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DRAFT STANDARD FOR PUBLIC COMMENT

(වෙනස්වීමට ඉඩ ඇත. திருத்தத்திற்குட்படக்கூடியது. Liable to alteration)

නිකුත් කළ දිනය வெளியீட்டுத் திகதி Date of Issue	} 2024-08-23	අදහස් එවියයුතු අවසාන දිනය அபிப்பிராயங்களை தெரிவிப்பதற்கான இறுதித்திகதி Latest Date for Receipt of Comments	} 2024-10-23

Draft Sri Lanka Standard
REQUIREMENTS FOR GOOD AGRICULTURE PRACTICES (GAP)
PART 9: TEA
(DSLS .....: .....)

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இவ்வரைவு இலங்கைக் கட்டளையெனக் கருதப்படவோ அன்றிப் பிரயோகிக்கப்படவோ கூடாது
This draft should not be regarded or used as a Sri Lanka Standard.

අදහස් එවිය යුත්තේ : ශ්‍රී ලංකා ප්‍රමිති ආයතනය, 17, වික්ටෝරියා පෙදෙස, ඇල්විටිගල මාවත, කොළඹ 08.

Comments to be sent to: SRI LANKA STANDARDS INSTITUTION, 17, VICTORIA PLACE, ELVITIGALA MAWATHA, COLOMBO 08.

හැඳින්වීම

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කොළඹ 08.

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Introduction

This Draft Sri Lanka Standard has been prepared by the Sri Lanka Standards Institution and is now being circulated for technical comments to all interested parties.

All comments received will be considered by the SLSI and the draft if necessary, before submission to the Council of the Institution through the relevant Divisional Committee for final approval.

The Institution would appreciate any views on this draft which should be sent before the specified date. It would also be helpful if those who find the draft generally acceptable could kindly notify us accordingly.

All Communications should be addressed to:

The Director General
Sri Lanka Standards Institution,
17, Victoria Place,
Elvitigala Mawatha,
Colombo 08.

Draft Sri Lanka Standard
REQUIREMENTS FOR GOOD AGRICULTURAL PRACTICES (GAP)
PART 9: TEA

DSLS 1523 PART 9:

Gr.

SRI LANKA STANDARDS INSTITUTION
No. 17, Victoria Place,
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Colombo 8,
Sri Lanka.

Draft Sri Lanka Standard
REQUIREMENTS FOR GOOD AGRICULTURAL PRACTICES (GAP)
PART 9: TEA

FOREWORD

This Standard was approved by the Sectoral Committee on Agriculture and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on ……..

Tea (*Camellia sinensis*) cultivated, managed, maintained, harvested and processed as a health benefiting and stimulating beverage and a prime trade commodity constitutes an important part of Sri Lankan life and economics being a major export item. In the new trade regime, there are significant divergences in the consumer behavior worldwide with regard to the product they consume. Consumers are increasingly concerned with the conditions in which the products they consume are produced. Therefore, many importing countries and local buyers are now necessitating producers and practitioners to implement Good Agricultural Practices (GAPs) as a pre-requisite for procurement to ensure quality and safety of the produce. To build trust and recognition of the produce to be accepted both in the domestic and international markets by considering the environment, health and food safety of consumers, quality of produce and welfare of the workers, it is appropriate to establish the GAP Standard for tea. The GAP stands on four pillars of economic feasibility, environmental sustainability, social acceptability, and food safety and quality. Therefore, GAP will serve as a guideline for the management of tea value chain aiming at ensuring safety in the crop produce for both domestic and international trade while minimizing negative impacts to environment but enhancing socio-economic and environmental stability.

This Standard is subjected to the provisions under the Food Act No. 26 of 1980, Tea control Act No 51 of 1957, Tea (tax and control of Export) Act No 16 of 1959, Sri Lanka Tea board Law No 14 of 1975, the Factories Ordinance Act No. 45 of 1942, Licensing of Produce Brokers Act No 09 of 1979, Ordinance the Plant Protection Act No. 35 of 1999, the Seed Act No 22 of 2003, the Promotion of Export Agriculture Act No. 46 of 1992, the National Environmental Act No. 47 of 1980, the Soil Conservation Act No. 25 of 1951, the Fauna and Flora Protection Ordinance No. 02 of 1937, the Forest Ordinance No. 16 of 1907, the Control of Pesticides Act No. 33 of 1980, the Employment of Women, Young Person and Children Act No. 47 of 1956 and the regulations framed thereunder, and any other regulatory and statutory requirements wherever applicable.

In the preparation of this Standard the valuable assistance derived from the publications of the Food and Agriculture Organization (FAO), Bureau of Indian Standards, China Standard body Sri Lanka Tea Board and the Tea Research Institute of Sri Lanka is gratefully acknowledged.

1 SCOPE

1.1 This Standard prescribes the GAP to be applied for the tea value chain for sustainable production that is legally compliant, environmentally sound, socially acceptable and economically viable to ensure safe and quality produce or product that is suitable for utilization and/or consumption.

1.2 This Standard does not absolve any product, person(s), corporate entities and organizations from fulfilling criteria laid down in the Standards for product(s) that use(s) the **SLS** mark.

1.3 All materials containing or produced from Genetically Modified Organisms (GMOs) are not compatible with this Standard.

2 REFERENCES

SLS 135	Black Tea
SLS 143	Code of practice for general principles of food hygiene
SLS 614	Specification for potable water
SLS 1465	Code of practice for application of pesticides
SLS ISO 3103	Tea — Preparation of liquor for use in sensory tests
SLS ISO 8589	Sensory analysis — General guidance for the design of test rooms
SLS ISO 19932	Equipment for crop protection - Knapsack sprayers - Part 1: Safety and environmental requirements
SLS ISO 27065	Protective clothing – Performance requirements for protective clothing worn by operators applying pesticides and re-entry workers

3 DEFINITIONS

For the purpose of this Standard the following definitions shall apply:

3.1 deforestation: Removal of trees from a designated forest area declared and conserved by the state.

3.2 economically viable: Production that gives positive returns on a sustainable basis.

3.3 environmentally sound: Farm practices with minimal effect on the environment.

3.4 farm: Land where cultivating tea.

3.5 good agricultural practices (GAP): Collection of scientific principles to apply for on-farm production and post-production processes, resulting in safe and quality food, spices, beverages and non-food agricultural products, while considering economic, social and environmental sustainability.

3.6 green tea leaf: leaf, leaf buds and immature stalks of the tea plant before they are subjected to any of the processes (excluding that known as withering) for conversion into made tea.

3.7 legally compliant: Adherence to all existing legal, regulatory and statutory requirements.

3.8 made tea: Tea manufactured from the leaves, leaf buds and immature stalks of *Camellia sinensis* plant, but does not include refuse tea.

3.9 plucking: Harvesting of green tea leaf.

3.10 produce: Tea that are produced according to this Standard.

3.11 producers: Entities involved in commercial production of tea including individuals, groups and companies.

3.12 production: Any primary operation involved in producing of tea including cultivation and harvesting of the product.

3.13 post harvesting: Operations involved in from the time of harvesting up to the point of processing.

3.14 processing: Operations involved in converting green tea leaf in to made tea.

3.15 tea value chain: A sequence of the steps and operations involved in the crop production, processing, distribution, storage and handling of tea and [its ingredients], from primary production to consumption.

3.16 product: Product that has been produced, processed, and/or handled in compliance with this Standard.

3.17 socially acceptable: Meeting concerns on the welfare and safety of persons working or living within the farmer and/or surrounding the farms.

3.18 sustainable production: A holistic, systems-oriented approach to farming that is efficient in resource management and focuses on the interrelationship of social, economic and environmental processes.

3.19 traceability: The ability to trace the history, application, use and location of an item or its characteristics through recorded data.

4 DOCUMENTATION REQUIREMENTS

4.1 Document requirements

4.1.1 *Traceability*

The produce shall be traceable to the farm where it has been originally produced.

4.1.2 *Site map*

The producer shall maintain an up-to date site map including the location, land extent of the farm, access to the site, tea fields, conservation area, natural ecosystems, water bodies, human settlements, buffer zones and factory layout which ever applicable.

4.1.3 *At the farm site*

Documents require assuring the traceability shall be maintained at the farm site.

4.1.4 *During transportation*

A traceability system shall be maintained during the transportation that shall be able to trace the product back to the farm, date of harvest, class and type of the produce.

4.1.5 *At the retail market*

The final product shall contain identification number, QR, Bar, batch code or any reliable method to be able to trace back to the farm as introduced by the relevant regulatory body.

4.2 Record keeping

4.2.1 Farms shall keep up-to-date records.

4.2.2 All records the entire value chain from farm to exporter shall be maintained and retained for at least 3 years unless stipulated by any specific legislation, otherwise wherever applicable.

4.2.3 The farm records shall be accessible and audited.

4.2.4 Record keeping system shall be established in which all the essential elements are captured including following details:

a) Name of the farmer / grower / planter / practitioner;
b) Address of the farm site / tea land / estate;
c) Map of the tea land / field / estate with natural boundaries and GPS points;
d) Year and season;
e) The cultivar/s, the origin of the planting materials and the date of planting;
f) All details of agronomic and cultural operations from planting, pruning, harvesting;
g) The type, amount, the mode-of-application and the date of application of agro inputs i.e. fertilizer, plant protection products, manures etc. as recommended by the relevant authority;
h) In connection with rational use of the plant protection products, the common name and brand / trade name, amount or dosage as per relevant circulars issued by relevant authority the name of the operator, the mode-of-application, the date of application and pre harvest interval;
j) The date of harvested quantity and type of produce; and
k) Waste recycling and safe disposal mechanisms.

4.2.5 *Record keeping- Tea factory*

4.2.5.1 Record keeping system shall be established in which all the essential elements are captured including following details:

a) Name of registered manufacturer of tea;
b) Type of business;
c) Name of the Tea factory;
d) SLTB Registration Number (MF number) of the Factory;
e) Address of the Tea factory;
f) Elevational category of the factory;
g) Agro-climatic region of the Factory;
h) Year of the factory established;
j) Ownership of the factory;
Types of teas manufactured: grades, grade mixes with their volumes;
k) Green leaf sources: own, bought leaf, neighboring farms, inter estates;
m) History of green leaf production inclusive of agricultural inputs and agronomic operations;
n) Reclaimable tea stocks and disposal;

p) Withering capacity;
q) Drying capacity;
r) Maximum capacity of the factory in Kilograms of made tea per month;
s) Garden mark/s used for sale of tea at the auction and name/s of selling broker/s;
t) Registered tea manufacturer, responsible officer/s and workers in the factory;
u) Items and materials for maintenance, cleaning, repairs, tea manufacturing etc. used in the factory premises;
v) Waste recycling and safe disposal mechanisms;
w) Storage facilities of made tea after grading prior to packaging;
x) Availability of suitable container to avoid moisture absorption; and
y) Details of fire protection mechanism.

4.2.6 *Record keeping – Warehouse*

4.2.6.1 Record keeping system shall be established in which all the essential elements are captured including following details:

a) Name of the registered owner of the Warehouse;
b) Type of Business;
c) Warehouse Registration No;
d) Details of insurance policy;
e) Ownership of the warehouse;
f) Year of the warehouse established;
g) Category for which the teas stored – As an exporter/As a Broker/As a Local Buyer/As a Forwarder/As a processor/As a manufacturer/As a Seller;
h) Location of the warehouse;
j) Floor area;
k) Facilities available- Stacking rate/Plants and machinery/Electricity/Restroom/washroom /weighing scales;
L) Availability of Security;
m) Supervisory staff and workers of warehouse;
n) Dehumidification and ventilation facilities;
p) Waste recycling and safe disposal mechanisms;
q) Details on any shared facilities with non-tea operations to ensure to avoid contaminations;
r) Details of fire protection mechanism; and
s) Details of tea stored (auction tea or otherwise).

4.2.7 *Record keeping – Local Packer*

4.2.7.1 Record keeping system shall be established in which all the essential elements are captured including following details:

a) Local packer name and contact details;
b) Business Name;
c) Type of Business;
d) Business address;
e) Registration No. as local packer;
f) Volume of teas sold per annum. (bulk/Packets);
g) Which channels of purchase to procure of teas;
h) Brand name;

j) Warehouse address;
k) Warehouse registration; and
m) Licensed Processer registration No.

4.2.8 *Record keeping - Exporter.*

4.2.8.1 Record keeping system shall be established in which all the essential elements are captured including following details:

a) Name of the registered exporter of tea and contact details.
b) Type of organization.
c) Business registration No.
d) If Subsidiary/Associate Company declare Parent/Holding company.
e) Tea Exporter registration No.
f) Details of insurance policy
g) Tea packer registration number
h) Business Address.
j) Manufacturer cum exporter or processor cum exporter
k) Ownership of warehouse
l) Warehouse registration No.
m) Brand name/s specify
n) Annual volume of export (Bulk/ value added products)
p) Registration number as an importer of tea (in case of tea imported of other origin)- volume, details of consignment

4.3 Internal audit

4.3.1 Internal audit shall be carried out at least once a year based on the requirements of this Standard. It shall be completed and documented.

4.3.2 Corrective actions shall be implemented and documented.

4.4 Record of complaints

Records of complaints on all produce not in compliance with requirements in this Standard and their remedial actions shall be made available on-site.

5 PRIMARY PRODUCTION REQUIREMENTS

5.1 Environmental hygiene

5.1.1 Tea plants shall be protected from contamination by human, animal, domestic, industrial and agricultural wastes which may be present at levels likely to be a risk to environmental health.

5.1.2 Adequate precautions shall be taken to ensure that these wastes are disposed of in a manner that will not contaminate plants, animals and humans, and not constitute a health hazard to consumers of the final product.

5.1.3 If a particular site categorized as unacceptable to be used, production shall not be carried out until the necessary control measures taken.

5.2 Location of the production and storage site

5.2.1 The proximity of production and storage sites that pose a high risk for contamination of source plants, such as animal production facilities, hazardous waste sites and waste treatment facilities, shall be identified and evaluated for potential contamination of the production fields. with microbial or other environmental hazards.

5.2.2 The producer shall implement measures to prevent or minimize contamination of source plants at the production site.

5.2.3 All procedures associated with primary production shall be carried out under hygienic conditions to minimize contamination and potential sources of contamination of produce or products.

5.3 Site history

5.3.1 A recording system shall be established on the history of the site, the layout of fields and cultivation history in digital and / or physical form.

5.3.2 For all new planting sites, a risk assessment shall be carried out where necessary, taking the following into account:

a) Prior use of the land;
b) Potential impacts for the production by adjacent crops and areas; and
c) Potential impact of activities carried out at adjacent areas.

5.3.3 The information of the risk assessment shall be recorded.

5.4 Deforestation

No new farm shall be permitted on deforested land from the date of implementation of this standard in compliance with the relevant regulation.

5.5 Bio-diversity Conservation

New plantings shall comply with the relevant national laws and regulations with respect to land use and bio-diversity conservation.

5.6 Good Resource Conservation

In the absence of relevant regulation on land use and bio- diversity conservation, new tea plantings shall be compatible with good resource conservation practice proven in comparable locations.

5.7 Selection of agro-ecological zone

Tea shall be grown in the agro-ecological zones as recommended by the relevant authority.

5.8 Minimum grace period for GAP certification

5.8.1 Minimum grace period from conventional farming to GAP production shall be 06 months or elapse of one annual harvest.

5.8.2 The grace period shall not be applicable when the crop is established in a land which has not been used for agriculture or industrial purpose for a long time (more than 1 year).

5.9 Planting materials

5.9.1 Producers shall not use any genetically modified / transgenic planting materials.

5.9.2 Planting materials either TRI or estate cultivars, improved seed progenies shall conform to the recommendations of the relevant authority.

5.9.3 Where propagation material produced within the farm, records of mother bushes, date of establishment, method of propagation, material used for preparation of bed, potting media (i.e. soil or alternate media), method of bed sterilization and date, materials used as mulch, agro-chemicals used and date of application, type of fertilizer used, date of application and agronomic practices shall be recorded.

5.9.4 Where protected varieties are used; the farm shall respect intellectual property rights legislation on tea cultivar protection.

5.9.5 Cultivars used for planting in the farm should preferably possess resistance or tolerance to the key pests and diseases in order to minimize use of pesticides.

5.9.6 All treatments as recommended by the relevant authority shall be recorded.

6 NURSERY ESTABLISHMENT AND MANAGEMENT

6.1 Site selection and preparation for nursery

6.1.1 The site shall be cleared and other preparation shall not cause undesirable effects such as soil erosion, elimination of high value plant species such as rare plant species. The preparation shall not involve the use of fire.

6.1.2 If chemicals are used to sterilize substrates for reuse, the location of sterilization shall be recorded.

6.1.3 If chemicals are used to sterilize substrates for reuse, the date of sterilization, type of chemical, method of sterilization, name of the operator and pre-planting interval shall be recorded.

6.1.4 Substrates shall be traceable to the source and shall not come from designated conservation areas.

6.1.5 The producer shall comply with relevant authority recommendations on site selection, nursery establishment, bed lay-out and nursery construction.

6.2 Nursery management

6.2.1 Nurseries shall be established and managed in a manner that ensures good nursery practices for propagation of standard quality and health of planting materials, protection of the environment and workers' safety.

6.2.2 The nursery site shall have adequate water supply, sheltered from wind and exposed to the sun.

6.2.3 The producer shall comply with relevant authority recommendations on nursery management practices and handling of plants during transplanting.

6.2.4 Sites excavated for nursery soils should be rehabilitated and ideally be maintained as soil banks as per relevant authority recommended grasses.

6.2.5 Wooden construction materials used should be from a sustainable source while complying with the legislations on protection of plant species.

6.2.6 Fertilizers use, type and application rates shall be as per regulatory authority guidelines.

6.2.7 Non-biodegradable materials such as polythene used in the nursery should be disposed.

7 FIELD ESTABLISHMENT AND MANAGEMENT

7.1 Site selection

7.1.1 The producer shall comply with relevant authority recommendations on selection of site for tea cultivation through land suitability criteria.

7.2 Site management

7.2.1 The farm management shall demonstrate that it has legal rights to the cultivation of the land and all necessary regulatory approvals.

7.2.2 Where farms are located on sloping lands (within the permissible level), relevant authority recommended soil conservation measures shall be undertaken to minimize soil erosion.

7.2.3 The farm shall not be established adjacent to natural forest reserves. The minimum distance from the natural water streams shall be maintained according to the national laws.

7.2.4 The required catchment including the ravine area shall be protected when the farm is located near the reservoir, streams or natural water body.

7.2.5 A visual identification or reference system for each field shall be established.

7.3 Soil and substrate management

7.3.1 *Soil type mapping*

Land use soil series map should be used and recorded for the farm, which can then be used

during land preparations, inter-cropping and replanting programmes, where necessary.

7.3.2 *Soil structure*

Cultivation practices that improve or maintain soil structure and those avoid soil compaction shall be selected.

7.3.3 *Soil conservation*

Cultivation practices and soil conservation techniques that minimizes soil degradation shall be adopted as recommended by the relevant authority.

7.3.4 *Soil treatments*

Soil treatments shall be followed as per the relevant authority recommendations.

7.3.5 *Growing media, mulches and shading materials*

7.3.5.1 Preference and priority shall be given to the use of natural substrates.

7.3.5.2 Mulching shall be practiced to maintain favourable soil moisture and soil temperature and for weed control.

7.3.5.3 No shelter, mulch, soil or any substrate shall be obtained from natural forest reserves.

7.4 Land preparations

7.4.1 The producer shall follow relevant authority recommendations on land preparation and soil rehabilitation.

7.4.2 Land preparation techniques (time, methods and technology) that minimize soil erosion and compaction, and safeguard the environment should be applied.

7.4. Soil quality check shall be implemented to ensure required soil pH, soil carbon and soil health.

7.5 Planting

7.5.1 Where there is no irrigation, planting shall be done during reliable rainfall in accordance with the planting seasons in respective regions.

7.5.2 Appropriate spacing and the correct size of planting hole, time of planting, prophylactic treatments and manures in the planting hole, planting technique and other guidelines for planting tea should be followed as per relevant authority guidelines.

7.6 Shade Management

7.6.1 The farm shall have a shade management policy in place as per the relevant authority recommendations.

7.6.2 Shade planting and management practices shall have to be followed as per relevant authority guidelines using recommended species as high and medium shade.

7.7 Intercropping/Agroforestry

7.7.1 Where intercropping/agroforestry is practiced, the relevant authority recommendations applicable on all crops shall be followed.

7.7.2 For enhancing land use, plant and tree biodiversity should be used through integrating different plant species in the landscape for various purposes recommended by relevant authority.

7.8 Weed control

7.8.1 Weeds should be controlled in such a way following the relevant authority recommended weed control calendar based on the rain fall patterns in respective regions is utilized aiming at rational use of herbicides and appropriate application methods as per relevant authority recommendations for effective control of all types.

7.8.2 When deploying mechanical weeding, soil disturbance shall not be permitted.

7.8.3 Herbicides shall not be sprayed on road side, ravines, drain edges and other terrestrial ecosystems that exists within the farm and safety precautions.

7.8.4 The farm shall have a policy of planting leguminous cover crops and live mulches in young tea fields and field borders as recommended by relevant authority.

7.8.5 Chemical applicators / sprayers shall be kept in good working condition when used and kept stored clean after use.

7.9 Fertilizer management

7.9.1 *Nutrient requirement*

7.9.1.1 A soil care plan shall be developed to ensure that nutrient losses are minimized.

7.9.1.2 The application of fertilizers shall be based on the nutrient levels of the soil or substrates and requirements of the crop specified by the relevant authority.

7.9.1.3 Soil pH correction and nutrient supply through appropriate fertilizer mixtures shall be followed based on laboratory test analyses as per the relevant authority recommendations.

7.9.1.4 Type, dose, timing, frequency of fertilizer/nutrient applications shall be adopted per the relevant authority recommendations.

7.9.1.5 Organic and inorganic fertilizers shall be used appropriately, optimizing yield and minimizing negative impacts on human health, the environment and the quality of the produce.

7.9.1.6 Compost, biochar and other soil amendments are encouraged to be used in order to increase fertilizer use efficiency and increase soil physical properties and biological activity ensuring soil health.

7.9.1.7 Under normal conditions fertilizer types, mixtures and rates for different stages of the crop should comply with relevant authority recommendations

7.9.1.8 The type, quantity, method, timing and frequency of fertilizer application shall be followed so as to maximize benefits on productivity and to minimize losses.

7.9.1.9 Fertilizers should be selected and used in a manner that promotes plant health while ensuring product safety of the workers and environment.

7.9.1.10 Application of fertilizers shall be in accordance with the recommendations of the relevant regulatory authority and fertilizers shall conform to the relevant Sri Lanka Standard Specifications.

7.9.1.11 Fertilizer application rates should be established in association with the guideline given by relevant authority and controlled to ensure sustainability of the crop and environmental protection.

7.9.1.12 Crop producers shall not use untreated solid or liquid manure.

7.9.1.13 In cases where the farm produces its own organic inputs, proper treatment procedures shall be adopted to reduce or eliminate pathogens present in the raw material and to minimize the probability of contaminating the product. Records of treatment procedures, including the raw materials used shall be kept. The location of the composting site shall also consider the slope and its proximity to crop production sites in order to prevent cross contamination from run-off or leaching.

7.9.1.14 Proper measures shall be in place to prevent the residues of organic material on the leaves after spraying liquid fertilizer.

7.10 Records of fertilizer/Nutrient Application

7.10.1 All of soil and foliar applications, both organic and inorganic shall be recorded.

7.10.1.1 All application dates, location of application, types, quantities, method of application, frequency of application, and operator details shall be recorded.

7.10.2 *Application machinery*

7.10.2.1 Fertilizer application machinery shall be kept in good working condition when used.

7.10.2.2 Where applicable, fertilizer application machinery should be calibrated and maintained in a manner that will ensure accurate delivery rate and records should be maintained;

7.11 Storage of Fertilizers/Nutrients

7.11.1 Fertilizer stock inventory or records shall be kept up-to-date and made available for inspection.

7.11.2 Fertilizers shall be clearly labeled and stored in a way not contaminating the environment.

7.11.3 Fertilizers shall not be stored in close contact with pesticides. If this is not possible, fertilizers and pesticides shall be physically separated and labeled accordingly.

7.11.4 Fertilizers shall be stored in an appropriate manner, which reduces the risk of contamination of water and environment.

7.11.5 Fertilizers shall be stored in a covered, clean, dry location where there is no risk of

contamination of water sources. Fertilizers shall not be stored in direct contact with the ground.

7.11.6 Fertilizers shall not be stored with farm produce or products.

7.11.7 Records of sources and nutrient content of fertilizers used shall be kept and made available for inspection.

7.12 Organic fertilizer

7.12.1 Relevant authority recommended organic fertilizer shall be stored and handled in an appropriate manner to reduce the risk of contamination of farm produce or products and the environment and also to maintain their quality.

7.12.2 Sewage sludge, municipal soil waste and treated / fortified sources of manures shall not be used.

7.12.3 Precautions shall be taken to avoid pollution by heavy metals or by nitrate leaching, the levels of nutrients, heavy metals and other potential pollutants in the organic fertilizer shall be confirmed before application. A proper account shall also be taken of the nutrient contents in organic fertilizers.

7.12.4 The use of organic fertilizers in cultivation shall be based on Integrated Plant Nutrient System (IPNS).

7.12.5 The source of organic fertilizer shall be recorded.

7.12.6 Operators shall maintain purchase, handling, treatment and processing records.

7.13 Irrigation/Fertigation

7.13.1 The user of irrigation shall seek for water saving techniques.

7.13.2 The producer shall justify the method of irrigation/ fertigation used in light of water conservation.

7.13.3 The water use management plan shall be prepared to optimize water usage and reduce waste.

7.13.4 Records of water usage for irrigation/fertigation should be maintained.

7.13.5 *Quality of water*

7.13.5.1 Water sources shall be analyzed at least once a year for microbial and inorganic contamination if there any possible risk/uncertainty. The analysis results shall comply with the microbiological requirements of the **SLS 614**.

7.13.6 *Supply of water*

7.13.6.1 On-farm water requirements shall be derived from sustainable sources.

7.13.6.2 Producers shall seek advice from relevant authorities on water sourcing.

7.13.6.3 On-farm water sources shall be managed to ensure water-use efficiency and sustainability.

7.14 Crop protection

7.14.1 The use of pesticides in crop production shall be minimized.

7.14.2 Non-chemical alternatives shall be explored. Whenever possible, pest and disease management should be attempted through following cultural and agronomic practices.

7.14.3 Wherever possible, producer shall apply recognized Integrated Pest Management (IPM) techniques.

7.14.4 Proper pruning and maintenance shall be practiced regularly as per the relevant authority guidelines.

7.14.5 Diseased or infested pods, branches and other plant materials shall be regularly removed from the field, and properly disposed of in a way that prevents contamination. Tools used shall be dedicated for this purpose only and disinfected before and after each use.

7.14.6 In situations where tea is already old and/or less productive, replanting or infilling should be followed as per the guidelines of relevant authority.

7.14.7 Measures to reduce risk of diseases shall be in place including right choice of resistant / tolerant tea cultivars, vigilance for pest outbreaks, timely identification of the pest damages etc.

7.14.9 *Choice of plant protection products*

7.14.9.1 Application of plant protection products shall be in accordance with the recommendations of relevant authority and registrar of pesticides.

7.14.9.2 The records of plant protection products used and stored shall be kept and maintained for inspection.

7.14.9.3 Producers shall only use the pesticides that are recommended by the relevant authority and registered under relevant act.

7.14.9.4 Producers shall select the type of plant protection products out of the recommended list and shall not use the dosage exceeding the recommendations.

7.14.9.5 Instructions on the pesticide label shall be followed to ensure effective application and to avoid risks to operators, consumers with respect to MRLs (Maximum Residue Limits) and the environment on soil, biodiversity, air and water pollution.

7.14.9.6 A pesticide-rotation strategy which have different mode-of-action shall be adopted to avoid reliance on any one pesticide.

7.14.9.7 The producers shall not use any pesticides that are banned, restricted or disallowed in importing countries and ensure the same to the relevant authority and tea exporters.

7.14.9.8 Crop sanitation and quarantine measures shall be maintained at all times.

7.14.9.9 Direct or drift contamination of agro chemicals with the crop from other crops or in neighboring fields shall be avoided.

7.14.9.10 All applications of plant protection products should be recorded, including: field identification (number or code, location), application date, product trade name (brand), name of the operator/supervisor, application machinery (e.g. knapsack) and name of pest or diseases controlled.

7.14.9.11 Application and measuring equipment should be well maintained and calibrated regularly with proper records to ensure accuracy of application rates.

7.14.9.12 All plant protection products should be transported in a safe manner with attention to minimizing possible danger to people, food products and the environment.

7.14.9.13 When an original package is broken or damaged, and the product is transferred to another package, the new package should contain key information of the original label.

7.14.9.14 Storage facilities should be appropriately designed with safety features, and a product inventory and manufacturer's safety information should be maintained.

7.14.9.15 Empty containers of plant protection products should not be re-used in any form or manner. Such containers should be safely stored and later disposed in accordance with relevant legislations.

7.14.9.16 The disposal of the surplus application mixes and wash downs should be carried out in a manner ensuring worker and environment safety.

7.14.9.17 Obsolete plant protection products should be labeled, stored and handled in a manner that prevents contamination of tea and environmental pollution.

7.14.9.18 The producers and workers shall be aware of the banned and restricted chemicals and the limitations and regulations in tea export / destinating country.

7.14.9.19 Plant protection products shall be transported safely, with attention to minimizing human and environmental contamination and if applicable, transported in accordance with local regulations.

7.14.10 *Records of application*

7.14.10.1 All applications of pesticides shall be recorded to include the name of crop, location and date of application, reason for application, name of pesticide (common name and the trade name) used, dosage, method of application and name of the operator.

7.14.11 *Safety, training and instructions*

7.14.11.1 Operators shall be trained on safety measures and proper application of pesticides on regular basis complying with the **SLS 1465**.

7.14.11.2 Each area of application shall be field-marked with appropriate warning signs of the re-entry / entry restriction period.

7.14.11.3 There shall be procedures dealing with re-entry of persons on the farm after application of plant protection products.

7.14.12 *Personal protective equipment*

7.14.12.1 Operators shall be equipped with suitable personal protective equipment (PPE) in accordance with the **SLS ISO 27065** as appropriate to the danger posed to the applicator.

7.14.12.2 Personal protective gear shall be cleaned after use, minimizing the environmental contamination and stored separately from pesticides.

7.14.13 *Pre-harvest interval*

7.14.13.1 Producers shall be strictly adhered to pre-harvest intervals prescribed in pesticide product labels.

7.14.14 *Spray equipment*

7.11.14.1 Spray equipment shall conform to the **SLS ISO 19932** and be calibrated and kept in good working condition.

7.14.14.2 Calibration shall be carried out as and when necessary to ensure accurate delivery of the required quantity of pesticide.

7.14.14.3 Equipment used for chemical application shall be properly cleaned and securely stored.

7.11.14.4 When chemical applications are done using drones or advanced techniques, proper guidance be obtained from the relevant authority with regard to delivery of exact levels of active ingredients, ensure minimal non target effects on crop, harvest, environment, workers and community.

7.14.15 *Disposal of surplus spray mix*

7.14.15.1 Surplus spray mix and tank washings shall be disposed of with utmost care (This can be sprayed on the treated part of the crop as long as the recommended dosage has not been exceeded or on designated fallow land away from water sources). Records shall be kept of such spraying.

7.14.16 *Pesticide storage*

7.14.16.1 Pesticides shall be stored separately in the chemical stores under strict supervision and in accordance with the national regulations.

7.14.16.2 Pesticides shall be stored in a secured, water-resistant, well-ventilated and well-lit location away from other materials.

7.14.16.3 All shelves shall be made of non-absorbent materials.

7.14.16.4 The pesticide store shall be able to retain spillage.

7.14.16.5 There shall be adequate facilities for measuring and mixing of pesticides.

7.14.16.6 There shall be emergency facilities to deal with contamination and accidental spillage including the first aid facility.

7.14.16.7 Keys and access to the store shall be limited to designated personal with adequate knowledge on safe handling of pesticides.

7.14.16.8 A procedure to handle accidents, a list of emergency telephone numbers and the location of the nearest telephone shall be available within the immediate vicinity of the store. Similar information shall also be available next to the designated telephone.

7.14.16.9 An inventory of the pesticides in store shall be kept, updated and maintained and readily available for inspection.

7.14.16.10 All pesticides shall be stored in their original packaging.

7.14.16.11 Only the pesticides that are recommended and registered for use by the relevant authority on tea on the farm shall be stored.

7.14.16.12 Solid pesticides shall be stored on shelves above liquids or stored separately.

7.14.16.13 Hazard and warning signs of potential dangers shall be placed on access doors.

7.14.17 *Empty pesticide containers*

7.14.17.1 Empty pesticide containers shall not be re-used. The disposal of empty pesticide containers shall be in a manner that prevents exposure to humans and contamination of the environment.

7.14.17.2 Collection and disposal systems shall be formalized.

7.14.17.3 Empty containers shall be rinsed at least three times with water and the washings are returned to the spray tank before disposing.

7.14.17.4 Unless participating in established recycling programmes or with expressed permission from the authorities, rinsed containers shall be pierced and dented to prevent reuse.

7.14.17.5 Empty containers shall be kept secure until they are disposed.

7.14.17.6 Disposal or destruction of containers shall be in accordance with the national Laws and regulations.

7.15 Bringing young tea into bearing

7.15.1 Bringing young tea into bearing shall be done timely as recommended in the relevant authority guidelines.

7.16 Pruning

7.16.1 Pruning type shall be determined according to pruning objective and with evidence of adequate root starch after laboratory tests or appropriate resting of tea fields with relevant authority recommendations.

7.16.2 Pruning cycle should be determined according to the climate/elevation with relevant authority guidelines.

7.16.3 Application of dolomite to correct soil pH level shall be practiced before pruning as per the relevant authority guidelines.

7.16.4 A pruning programme shall be available for every tea section/field.

7.16.5 Section/field-wise pruning programme shall be documented.

7.16.6 Records on pruning operations shall be available.

7.16.7 All safety measures shall be followed to prevent injury to personnel during pruning operations.

7.16.8 Necessary training on safe operating procedure, use of appropriate PPE on site during operations shall be imparted to all persons engaged in pruning.

7.16.9 Tipping should be done as per the relevant authority guidelines.

7.16.10 Appropriate post prune cultural practices shall be implemented on time as per the relevant authority guideline.

7.17 Filling vacancy

7.17.1 Estimation of field vacancies shall be established soon after pruning.

7.17.2 Vacancies in tea fields should be in-filled with respective cultivars when necessary, according to the relevant authority guidelines.

7.18 Harvesting

7.18.1 Plucking shall be done according to relevant authority recommendations on harvesting policy ensuring green leaf standards, bush health and suitability of the crop.

7.18.2 Harvesting should be done in a manner that is hygienic and protects the quality of the leaf.

7.18.3 Measures should be taken to avoid leaf contamination during harvesting, handling, weighing, transportation, and reception at the factory.

7.18.4 Green tea leaf shall be transported to the factory according to the relevant authority regulation to avoid deterioration, contamination and the subsequent loss of quality.

7.18.7 Mode of transport, equipment and containers should be designed to prevent contamination, maintain green tea leaf quality and hygiene and allow adequate ventilation.

7.18.8 Measures should be put in place to prevent falsification of weights at tea buying and collection centers as per the guideline.

7.18.9 Measures should be put in place at green leaf weighing, buying and collection points to control possible contamination and ensure the leaf complies with set quality specification and minimizes post-harvest losses.

7.18.10 Weighing should be done using calibrated and licensed equipment.

7.18.11 All records on green tea leaf shall be documented and monitored.

7.18.12 *Harvesting Procedure*

7.18.12.1 The harvesters shall be trained on harvesting of green tea leaf in order to maintain the leaf quality and bush health.

7.18.12.2 A management plan shall be maintained for manual/mechanical harvesting aiming at leaf quality and bush health.

7.18.12.5 Mechanized harvesters shall be trained and skilled on correct use of tools/machines for quality harvest and bush health.

7.18.13 *Hygiene at harvesting*

7.18.13.1 The hygienic procedure shall ensure reusable containers, tools, equipment and handling areas are cleaned and free from any contaminants.

7.18.13.2 Appropriate personal hygiene practices should be maintained and the personnel should be sensitized on appropriate behaviour, handling of equipment and personal protection.

7.18.13.3 Harvesting and transportation containers should be clean, and free from contamination.

7.18.13.4 Where harvesting machines are used, they should be maintained in good hygienic condition.

7.18.13.5 The hygiene procedure shall take into consideration in handling green leaf from field and in transporting vehicles.

7.18.13.6 The hygienic procedures shall take into consideration personal hygiene and potential contaminations through worker's personal belongings carried in the harvesting containers.

7.18.13.7 Pluckers shall have access to clean hands- in the vicinity of their fields.

7.18.13.8 Harvest workers shall have access to clean toilets in the vicinity of their work.

7.19.14 *Quality attributes of green leaf*

7.19.14.1 Green leaf shall be harvested within the specified round length (days) as per elevations and means of harvesting.

7.19.14.2 For the purpose of obtaining best quality tea, the standard of green leaf shall be as specified in relevant authority recommendations

7.19.14.3 Harvested green leaf shall be handled in a manner that minimizes bruising, crushing and any contamination

7.20 Handling of green leaf in the field

7.20.1 Harvested green leaf shall be handled in a manner that minimizes bruising, crushing and any contamination.

7.20.2 Inspection of harvested leaf shall be made and sorting conducted under a shade (from sun & rain) to remove unwanted materials.

7.21 Leaf weighing points

7.21.1 Weighing points shall be prepared in such a way that harvested leaf shall not come into contact with soil and animals with elevated structures.

7.21.2 Leaf handling points shall be cleaned before use.

7.21.3 Leaf sheds or leaf collecting/weighing points shall not be used for mixing or storing of chemicals, fertilizers, sprayers etc.

7.22 Leaf transport and handling to processing plant

7.22.1 Handling of green leaf (collection centers to factory)

7.22.2 Properly harvested green leaf shall be collected into suitable containers, preferably aerated ones and packed lightly to avoid crushing and heating while on transit to the processing factory

7.22.3 Harvested leaf shall be transported to the processing factory as early as possible within the same day of harvesting

7.22.4 Transportation of green leaf as per relevant authority for green leaf from a party other than the processing factory owner, transfer of ownership is at the buying point that may be the collection shed or point of delivery at the factory

7.23 Green leaf storage and transportation

7.23.1 The temporary storage (field storage and handling area storage) and the transportation method of the fresh tea leaves shall assure protection against direct sun, rain, avoid contamination and allow sufficient space and ventilation.

7.23.2 There shall be sufficient measures to avoid compacting and crushing in the harvesting and transport containers.

7.23.3 The harvested green leaf shall reach the processing plant on the same day of harvesting as guided by the relevant authority.

7.24 Calibration of weights and measures

7.24.1 The weights and/or volume- measures that define the weight or volume of harvested tea shall be calibrated at least once a year.

7.25 Management of green leaf collection centers

7.25.1 Green leaf collection centers should be designed to assure that tea quality is not affected

after harvesting and every center of collection should have clear instruction describing the reception and rejection criteria, Quality Control measures, procedures of sorting, loading a truck and good hygienic practices.

7.25.2 Every collection center should have hygiene and first aid tools.

7.25.3 Every collection center should have cleaning program, plan and record.

7.25.4 Every collection center should have separate waste bins for organic and non-organic sources.

7.25.5 Every collection center should have trained personnel who conduct all activities relating to Quality control and assurance.

7.26 Packaging

7.26.1 Tea should be packaged for sale in food grade containers which will assure quality and the hygienic and nutritional properties of the product.

7.26.2 Packaging material should be made of substances which are safe and suitable for their intended use.

7.26.3 All packaging material should be stored under clean and hygienic conditions.

7.26.4 Careless handling of containers should be avoided to prevent the possibility of contamination of tea.

7.26.5 Packaging materials shall be stored in clean storage areas to avoid contamination by physical and chemical hazards as well as storage pests. It shall also be protected from rodents, birds and other animals as well as damp to avoid mold contamination.

7.26.6 The operations of packaging shall ensure no risks of any biological, physical and chemical contaminations, adulterations and moistening etc.

7.26.7 Packing material shall be made of natural material. The processor shall obtain food-grade certificates from the supplier with Material Safety Data Sheet (MSDS).

7.26.8 Bags or containers used to store chemicals and any other purposes shall not be re-used.

7.29.9 Re-usable crates, boxes, containers and also vehicles used to transport harvested produce shall be cleaned to ensure that they are free from foreign materials, soil, dirt, manure, crop residue, decaying produce, lubricant and any other contaminant which may be detrimental to the quality of the produce and/or consumers' health.

7.30 Waste and pollution management, recycling and re-use

7.30.1 Tea by-products and wastes in field and processing centers shall be re-used.

7.30.2 All possible waste products and sources of pollution shall be identified in all areas of the production.

7.30.3 Having identified wastes and pollutants, a plan shall be developed and implemented to prevent or reduce waste and pollution. Whenever possible, crop debris and waste shall be

composted and re-used for soil conditioning and shall not be burnt.

7.30.4 Sufficient area of garbage disposal or clearly specified disposal areas shall be provided.

7.30.5 There shall also be a plan for proper disposal of household waste from the worker quarters within the tea plantations and houses in small holder communities.

8 PROCESSING UNIT

8.1 Traceability

8.1.1 When the tea farm or group of compliant farms does not process its own tea, the traceability shall be ensured at the outsourced processing unit.

8.2 Location, design and layout

Tea processing premises shall be located, designed and constructed to facilitate necessary good manufacturing practices (GMP), requirements and effectively control food hazards and protect the environment as per the guidelines stipulated by the relevant authority.

The location, design and layout should ensure that:

a) Manufacture good quality tea;
b) Should ensure adequate lighting and ventilation;
c) Sources of contamination, pollution, and threats to product quality and food safety are identified and appropriately controlled;
d) Adequate maintenance, cleaning, disinfection and monitoring of equipment, surfaces, ceilings and overhead structures is achieved;
e) Materials in contact with tea are of food grade quality, appropriately designed; and easy to maintain and clean;
f) Wet and dry operations are adequately separated to reduce microbiological contamination of the finished tea;
g) A room for sensory analysis of tea is available and designed in accordance with **SLS ISO 8589**;
h) Worker safety and welfare is assured and monitored through use of appropriate controls by designated personnel; and
j) Waste is managed effectively to prevent recontamination of food, pest access and infestation.

8.2 Principles of hygiene

8.2.1 A risk analysis shall be performed for the processing unit, including hygiene aspects and occupational health and safety issues.

8.2.2 The hygiene procedure shall be implemented for the processing unit operation

8.3 Personal hygiene

8.3.1 Workers shall receive basic instructions on hygiene before handling tea and manufacturing operations.

8.3.2 Workers shall implement the hygiene instructions for handling produce.

8.3.3 All workers should wear outer garments suitable for the operation to avoid contamination.

8.3.4 The protective clothing (outer garments) shall be changed and/or regularly cleaned to avoid cross-contamination according to the risk analysis.

8.3.5 Smoking, eating, chewing and drinking shall be confined to designated areas away from factory / tea processing premises.

8.3.6 There shall be signs with the main hygiene instructions inside the operational areas and packing facilities clearly displayed for workers and visitors.

8.4 Hygiene facilities

8.4.1 Tea processing premises should have appropriate internal design, equipment layout and location that ensure maintenance of good hygiene throughout the plant and prevention of cross contamination and the following should be provided;

a) Foot baths, washrooms, changing rooms, and hand-washing facilities supplied with water, disinfectants liquid soap, sanitizer, disposable towels and/or hot air hand driers, as appropriate;
b) Potable water conforming to SLS 614;
c) Adequate lighting and "Glass" policy;
d) Clean compressed air for dry cleaning;
e) Non hazardous lubricants;
f) Appropriate storage facilities for packaging materials, finished products (unpackaged and packaged), lubricants, fumigants;
g) Facilities for appropriate waste disposal; and
h) Where required, stairs in close proximity to production lines should be appropriately designed and maintained;

8.5 Sanitary facilities

8.5.1 Workers in the packing facility shall have access to clean toilets and hand washing facilities in the vicinity of their work.

8.5.2 Signs shall be clearly displayed instructing workers to wash their hands before returning to work.

8.5.3 There should be suitable changing facilities for the workers.

8.5.4 There should be lockable storage facilities for the workers.

8.6 Processing and storage areas

8.6.1 Processing unit facilities and equipment shall be cleaned and maintained so as to prevent contamination.

8.6.2 The machines and equipment used for processing shall be cleaned adequately and the workers deployed in such operations shall be trained properly in order to carry out effective cleaning operations.

8.6.3 All equipment that come into direct contact with tea, such as rolling tables, Crushing, Tearing and Curling (CTC) machinery, fermenting floor/trays, floor of the rolling and fermenting area and the containers used for transfer of semi processed tea shall be regularly cleaned.

8.6.4 Storage areas shall be clearly identified and cleaned periodically.

8.6.5 Rejected green leaf and waste material should be stored in designated areas which are routinely cleared.

8.6.6 Disinfectants and cleaning agents used shall be approved for the use in food industry and doses/ rates shall be followed correctly.

8.6.7 Cleaning agents shall be kept in a designated area, separate from green leaves and packing materials.

8.6.8 Contamination of tea with lubricants of the machinery shall be avoided.

8.6.9 Physical hazards in green leaf shall be controlled before processing.

8.6.10 Breakage safe lamps or lamps with a protective cap shall be used in all storage and handling areas.

8.6.11 Packing materials shall be clean and stored in clean and hygienic conditions

8.6.12 The drying system shall be well maintained according to the processing operations manual.

8.6.13 In case of direct heaters the complete burning of the fuel shall be ensured.

8.6.14 Access of animals and birds to the facilities shall be restricted.

8.6.15 All visitors shall be aware of the relevant demands on personal hygiene.

8.6.16 All operations, items and personnel involved in tea processing shall be recorded properly and monitored daily through the designated personal.

8.7 Processing of tea

8.7.1 All processing operations shall be explained in a processing operations manual and the workers involved in such operations shall be trained properly on the technical aspects as well as hygienic aspects.

8.7.2 Processing operations shall be carried out according to the specifications as laid down in the processing operations manual.

8.7.3 Green leaf drying shall be managed to ensure optimum physical and chemical withering of leaves.

8.7.4 Cleanliness shall be maintained during all the transferring steps of processing in order to ensure that the raw material or the partially processed green tea is free from any contaminants. Handling methods shall be such that they minimize the risk of contamination.

8.7.5 Adequate temperature and time combination shall be used for blanching (steaming/roasting) of green leaves in order to inactivate the enzymes to prevent further enzymatic reactions.

8.8.6 Fermentation and drying operations shall be carried out under best conditions of energy use and hygiene conditions.

8.8.7 The right working and operating environment shall be maintained in the processing locations.

8.8.8 Sufficient measures shall be in place to avoid chances of physical hazards in the processing area.

8.9 Processing Water

8.9.1 The water used for steam generation shall be potable and clean.

8.9.2 The source of water used for fermentation shall be potable or declared suitable by the competent authorities.

8.10 Process control

8.10.1 All process steps shall be designed, implemented, monitored, measured, documented and reviewed for effectiveness of controls and compliance with critical limits for contaminants in accordance with Sri Lankan Standards for various tea products.

8.10.2 A systematic and effective control system which identifies potential food safety hazards arising from value chain and their measures such as HACCP shall be established.

8.10.3 Incoming green leaf sources should be inspected for foreign matter and be within the acceptable standards stipulated by the relevant authority.

8.10.4 Measures shall be established to ensure tea spillages in the processing area are appropriately handled and that those intended for reuse are collected in clean and clearly marked containers and handled in a hygienic manner.

8.10.5 Equipment and facilities used for process controls shall be calibrated and maintained in good state of repair.

8.10.6 Measures shall be established as appropriate, but not limited to control of pesticide residues, iron filings, foreign matter, moisture levels and microbiological contamination.

8.10.7 Appropriate temperature time controls shall be established to prevent spoilage and eliminate pathogens.

8.10.8 Monitoring shall be undertaken to identify processing points and products that are out of specification; identify non-conforming products as appropriate for isolation, rework, release and /or disposal, and records of actions taken maintained.

8.10.9 Sensory evaluation shall be undertaken as appropriate during and after processing in accordance with **SLS ISO 3103** to ensure production of tea with acceptable organoleptic characteristics.

8.10.10 Cleaning and disinfection shall be done in a manner that will safeguard the package integrity and product quality.

8.11 Quality control

8.11.1 In case of the natural and artificial flavors are used for the processing of different flavored teas, shall be approved for tea flavoring in Sri Lanka and in the country where the final product is intended to be traded.

8.11.2 The list of natural and artificial flavors used for the processing of different flavored teas and the amount used per batch shall be recorded in case of flavoring teas.

8.11.3 The key staff and/or supervisors appointed for critical operations in regard with food safety and quality shall be trained and be aware of the specifications of the process.

8.11.4 A specific storage plan shall be in place for longer term final packed product storage.

8.11.5 Stock rotation shall be managed.

8.11.6 There shall be a process for calibrating equipment.

8.12 Product control

8.12.1 The finished product shall be stored, packaged, dispatched and transported in a manner that maintains its wholesomeness and complies with relevant Sri Lanka Standards and should be traceable to the market.

8.12.2 Contractual agreement for supplies shall be honoured by both parties.

8.12.3 A quality control system shall be established to verify compliance of finished products with specifications, and maintain records.

8.12.4 Storage bins for finished tea shall designed to ease cleaning, constructed of food grade materials and managed in a manner that prevents additional moisture pick up.

8.12.5 Containers and packages shall be designed in a manner that minimise damage and prevent contamination.

8.12.6 Where recycled materials are used, they shall not be in direct contact with the product.

8.12.7 Where required, pallets for product packaging should not compromise product safety and quality, and straps holding packages should be used in a manner that prevents damage to packages.

8.12.8 A dispatch procedure and criteria shall be established to ensure only clean vehicles capable of preserving safety and quality of the product are used.

8.12.9 Containers used for tea transportation should be dry, clean and free from holes, Odours, leak proof and designated only for tea transport at a time.

8.12.10 Transport personnel and drivers shall be sensitized and aware of food safety

requirements, and appropriate vehicle and security conditions for transporting finished products.

8.12.11 Vehicles and containerized transport shall be locked with a security seal to be opened only by authorized personnel at the designated point of offloading and the seal identification number shall be traced to the warehouse.

8.12.12 The producer/exporter shall establish a documented system to ensure every unit or batch of the products is traceable.

8.12.13 A procedure shall be established to ensure tea samples are representative of the offered lot and that non-conforming products are handled appropriately.

8.13 Pest control

8.13.1 Facilities, packaging storage areas and surrounding areas shall be monitored, kept clean and maintained to avoid pest attractions and contaminations

8.13.2 Site plans with bait points and/or traps, shall be available.

8.13.3 Baits shall be placed in such a manner that non-target species do not have access.

8.13.4 Detailed records of pest control inspections and necessary actions taken, shall be kept.

8.14 Maintenance and sanitation

8.14.1 Maintenance and sanitation procedures and programmes shall be established to cover all areas of the manufacturing premises and ensure that;

a) Efficient operation programmes are in place for all plant machinery and equipment;
b) Effective cleaning and disinfection programs for all facilities and equipment are undertaken;
c) Use of approved solvents, oils, lubricants, detergents and disinfectants is adhered to ; and
d) Monitoring is done to establish effectiveness of maintenance, cleaning and sanitation programs.

8.15 Storage of tea samples

There shall be in place, a system where representative lot samples of tea (with reference codes) are kept and to be analyzed in case of any complaint.

9 WORKER'S HEALTH, SAFETY AND WELFARE

The farm shall have policy on Occupational Health & Safety.

9.1 Action plan

There shall be an action plan to promote safe and good working conditions. Workers who are handling fresh produce shall be medically screened as per the legal requirement.

9.2 Training

9.2.1 Training shall be given to workers operating risky or sophisticated equipment where applicable.

9.2.2 Workers shall undergo training in basic hygiene and food safety before handling produce. The aspects of hygiene shall include personal cleanliness, clothing cleanliness and personal behavior. Workers shall be made aware of the requirement to notify management when they are in contact with anyone with a communicable disease which may render them unfit to work in the vicinity of produce destined for human consumption.

9.2.3 Records of training for each employee shall be kept.

9.2.4 Adequate precautions shall be taken, to prevent on farm accidents during operation of farm equipment/ machinery

9.2.5 Accident and emergency procedures shall be available with clear instructions to all workers associated with the farm activities. These procedures shall be displayed in the appropriate language of the workforce.

9.2.6 Instructions shall be supported by symbols where possible.

10.3 Facilities and equipment

10.3.1 First aid boxes shall be available at permanent sites on the farm. All workers shall be informed of these locations and the personnel-in-charge of safety.

10.3.2 All hazards shall be clearly identified by warning signs and symbols where appropriate.

10.4 Pesticide handling

10.4.1 Workers undertaking pesticide applications on the farm shall receive regular health checks in line with guidelines based on regulatory requirements.

10.5 Workers' hygiene

10.5.1 Hygiene protocol for workers shall be put in place in order to prevent physical, microbiological and chemical contamination of the produce.

10.5.2 Workers shall be encouraged to wear Personal Protective Equipment (PPE) to prevent possible contaminations.

10.5.3 Workers shall have access to clean toilets and washing facilities in the vicinity of their work.

10.5.4 Workers shall receive basic training in hygiene requirements for the handling of produce. The training program shall outline the need for hand cleaning, the covering of skin cuts, and the confinement of smoking, eating and drinking in permitted areas.

10.6 Worker Welfare

10.6.1 All employment conditions shall comply with National Employment Regulations.

10.6.2 Appropriate actions shall be taken to promote safe and healthy working conditions.

10.6.3 If on-site living quarters are provided, they shall be habitable and have basic amenities and facilities.

11 SOCIAL JUSTICE

11.1 The certification body shall not certify the GAP production in the case of clear social injustice or any violation of basic human rights.

11.2 Farm shall not engage in or support the use of child labour. Farm shall comply with Sri Lankan child labour laws regarding minimum working age.

11.3 Employees shall have equal opportunities, treatment and equal wages when performing the same level of work, regardless of colour, sex, religion, race, political opinion, nationality, extraction or origin.

11.4 The operator shall provide adequate health and safety measures for employees, casual workers and contractors to prevent accidents and injuries to health arising out of, linked with or occurring in the course of work, by minimizing, so far as is reasonably practical, the causes of hazards inherent in the working environment.

12 ENVIRONMENT AND CONSERVATION

12.1 Impact of farming on the environment

12.1.1 Producers shall conform to existing environmental legislation. This covers the concern for air, water, soil, biodiversity and other environmental issues.

12.1.2 Deforestation of primary and secondary forests shall be prohibited.

12.1.3 Forest patches and biodiversity corridors shall be conserved.

12.1.4 Watersheds shall be protected and conserved.

12.1.5 Native or well-adapted tree species shall be used as shade for the tea where applicable as per the relevant authority guideline.

12.1.6 Native vegetation shall be allowed to grow along streams.

12.1.7 Threatened and endangered species and habitats shall be protected, including adequate measures to restrict hunting or commercial collection of flora and fauna.

12.1.8 If the farm is within two kilometres of a designated park or biological corridor, there shall be evidence that the producer has communication with the public park managers.

12.1.9 Areas of ecological, social, cultural or religious significance should be clearly identified, delineated and preserved.

12.2 Wildlife and biodiversity conservation

12.2.1 Producers shall always be conscious of the need to conserve wildlife, biodiversity, high conservation value areas and the enhancement of agricultural biodiversity.

12.2.2 Where Environmental Impact Assessment (EIA) is required, consideration for the conservation of wildlife and biodiversity shall include the following areas:

a) Conduct a baseline audit to understand existing animal and plant diversity on the farm. Conservation organizations may be requested to conduct surveys to measure biodiversity and identify areas of concern.

b) Take action to avoid damage and deterioration of habitats on the farm; and

c) Create an action plan to enhance habitats and increase biodiversity on the farm complying with the national legislation.

12.3 Unproductive sites

12.3.1 Producers are encouraged to convert unproductive sites in their farms into conservation areas for natural flora and fauna.

Areas in the farm not suitable for tea production should be reforested.

12.4 Energy use

12.4.1 There shall be a plan in action to monitor effective and efficient use of energy.

12.4.2 The farm, group of registered farms, or processing unit shall demonstrate measures to conserve or use energy more efficiently in energy intensive activities.

12.4.3 There should be a plan in action to monitor the savings of energy.

12.4.4 If fire woods are used as fuel for tea firing, it shall come from managed woodlots or pruning from within the farm itself, and not from native forests, unmanaged community forests, watersheds or protected areas.

13 PACKAGING REQUIREMENTS

13.1 Tea shall be packaged for sale in food grade containers which will safeguard the hygienic and nutritional qualities of the product.

13.2 Producers shall not use packaging material that may contaminate GAP produce or products.

13.3 Packaging material should be made of substances which are safe and suitable for their intended use.

13.4 All packaging material should be stored in a clean and hygienic condition.

13.5 Where produce is field packed, packaging shall not be left in the field overnight where risk of contamination and moistening exists.

13.6 The use of packing material containing Polyvinyl chloride (PVC) and Anthraquinone shall be prohibited.

13.7 Packaging materials, storage containers or bins that contain a synthetic pesticide, preservative, fumigant or their residues shall be prohibited.

13.8 Recycled materials shall not be used for packaging of GAP produce or products.

13.9 Agricultural produce from conventional agriculture shall not be packed together with GAP-certified and GAP-labeled products.

13.10 Tea packages should be kept away from the floor on pallets (no contact with floor

13.11 Pallets used should be constructed and treated in a manner that preserves tea quality and integrity of packages

13.12 Hygienic and mechanical conditions of dispatch vehicles and integrity of packages should be confirmed before dispatch and records maintained

13.13 Packing material shall be made out of virgin material. The farmer shall obtain food-grade certificate from the supplier with Material Safety Data Sheet (MSDS).

13.14 Bags or containers used to store chemicals and feeds shall not be re-used.

13.15 Re-usable crates, boxes, containers and also vehicles used to transport harvested produce shall be cleaned to ensure that they are free from foreign materials, soil, dirt, manure, crop residue, decaying produce, lubricant, and any other contaminant which may be detrimental to the quality of the produce and/or consumers' health.

14 MARKING AND / OR LABELLING REQUIREMENTS

14.1 The following shall be marked or labeled legibly and indelibly on each package/container:

a) Name of the produce or product;
b) Grade (quality/ size);
c) Name and address of the crop producer;
d) QR code, bar code, batch code or any decipherable code marking;
e) Net mass in g or kg;
f) Date of manufacture/ harvest;
g) Date of expiry/ best before;
j) Instruction for usage; and
k) Storage condition.

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