



Research School for Operations
Management and Logistics

REFRESH: Modelling food supply chains to reduce food waste

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The objective of this PhD is to find and quantify solutions to reduce food waste. The focus of this research is mainly on the retailer, however also other actors in the food supply chain are addressed. Fresh food products are most likely to be wasted as quality is deteriorating fast. This deteriorating quality makes proper inventory management for retailers more complex. In this research several actions, leading to food waste reduction, are evaluated. Inappropriate quality control or excessive inventories are the main reasons for food waste at the retailer. Therefore we focus on solutions which improves quality tracking, such as dynamic shelf life, or solutions that focus on consumer behaviour (e.g. incorporation substitution behaviour). Besides the focus on food waste reduction at retailers, the re-use of leftovers is addressed.