
Certification of Agricultural Commodities for Better Export Prospects

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ABSTRACT

The certification of agricultural commodities has become increasingly crucial in global exports, particularly for producers navigating complex import regulations and standards imposed by destination markets. Certification serves as a vital assurance that the production process of a commodity complies with specific norms or standards, facilitating trade between geographically separated producers and consumers. There are three primary methods of verifying compliance: first-party verification, wherein companies internally adhere to standards; second-party verification, involving companies instructing suppliers to comply; and third-party verification, where external agencies ensure supplier adherence. In India, certification is mandatory for exporting various products such as fish, dairy, poultry, meat, and honey, typically based on Food Safety Management Systems. Furthermore, European and US markets impose quality standards on fresh produce, specifying criteria like size, shape, defects, color, and organoleptic qualities. Such certifications not only ensure safety but also align with stringent quality requirements demanded by discerning international buyers. This article examines the significance of certification in agricultural exports, emphasizing its role in meeting diverse market standards and enhancing trade viability.

INTRODUCTION

In recent years, the certification of agricultural commodities has assumed greater significance in exports. Producers of exporting commodities need to follow several import regulations and standards as suggested by the importing countries or niche markets. Certification signifies that the manufacturing process of the certified product adheres to specific norms or standards. It can be of great utility in cases where the producers and consumers are geographically separated and do not have any direct contact. International trade is a typical example where the buyers are usually handicapped in checking the producer's compliance with standards. There are mainly three ways to verify compliance with the standard:

- First-party verification: In this case, the company itself opts to follow a particular standard. To adhere to the standard, it may authorize selected staff from within the company.
- Second-party verification: In this case, a company would instruct its suppliers to adhere to a particular standard.
- Third-party verification: In this type of verification, a company demands its suppliers meet a particular standard and appoint an external agency to check their compliance.

Certification is a must for exporting fish & allied products, dairy products, poultry, meat & allied products, eggs, and honey from India. Usually, the certificate is issued following inspection based on a Food safety management system-based certification. Alongside safety considerations, prominent purchasers in Europe and the US have implemented quality criteria for every fresh farm product, detailing specifications such as size, shape, appearance, defects, shine, colour, texture, and organoleptic attributes. The major dimensions of certification are depicted in Figure 1.

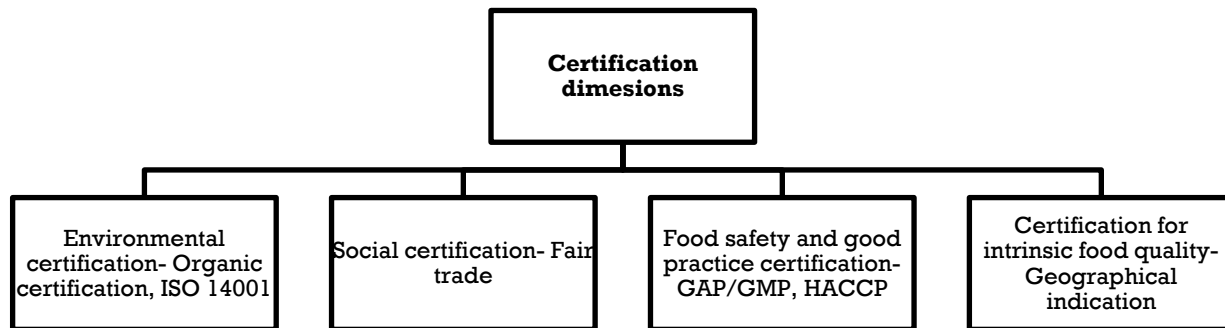


Figure 1: Certification dimensions

ORGANIC CERTIFICATION

Organic certification encompasses the validation of organic food producers. Businesses closely involved in food production, including food processors, seed suppliers, restaurants, and retailers, can also undergo certification alongside farmers. This process mandates adherence to specific standards throughout various stages of operation, such as crop cultivation, storage, processing, packaging, and transportation. Primarily, these standards aim to prohibit the use of chemical based inputs and GMOs in agricultural practices, necessitating the utilization of chemical-free cropland for at least three consecutive years and maintaining comprehensive

records of farm activities. The majority of contemporary organic standards are formulated and established by private certification agencies. Some of the countries have established their national-level standards and regulations related to organic certification (e.g., Japan, China, Korea, Malaysia, Thailand). Green Net/Earth Net Foundation in Thailand also promotes organic farming. The EU, the USA, Japan, etc., are some countries that have successfully implemented country-level labeling regulations for organic produce, and exporters must meet these regulations to export to these countries. The selection of a certification agency involves strategic decisions by competent authorities. This is because it is essential to confirm that the certification agency is formally accepted and recognized in the nation to where the good is exported. The decision also needs to be made when selecting national or international agencies. Though national-level certification agencies may charge less, their global acceptance of the certificates they issue needs to be verified. However, the effort should always be to make the right decisions at every stage, because the target is to provide better price realization for the farmers.

ORGANIC CERTIFICATION REGULATION

Initiated by the Ministry of Commerce and Industry, Government of India, in 2001, the National Program on Organic Production (NPOP) outlines standards, procedures, and criteria for organic certification. It also specifies approved inspecting and certifying agencies, outlines guidelines for the use of the organic logo, and imposes restrictions on its usage. According to NPOP, organic certification necessitates adherence to the following key standards:

- Conversion of land to organic farming.
- Exclusive utilization of natural inputs on the farm.
- Prohibition of genetically modified inputs and irradiation technology.
- Consistent integration of physical, biological, and mechanical processes.
- Prevention of contamination from neighboring farms or external sources.
- Strict adherence to sustainable agricultural practices.

ELIGIBILITY FOR ORGANIC CERTIFICATION

Individual farmers or farmer collectives, comprising between 25 and 500 members within the same geographical region, are eligible to apply for organic certification. Certification is granted for agriculturally produced organic products, although the land itself cannot be certified as organic. Once certified, these products can bear the organic label and be marketed domestically and internationally. Due to the enhanced incentives offered by foreign markets for organic produce, India exports substantial volumes of organically certified agricultural goods. The Agricultural & Processed Food Products Export Development Authority (APEDA) facilitates certification for export through an electronic service called TraceNet. Numerous stakeholders utilize this platform in the organic supply chain to consolidate traceability data provided by producers, operators, and certification organizations. Products that receive organic certification are permitted to use the "India Organic" logo for marketing purposes.

STEPS INVOLVED IN ORGANIC CERTIFICATION

In India, accredited bodies under the National Program on Organic Production (NPOP) are responsible for conducting organic certification. NPOP establishes norms for organic agriculture and aims to promote organic farming across the country. The United States Department of

Agriculture (USDA), European Commission, and Switzerland recognize NPOP standards for organic production and accreditation procedures, considering them equivalent to their own.

The key steps in organic certification in India include:

- Submission of an organic certification application to an accredited organic certification body by an individual farmer or group of farmers.
- Issuance of standards and operational details by the accredited body to the applicant.
- Payment of fees.
- Audit of farm operation documents.
- Field inspection and documentation conducted by an external inspector in collaboration with the farm manager.
- Thorough inspection to ensure compliance with standards.
- Report preparation by the field inspector.
- Review of the report by a designated body.
- Final decision on certification issuance.

BENEFITS OF ORGANIC CERTIFICATION

Organic certified products command a premium price due to their perceived quality and adherence to stringent standards. This certification grants access to regional, national, and international markets, bolstering opportunities for farmers and the economy alike. Additionally, it empowers domestic agricultural producers by attracting funding and technical guidance, fostering sustainable practices. Moreover, organic farming promotes environmental stewardship through its eco-friendly production processes, further enhancing its appeal to consumers and stakeholders.

ISO 14001 CERTIFICATION

This certification has been developed to implement environmental management practically in public and private institutions. ISO is a private global network of national standard institutes that works together with national governments, the industrial sector, and consumer representatives. Though there are many ISO standards available for environmental management in organizations, ISO14001 is specifically for certification. Under this, certification is granted by the agencies accredited by the national accreditation bodies. This can be from the government sector or the private sector.

Relying on the ISO 14001 certification system offers numerous benefits for organizations. Firstly, it signals a commitment to compliance with both present and forthcoming statutory and regulatory obligations. Secondly, it facilitates the alignment of business objectives with environmental concerns, enabling companies to meet targets while prioritizing sustainability. Additionally, ISO 14001 certification can lead to competitive advantages and financial gains through enhanced operational efficiencies and lowered costs. Moreover, integrating suppliers into the organization's environmental management systems fosters improved environmental performance across the supply chain, contributing to overall sustainability goals.

FAIR TRADE

Fair trade, symbolized by the FAIRTRADE Mark, ensures that producers and businesses adhere to internationally recognized standards, independently verified. It transforms trade by offering fair prices, decent working conditions, and equitable deals for farmers and workers in developing nations, aiming to provide fair compensation. Compliance with labor rights, environmental sustainability, and social responsibilities is mandatory. Participants benefit from prices covering sustainable production costs, a fair-trade Premium for community projects, improved working conditions, a ban on exploitative practices, access to credit, and enhanced security and relationships with buyers, fostering a more stable future.

The fair-trade Labelling Organizations International (FLO) controls the process of setting standards and certification. FLO is a network organization that encompasses about 20 national /non-governmental organizations from Asia, Europe, Oceania, and America. It also needs to be understood that there exist other organizations outside the FLO network that work in a similar line to setting up the standards of fair trade. To obtain certification, the organization must be operating in a democratic mode. Other requirements that need to be met include that related to the treatment of the company's workers, permission to associate and perform collective bargaining, housing, and sanitation as well as health and safety of the workers, and absence of child labour or forced labour. Besides, compliance with the environmental and social laws of specific countries and proper auditing are also necessary.

A producer group cooperative or a farmer association can apply for FLO fair-trade certification. Farm inspection will then be done by the local auditors, after which the certification agency will decide on the certification of the producer association. Certification will be followed by regular inspection every year to verify compliance with the requirements of the fair trade and to examine the utilization of fair-trade premiums. The advantage of fair trade is that the certified products have a higher chance of receiving stable, better prices. The production costs determine the actual price paid to producers. Besides, the cost encompasses all the extra charges incurred for compliance with the requirements of fair trade.

GOOD AGRICULTURAL PRACTICES (GAPS)

According to the FAO, Good Agricultural Practices (GAP) encompass a set of principles applied to both on-farm production and post-production processes, aiming to ensure the production of safe and healthy agricultural products while considering economic, social, and environmental sustainability. GAPS address sustainability across environmental, economic, and social dimensions within on-farm processes, leading to the production of safe and high-quality food and agricultural products. Recently, guidelines have been developed to formalize farm-level agricultural practices, known as GAP codes, standards, and regulations. These guidelines serve to enhance food quality and safety, facilitate market access, and mitigate risks associated with pesticide use, maximum residue limits (MRLs), and other contamination hazards, ultimately contributing to improved agricultural practices and product safety (Liu *et al.*, 2007).

GLOBAL GAP

GLOBALGAP is a private organization that establishes voluntary certification standards for Good Agricultural Practices (GAPs), originally developed by a consortium of European supermarket chains. These standards enhance consumer confidence in food safety by promoting good agricultural practices among producers. Focused on food safety and traceability, GLOBALGAP certification covers processes from pre-planting to product distribution. Producers or producer groups can apply for certification, subject to certification and registration fees. Compliance necessitates meticulous record-keeping, facilitated by robust administrative systems. While not linked to premium prices or product labeling, certification provides a competitive advantage for producers when engaging with retailers who require GLOBALGAP compliance, emphasizing its importance in business-to-business relations.

INDIA Good Agriculture Practices (INDGAP)

The agricultural sector in India, along with retailers and buyers, recognizes the potential benefits of implementing Good Agricultural Practices (GAP) to improve hygiene and food safety standards. By adopting GAP, farmers can access new markets, receive quality inputs, enhance the value of their farms, and improve their farming skills, both domestically and globally. With international agricultural trade becoming increasingly important, defining minimum standards with a clear certification and accreditation mechanism is essential to facilitate trade of farm produce. Introducing GAP in India promotes sustainable agriculture, aligns with environmental and social development goals, and enhances food quality and safety. It also aids in compliance with national and international regulations regarding pesticide use, contaminant levels, and other hazards. The focus of INDGAP (Indian Good Agricultural Practices) is to ensure not only the quantity and quality of produce but also food safety, pre-and post-harvest practices, and worker health and safety. INDGAP offers tailored certification criteria, such as BasicGAP for small and marginal farmers, and streamlined criteria for larger farms, promoting a phased approach to international GAP adoption.

ASEANGAP

ASEANGAP, established in 2006 by the ASEAN, sets standards for Good Agricultural Practices (GAP) in the region, particularly focusing on production, harvesting, and post-harvest handling of fresh fruits and vegetables. Its primary objective is to harmonize country-level GAP initiatives within ASEAN, enhancing the safety of fruits and vegetables for consumers while promoting sustainability in natural resource management and facilitating trade, both domestically and globally. Comprising four modules covering food safety, environmental management, worker health and safety, and produce quality, ASEANGAP certification procedures are conducted by national authorities in each ASEAN country.

ASEAN GAP targets harmonizing standards and supporting trade in the region by providing better options for certified producers to improve their export of fresh fruits and vegetables. Within the region, some countries are frontrunners in this, and other countries follow them. ASEAN GAP can thus help some of the less developed countries in the region adopt the standards for formulating or customizing their national GAPs. The guidelines of implementation, training-related materials, and the code of recommended practices available in the ASEAN GAP

can be used by such countries. All the member countries can harmonize their national GAP standards with those of the ASEAN GAP to reap the maximum benefits. The major drawback of the ASEAN GAP is the exclusion of high-risk commodities for food safety. However, because it is a comparatively new standard in the world, there is an opportunity to expand its scope in the future.

GOOD MANUFACTURING PRACTICE (GMP) CERTIFICATION

GMPs correspond to the detailing of fundamental operational and environmental conditions needed to produce safe foods. GMPs make sure that they are produced and handled according to the recommended quality standards. Since GMPs cover all the aspects of food production and processing starting from the inputs or the materials used, equipment used in processing, and personal hygiene of the staff involved, etc, the customers can trust such products for the ingredients, packaging materials used, and safe handling all the way from farm to home. In short, they form the foundation of all the food safety systems in the world (Government of Canada).

- **International Food Standard (IFS) Certification:** The IFS standard was developed as a uniform tool to assure food safety and monitor the quality of producers of branded food items. The standard in GMP can be used in most stages, from production to processing. IFS permits certification in two levels.
 - Foundation level- minimum requirements for the international food industry (230 criteria).
 - Higher level for achieving superior standards in the food industry (60 additional criteria).
- **Safe Quality Food (SQF) codes:** It is an integrated and voluntary food safety and quality management protocol for use in the food sector. It can also be applied in different nodes of the food supply chain. It is formulated in line with the guidelines of Codex Alimentarius Hazard Analysis Critical Control Points (HACCP). Two certification programs under this are:
 - SQF 1000: Specific to primary producers.
 - SQF 2000: Specific to food industries.

CONCLUSION

In conclusion, the increasing emphasis on certification in agricultural exports underscores its pivotal role in facilitating global trade. With stringent import regulations and quality standards prevalent in key markets like Europe and the US, certification becomes indispensable for ensuring compliance and market access. Whether through first-party, second-party, or third-party verification, certification serves as a critical tool for building trust between producers and consumers, particularly in geographically distant transactions. By guaranteeing adherence to safety and quality standards, certification not only enhances market competitiveness but also fosters sustainable growth in the agricultural export sector, ultimately benefiting producers, consumers, and global trade relations.