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## Factors explaining differences in FSMS performance in supply chains of fresh produce: A global study

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An international study investigated the performance of Food Safety Management Systems (FSMS) implemented in the food companies in different stages of the supply chain (primary production, processing and trade) and in different world locations. More than 300 food companies participated in the study located both in developed and developing countries. Data was collected by using a diagnostic instrument to assess the performance of food safety management systems (low, basic, average, advanced), their output (poor, moderate, good) and the riskiness of the context factors (low, moderate, high). The majority of the companies were producing high-risk products in terms of their vulnerability to microbiological and chemical contamination. Statistical data analysis revealed that companies do not groupper chain stage, type of product (risk) or country of operation. Instead other factors explain the grouping. Companies with most advanced FSMS operate in low risk of organisational characteristics and they putmore efforts into assurance activities such as validation and verification. Another factor that contributes to better performing FSMS was attributed to chain characteristics especially in the case of export-oriented companies located in developing countries.

## **Biography**

Pieternel A Luning graduated at Wageningen University in Food Chemistry & Microbiology, was researcher at ATO-DLO and completed her PhD (flavour) in 1995. After a Post-doc (Unilever), she worked as product manager "innovative packaging" at TNO Nutrition. Since 2000 she is employed at Wageningen University as Lecturer and since 2006 as Associate Professor Food Quality Management. She developed the MSc-program "Food Quality Management", supervises 10-15 PhDs and 20 MSc-students. She is author/editor of several books, participated in various national and EU-projects (PathogenCombat, Veg-i-trade). Current research areas include risk-based auditing, system dynamics modelling, food safety culture, quality management assessment tools, food waste reduction, sustainability assessment, and quality perception.

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