

Title Complex adaptive processes in building supply chains: case studies of fresh mangoes in Indonesia

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Abstract

Achieving supply chain management among firms in the Indonesian mango industry is a worthwhile goal, for such will provide opportunities for supply chains to better respond to the dynamics of international and domestic markets. This paper discusses supply chain formation for the purpose of addressing the question “how can the mango industry improve supply chain management?” We propose that this question is best addressed by changing the state of the system from segmented supply chains to more integrated supply chains. Complexity theories have portrayed the supply chain as a complex adaptive system whose behaviour is influenced by self organizing mechanisms. On the other hand, governments sometimes intervene in an attempt to create improved supply chains. This paper addresses government intervention whose predetermined goal is supply chain formation by examining two case studies in West Java and East Java, Indonesia. In West Java, the intervention failed to meet its goals and broke down as it could not build trust-based relationships. In East Java, intervention initially failed, but supported by lessons drawn from the West Java case, it is now showing signs of flexibility, agility and robustness, which are features of positive self organising systems. In this case, it is possible that improved supply chain management may be achieved. Based on theory, combined with learning from these two cases, a framework is developed that integrates complex adaptive system characteristics and supply chain management outcomes.