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Title: Sharing deliveries in a short food logistic context

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Abstract :

A food supply chain qualifies as "short and local" when it is characterized by a short physical distance between producers and consumers, with no more than a single intermediary between them. Such a configuration is referred to as the "short local food supply chain" (SLFSC). Our focus lies in examining the logistical problems associated with the SLFSC.

Producers often set up organizations to simplify their logistical operations. For instance, they create producers's stores, design nodal points for third-party logistics operators to collect goods, or engage in reciprocal assistance. Our study focuses on the latter type of cooperation.

We consider that a producer is authorized to transport goods from one another to customers. This practice is now possible in France for short distances, specific products and limited quantities. In the case where a customer C orders products from producers A and B, two collaborative cases may arise: producer A delivers to customer C after retrieving goods coming from producer B, or producer A drops off his own goods to producer B, and the latter delivers customer C.

We model this new delivery sharing problem and present our first results.