

Day three: Flow of Water

Title:

Transforming Landscape Character with Sustainable Development: case study the Royal Project at Fang, Chiangmai, Thailand

Main theme:

Transforming landscape to integrate land, water, and technology with local identity: sustainable development case study the Royal Project at Fang, Chiangmai, Thailand

Proposed discussion:

On October 2006 the big flood hit Northern part of Thailand, more than 40 provinces were damaged by massive water, thousands of villagers along both sides of rivers and streams lost their homes and their farmlands. The dramatic force of water accumulated from the northern mountain range flew through flood plain area and agricultural land to Chaopraya River Basin before disposing to Ao Thai Bay. An extreme force of water flow was the evident of earth un-balance caused from deforestation and critical changing global climatic condition. Up on the north in watershed mountainous area, one Royal Project¹ was also affected by the fierce stream. Doi-Kham factory at Fang, Chiangmai was destroyed by flood, 6 factories and most areas were covered by water, and the project had to be close down. Employees and workers in the project were immediately unemployed.

This paper is to discuss about how to transform this old factory site which formally built unplanned into the more suitable uses according to natural constraints, so it can help preserve watershed and be able to adapt with excess water in rainy season. The project is significant not only in terms of its water-sensitivity site but also its historical and social value. It is the first factory built under His Majesty's initiative to promote and develop the agricultural products in order to support the rural living standard². The task was the factory must be re-open as soon as possible so production line would not stop too long. So the study of proposed new land use had to be done almost at the same time as reclamation and re-construction process. New development program must be formed in response to natural-social value as well as reflect to the Royal Project's concept and objective. Thus, communication and co-ordination between key bodies is important to find appropriate solutions. The study has been conducted through the analysis of site physical contexts and the participation of local people to preserve and rebuild the local landscape character, of which will become the most achievement of the project and community as a whole. Collaboration program between policy makers, villagers and project management team should be set in action to make the development possible.

¹ The Royal Project is the project initiated by King of Thailand, His Majesty the King Bhumibol Adulyadej, to help curbing opium production in Thailand's highlands, preserving nature and watershed areas and developing the socio-economic conditions in the highlands through the agricultural research and implementation of development programs.
<http://www.royalprojectthailand.com/general/english/main.html>

² All Royal Project products are marketed under the brand name Doi Kham, Which in Northern dialect means Golden Mountain. Doi Kham Food Products Co., Ltd. was founded in 1969 as a leading manufacturer and exporter of agricultural products.
Doi Kham Food Product Co., Ltd. Annual report 2005

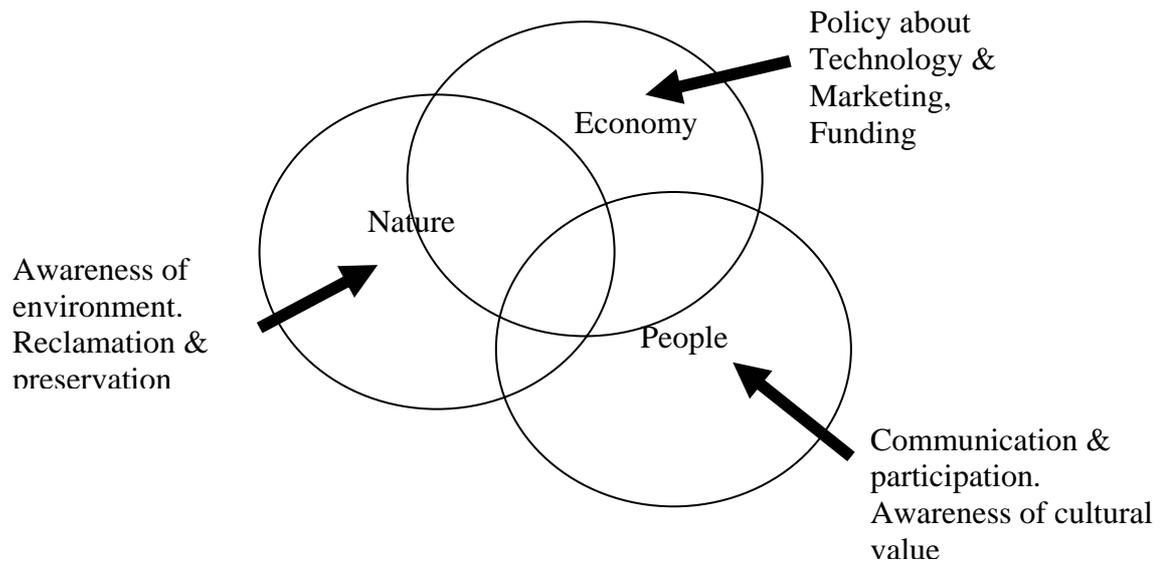


Fig.1 Scheme of sustainable development using in Doi Kham project

This case study shows the site which was destroyed by water and how we can take this opportunity from the disaster to rethink about suitable usage. After reading the landscape and water flow system, we proposed that the reclamation plan should not scope only at the site itself but also extend to the adjacent community and agricultural land. New planning will take an advantage of water usage, at the same time be able to adapt to high stream flood as a retention area, so some portion has to leave un-built and this is the matter to challenge engineer and researchers to bring in innovative technology for the production line. The new master plan will be a place for Living Museums, research field, and innovative preserved fruit processing factory where people can observe and receive training by seeing and learning from the real-life examples. It will be a live-long learning center for various interest groups which will benefit to Thai society in a vast scale. Economically, it will attract tourists to visit study and appreciate Thai culture and buy local high quality products.

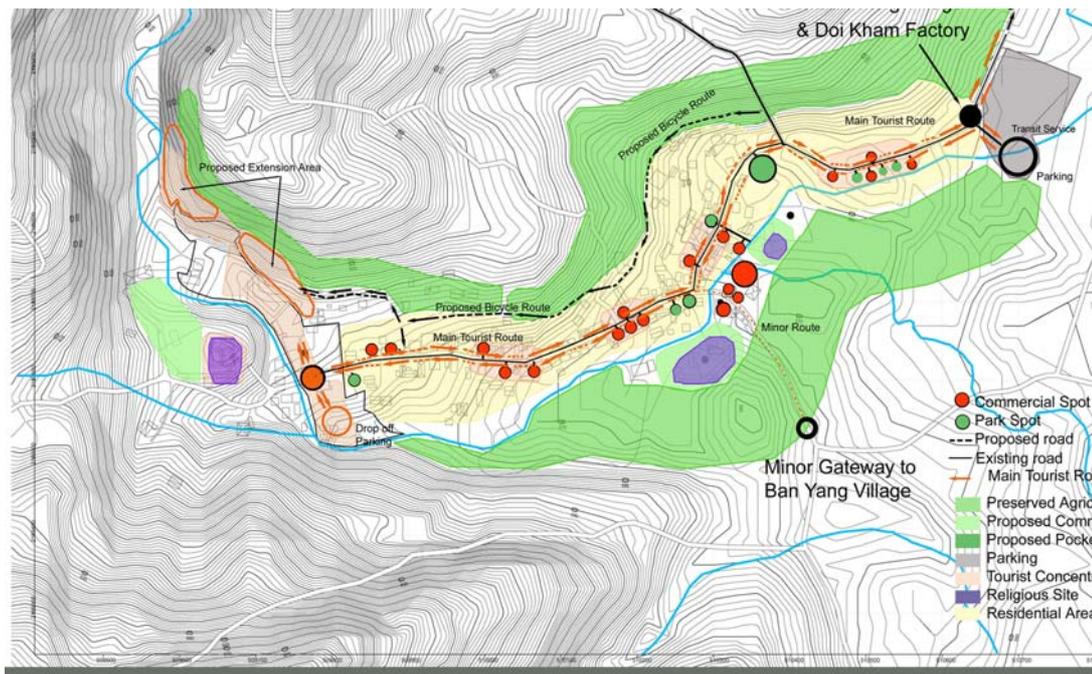


Fig.2 The conceptual master plan.

Even the project is small in size, if implement successfully, it will be an example of sustainable development to show that people (society), nature (water), and economy (policy) can developed together. The development plan demonstrated in this study would support the most significant objective of Royal Project, which is enhancing people's quality of life along with environmental awareness. In conclusion, this work demonstrates how landscape character would change to transforming with water and how Landscape Profession could contribute to society and nature.



Fig 3,4 the project site after the flood