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SINGAPORE STANDARD

Specification for clean and green urban farms — Agriculture

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The Technical Committee set up the Working Group on Clean and Green Urban Agriculture Farms to prepare this standard. The Working Group consists of the following experts who contribute in their *individual capacity*:

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The organisations in which the experts of the Working Group are involved are:

Agency for Science, Technology and Research
ComCrop Pte Ltd
Control Union Singapore Pte Ltd
Dairy Farm Singapore
Enterprise Singapore
Japan Plant Factory Association
Meod Pte Ltd
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National Environment Agency
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Singapore Environment Council
Singapore Food Agency
Singapore Institute of Technology
Upgrown Farming Asia Pte Ltd
VertiVegies Pte Ltd

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Foreword

This Singapore Standard was prepared by the Working Group on Clean and Green Urban Agriculture Farms set up by the Technical Committee on Food Production under the purview of FSC.

The intent of this standard is to help urban farms in establishing a clean and green urban agriculture production system. Adoption of this standard will enable urban farms to enhance their business competitiveness through optimising operational efficiency in a sustainable manner and to brand their farm products for market access.

In preparing this standard, reference was made to the following publications and permission was sought from the overseas organisations to reproduce some definitions from these documents:

1. ISPM 5 Glossary of phytosanitary terms by International Plant Protection Convention

2. Soil taxonomy, a basic system of soil classification for making and interpreting soil surveys by United States Department of Agriculture Natural Resources Conservation Service

3. Sustainability assessment of food and agriculture systems guidelines (version 3.0) by Food and Agriculture Organisation of the United Nations

4. SS 632: 2017 Specification for organic primary produce by Enterprise Singapore

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

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.

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Specification for clean and green urban farms — Agriculture

0 Introduction

0.1 Agriculture has progressed immensely in its journey to fulfil the world's demand for food. However, it faces impending threats brought about by climate change, degradation of arable land, depletion of natural resources and competing land use as a result of urbanisation. Coupled with rapid population growth and influx of people into urban cities, the demand for food is predicted to outstrip its supply if agriculture practices were to remain status quo.

0.2 Rising consumer affluence has resulted in shifts in food demands and consumption habits. Increasingly, consumers are consciously opting for higher quality and more sustainable food sources. Likewise, businesses are beginning to transform their operations to become more sustainable and environmentally friendly so as to keep pace with the evolving needs of consumers.

0.3 In view of these developments, there is a pressing need for the agriculture sector to become more productive and future-ready, and at the same time, cleaner and greener. The need for transformation in the agriculture sector is even more imperative for Singapore, which imports more than 90 % of the nation's food supply. Being a small country with limited arable land and natural resources, it is important for the local farming sector to become more productive, innovative and resource-efficient, while ensuring the production of quality, safe and fresh food for consumers. This will greatly enhance the nation's food resilience by mitigating uncertainties in the agri-food supply from overseas.

0.4 Taking into account the unique circumstances and context of Singapore, this standard was conceived to provide guidance and inspire the movement for local food production that is done in a cleaner and more sustainable manner, while striving towards productivity and leveraging on innovations. Ultimately, this standard is envisioned to transform the urban agriculture sector in Singapore and to position Singapore at regional and global frontiers in the pursuit of sustainable production of quality and safe foods.

1 Scope

This standard establishes requirements on farming techniques, practices and management of a production system to grow farm products that can be labelled as clean and green. Key performance indicators are included for farms to monitor their resource consumption and waste management, together with specifications for a quality, safe and clean product. Recommended practices are provided in Annex A. This standard is applicable to urban farms that produce terrestrial vascular plants as crops meant for consumption as vegetables, fruits, herbs, sprouts and condiments. As Singapore is a city-state, all local farms are considered urban farms in the context of this standard.

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 585	Cold chain management of vegetables[1]
SS 628	Specification for compost used in agriculture and horticulture

[1] SS 585 is under revision and is expected to be replace by Specification for cold chain of chilled and frozen foods – Part 3: Code of practice for vegetables and fruits.