



Effectiveness of Food Quality Systems

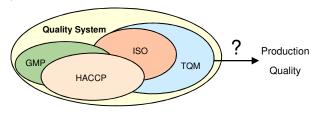
Marjolein van der Spiegel^{1,2}, Pieternel Luning¹, Gerrit Willem Ziggers and Wim Jongen¹

Introduction

Nowadays, consumers expect a high level of food quality. In a consumer driven innovative organisation, food production has to comply with the expectations of the consumer, including the production quality:

- · Quality of the product:
 - · product quality
 - availability
 - costs
- · Quality of the organisation:
 - · flexibility
 - reliability
 - service

The production quality can partly be realised by using specific quality systems, such as GMP, HACCP, ISO or TQM.



However, it is still unknown to what extent these systems contribute to the production quality, since an instrument is lacking that measures the performance of quality systems.

Objective

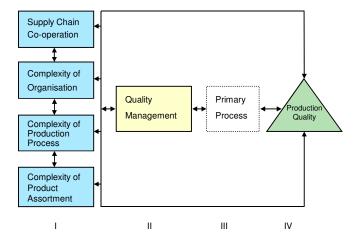
The objective of the project is to develop a diagnostic instrument that measures the performance of food quality systems. Based on this instrument, the performances of quality systems will be measured and evaluated. As a consequence, the most suitable specific quality system for a certain company can be determined.





1. Conceptual model

A conceptual model has been developed which reflects the interrelationships between four elements: four contextual factors (I), quality management (II), primary process (III) and production quality (IV).



2. Diagnostic instrument

Based on the conceptual model, a diagnostic instrument has been developed. This includes a questionnaire with a classification system. It has been internal validated by 8 case studies in the bakery sector.





3. Quantitative research

The diagnostic instrument will be used to collect data at 60 bakeries. These data will be analysed by several statistical methods. This will result in a test of:

- the validity and reliability of the diagnostic instrument;
- the assumed interrelationships of the conceptual model, which will indicate how quality systems are related to the production quality.

WAGENINGEN UNIVERSITY Department of Agrotechnology and Food Sciences