Majesty’s approach to development has been His Majesty’s the rural population should be encouraged to be self-reliant. Therefore, His Majesty has stressed the dissemination of knowledge to villagers with regards to occupational and agricultural techniques.(Office of Royal Development Project Board,2003)

There are many of the researchers doing with His Majesty under the Royal Development Project on researching to serve and provide a complete “one-stop service” where people can go to see demonstrations of development methods and techniques in various fields in order to seek more knowledge of education and to receive occupational training with are appropriate for local condition. Realizing that GLOBE project is real science and real education that can be able to do inquiry using scientific process and scientific thinking in doing science in actual practices in natural setting, as well as using science background to interpret, explain, predict the relationships, identify anomalies and research questions and to design investigation by themselves. Thai’s GLOBE project have asked to participate and learn with scientists of the Royal Development Centre in order to encourage the Thai student to do inquiry, to understand how scientist produce science, to be confident that they can produce science themselves. Another objective of focusing on this approach is to form the GLOBE Learning Community (GLC) as student- teacher - scientist collaboration researches focusing on local environment to benefit their communities. The local scientists form Royal Development Center can also support both in the instruments and scientific skills for GLOBE students which can stimulate them for scientific research on natural resources and environment.

Royal Development Theory

His Majesty King Bhumibol Adulyadej's theory and idea of development are based on the following logic :

1. Simplicity: makes things easy to do, easy to understand and coherent with the natural environment and life styles of the community.
2. Wise Management: make the best use of natural resources and conditions to solve the problems, e.g., use the timing of tide as a way of water treatment, water hyacinth to absorb contamination from the waterway.



Figure1.His Majesty The King was discussing with the researchers

3. Reach the End Users: end users will benefit from the program. Emphasis is made on "having enough to live on" first then moving onto "having a better life". The benefit is considered not in term of "business gain" but more on the "people gain" as he described it as "our loss is our gain".
4. Flexibility: the program must be "flexible", never to go strictly by the book. New technologies have to be adaptable to fit the local needs as well as the socio-psychology of the community.
5. Local Participation: co-operation from the members of the community is important, making the people feel that they are a part of the development program. There must be a sense of belonging, participating, and effective operation as he described it as "one stop service for the farmers

His Majesty The king laid 8 principles to achieve the purpose:

1. Not to give command or order to the people, but provide idea and information for them to choose voluntarily. They would be more satisfied with the outcome.
2. Emphasis is made on self reliance based on the people own way before seeking outside help. He believes in free will and mind.
3. People's participation is the answer to the community success.
4. Willing to accept different opinion. All projects are apt for modulation or modification. Things are flexible and plans can be changed to make them applicable to use. Not all projects have to be succeeded as planned.
5. All projects have to go along with the local geographic, environment, culture, and their ways of life. Never to have any conflict with the traditional standard of living.

6. Basic infrastructure for production is very important for long-term self reliance. Water resource must be sufficient for annual production to make the first step in providing themselves with enough food. The next step is to be able to communicate with the outside world, i.e., building roads for transportation of agricultural products. However, things must be done gradually and economically.

7. "Knowledge" is the most important tool to overcome the rural shortcomings. New technology and its successful use would be an incentive for the farmers. However, care must be taken not to bring in too many expensive technologies that would change all their lifestyle or take away the labor force. This would result in more damage than benefit to the community.

8. Implementation and application of agricultural technology must be continuously provided. It should be systematically operated by :

1) People's participation in the form of co-operatives to solve the community's problems.

2) Convince the community leader to participate in the projects while organize the working members to help the community development.

3) Step-by-step progression of self-reliance should be made, starting from food productions for local consumption and move further to commercialize the surplus products and marketing. Basic accounting to manage their own business is also necessary.



Figure 2. His Majesty the King was teaching on soil auguring sample to the students

Royal Development Study Centers and Their Activities:

In implementing the Royal Development Projects, the development work follows steps beginning with the strengthening of the community, which consequently encourage the people to become self-sufficient, at the same time conserving and developing the environment and promoting modern knowledge and technology. In practice, the implementation of the Royal Development Projects are undertaken in ways consistent with the topographical and sociological conditions of the local areas, which are different in terms of the nature of the problems concerned. His Majesty

initiated the establishment of six “Royal Development Study Centers” located throughout every region of the country to serve as the centre for conducting study, research and experimentation in search of guidelines and development methods appropriate to the different conditions of each area and occupations of the local people. The successful results of the study, research and experimentation conducted in the Centers will be disseminated to the farmers. In addition, the Centers are intended to serve as “living natural museums” where interested people can come to observe and receive training by seeing and learning from the real thing. There are 6 centers which are detailed on the objectives and activities as follow:

1. Huai Hong Khrai Royal Development Study Center, Chiang Mai Province

The activities for Huai Hong Khrai Royal Development Study Centre are under the objective to promote the study of water resources development, to study 3 types and 3 methods of forestry development and the conservation of watersheds and study livestock and milch cow development which are under the following activities:

- 1.) Water Source Development,
- 2.) Forestry Development,
- 3.) Land Development,
- 4.) Development of Crop Cultivation
- 5.) Development of Intensive Farming
- 6.) Development of Milch Cow and Livestock
- 7.) Development of Fishery
- 8.) Conservation and Development of Frog Farming
- 9.) Vetiver Grass
- 10.) Implementation of Work in the Villages Encompassing the Huai Hong Khrai Royal Development Study Centre
- 11.) Development-oriented Educational Tourism

2. Khao Hin Sorn Royal Development Study Centre Chachoengsao Province

The activities for Khao Hin Sorn Royal Development Study Centre are under the objective to serve as the source of knowledge on agricultural development, to serve as a centre for transferable appropriate technology on occupational development for farmers and to serve as a training centre for farmers on agricultural technology and handicraft skills which are the activities on the following:

- 1.) Land Development

- 2.) Agricultural Education
- 3.) Agricultural Extension
- 4.) Forestry
- 5.) Livestock Development
- 6.) Fishery
- 7.) Community Development
- 8.) Cooperative Promotion

3. Huai Sai Royal Development Study Centre Petchaburi Province

The activities for Huai Sai Royal Development Study Centre are under the objective to rehabilitate, improve and preserve forests to enable an increase of soil moisture in the project and surrounding areas, to ensure the success of the resettlement programme in order to help the people to have a place to stay and land to cultivate, and promote occupational development, which will lead to improvement of their socio-economic conditions and quality of life, to serve as the model where the people can obtain knowledge and trainings to apply in their livelihood and to coordinate the policies and plans of the implementing agencies to enable the work to proceed towards the same direction and become effective, which run on the following activities:

- 1.) Water Resources and Soil Development
- 2.) Forestry Development
- 4.) Community Development
- 5.) Quality of Life and Environmental Development
- 6.) Promotion and Results Dissemination

4. Kung Krabaen Bay Royal Development Study Centre Chantaburi Province

The activities for Kung Krabaen Royal Development Study Centre are under the objective to promote the effective management of coastal fishery, as well as agricultural and occupational development in the eastern coastline; to provide the effective programme of environmental conservation and to examine problems and find solutions related to mangrove destruction in the coastal environment using an integrated approach and to increase the income of the surrounding villagers and farmers and improve their standard of living which are under the following activities:

- 1.) Study and Research on the Problems and Potentials of Coastal Zone Resources and Coastal Environmental Management

- 2.) Agricultural Development and Extension Work
- 3.) Study and Development of Improving Soil Conditions in the Area.

5. Puparn Royal Development Study Centre Sakon Nakhon Province

The activities for Puparn Royal Development Study Centre are under the study and experiment on appropriate agricultural techniques as models for farmers to use and apply for their own livelihood; to restore, conserve and develop forestry through the use of simple irrigation systems. to cultivate economic crops and to process agricultural products for agro-industry and to promote occupational development to enable the formers to have a steady income to support their family. These objectives are under the project on:

- 1.) Irrigation Work
- 2.) Soil Erosion Control
- 3.) Model Development Villages
- 4.) Study and Development of Agriculture
- 5.) Demonstration Work to Promote Development of Water Resources for Fishery
- 6.) Promotion of Cottage Industry
- 7.) Study and Development of Animal Husbandry
- 8.) Study and Development of Soil
- 9.) Study and Development of Forestry
- 10.) Agricultural Extension Work
- 11.) Public Health Work
- 12.) Training and Dissemination of Technology

6. Pikun Thong Royal Development Study Centre Narathiwat Province:

The activities for the Pikun Thong Royal Development Study Center are undertaken on an intersectorial basis involving 23 agencies working together within the framework of the master of action plan of the Center. The programme of activities is as follows:

- 1).Soil Development
- 2).Promotion of Agriculture
- 3).Promotion of Fishery
- 4).Development of Animal Husbandry
- 5).Provision of Water
- 6).Promotion of Agro-Industry
- 7).Economic and Social Development

GLOBE Activities with the Royal Development Centers:

GLOBE Thailand has been established since 1999. The Institute for the Promotion of Teaching Science and Technology (IPST) acts as the country coordinator. GLOBE IPST, with the

cooperation of the GLOBE university partners have conducted many teacher training workshops. Many schools still have some problems of doing GLOBE, due to lacking of equipment, and administrative supports. Some schools have sent data. However most of such data are still not being used for the researches to serve the community. GLOBE Thailand has tries to solve these problems by asking for the collaborations with the Land Development Department, Pollution Control Department and Meteorological Department for supporting on the instruments and academic consulting. Many schools have requested for the local scientist supervisors to support their academic and research activities. The Royal Development Study Centers are usually worked and undertaken in ways consistent with the topographical and sociological conditions of the local areas, which are different in terms of the nature of the problems concerned. His Majesty initiated the establishment of six “Royal Development Study Canters” located throughout every region of the country to serve as the centre for conducting study, research and experimentation in search of guidelines and development methods appropriate to the different conditions of each area and occupations of the local people. All of GLOBE learning activities can be integrated with the activities of those centers, particularly in soil, water, climate, land use and also phenology. The students can reach to form the GLOBE Learning Community (GLC) with the local scientist and make the collaboration researches focusing on local environment to benefit their communities. IPST are planning to cooperate with the office of Royal Development Project Board to set up “the Natural Resources and Environmental Study Centers” at Huai Sai Royal Development Study Centre as the center for providing natural resources and environmental data and GLOBE - research based - learning activities.

References:

1. Land Development Development.2004.Royal Development Theory and His Majesty The king laid 8 principles to achieve the purpose . [www.idd.go.th\(6/7/04\)](http://www.idd.go.th(6/7/04))
2. Office of Royal Development Project Board.2003.Royal Development Centers.Bangkok.THAILAND.
3. Pikun Thong Royal Development Study Centre. [www.rdpb.go.th detailH.asp?lang =EN&file=study &subject =nara1 \(6/5/47\)](http://www.rdpb.go.th/detailH.asp?lang =EN&file=study &subject =nara1 (6/5/47))
4. The Institute for the Promotion of Teaching Science and Technology (IPST).2003.GLOBE Activity in Thailand.