

Phiraphong Chanchuklin 2012: Preliminary Study for Distribution Management of OTOP Product by Private Vehicles in Nakhon Pathom Province. Master of Engineering (Food Engineering), Major Field: Food Engineering, Department of Food Engineering. Thesis Advisor: Miss Wongphaka Wongrat, Ph.D. 175 pages.

The objective of this work is to propose preliminary management technique to distribute OTOP products in Nakhon Pathom province by a private vehicle. The technique includes 3 main steps; searching OTOP products within a defined searching radiance using Euclidean distance method to calculate the distance; finding types and quantities of transported products which give the maximum profit while meeting space limitation of a private vehicle using the optimization technique; finally, finding the shortest route to pick up the products using the Nearest Neighbor method.

The results from the case study of 65 OTOP products in the food category of Amphoe Muang in Nakhon Pathom province found 8, 9 and 13 product types at searching radiance of 3, 5 and 10 kilometer, respectively. Also, from these three radiances, that maximum profits to obtained are 32,896, 33,897 and 34,583 bath and the total transportation route are 6.56, 8.42 and 35.51 kilometer, respectively.

The survey results of the interest in using of private vehicles as an alternative method to distribute OTOP products the in Nakhon Pathom province show that 40.8 percent of population interest in this concept.

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Thesis Advisor's signature