



The broad application of this standard is exemplified by reviews carried out on its applicability to crops as diverse as high-intensity olive production and marigold cultivation for nutritional supplements.

Process approach

The focus of the standard is what is termed the process approach. It refers to the application of a system of processes within an organization, together with the identification and interactions of these processes and their management.

Thirteen core agricultural processes were identified and used to create the first draft document. These include:

Behind the farm gate

The scope of ISO 22006 is crop production. Activities beyond the farm gate such as transportation and storage by the first purchaser of the crop are addressed in other standards. Food safety is similarly covered by ISO 22000 and related standards.

ISO 22006 can be applied to the production of a wide range of foodstuffs, including:

- commodities – wheat, corn (maize), soybeans;
- fruits – apples, pears, etc.;
- fresh produce – lettuce, tomatoes, spinach;
- root crops – carrots, potatoes, beets;
- mixed crops – cotton.

Quality crops

by Richard Cantrill,
Convenor ISO/TC 34/WG 12,
Application of ISO 9001
in agriculture

Organizations from around the world are well acquainted with the ISO standard for quality management systems: ISO 9001, *Quality management systems – Requirements*. Widely applied in areas as diverse as airlines and sports clubs, some ISO committees have found it useful to prepare complementary documents with specific guidance for particular industry sectors to further improve the standard's application.

ISO 22006, *Quality management systems – Guidelines for the application of ISO 9001 in crop production*, provides guidance to individuals, cooperatives and companies wishing to apply ISO 9001 principles to agricultural practices.

“The ISO process of consultation and consensus-building aims to produce a final standard equally applicable to all forms of agriculture.”

The application of ISO 9001 and of the ISO 22006 industry specific guidance for agricultural systems will promote food safety, process verification, bio-security, identity preservation, the consumer's right to information, biotechnology, and country-of-origin legislation.

Although the idea originated in the American Midwest, a region characterized by large, mechanized farming operations, the ISO process of consultation and consensus-building will ensure that the final standard is equally applicable to all forms of agriculture, be they large or small scale.



Main Focus

- farm planning;
- land allocation;
- allocation, purchase and procurement of inputs;
- field preparation;
- field planting;
- field activities;
- pre-harvest and storage activities;
- harvest;
- transportation and handling on the farm;
- crop storage on the farm;
- distribution and delivery;

These processes are outlined in the standard, and an example of their application is given in an informative annex.

“Thirteen core agricultural processes were identified and used to create the first draft document.”

And ahead to the finishing line

The ISO working group developing the standard, ISO/TC 34, *Food products*, working group WG 12, *Application of ISO 9001 in the agriculture*, will meet

About the author



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Question	Answer
<i>Can ISO 22006 requirements be met by organizations of all sizes?</i>	ISO 22006 does not provide requirements, but guidance. It is based on ISO 9001, a standard already implemented by organizations of all sizes.
<i>Isn't "crop production" a much too broad (or too narrow) concept?</i>	The standard will have wide application.
<i>What about other national and regional documents on food safety already in place?</i>	ISO's globally relevant and applicable standards are the result of consensus amongst representative stakeholders from around the world. Unlike national, regional or private company standards, they can ensure that everyone in the world is on the same page.
<i>Should ISO 22006 wait until the new ISO 9001 is published in 2008?</i>	The new edition has only small changes, and these have been incorporated into the draft standard.
<i>Isn't this material covered by ISO 22000?</i>	ISO 22006 addresses specifically quality management for crop production. It is thus complementary to ISO 9001 (which can be implemented without ISO 22000).
<i>Does it conflict or overlap with existing environmental standards?</i>	The Working Group has made references to other standards where appropriate.
<i>Is there a risk that the examples provided in the standard may be interpreted as requirements?</i>	The standard provides guidance only, and examples should only be interpreted as such.

Table 1 - Above are examples of some of the questions raised during the submission of the standard for comments, and the responses given.

in December 2008 to discuss and resolve comments received during the DIS (draft International Standard) vote. Some of the issues to be addressed include:

- optimizing references to ISO 14001 and ISO 22000;
- definition of “design” (Clause 7.3) in crop production;
- length of the document;
- use of country-specific terms throughout the document, for example, USA terminology such as “scouting” (field observation) and “employees” (people involved);
- removal of selected terms from the guidance text.

The development of this standard has been a rewarding process incorporating a wide range of viewpoints and experiences from both local and global perspectives.

From the time the idea emerged in the year 2000 until its approval as a new work item in 2005, there were many discussions on how broad the scope should be and which crops should be considered. The authors are aware that the standard can be applied to other activities such as the production of food for animals, biomass/substrates for biofuels, fibre products (cotton/hemp), non-food seed (grass seed) and forestry.

Activities that are not addressed in this standard but which might be included later on include transportation of agricultural products, processing of agricultural products, dairy, livestock and poultry. It is anticipated that ISO 22006 will have a wide audience, including crop producers, processors, customers and suppliers in the food distribution chain, as well as agricultural training centres and universities. ■