

ABSTRACT

The purposes of this study were 1) to study the logistics system and the problems of logistics system and 2) to analyze the economic, social, and environmental sustainability of Jedi Maekrua's New Theory of Agriculture Group. The population was 60 farmers who enrolled as the member of Jedi Maekrua's New Theory of Agriculture Group in Sansai District, Chiang Mai. With simple random sampling, 38 farmers of population were selected as samples.

The result finding from a descriptive statistic indicated that there were 6 models of inbound logistics from input sources to production areas. The finding showed that the most usage logistics model was the first model which inputs were collected from local sources to produce by personal vehicles.

In aspect of logistics production, harvest processes and stocking, the farmers used individual labors and vehicles, and also to receive production's information by themselves. The farmers usually sold the products immediately after their harvest processes. The flows of inputs until sold to the customers were well planned.

There were 6 models of outbound logistics system to distribute outputs from producers to consumers. The most popular model was the third pattern which involved middleman to distribute outputs from producers to local consumers by using their vehicles.

The common problems of logistics system were scarcity of inputs that affected the cost of transportation to locate new production resources. The effects would have been the same as inputs and products transportation that used personal and rented cars. However, the effected would be lesser because most of production resources and markets were in local areas.

The analyzing of economic, social and environmental sustainability used Economic Sustainability Index (ESI), Social Sustainability Index (SSI), Soil Conservation Index (SCI), and Environmental Risk Index (ERI) revealed that the farmers of Jedi Maekrua's New Theory of Agriculture Group had economic and social sustainability in the highest level. For the environmental sustainability, this study found that the farmers had soil conservation and environmental risk in high level.