

# ACCREDITATION SCHEME FOR CERTIFICATION BODIES

# CT 26 SAC CRITERIA FOR CERTIFICATION BODIES (GAP and Clean & Green Urban Farms)

#### 1 Introduction

- 1.1 This document specifies the additional definitions and supplementary criteria for certification bodies conducting certification on Singapore Standards: Good Agricultural Practice (SS 670, SS 675, SS 676) and Clean & Green Urban Farms (SS 661) and is to be used with ISO/IEC 17065, SAC documents and the applicable IAF Mandatory Documents.
- 1.2 The main section of this document applies to all certification bodies certifying farms to Good Agricultural Practice (SS 670, SS 675, SS 676) and Clean & Green Urban Farms (SS 661) requirements. The specific requirements for different types of certification and their respective audit criteria are specified in the Appendices, as appropriate:
  - Appendix A Specific requirements for Good Agricultural Practice Certification
  - **Appendix B** Specific requirements for Clean & Green Urban Farms Certification

## 2 Abbreviations

The following abbreviations are used in this document:

Term	Definition
СВ	Certification Body
C&G	Clean and Green Urban Farms
GAP	Good Agricultural Practice

## 3 Certification Criteria

3.1 CBs shall assess and certify the farms according to the specific standard(s), regulation(s) and corresponding interpretative guide, where applicable.

#### 4 Certification Scheme

4.1 The certification scheme used is ISO/IEC 17065 – Type 6.

Note: As per ISO/IEC 17067, Type 6 certification scheme consists of initial audit and subsequent surveillance of client's process & management system.

- 4.2 The certification scope shall only cover production process of products that are produced, and related activities based on the requirements stated in applicable standard(s) mentioned in Clause 3.1 of respective Appendices at the audited location(s).
- 4.3 CB shall ensure that farms meet all the 'shall' requirements within the stipulated Singapore Standard(s).
- 4.4 In cases where non-conformity is raised against any 'shall' requirements and the nonconformity remains unaddressed by farm, the CB, in consultation with the Scheme Owner (where applicable), shall issue a warning, suspension or withdrawal of certification to the farm.

Satisfactory corrective actions shall be submitted by the farm within 30 days from the closing meeting. The farms shall formally request for an extension of deadline for submission of corrective actions with valid reasons. A maximum of 6 weeks extension beyond the 30 days may be granted for submission of corrective actions to address the non-conformity. Justification for the extension shall be documented.

# 5 Certification Body Auditors

- 5.1 CB shall appoint and qualify auditors and lead auditors to conduct the inspections/audits. Auditors shall meet the criteria specified in respective Appendices.
- 5.2 The audit team shall comprise at least 2 auditors and the audit team shall fulfil the requirements defined in the Appendices.
- 5.3 The CB shall not assign the same Lead Auditors for 2 consecutive audit cycles.

## 6 Duration and Frequency of Inspections/Audits

- 6.1 In determining the inspection duration, the CB shall consider, among other things, the following aspects:
  - a) the requirements of the relevant standards or schemes that may be included in, or in addition to, inspection/audit duration;
  - b) complexity of the client activities (e.g., number and diversity of product and process types, number of product lines, number of employees or type and variety of tasks affecting food safety, product development, in-house laboratory testing, sanitation);
  - c) Scheme Owner requirements;

- d) any outsourcing of any activities included in the scope of certification [outsourced activities (e.g., seedling production, storage of harvest products prior to packaging, produce packing) shall be audited];
- e) size of farming sites, infrastructure and number of farming sites, their geographical locations;
- f) multi-site considerations;
- g) whether audits are combined, joint or integrated
- h) audit deliver method (e.g., ICT and the extent used)
- i) the level of automation, closed production systems, use of technology, mechanization and labor intensiveness;
- j) language and interpretation needs;
- k) risk associated with products and process;
- I) result of prior inspections/audits (for surveillance inspections and recertification audits).
- 6.2 The CB shall conduct on-site inspection / audit and the man-days shall be justified and documented.

Note: Typically, on-site initial audit will require at least 1 man-day.

6.3 The CB shall inspect / audit the certified farms based on the frequency stated in Table 1.

Table 1 - Frequency of Inspections/Audits

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Туре	Frequency
Initial Audit	-
Surveillance Inspection	Annual (within 12 months from last initial / last recertification audit date)
Recertification Audit	Biennial

#### Note:

- Initial and recertification audits shall be carried out at a time where relevant farming activities and/or postharvest handling (but not only storage) are carried out.
- Inspections/Audits shall be avoided during off-season or when the farming activities are minimal.
- 6.4 The Certificate of Conformity (CoC) is valid for two years with recertification subject to continuing satisfactory performance.

- Surveillance inspection shall be conducted within 12 months after the initial inspection or recertification audit date.
- Recertification audit shall be carried out within 3 months before the expiry of the last CoC. If certification is not attained before the expiry of the certificate, the farm shall be considered as a new applicant.
- 6.5 Transfer of CoC between CBs is only allowed for CoCs that are still valid. Valid CoCs are those that are not expired, withdrawn or suspended. The transfer of certificate shall be based on IAF MD 2 IAF Mandatory Document for the Transfer of Accredited Certification of Management Systems
- 6.6 Farms, that had their CoC withdrawn by the certification body (i.e., non-voluntary withdrawal by farm), shall be assessed as a new client and any non-conformity raised in the previous audit shall be reviewed. Examples of non-voluntary withdrawal of CoC may include evidence of fraud and gross lack of competency to comply with the certification standard(s) mentioned in Clause 3.1 of respective Appendices.
- 6.7 Unannounced or short notice inspection, with defined focus shall be conducted for investigation of complaints [e.g., threats to food safety, safety of workers, the environment, consumers and/or product integrity (i.e., sale of products not included in the certification scope)], against a farm or doubt on the compliance of a farm to the requirements stated in applicable standard(s) mentioned in Clause 3.1 of respective Appendices.

Where applicable, the CB shall inform the relevant Scheme Owner, on details of all complaints received within 1 working day upon receipt of complaint to allow the Scheme Owner to evaluate whether if any of such complaints are related to national food safety regulations or legislations. If the complaint is received by the Scheme Owner, the Scheme Owner shall inform the relevant CB so that the CB can be kept informed.

- 6.7.1 For complaints that are deemed to be related to national food safety regulations or legislations, the investigation shall be performed by the Scheme Owner, where applicable.
  - The CB shall work together with the Scheme Owner in the investigation, and shall be required, as directed by the scheme owner, to correspond and monitor the progress of resolution until the complaint has been successfully resolved.
  - Where product recall is needed following the confirmation of food safety contamination in the investigation, the CB shall

work with scheme owner where applicable to monitor and validate the product recall by farm.

- 6.7.2 For complaints not related to food safety regulations or legislations, investigation shall be conducted by the CB.
  - Upon receiving confirmation from the Scheme Owner that the complaint is not related to food safety regulations or legislations, the CB shall conduct the inspection, if required, within 5 working days. The CB may inform the farm 2 working days in advance of the intended inspection.
  - If it is impossible for the farm to accept the proposed inspection date (due to medical or other justifiable reason), the farm will receive one more chance to be informed of an unannounced or short notice inspection within 5 working days from the original proposed inspection date.
- 6.7.3 When sampling and testing is required for investigation purposes, the CB shall have clear procedures for sampling methods and proper storage to ensure that representative samples are provided to the testing laboratories, latest by the next working day. The CB shall ensure the laboratory is accredited to ISO/IEC 17025 for the test(s) performed, where required by the applicable standard(s) mentioned in Clause 3.1 of respective Appendices.

The CB shall submit the investigation report to the Scheme Owner within 2 working days after the test report is obtained.

6.7.4 When reviewing test reports provided by the farm or farm's supplier, the CB shall verify that the test(s) is(are) performed by an ISO/IEC 17025 accredited laboratory, where required by the applicable standard(s) mentioned in Clause 3.1 of respective Appendices, and that the test results met the specifications, stated in applicable standard(s) mentioned in Clause 3.1 of respective Appendices. Likewise, the CB shall request ISO/IEC 17025 accredited test reports from the complainant for such investigation purposes.

#### 7 Records

7.1 The records of all tasks relating to the inspections/audits shall be retained for at least 2 audit cycles unless legal obligations require a longer period.

# Specific Requirements for Accreditation of GAP Certification Bodies

The requirements in the main section of this document are applicable except where amended below. The clause numbers below refer to the clause number in the main section of this document.

#### 2 Definitions

2.1 **'GAP'** means Good Agricultural Practice covering all applicable standards for production of farm produces such as agriculture products (vegetables, fruits and herbs), aquatic animals (fish, crustaceans and molluscs), poultry eggs (chicken and quail).

#### 3 Certification Criteria

- 3.1 CBs shall assess and certify the farms according to the following standard(s), regulation(s) and corresponding interpretative guide, where applicable:
  - SS 670 Specification for good aquaculture practice
  - SS 675 Specification for good agriculture practice
  - SS 676 Specification for good animal husbandry practice for layer farms

#### 4 Certification Scheme

4.5 CB shall also assess all 'recommendations' and 'should' requirements, where applicable, within the stipulated Singapore Standard(s).

# 5 Certification Body Auditors

5.1 CB shall appoint and qualify auditors and lead auditors to conduct the inspections/audits. Auditors shall meet the criteria specified in **Annex A.** 

Note: In totality, the competency of the whole audit team shall meet the criteria detailed in Annex A.

5.2 The audit team shall comprise of at least 2 auditors and the audit team shall fulfil the requirements defined in **Annex A**.

# 6 Duration and Frequency of Inspections/Audits

6.6 Farms, that had their CoC withdrawn by the certification body (i.e., non-voluntary withdrawal by farm), shall not be accepted for GAP certification within 12 months from the date of withdrawal. Examples of non-voluntary withdrawal of CoC may include evidence of fraud and gross lack of competency to comply with the certification standard(s) mentioned in Clause 3.1.

# Annex A to Appendix A

# **Criteria for Auditors**

The summary of the criteria for auditors performing audits is tabulated below.

Auditors
Demonstrate personal attributes for effective and efficient performance of audits
Have knowledge of current regulatory requirements and applicable Codes of Practice
Tertiary education in a discipline related to the scope of GAP certification (e.g., veterinary science, life science, biology, biotechnology, microbiology, environment science, ecology, agriculture), or food science related disciplines
Minimum 3 years relevant experience in the farming or food industry. For the latter, experience in process control, quality assurance, and quality control will be considered relevant.
Completed following formal training courses, with appropriate training records available  • Standard(s) mentioned in Clause 3.1 or GlobalG.A.P.;  • Food Safety Management System (FSMS) and Hazard Analysis Critical Control Point (HACCP) principles
Have attended and successfully completed FSMS Lead Auditors course and ISO/IEC 17065 training course
Minimum of <b>3 audits</b> <sup>1</sup> and minimum total of <b>10 man-days</b> to any 3 <sup>rd</sup> party agri-food or FSMS related audit requirements within the last 3 years
The audit team shall have at least one person with audit experience in product certification (ISO/IEC 17065).
Perform a minimum of <b>5 GAP</b> <sup>2</sup> inspections and/or audits  Note: Exceptions to this requirement, e.g., if the CB does not have a total of 5 clients, shall be justified and documented.  For Lead Auditors, perform at least 1 GAP certification audit in
the capacity of a team leader.  On-site monitoring for GAP inspection/audit shall be performed at least once every four years to verify auditor's competency.

# Note

<sup>&</sup>lt;sup>1</sup>Audits can be initial, surveillance or recertification audits.

<sup>&</sup>lt;sup>2</sup>GAP inspections/audits include those conducted based on standards listed in Clause 3.1 and GlobalG.A.P.

# Specific Requirements for Accreditation of Clean & Green Urban Farms Certification Bodies

The requirements in the main section of this document are applicable except where amended below. The clause numbers below refer to the clause number in the main section of this document.

#### 3 Certification Criteria

- 3.1 CBs shall assess and certify the farms according to the following standard(s), regulation(s) and corresponding interpretative guide, where applicable:
  - SS 661 Specification for clean and green urban farms Agriculture
- 3.2 For farms to meet the C&G requirements / specifications, farms shall:
  - Be certified to SS 675 Specification for good agriculture practice or
  - Concurrently apply for certification to SS 675 and be audited

#### 4 Certification Scheme

- 4.4 For non-conformity relating to clause 6.10 of Appendix B, the farm could be given up to 6 months to rectify with reasons documented. For satisfactory rectification of non-conformity relating to meeting of performance level, the farm shall demonstrate at least one calculated farm's performance value (after identification of non-conformity) that meets the performance level in Table B.2 of SS 661 for the green indicator of concern. For satisfactory rectification of non-conformity, the farm shall demonstrate at least one calculated farm's performance value (after identification of non-conformity) that is lower than that of the previous for the green indicator of concern.
- 4.5 CB shall assess all 'should' requirements relating to the green indicators (As stipulated in Clause A.5, A.6 and A.7 in SS 661) and where applicable, within the stipulated Singapore Standard(s).

# 5 Certification Body Auditors

5.1 CB shall appoint and qualify auditors and lead auditors to conduct the inspections/audits. Auditors shall meet the criteria specified in **Annex B.** 

Note: In totality, the competency of the whole audit team shall meet the criteria detailed in Annex B.

5.2 The audit team shall comprise of at least 2 auditors and the audit team shall fulfil the requirements defined in **Annex B**.

# 6 Duration and Frequency of Inspections/Audits

6.8 For audit and maintenance of certification, the certification body shall assess that the farm has fulfilled the applicable testing and sampling requirements in the below table.

Sample	Parameter / Indicator	Frequency	Performance Level
Soil⁴	Heavy Metals <sup>3</sup>	<ul> <li>Once every 5 years</li> <li>On the new soil to be added and before large-scale application to original soil</li> </ul>	Annex B of S 661
Soil amendment	Heavy metals <sup>3</sup>	Before large-scale application to soil	Annex B of SS 661
Growing Substrates⁴	Heavy Metals <sup>3</sup>	For every batch of purchased product  Note: This only applies to substrate culture and not for hydroponics culture	Annex B of SS 661
Fertiliser <sup>4</sup>	Heavy metals <sup>3</sup>	For every batch of purchased product  Note: If the farm mixes its own fertiliser formulation using technical grade stock solutions, this testing requirement shall not be required.	Annex B of SS 661
Compost <sup>4</sup>	Heavy metals³, Salmonella enteriditis, Salmonella	Once every certification cycle, or when there is significant change in	Table 2 of SS 628

	typhimurium, Faecal coliforms	feedstock used for composting	
Stormwater discharge <sup>8</sup>	Table 1 of SS 661	<ul> <li>Once every certification cycle, or when there is significant change to farming operations<sup>5</sup> for farms situated within water catchment area</li> <li>Note:         <ol> <li>Sample shall be taken at farm discharge point within 1 hour after rain event or during the rain event.<sup>6</sup></li> </ol> </li> <li>Rain event is considered as having &gt; 2mm/hr of rainfall intensity.<sup>7</sup></li> </ul>	Table 1 of SS 661

#### Note

- Accredited laboratory test report showing the stormwater discharge quality result
- Record of date, time and rainfall intensity of the rain event when/before the sample was collected

<sup>6</sup>Farms should assess and ensure that there are necessary safety precautions/measures in place before undertaking sampling during a rain event.

<sup>7</sup>An indication of the rainfall intensity for a particular area can be obtained from the Meteorological Service Singapore (MSS) website.

<sup>8</sup>It shall be noted that the stormwater discharge quality limits stipulated in clause 7.3.10 in SS 661 is a requirement by PUB that applies to all farms sited within water catchment and is independent of the clean and green certification. PUB carries out routine monitoring and should the stormwater discharge quality of a farm be found to be in breach of the stated limits, the said farm will then be liable to enforcement actions by PUB.

- 6.9 The certification body shall assess that the farm has correctly and reasonably calculated its performance in the 4 green indicators.
  - 6.9.1 The farm shall be allowed to include non-crop production related activities in its calculations of water and energy consumption, provided that it is able to meet requirements in Clause 6.10 of the Appendix B of this CT document.
  - 6.9.2 For initial certification, the farm may employ manual calculation methods to determine crop production related water and energy

<sup>&</sup>lt;sup>3</sup>Heavy metals refer to Arsenic, Cadmium, Chromium, Lead, Mercury

<sup>&</sup>lt;sup>4</sup>For sample testing of soil, growing substrates, fertiliser and compost, the testing requirements are common for certification to SS 675. Requirements relating to soil amendment will apply to soil additives for certification to SS 675.

<sup>&</sup>lt;sup>5</sup>Farms would be required to retain the following as evidence of meeting the requirements:

- use. The certification body shall assess that such manual calculations are reasonable and justifiable and shall verify that the farm has future plans to install submeters to record its water and energy use.
- 6.9.3 For recertification audits, the certification body shall ensure that water and energy use are determined using appropriate submeters by the farm. The certification body shall not allow the use of manual calculation methods to determine crop production related water and energy use for recertification audits.
- 6.9.4 The farm shall make available its water and energy utility bills to the certification body as supporting documents. For the scenario described in Clause 6.9.1 of the Appendix B of this CT document, the certification body shall assess that the water and energy consumption indicators have been accurately calculated based on the farm's utility bills. For the scenarios described in Clause 6.9.2 and 6.9.3 of the Appendix B of this CT document, the certification body shall assess that the calculated water and energy consumption values are reasonable and plausible in relation to the farm's utility bills.
- 6.10 The certification body shall assess that the farm fulfils requirements in the below table for the 4 green indicators.

Туре	Requirements for performance level	Requirement for continual improvement
Initial certification audit	For each indicator, the farm shall have complete data required for calculation for an applicable period of at least 3 months before the initial certification audit date. The cumulative data for the applicable period shall be used to calculate the farm's performance value, which shall meet the performance level in Table B.2 of SS 661.	Not applicable.
Surveillance inspection	For each indicator, the interval between each calculation of the farm's performance value shall	Not applicable.
Recertification audit	not exceed 6 months and shall remain consistent for each calculation.  For each indicator, the average value of the calculated farm's performance values over the	The farm shall demonstrate a decreasing trend in the calculated farm's performance values for at least one green indicator for the entire current

entire current certification period shall meet the performance level in Table B.2 of SS 661.

certification period.

During the current certification period, the farm may adjust the interval between calculations with justified reason(s). In such scenario, the certification body shall assess that the reason(s) provided by the farm is(are) iustifiable (e.g., increase monitoring frequency to better track resource use). If reason(s) is(are) justifiable, the weighted average (weighted by the time interval for each calculation) of the calculated farm's performance values shall be used to determine if the farm meets the performance level in Table B.2 of SS 661.

- a) In the event that there is any anomaly in the calculated farm's performance value in any of the green indicator, the certification body may omit the anomaly in its determination of compliance to the requirements for performance level and/or continual improvement. In this case, the certification body shall assess that the following conditions are met before acceptance of the omission of the anomaly.
  - The anomalous value shall be justified and supported by documentation by the farm.
  - If applicable, rectification action shall be put in place by the farm to prevent future occurrence of the anomaly. Such rectification action shall be assessed for effectiveness by the certification body.
  - Justification for anomalous value shall be unique and shall not occur for more than once during the entire current certification.
  - The anomalous values shall form a small proportion of the total number of calculated values within the entire current certification period.
  - After omission of the anomalous value, there shall be at least 3 calculated values within the entire current certification period.



# **Annex B to Appendix B**

# **Criteria for Auditors**

The summary of the criteria for auditors performing audits is tabulated below.

Criteria	Auditors
Personal Attributes	Demonstrate personal attributes for effective and efficient performance of audits
Other Qualifications	Have knowledge of current regulatory requirements and applicable standards
Formal Education	Tertiary education in a discipline related to the scope of C&G certification (e.g., veterinary science, life science, biology, biotechnology, microbiology, environment science, ecology, agriculture), or food science related disciplines); AND
	Formal education / course relating to energy and water engineering related discipline
Work Experience	Minimum of 3-year relevant experience in farming or food- related industry. For the latter, experience in process control, quality assurance, and quality control will be considered relevant.
Technical Knowledge	Completed the following formal training courses, with appropriate training records available:
	<ul> <li>Food Safety Management System (FSMS) and Hazard Analysis Critical Control Point (HACCP) principles; AND</li> </ul>
	Resource use efficiency and sustainability principles.
Auditing	Have attended and successfully completed:
Knowledge	Recognised Food Safety Management System (FSMS)     Lead Auditor course; AND
	ISO/IEC 17065 training course; AND
	Recognised ISO 14001 Lead auditor course; AND
	Formal C&G Standard training course.
Audit Experience	Conducted a minimum of <b>3 audits* and a minimum total of 10 man-days</b> to any 3 <sup>rd</sup> party food-related audit requirements within the last 3 years
	The audit team shall have at least one person with audit experience in product certification (ISO/IEC 17065).
Maintenance of	Perform a minimum of 3 C&G inspections and/or audits.
qualification (every four years)	Note: Exceptions to this rule, e.g., if the CB does not have a total of 3 clients, shall be justified and documented.

	For Lead Auditors, perform at least 1 C&G or GAP certification audit in the capacity of a team leader.
Management of Personnel	As a <u>Lead Auditor</u> demonstrate personal attributes for effective and efficient management and control of other team auditors

Note \*Audits can be initial, surveillance or recertification audits.