

# Abstract

As a consequence of the 1997 Asian financial crisis and the rural economic development policy of the previous Thai government, silk production in the informal economy has expanded from micro production to small and medium size enterprises. This is because SMEs in the formal sector mostly subcontracted their orders to new entrepreneurs in peri-urban areas. To achieve a large scale production, other process tasks, such as reeling, spinning and weaving have been distributed to home workers in villages or nearby areas. Therefore, silk production has become another important source of income for agricultural areas.

However, the growth of these silk businesses has had an unexpected effect on the local environment and natural resources in rural and peri-urban areas. Extensive quantities of chemical substances and dyes, fuel-wood and water are utilised in bleaching and dyeing batch process to attain massive scale production. Due to lack of appropriate waste management, effluent is typically not treated to public health standards. Additionally, excess effluent has often overflowed onto common land or into reservoirs. This contamination has led not only to environmental deterioration but also to conflicts between villagers in relation to health and local resources utilisation, particularly in Pak Thongchai, Nakhon Ratchasima province.

Therefore, the sustainability of silk production at the Micro-Small Enterprise scale or cottage industry should be investigated. The local sustainable development concept, the Sufficiency Economy philosophy, and other tools such as the Sustainable Livelihood and Cleaner Technology concepts were employed in this project to develop an appropriate win-win solution for the silk cottage industry. Currently the informal economy plays a significant role in the rural non-farm livelihoods of developing countries in general. An outcome of this project could be the improved application of sustainability tools and concepts in order to increasing an understanding of essential factors that affected the sustainability of this traditional craft economic activity and their community.