QUALITY ASSURANCE SYSTEMS IN THE HORTICULTURE

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ABSTRACT:
A wide range of quality assurance schemes operates currently in the agricultural sector in the European Union and their number is still growing. According to a survey done in 2006 in total 386 scheme were collected. The general aim of these standards is providing additional information for consumers offering higher level of guarantee and help identifying and distinguishing the labelled products from the mass apart from their special characteristics. No one debates on the need of quality assurance schemes, but confusion is present among the farmers which standard should be choose and there is no official help or enough adequate information available to ease their decision-making.

Keywords:
food quality, quality assurance system

1. INTRODUCTION

Due to the current agricultural market situation the professional knowledge and skills are not enough anymore to stay alive on the market but the deep familiarity of quality systems and sales are also inevitable. The aim of the article is examining the quality assurance systems implemented in the horticulture. There are hundreds of schemes operating that field and because of the importance of food safety issue almost all the standards contain it in a way. Via ensuring food safety the primary aim of all standards is to regain the trust of the indecisive consumers and finally influencing the consumers’ decision. In majority of the food retail chains require at least one implemented and maintained quality assurance system as a prerequisite for accepting the product.

2. FOOD QUALITY

Food quality is a quite complex system. According to the definition of ISO (8402:1994) (1) quality is the totality of characteristics of an entity — in our case a food stuff — that bears on its ability to satisfy stated and implied needs. Thus, a quality product is the product which answers as much as possible to the demands of the consumers. The difficulty is that almost every consumer has diverse demands and the needs can also be contradicted. The answer for the question what quality is only can be given by the market.
Quality has many aspects; only the most relevant features are listed here based on a speech of Commissioner Fischer-Boel (3):

- **Organoleptic quality**: such as taste, flavour, maturity and appearance of the product wholeness, cleanness,
- **Nutrition value**: vitamin-, fibre content e.g.,
- **Food safety**: this is which basically determines the quality of a product, The best-known issue is the residues of plant protection products, toxicity of the heavy metal content, toxins of fungi etc.,
- **Specific production methods**:
  - Specific techniques, manners during production or processing
  - Environment issues like organic or integrated products
- **Origin**: There are many preferred origins in the field of horticultural products, like Hungarian paprika powder, South-Tyrolese apple etc. Some of them wear official EU or country labels, but some of them only known from their names.
- **Related to environment or environment friendly or conscious items**.
- **Related to social fields such as Fair Trade products**.
- **Although price not always considered as a part of quality, it has a very severe influence on the products’ judgment and consumers’ decision.**

### 3. QUALITY ASSURANCE SYSTEMS IN GENERAL

Quality assurance systems, quality assurance schemes or quality management systems in practice mean the same, a kind of system which helps to meet with the given requirements. According to the demand requirements can derive from official legislations (like the implementation of a traceability system on the European food producing farms), from consumers either end-consumers or wholesalers/retailers or from ourselves. There are hundreds of quality systems in the sectors of horticulture/agriculture around the world. Only in the 25 member states of the European Union about 386 schemes have been collected in 2006 by EU JRC (4). The top player is Germany with its about 70 programmes. The most important systems are listed in Table 1.

<table>
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<th>Types of system</th>
<th>Examples</th>
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<tr>
<td>EU Geographical Indicators</td>
<td>PDO, PGI + TSG</td>
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<tr>
<td>Specific production methods</td>
<td>Organic programs (EU, Demeter, USDA, NOP etc.)</td>
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<td>Integrated programs (Leaf marque)</td>
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<td>Special schemes for farming</td>
<td>Eurepgap, QS, SQF1000</td>
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<td>Quality Management Systems</td>
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<td>Food Safety Systems</td>
<td>ISO 22000, BRC, IFS, HACCP</td>
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<td>Relationship to environment</td>
<td>ISO 14000, EMAS</td>
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<tr>
<td>Social relationship</td>
<td>Fair Trade</td>
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What is the reason that enormous amount of standards operate independently from each other? The main purposes to introduce and maintain this kind of system are:

- The main question they attempt to answer is the raising trust and distinguishing their products from the mass.
- An implemented system via its label or any recognizable text or log provides information about the products and offers a higher level of guarantee for the consumers.
o Gives access to markets for the farmers, generally on higher price, although sometimes price premium can not be achieved because the system is a prerequisite on the market.

The systems endeavour to fulfil more, different aims in one time. Most of them prove product/production quality or processing quality, genuineness, and hygiene and food safety. Some of them are willing to exploit niche markets such as geographical indicators, Fair trade. Others - on the contrary - intend to homogeneity, comparability and offer a basic standard (Eurepgap/Globalgap, QS) Fulponi (5).

3.1. Common features of the standards

In general can be stated:

- All schemes have written manual, procedure no matter how it is called,
- All schemes have a central governing board and administration who issues updated versions of their standard. Their legal form and market orientation depends on the initiators (non profit or for profit, interprofessional organization etc.) Most often the members of the agri-food chain create a formation and a system: farmers, retailers, processors.
- Standards are being developed, time to time new versions, updates are available.
- Conformity has to be proved by self- and independent inspections.
- The conformity is inspected and certified by third, independent parties (not always).
- Standards are voluntary, everyone can join.
- They require stricter liability than official legislation.

4. ADVANTAGES AND DISADVANTAGES OF QUALITY ASSURANCE SYSTEMS

4.1. Pros

1. Gives farmers better access to markets.

In some retail chains there is the only way - as a prerequisite - to be on the shelves, they require a kind of system. It can be their private system (like Tesco Nature's Choice), but in majority a general scheme is accepted.

2. Increase the effectiveness and efficiency of the farm.

During implementing a system all farm process has to be checked all input source have to be (re-)evaluate and so thus helps to re-organise the way of farming.

3. Reduce possible official fines where official legislation is done for these fields. In case of a big processor it can be a significant amount of spared money even if it the first years they have to invest in it.

4. Inform consumers about food quality and/or origin, environment impact, social care of the product and the producer. This advantage can only in case of business-to-consumer (B2C) standards and labels count where the logo is allowed to appear on the final packaging of the product.

5. Indirect positive effect can have on rural development via environment protection, preserving local traditions and culture (Traditional Specialty Guaranteed TSG, HÍR program in Hungary) Ferencz et. al (2). Effect on higher income of the farmers and help them to stay in the countryside.
4.2. Contras

1. The biggest problem of the farmers connected to systems is the heavy administrative burden and costs. They are not used to write inventories, records and are not taught to prepare risk analysis and assessments. There are many obvious facts for them which they have to prove.

2. High investment is needed generally at the beginning when farmers are preparing to introduce a quality system. The money using items are generally the forming of eating and lavatory facilities.

3. The oversupply of quality systems results misunderstanding and embarrassment among the farmers. They do not see the point which worth implementing and why. Generally farmers got the instructions from their forestaller of retail chain which system is required by them.

4. Also as a result of the amount of the systems consumers are not well informed about them. Although according to one of our previous survey they are interested in labels and quality systems and check the labels on the packaging of a product (if it has) they know only some of them, the most often used standards but in general they know almost nothing about the majority of labels and systems.

5. Concerns about the value of certificates.

5. CONCLUSION

Quality especially food quality has become a major issue in the last decade almost anywhere in the world. By the help of quality schemes a level of uniformity and comparability are achievable in agriculture and food industry. On one hand helps to evaluate the products for the consumers and on the other prices can be determined according to the real quality of the product.

Quality assurance schemes are useful tools to fulfil many kinds of requirements, but the enormous amount of them make farmers’ situation difficult to be able to serve the retailers/wholesalers as well as burden farmers heavy administrative costs. As long as a few most common standards will not reach common benchmarking or as another possibility European Union should introduce common agricultural/ horticulture standard (at least on basic level) confusion will present in the issue.

REFERENCES