

Research Title	Natural Resource Conservation and Management for a Sustainable in the highland : A Case Study of Karen Community in Ta Phoen Khi Village, Suphan Buri Province.
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The main aim of this research was to find a way to conserve and sustainably manage natural resources on the plateau. A Karen community in Tapernkee Village, Supanburi, was used as a case study due to its influence on the environment and health sensitiveness. At present, most of the land is used for mobile plantation while some areas are also used to grow rubber trees. Three measurement criteria, namely social, economic and environmental, were used to perform this research. The results of this researcher will be beneficial to those responsible for sustainable natural resource conservation and management.

The three main problems found were:

- 1) Deterioration of land caused by improper use and conservative measures.
- 2) Excessive use of agricultural chemicals found in the land and in the water source.

In this case study, it was found that durable bacteria in the land, a nearby water source, and in clay dregs had developed a resistance to anti-biotics and were also a cause of disease

- 3) Limited access to public utility systems, power resources and electrical systems due to the highland community's location.

This research focused on alternative energy sources which could reduce household expenses and conserve the use of agricultural products. This management guideline would allow the villagers to use the cultivated area efficiently by providing knowledge on how to manage soil and water at the same time as developing the area for fine agriculture. Moreover, a supportive cooperative community would help the villagers to be self-sufficient and reduce excessive spending on agricultural chemicals, which would result in organic produce. Furthermore, the farmers could apply the model of making briquettes as the study found that the alternative energy effective in reducing expenses and solid waste from agriculture was fuel derived from cassava rootstock and corn, in the form of briquettes.