

DRAFT KENYA STANDARD

KS 2128: 2015
ICS 67.140.10

Tea industry — Code of practice

DKS 2128: 2015

TECHNICAL COMMITTEE REPRESENTATION

The following organizations were represented on the Technical Committee:

Agriculture, Fisheries and Food Authority — Tea Directorate
Kenya Agricultural and Livestock Research Organization — Tea Research Institute
Kenya Tea Development Agency
Karatina University
Egerton University
Ministry of Agriculture, Livestock and Fisheries — State Department of Agriculture
Ministry of Foreign Affairs and International Trade
Ministry of Industry and Enterprise Development
Ministry of Health – Food Safety Unit
Government Chemist’s Department
James Finlays (K) Ltd.
Unilever Tea (K) Ltd.
Melvin Marsh International Ltd.
Institute of Packaging of Kenya
Kenya Tea Packers Ltd.
Consumer Information Network
East African Tea Trade Association
Kenya Plant Health Inspectorate Service
Kenya Bureau of Standards — Secretariat

REVISION OF KENYA STANDARDS

In order to keep abreast of progress in industry, Kenya Standards should be regularly reviewed. Suggestions for improvements to published standards, addressed to the Managing Director, Kenya Bureau of Standards, are welcome.

©Kenya Bureau of Standards, 2015

Copyright. Users are reminded that by virtue of Section 25 of the Copyright Act, Cap. 12 of 2001 of the Laws of Kenya, copyright subsists in all Kenya Standards and except as provided under Section 26 of this Act, no Kenya Standard produced by Kenya Bureau of Standards may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from the Managing Director.

Tea industry — Code of practice

KENYA BUREAU OF STANDARDS (KEBS)

Head Office: P.O. Box 54974, Nairobi-00200, Tel.: (+254 020) 605490, 602350, Fax: (+254 020) 604031
E-Mail: info@kebs.org, Web:<http://www.kebs.org>

Coast Region

P.O. Box 99376, Mombasa-80100
Tel.: (+254 041) 229563, 230939/40
Fax: (+254 041) 229448

Lake Region

P.O. Box 2949, Kisumu-40100
Tel.: (+254 057) 23549, 22396
Fax: (+254 057) 21814

Rift Valley Region

P.O. Box 2138, Nakuru-20100
Tel.: (+254 051) 210553, 210555

DKS 2128: 2015

Foreword

This Kenya Standard has been prepared by the Tea Technical Committee under the guidance of the Standards Project Committee and it is in accordance with the procedures of the Kenya Bureau of Standards.

This code of practice is aimed at providing guidance to all stakeholders in the value chain to conduct all activities in a manner that ensures food safety and quality; personnel safety and welfare; environmental protection and sustainability. It also intends to enhance compliance with statutory and regulatory requirements in Kenya.

This second edition provides updates on existing national legislations and also covers requirements for production of organic tea and maximum residue limits for pesticides.

In the development of this Code of Practice, reference was made to the following documents:

CAC/RCP 1: 1969, General principles of food hygiene

CAC/GL: 1999, Guidelines for the production, processing, labelling and marketing of organically produced foods,

CODEX Online Commodity Details for Tea,

<http://www.codexalimentarius.net/pestres/data/commodities/details.html?id=101>

Tea industry — Code of practice

1 Scope

This code of practice provides guidelines for achieving requirements for food safety and quality; worker health, safety and welfare; environmental protection and sustainability by stakeholders along the tea value chain in Kenya.

2 Normative references

KS EAS 39, Hygiene in the food and drink manufacturing industry - Code of practice

KS ISO 22000, Food safety management systems — Requirements for any organization in the food chain

KS ISO 22005, Traceability in the feed and food chain — General principles and basic requirements for system design and implementation

KS 22006, Quality management systems — Guidelines for the application of ISO 9001:2008 to crop production

KS EAS 38 Labelling of pre-packaged foods,

KS EAS 804 Claims- General requirements

KS 1927, Specification for tea packets and container

KS ISO 9884, Tea sacks palletisation and containerised transport of tea

KS ISO 2859 – Tea sampling

KS ISO 8589, Sensory analysis- General guidance for the design of test rooms

KS ISO 3103, Tea-Preparation of liquor for use in sensory tests

KS EAS 12, Portable water –Specification

3 Definitions

For the purposes of this standard, the following definitions should apply:

3.1

Tea value chain

sequence of the steps and operations involved in the production, processing, distribution, storage and handling of tea and [its ingredients], from primary production to consumption

3.2

Contaminant

any biological or chemical agent, foreign matter, or other substances not intentionally added to tea which may compromise food safety or suitability

3.3

Contamination

introduction or occurrence of a contaminant in tea or tea environment.

DKS 2128: 2015

3.4

Hazard

a biological, chemical or physical agent in tea, or condition of, tea ,equipment or environment, with a potential to cause an adverse health effect or environmental deterioration

3.5

Hazard Analysis Critical Control Point (HACCP) a system which identifies, evaluates, and controls hazards which are significant for food safety, worker safety, and environmental protection

3.6

Critical Control Point

a step or operation at which control can be applied and is essential to prevent, eliminate or reduce a food safety hazard to acceptable levels

3.8

Critical limit

a criterion (threshold) which separates acceptable tea from unacceptable tea.

3.9

Calibration

measuring and adjusting the output and rate of working of application equipment so as to achieve predetermined accuracy

3.10

Integrated pest management (IPM)

consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep plant protection products and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment..

3.11

Field establishment

field planting, bringing into bearing and in filling of a tea plantation

3.12

organoleptic evaluation / sensory analysis

a method of establishing acceptable tea quality based on appearance of dry leaf, liquor and infused leaf; colour and odour of dry leaf; and taste characteristics of tea liquor

3.13

Traceability

ability to follow the movement of a feed or food through specified stage(s) of production, processing and distribution

3.14

Certification

is the procedure by which official certification bodies, or officially recognized certification bodies, provide written or equivalent assurance that foods or food control systems conform to requirements. Certification of food may be, as appropriate, based on a range of inspection activities which may include continuous on -line inspection, auditing of quality assurance systems and examination of finished products.

3.15

Audit

is a systematic and functionally independent examination to determine whether activities and related results comply with planned objectives.

4 General requirements

4.1 Tea value chain

Stakeholders within the tea value chain shall undertake production, processing, distribution and trading of tea in a manner that ensures food safety and quality; worker health, safety and welfare; environmental protection and sustainability. Adequate measures should be taken, as appropriate throughout the value chain in accordance with relevant Kenya standards but not limited to KS EAS 39, KS ISO 22006 and KS ISO 22000, KS ISO 22005 to achieve;

- a) Food safety by identifying practices and measures, monitor and control hazards associated with the product at each step.
- b) Food quality by identifying factors that compromise made tea quality and implement measures to ensure conformity to product specifications.
- c) Environmental protection and sustainability by adopting sustainable environmental practices.
- d) Worker health, safety and welfare by adhering to relevant legislations

4.2 Documentation requirements

Stakeholders within the tea value chain should establish, approve, implement and maintain necessary documents to demonstrate effective control of processes within the value chain, that have potential to negatively affect food safety; environmental protection and workers welfare and health, . Documentation may include but not limited to the following:

- a) Policies and manuals for tea quality and food safety, environmental protection, and worker welfare and health,
- b) Records of tea approved tea growing sites
- c) Records of soil analysis
- d) Records for production
- e) Records for pesticide residue analysis
- f) Records for heavy metals
- g) Records for pests and disease incidences
- h) Records for residue monitoring
- i) Records of stocked and applied fertilizer and crop protection products
- j) Procedures for handling harvested leaf
- k) Records for harvested leaf quality
- l) Records for monitoring
- m) Procedure for segregation and disposal
- n) Procedure for traceability, withdrawal and recall
- o) Procedures and programs for cleaning and disinfection
- p) Programs for pest control
- q) Personnel hygiene policy
- r) Prequalification of suppliers
- s) Records for training
- t) Personnel medical records

5 Primary Production

Agronomic practices should comply with good agricultural practices (GAP) and recommendations in approved tea producer manuals.

5.1 Site selection

- a) Tea should be grown in recommended agro-ecological sites complying with the relevant national legislative requirements for industrial crop production.

DKS 2128: 2015

- b) In case of forested land, and land use change, an environmental impact assessment (EIA) license from National Environment Management Authority should be obtained.

5.2 Nursery establishment and management

- a) The nursery site should have adequate water supply, sheltered from wind and exposed to the sun.
- b) The nursery soils should have top soils with a pH of about 5.6 and the subsoil pH of about 5.0
- c) Sites excavated for nursery soils should be rehabilitated
- d) Nursery construction and management practices should comply with the recommendations in the approved tea producer manuals
- e) Wooden construction materials used should be from a sustainable source while complying with the legislations on protection of plant species.
- f) Fertilizers use, type and application rates be as per tea grower's handbook or approved producer manual
- g) Non biodegradable materials such as polythene used in the nursery should be disposed of in accordance with Environmental Management and Coordination Act (EMCA)
- h) Planting material used should be approved in accordance with the Seed and Plant Varieties Act, Biosafety Act and other relevant legislations.
- i) Use of agrochemicals for pest and disease control should be limited to those approved for use in the tea industry in accordance with applicable legislations on chemical use.

5.3 Field Operations

5.3.1 Land Preparation

- a) Land preparation techniques (time, methods and technology) that minimize soil erosion and compaction, and safeguard the environment should be applied.
- b) Where necessary, soil PH correction should be based on soil analysis reports to effect rehabilitation.
- c) Field establishment that ensures complete bush canopy for the control of weeds and prevent use of herbicide should be applied.
- d) Pruning should be done in accordance with approved tea producer manuals and left in field for sustainable soil fertility.

5.3.2 Fertilizer

- a) Fertilizer used should not contain potentially harmful substances and should comply with relevant Kenya standards.
- b) Fertilizer application rates should be established and controlled to ensure sustainability of the crop and environmental protection.
- c) Where applicable, fertilizer application machinery should be calibrated and maintained in a manner that will ensure accurate delivery rate and records should be maintained.
- d) Records of fertilizer application indicating location, date of application, type and quantity of fertilizer applied should be established and maintained.

- e) The stock records of fertilizer should be established and maintained. The fertilizer should be stored in a covered dry location and not in the same room with pesticides or tea

5.3.3 Crop protection products

The grower should use crop protection products that are approved for use in tea crops and applied in a manner that protects the worker and the environment in accordance with approved manuals and relevant legislations; and ensures that acceptable maximum residue limits prescribed in Annex B are complied with to safeguard human health.

- a) The choice of crop protection products, their storage and application, shall be appropriate and in accordance to the instructions on the label.
- b) The product used shall be registered by the Pest Control Products Board
- c) Where they are technically feasible, recognized IPM techniques should be applied by competent persons.
- d) An up to date and complete list of all the crop protection products that are used and/or stored on the farm shall be maintained
- e) All applications of crop 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.
- e) Application and measuring equipment should be well maintained and where necessary calibrated regularly to ensure accuracy of application rates and proper records should be maintained.
- f) All crop protection products should be transported in a safe manner with attention to minimizing possible danger to people, food products and the environment.
- g) 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.
- h) Storage facilities should be appropriately designed with safety features, and a product inventory and manufacturer's safety information should be maintained.
- i) Empty containers of crop 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.
- j) The disposal of the surplus application mixes and wash downs should be carried out in a manner that is not injurious to the worker and the environment.
- k) Obsolete crop protection products should be labeled, stored and handled in a manner that prevents contamination

5.4 Harvesting

Harvesting should be done in a manner that is hygienic and protects the quality of the leaf. Measures should be taken to control leaf contamination during plucking, handling, buying, weighing, transportation, and reception at the factory.

- a) There should be a clear process for handling of fresh tea leaves from harvesting to receipt at the factory

DKS 2128: 2015

- b) Appropriate personal-hygiene practices should be maintained and the personnel should be sensitized on appropriate behaviors, handling of equipment and personal protection.
- c) Harvesting and transportation containers should be used for tea only and should be clean, free from any foreign matter
- d) Where harvesting machines are used, they should be maintained in good hygienic condition and the lubricants used should be of food grade quality.
- e) Mode of transport, equipment and containers used should be designed to prevent contamination and maintain leaf quality and hygiene
- f) The leaf should be handled with care to control contamination with foreign matter e.g. stones, grass etc.
- g) Measures should be put in place at buying and collection points to control contamination and ensure that the leaf complies with set quality specification
- h) Weighing equipment should be calibrated and in accordance with the legislation for weights and measures
- i) Records for harvested leaf should be maintained

6. Processing

To ensure that tea products are wholesome, safe for human consumption and the worker is protected from occupational hazards, tea processing location, premises and steps should conform to Good Manufacturing Practices (GMP) in accordance with KS EAS 39, and other relevant legislations, but not limited to Public Health; and Occupational Safety and Health.

6.1 Location, design and layout

Tea processing premises should be located, designed, and constructed to facilitate necessary hygienic practices and effectively control food hazards and protect the environment. The location, design and layout ensure that:

- 6.1.1 Sources of contamination, pollution, and threats to food safety are identified and appropriately controlled.
- 6.1.2 Adequate maintenance, cleaning, disinfection and monitoring of transport vehicles, equipment, surfaces, ceilings and overhead structures is achieved
- 6.1.3 Materials in contact with tea are of food grade quality, appropriately, designed; and easy to maintain and clean
- 6.1.4 Wet and dry operations are adequately separated to reduce microbiological contamination
- 6.1.5 A room for sensory analysis of tea is available and designed in accordance with KS ISO 8589
- 6.1.6 Workers safety is assured and maintained by appropriate use of personal protective equipment
- 6.1.7 Waste is managed effectively to prevent recontamination of food, pest access and infestation

6.2 Hygiene Facilities

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:

- 6.2.1 Washrooms, changing rooms, hand-washing facilities supplied with hot and cold water and detergent
- 6.2.2 Portable water conforming with Kenya standards for Portable water KS EAS 12
- 6.2.3 Adequate lighting and “No glass” policy
- 6.2.4 Clean compressed air for dry cleaning
- 6.2.5 Food grade quality lubricants,
- 6.2.6 Appropriate storage facilities for packaging materials, finished products (unpacked and packaged), lubricants, fumigants, etc
- 6.2.7 Stairs that run away from product lines
- 6.2.8 Facilities for appropriate waste disposal

6.3 Maintenance and Sanitation

Maintenance and sanitation procedures programmes should be established to cover all areas of the manufacturing premises and ensure:

- 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
- d) Monitoring is done to establish effectiveness of maintenance, cleaning and sanitation done**

6.4 Personal hygiene

A personal hygiene policy should be established and implemented to ensure that tea is not contaminated by food handlers

- a) Written instructions for acceptable personal hygiene should be visibly displayed at appropriate areas and enforced.
- b) Visitors to manufacturing and storage areas should be sensitised on hygiene practices and wear protective clothing as appropriate.
- c) A documented and effective training program will be in place to ensure that employees, contractors and sub-contractors are competent in assigned duties, and are conversant with hygiene, accidents, and emergency procedures and any other issue critical to food safety.

6.5 Process Control

All process steps should be designed, implemented, monitored, measured, documented and reviewed for effectiveness of controls and compliance with critical limits for contaminants in accordance with Kenya standards for various tea products.

- a) A systematic and effective control system which identifies potential food safety hazards arising from value chain and their measures such as HACCP should be established.
- b) Incoming leaf should be sorted to remove foreign matter

DKS 2128: 2015

- c) Measures should be established to ensure that 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.
- d) Equipment and facilities used for process controls should be calibrated and maintained in good state of repair
- e) Measures should be established as appropriate, but not limited to control of pesticide residues, iron filings, foreign matter, moisture levels and microbiological contamination.
- f) Appropriate temperature time controls should be established to prevent spoilage and eliminate pathogens
- g) Monitoring should 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.
- h) Sensory evaluation should be undertaken as appropriate during and after processing in accordance with KS ISO 3103 to ensure production of tea with acceptable organoleptic characteristics
- i) Cleaning and disinfection should be done in a manner that will safeguard the package integrity and product quality.

6.6 Finished /product control

The finished product should be stored, packaged, dispatched and transported in a manner that maintains its wholesomeness and complies with relevant Kenya Standards and customer contractual agreements; and should be traceable to the market.

- a) Contractual agreement for supplies should be honoured by both parties
- b) A quality control system should be established to verify compliance of finished products with specifications, and maintain records.
- c) Storage containers for finished tea should be designed to ease cleaning, constructed of food grade materials and managed in a manner that prevents additional moisture pick up.
- d) Containers and packages should be designed in a manner that minimise damage, prevent contamination, and there should be no direct contact of the product with recycled materials.
- e) Where required, pallets for product packaging should not compromise product safety and quality.
- f) A dispatch procedure and criteria should be established to ensure that only clean vehicles capable of preserving safety and quality of the product are used
- g) The producer/exporter should establish a documented system to ensure that every unit or batch of the products traceable
- h) A procedure should be established to ensure that tea samples are representative of the offered lot and that non-conforming products are disposed of appropriately.
- i) Consumer packages should be designed for compliance with KS 1927, Specification for tea packets and container and labelled in accordance KS EAS 38, KS EAS 804

7. Tea trade practices

7.1 Buying and selling

Tea buying and selling should be carried out in accordance with relevant tea industry rules, national legislations and Kenya standards:

7.1.1 Tea samples should be prepared and handled in a manner that is representative of the lot and preserves traceability and product integrity in accordance with KS ISO 2859

7.1.2 Organoleptic tasting should be done to ascertain quality and value of tea by relevant parties and in accordance with KS ISO 3103

7.1.3 Tea intended for auction should be catalogued and offered for sale in accordance with relevant legislations

7.1.4 Direct sales, factory door sales and forward contract sales should be executed in accordance with contractual agreements and applicable legislations

7.1.5 Auction activities should ensure accountability and transparency

7.1.6 Auction purchased teas and direct sales destined for export should be registered prior to shipment.

7.1.7 Imported and transit teas should be registered and monitored.

7.2 Warehouse operations

In addition to the requirements for design, location and layout in Clause 6, warehousing, blending, packaging, and dispatch should be done in a manner that ensures food quality, safety and traceability

7.2.1 Warehouses should be designed and located in a manner that ensures:

- a) Clean and hygienic environmental conditions for preservation of tea quality
- b) Prevention of vehicle fumes entering the warehouse and use of diesel powered forklifts within the warehouse
- c) Provision of adequate space for movement of equipment and goods without damaging

7.2.2 A prequalification and traceability procedure should be established to ensure that packaging materials and tea received at the warehouse are of approved quality and are traceable to the supplier.

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

7.2.4 Procedures should be established to identify potential sources of contamination during tea blending and related control measures. Records of monitoring should be maintained.

7.2.5 Tea should be packaged in approved food grade materials and appropriately labelled to ensure traceability

7.2.6 Hygienic condition of dispatch vehicles and integrity of packages should be confirmed before dispatch and records maintained

7.2.7 Identify conditions that negatively impact on the safety of the product, and control measures implemented

8 Transport

8.1 Transporters

DKS 2128: 2015

- a) Any mode of transport used shall be fit for the purpose and transfer of product from one truck/trailer/container during transit shall not compromise product safety and integrity.
- b) The prequalified transporters should have adequate knowledge of the quality and safety issues of the tea product.
- c) Prequalified transporters must have systems in place to ensure that accidental damages to the product on transit are appropriately addressed.

8.2 Shipping

Tea shall be shipped in accordance with the relevant rules and regulations. Shipment records showing the consigner, consignee, quantity, type or grade, and the port of destination shall be maintained.

9 Product tracking information

Information on tracking of the product should be documented at the factory and include among other things:

- 9.1 Truck/trailer registration number;
- 9.2 Date and time of dispatch.
- 9.3 Name of manufacturing factory;
- 9.4 Garden mark and grade;
- 9.5 Product invoice numbers;
- 9.6 Delivery note
- 9.7 Goods received note

10 Labour and workers welfare

All stakeholders within the value chain should comply with relevant legislations on labor and employment

11 Environmental management

- a) Sustainable environmental management should be maintained to conserve energy, soils, water resources, wild life and forests in accordance with the relevant environmental related legislations.
- b) Emissions from factories be managed in a manner that minimizes environmental degradation.

ANNEX A
(normative)
Organic tea- Variations from conventional tea

A.1 Scope: This annex provides additional practices required for production of organic tea.

A.2 Organic tea is produced and processed in accordance with organic products standard (KS EAS 456) and the integrity of the tea shall be maintained throughout the production, processing and distribution steps.

A.3 Differences in the growing and handling of organic tea

The following are the differences between organic and conventional tea:

A.3.1 Isolation of site for organic farming

- a. The area shall be sufficiently isolated to ensure that there is no possibility of any pollutants or contaminants flowing into the growing area.
- b. A risk assessment shall be undertaken to establish the potential contamination from adjacent farms and appropriate measures implemented.
- c. Water used in compost preparation shall be free from pollutants
- d. A detailed history of a period of about five years, fully documented to give details of external inputs during pre-conversion period, be maintained to facilitate inspection of organic tea cultivation.

A.3.2 Conversion period of site for organic farming

- a. The minimum conversion period should be three years from the last usage of synthetic agrochemicals or at least three years in the case of land on perennial crops other than grassland. Tea can be marketed as “in conversion organic tea” only after one year from the start of conversion.
- b. Based on risk assessment tea may be marketed as “organic tea” only after the completion of conversion of three years.
- c. In cases where land is not in use for more than two years, a competent authority shall determine the period of conversion, but exceeding twelve (12) months, based on risk assessment.
- d. In cases where a whole farm is progressively converted, permitted techniques monitored by a competent authority shall apply.
- e. Areas in conversion as well as areas converted to organic production shall not be alternated or switched back and forth between organic and conventional production methods.
- f. Manure and bio-fertilizers used in organic tea farming shall comply with KS 2290 and KS 2356

A3.4 Handling, storage processing

- a. Appropriate measures shall be taken to avoid cross contamination of organic tea with organic tea in conversion and conventional teas
- b. Packaging materials and printing ink should preferably be chosen from bio-degradable materials.
- c. Additives and processing aids should be in accordance with the Annex D of KS EAS 456
- d. Tea labelled as “organic tea” shall certification for organic products.

**Annex C
(normative)
Maximum pesticide residue limits for tea**

- A.1 Maximum pesticide limits in this annex are based on the Codex database for pesticide residues, 2013.
- A.2 The pesticide residue database is regularly reviewed and updated.
- A.3 It is therefore recommended that the list of the current pesticide residue be confirmed by accessing the codex database
- A.4 Most current limits can be found on CODEX Online Commodity Details for Tea at <http://www.codexalimentarius.net/pestres/data/commodities/details.html?id=101>

A.5 List of pesticides and maximum residue limits

SLN	Pesticides	Maximum Residue Limit (mg/kg) Green tea/Black tea
1.	Paraquat	0.2
2.	Methidathion	0.5
3.	Clothianidin	0.7
4.	Fenpropathrin	2
5.	Chlorpyrifos	2
6.	Deltamethrin	5
7.	Propargite	5
8.	Endosulfan	10
9.	Etoxazole	15
10.	Hexythiazox	15
11.	Cypermethrins (including alpha- and zeta-cypermethrin)	15
12.	Permethrin	20
13.	Thiamethoxam	20
14.	Bifenthrin	30

**Annex C
(Informative)
Relevant legislations**

The following is a list of legislations that apply to the tea industry:

- i. The Agriculture, Food and Fisheries Act (AFFA) 2013
- ii. Crops Act 2013
- iii. Kenya Agricultural and Livestock Research Organization Act 2013
- iv. The Employment Act, Cap. 226.
- v. The Environmental Management and Coordination Act , 1999.
- vi. Occupational Safety and Health Act, 2007
- vii. The Food Drugs and Chemical Substances Act, Cap. 254.
- viii. The Irrigation Act, Cap. 347.
- ix. The Lakes and Rivers Act, Cap. 409.
- x. The National Hospital Insurance Fund Act, Cap. 255.
- xi. The National Social Security Fund Act, Cap. 258.
- xii. The Pest Control Products Act, Cap. 346.
- xiii. The Physical Planning Act, 1996.
- xiv. The Regulation of wages and conditions of employment Act, Cap. 229 (ROWA).
- xv. The Standards Act, Cap. 496
- xvi. The Trade Disputes Act, Cap. 234.
- xvii. The Children's Act, 2001.
- xviii. The Trade union Act, Cap. 233.
- xix. The Water Act, Cap. 372.
- xx. The Seed Act, Cap. 326.
- xxi. The Public Health Act, Cap. 242.
- xxii. The Forest Act, 2005.

ANNEX D (Informative) Relevant manuals

The following is a list of manuals from Kenya Agriculture and Livestock Research Organization- Tea Research Institute (KALRO-TRI).

- i. Tea growers' handbook, 5th Edition 2002, Tea Research Foundation of Kenya.
- ii. Fertilizer User Manual guide for tea, 1st Edition 2012. Tea Research Foundation of Kenya.
- iii. Tea pest and disease handbook, 1st Edition 2012, Tea Research Foundation of Kenya.
- iv. Tea cultivation manual for good agricultural practices, 1st Edition 2012, Tea Research Foundation of Kenya.
- v. TRFK clonal catalogue, 1st Edition 2012, Tea Research Foundation of Kenya.
- vi. Waste management manual, 1st Edition 2012, Tea Research Foundation of Kenya.
- vii. Soil, plant tissue and fertilizer sampling and analytical methods, Tea Research Foundation of Kenya.
- viii. Soil conservation manual, 1st Edition 2012, Tea Research Foundation of Kenya.
- ix. Tea plucking practices manual, 1st Edition 2013, Tea Research Foundation of Kenya.
- x. The biochemical Methods Manual, 1st Edition 2014, KALRO-TRI
- xi. Tea extension providers manual, 1st Edition 2014, KALRO-TRI
- xii. Integrated pest and disease management sampling and analytical manual, 1st Edition 2014. KALRO-TRI