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SINGAPORE STANDARD Specification for good agriculture practice

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Foreword

This Singapore Standard was prepared by the Working Group on Good Agriculture Practice for Vegetable Farming set up by the Technical Committee on Agritech and Agrifood Production under the purview of FSC.

It is presupposed that in the course of their work, users will comply with all relevant regulatory and statutory requirements. Some examples of relevant regulations and acts are listed in the Bibliography. The Singapore Standards Council and Enterprise Singapore will not be responsible for identifying all of such legal obligations.

In preparing this standard, reference was made to the following publications. Permission has also been sought from the following organisations to reproduce their works in this Singapore Standard:

- 1. ASEAN Secretariat ASEAN Good Agriculture Practice Standard
- 2. GLOBALG.A.P. GLOBALG.A.P. standard
- 3. Ministry of Agriculture, Forestry and Fisheries Japanese Agricultural Standard (JAS) Cultivation environment management of leafy vegetables in plant factory with artificial lighting
- 4. European Union Official Journal of the European Union, Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019, Page 14, © European Union, <u>http://eur-lex.europa.eu</u>, 1998-2021
- 5. Food and Agriculture Organization of the United Nations, 2007, Codex Alimentarius for Fresh Fruit and Vegetables, <u>http://www.fao.org/3/a1389e/a1389e00.htm.</u> Reproduced with permission.
- 6. SS 661 : 2020 Specification for clean and green urban farms Agriculture
- 7. SS 670 : 2021 Specification for good aquaculture practice

Acknowledgement is made for the use of information from the above publications.

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- Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "mature standards". Mature standards will not be subject to further review unless there are requests to review such standards.
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.

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0 Introduction

0.1 Singapore food supply is vulnerable to the volatilities of the global food market including sudden disruptions of supply sources and to transport routes. This is in addition to the challenges such as climate change which affect food production locally and worldwide. To ensure food security, Singapore has set the target of producing 30% of Singapore's nutritional needs by 2030 (also known as the "30 by 30" goal).

0.2 This standard is intended to help farmers improve productivity and provide quality assurance through the adoption of farming technologies and best practices, and having trained personnel, thus enhancing market access. It also aims to assist local farms to meet the increasing market/consumers' demand for farm produce to have attributes beyond the basic safety requirements. Retailers' and consumers' preferences are shifting towards sustainable and ethical business practices and consumers are willing to pay a premium for higher quality and sustainably produced products. As such, more organisations are implementing business practices that have low environmental impact, uphold animal welfare, protect public health and have good employment practices and community support.

0.3 Globally, more farms are adopting international and/or national farming standards as they seek to enhance their access to export markets that demand such increasing consumer requirements. Regionally, Association of Southeast Asian Nations (ASEAN) had developed a Good Agriculture Practice (ASEAN GAP) for fresh produce farms in 2014. ASEAN member states including Singapore are also in the midst of aligning their national agri-food standards as part of an ASEAN commitment to realise the ASEAN Economic Community, through the promotion of intra-regional trade of agri-food products by improving food safety and the agri-sector competitiveness.

0.4 The standard aims to address these new market/consumer requirements and to align with the ASEAN GAP. This allows local farms to demonstrate that they have a robust farm management system in place to address food safety, produce quality, environmental management, workers' health, safety and welfare. Farms applying this standard will be able to enhance the branding of their fresh produce to improve their market access and gain better acceptance from customers.

1 Scope

The standard provides a set of requirements for a farm management system detailing best practices to prevent risk of hazards occurring to ensure the production of safe and high quality produce, while minimising impact to the environment and workers.

The scope of the standard covers the following four areas of agriculture farm production:

- a) food safety;
- b) crop protection and produce quality;
- c) environmental management; and
- d) workers' health, safety and welfare.

The standard covers all phases of farm operations, including pre-production (nursery), cultivation, harvesting and postharvest handling prior to delivery of agriculture products for both outdoor and indoor agriculture. This standard applies to vegetables, fruits and herbs farms.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

SS 628	Specification for compost used in agriculture and horticulture
SS 668 : Part 1	Cold chain management of chilled and frozen foods – Part 1 : General requirements
SS 668 : Part 3	Cold chain management of chilled and frozen foods Part 3 : Code of practice for vegetables and fruits