# AMIS for Designing Tapioca Starch Logistics Network for the Land Port of Nakhon Ratchasima Province, Thailand

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**Abstract.** With the land port in Thailand's Nakhon Ratchasima Province serving as the logistics hub, the goal of this research is to create an efficient algorithm to design a logistics network chain for tapioca starch. The operating supply chain players in the case study consist of 404 farms, 33 businesses, and 2 land ports. The three procedures that make up the design techniques discussed in this paper are; 1) Lingo v.16's generation and solution of mathematical models, 2) AMIS, and 3) DE. The original AMIS algorithm now includes two more IBs: 1) PSOtransit inspired (PSO-TI) and 2) DE-transit inspired. According to the computation, AMIS offers answers that are, respectively, 13.88 percent and 15.42 percent superior to those offered by DE and Lingo v.16.

**Keywords:** AMIS, Location Allocation Problem, Capacitated Location Problem, Logistics Network Design, Land Port, Tapioca Starch