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Inbound logistics cassava starch planning: With application of GIS and K-means clustering methods in Thailand

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\textbf{Abstract}
This paper present the decision support system in logistics inbound and transportation system with application of Geographic Information System (GIS) to analyse the Cassava Service Centres (CSC) location in order to collect cassava roots location and optimized the number and location suitability of CSC. The methodology used K-mean clustering and application of Geographic Information System with spatial and attribute data, and network analyst extension to find, compared and minimize optimization with cost for investment and transportation distance solution of their scenarios. The results had show the optimization number of location of CSC must be 20 nodes, investment cost for CSC location was reduced to 9.8 million baht, and distance was 136,176.58 kilometres, that results had reduce to 49.5 and 13.3 percent, respectively. © 2011 IEEE.

\textbf{Author Keywords}
Cassava Starch; Geographic Information System; K-mean Clustering; Logistics; Network Analyst

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