KS1758 HORTICULTURE INDUSTRY — CODE OF PRACTICE

PART 2: FRUITS AND VEGETABLES

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| **FARM REFERENCE NO:** | **Fredrick Ndambuki** | | **DATE/S:** | **17/03/2023** |
| **AUDITORS:** | **1** | **Tony MULWA** | **2** |  |
| **3** |  | **4** |  |

**Page one of this checklist provides the instruction to the auditors**

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| COMPLIANCE VERIFICATION AND COMMENTS  1. Verification for compliance is recorded in the audit checklist in the following ways. 2. **Yes** 3. **No** 4. **N/A** 5. **Comments.** 6. The checklist must be marked within the following guidelines: 7. A tick (√) on the “Yes” column of the checklist indicates 100% compliance. 8. A tick (√) on the “No” column of the checklist indicates partial compliance or 100% non-compliance. 9. A tick (√) on the “N/A” column indicates that the clause of the standard is not applicable to the operator. 10. Comments provided for each clause in the checklist for all audits, and inspections both internal and external by the operator and by the Certification Body respectively. This enables the audit trail to be reviewed after the event and include the details of the references noted during the inspection. 11. The above comments shall be site and product specific, and included in the checklist to give confidence that all the control points have been assessed for all sites and products. 12. Any Clause in the standard categorized as “A” indicates a *major must* requirement. 100% compliance of all applicable Major must control points is compulsory. 13. Any clause in the standard categorized as “B” indicates a *minor must* requirement. 95% compliance of all applicable Minor Must control points is compulsory 14. Any Clause in the standard categorized as “C” indicates a *recommendation* and is encouraged but not mandatory |
| **COLOUR CODES FOR CONTROL POINTS:**  • **Section 1 –** All legal & regulatory requirements  • **Section 2a)** – All other Major Musts  • **Section 2b)** – All other minor must  • **Section 3** – All recommendations |

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| **4.0** | **FARM MANAGEMENT RESPONSIBILITIES AND DOCUMENTATION** | **Yes** | **No** | **N/A** | **Comments** |
| **4.1A** | The ultimate responsibility for compliance with the code of practice rests with the owners or board of directors of each growing or exporting company. | √ |  |  | **Management commitment policies available** |
| **4.2A** | The operator is responsible for the day to day management and implementation of the code of practice and the health and safety of all personnel, keep a check on the observance of the labour and safety regulations and evaluate suggestions for improvements and complaints. | √ |  |  | **Captured in contract, Operators were trained on KS1758 requirement on 09.12.2022** |
| **4.3A** | The operator demonstrates a commitment to continual improvement of standards in social responsibility towards all categories of workers. | √ |  |  | **compliant** |
| **4.4A** | The operator periodically reviews its policies and practices in social responsibility towards all categories of workers, subcontractors and out-growers. | √ |  |  | **Compliant** |
| **4.5A** | The operator demonstrates a commitment to investigating non-compliance and to taking corrective action where necessary. Resources are allocated to this purpose as necessary and take measures to ensure that workers and out-growers who raise concerns about non-compliances are not discriminated. | √ |  |  | **Documented procedures available.** |
| **4.6A** | The operator provides access to third parties carrying out external verification of compliance to the requirements of this code of practice. | √ |  |  | **The documented policy is in place.** |
| **4.7A** | The operator makes a commitment to employee and out-grower training to ensure that all persons are able to work in accordance with this code of practice. | √ |  |  | **The farm is committed to provide training to its workers/members as per the training procedure.** |
| **4.8A** | The operator liaises with its customers to ensure compliance with specific customer policies regarding workers welfare, out-grower relationships, environmental protection and food safety. | √ |  |  | **Compliant** |
| **4.9A** | The operator has developed an environmental management plan to cover all aspects of both positive and negative aspects of agricultural and social activities. | √ |  |  | **Available - ref Environmental Management Plan of 2022.** |
| **4.10** | **Input procurement.** |  |  |  |  |
| **4.10.1A** | Procurement of inputs used in production, processing and packaging complies with legislative and customer requirements. | √ |  |  | **receipts available.** |
| **4.10.2A** | Where used, Genetically Modified Organisms (GMOs) are accordance with the Biosafety Act and the prevailing regulations. |  |  | √ | **No use of GMOS. Declaration is in place.** |
| **5.1** | **Traceability** |  |  |  |  |
| **5.1.1A** | The operator has put in place a traceability system that addresses raw materials procurement, product process and conditions. | √ |  |  | **Traceability procedure available** |
| **5.1.2A** | The traceability procedure ensures the consumer is informed correctly on produce specifications and origin. | √ |  |  | **Traceability procedure available effective March 2022** |
| **5.1.5.A** | Operator procures produce as per the Horticulture regulations and ensures the following;   1. All growers, traders and processors are responsible for the safety of the produce and products. 2. All farm produce are labeled at source based on guidelines provided in this code 3. All Food products are labeled in accordance with East African standards, EAS38: 2000 advertising and presentation are not misleading consumers. 4. All food products are coded; indicating the Country code, farm location and block number and other parameters indicated in the national traceability system. 5. Food produce traders and processors are able to identify the businesses from whom they obtained and the businesses they have supplied with food produce and products. 6. Unsafe food produce and products are withdrawn from sale or distribution chain or recalled from consumers if already sold. 7. The withdrawal or recall applies to all stages of production, processing and distribution of food produce and products. 8. Processors, traders, importer and exporter keep records from whom food produce is source, to whom is sold for a period not less than six months and in consideration of the nature of the food and its shelf life. 9. Food produce or products which are considered unsafe for human health are not presented for sale exported or imported. The food produce or products comply with the relevant requirements of national food law. 10. The operator is responsible for withdrawing or recalling food produce from the market. They must also notify the relevant competent authority and collaborate with the authority (i.e.) on any action they should take to avoid or reduce the risk posed by the food. 11. Where the operator has reason to believe the food produce has reached the consumer, the operator or processor informs the consumer effectively and accurately of the reason for withdrawal of the produce and product. | √ |  |  | **Traceability procedure available**  **Product recall procedure available through mock recall has been done.** |
| **5.2** | **Produce inspection** |  |  |  |  |
| **5.2** | Every unit of produce is clearly and indelibly marked from source (farm) to the point of sale such that the identification marks are not altered, adulterated, or obliterated. | √ |  |  | **Traceability tags and codes provided. Traceability procedure also available** |
| **5.3** | **Produce receipt** |  |  |  |  |
| **5.3.1A** | The operator has in place a detailed and precise process flow that ensures that every unit or batch of produce received is clearly marked to enable it to be clearly traced from receipt through the handling process to dispatch point. | √ |  |  | **Traceability tags and codes provided. Traceability procedure also available** |
| **6** | **Record keeping and internal audit** |  |  |  |  |
| **6.1A** | **Documentation** | √ |  |  |  |
| Records and documentation to be kept by the operator in addition to those required by the laws of the land shall include:   1. crop diary showing seed quality, rooting rate, variety name, batch number, planting dates, germination dates, date of harvest and other records related to the plant life cycle;      1. agrochemical stock record; 2. a list of personnel who have access to pesticide stores, those responsible for transport, mixing and handling of pesticides and records of their relevant trainings; 3. a list of all the chemicals used in the farm; 4. a list of “Hazardous” and “Highly Hazardous” (WHO Class 1a and 1b) chemicals in use on the farm including source, application and disposal records 5. all pesticide applications, time and date, details of chemicals used, active ingredients and toxicology ratings location of the crop, weather conditions, names of spray operators and supervisors, equipment used, dosage rates, crops and reason for use and re-entry intervals to be tabulated 6. a list of spray operators indicating status, most recent attendance of a spray training course (Form 4) and records of the work rotation program, regular medical checks and blood cholinesterase tests (Form 5); 7. maintenance of the spray supervisor log book to include record of filter cartridge replacement in respiratory protection equipment 8. all machinery including spraying machines to have a log book, showing maintenance regular calibration checks, dates of service etc. 9. a record of daily amount of water consumption, all fertilizer usage, date, type, crop weather conditions (Form 9); 10. an accident and incident diary to record all accidents and emergency incidents such as spillage, poisoning cases, sickness, absence from work, etc and the remedial actions taken. 11. Notices have been posted giving emergency procedures in case of fire, spillages, contamination of humans or animals etc. is a guide on action to be taken; 12. a list of first aiders and training given; 13. a record of disposal of dilute pesticides, pesticide containers etc and a simple map of the entire disposal sites whether in use or not; 14. a record of work contracts for permanent and seasonal workers. 15. a record of all the daily roll call for all casual workers. 16. a record of all the monetary receipts in accordance with the pay roll and any receipts of payment of kind. |  | √ |  | **All relevant records have been documented on the farm**  **which include:**   * **Pesticide application records** * **Stock inventory record** * **List of PPPs dated 08.08.2022** * **Training records** * **PPE list** * **Fertilizer record** * **Accident and** * **emergency procedures** * **Waste disposal** * **procedures**   dosage rates, toxicology ratings missing in application records  filter cartridge replacement in respiratory protection equipment |
| **6.2A** | Operators ensures that employees charged with record keeping are trained to do so accurately and that they are adequately supervised. | √ |  |  | **Training Record available** |
| **6.3A** | Records are clearly written, dated and signed by a responsible person. | √ |  |  | **All records clear and signed** |
| **6.4A** | Records showing non-conformity with this code have been followed up with a written corrective action | √ |  | √ | **Initial** |
| **6.5A** | All records are available for inspection by authorized persons. | √ |  |  |  |
| **6.6A** | Records have been maintained for a period of at least two years or as required by law. | √ |  |  | **Documented evidence on the duration of record retention as per document control procedure** |
| **6.7A** | The operator has undertaken and documented at least one self-assessment annually. | √ |  |  | **Self -assessment has been done** |
| **6.8A** | The grower undertakes a minimum of one audit per year which are documented. | √ |  |  | **Initial though not documented** |
| **6.9A** | All the corrective actions generated from the self-audit are documented and acted upon. |  |  | √ | **Initial** |
| **7** | **Varieties and rootstocks** |  |  |  |  |
| **7.1.1A** | The operator procures registered varieties, rootstocks and seed stocks from licensed sources for purpose of traceability | √ |  |  | **Records of seed source available.** |
| **7.1.2A** | The planting materials including propagules or seeds are certified in accordance with the seeds and plant varieties act Cap 326 and if imported are accompanied with a Phytosanitary certificate issued by a competent authority at source, in accordance with the plant protection Act Cap 324. | √ |  |  | **Seeds are certified and are sold by licensed dealers.** |
| **7.1.3A** | Where sourced from own farm, the operator observes the good agricultural practices for the respective crop. The operator has a quality control system and a monitoring system that monitors any visible signs of pest and diseases to guarantee the quality of the nursery stock produced. | √ |  |  | **The farm has quality management system which has contains scouting procedures and records** |
| **7.1.4A** | When pesticides are used, the operator keeps records indicating the product name, application date, doses and the justification for use. |  |  |  | **Spray records on the farm capture dosage** |
| **7.1.5A** | The planting material is aimed to meet the customers’ specifications i.e. for growers who produce nursery stock for sale. |  |  | √ | **Grower does not produce nursery stock for sale.** |
| **7.1.6A** | The operator has a written agreement with the customers detailing the variety, volumes and quantity specifications |  |  | √ | **No Contracts with the customer** |
| **7.1.7A** | The accompanying documentation shows that the nursery stock is fit for the purpose. |  |  | √ | **No nursery done at the farm** |
| **7.1.8A** | The firm through a senior manager provides documentary evidence that the breeders’ rights as per the requirements of the International Union of the Protection of new Varieties of plants (UPOV) are observed. |  |  | √ | **No breeding done in the farm** |
| **7.1.9A** | The propagation materials are traceable to the registered/authorized. |  |  |  | **Purchase receipts available** |
| **7.2** | **Pest and diseases** |  |  |  |  |
| **7.2.1A** | Where alternatives exist the grower selects varieties which have some level of tolerance or resistance to commercially important pests and diseases. | √ |  |  | **The evidence of pest and disease tolerance indicated on the purchase** |
| **7.3** | **Seed treatments and dressings** |  |  |  |  |
| **7.3.1A** | Where and when seed treatments are used by the grower, there are justifications for their use. |  |  | √ | **No seed treatment done in the farm** |
| **7.3.2A** | Seed treatment are only used to prolong seed storage life or to reduce subsequent application of pesticides after germination. |  |  | √ | **No seed treatment done in the farm** |
| **7.3.3A** | The products are recorded giving name, active ingredient the target pest and/or diseases, and any other benefit, if stated. |  |  | √ | **No seed treatment done in the farm** |
| **7.4** | **Nursery stock** |  |  |  |  |
| **7.4.1A** | Purchased nursery stock is from a certified source and if imported is accompanied with a phytosanitary certificate issued by the competent authority at source. | √ |  |  | **rootstock in the farm found compliant** |
| **7.4.2A** | The management ensures that the farm produce complies with the World Trade Organization Sanitary and Phytosanitary Measures (WTO-SPS) agreement and the latest version of the International Plant Protection Convention (IPPC). | √ |  |  | **rootstock in the farm found compliant** |
| **7.4.3A** | Inspections of plant materials is done at all entry and exit points by competent authority and the seed and/or plant material is released only if certified to be compliant. | √ |  |  | **rootstock in the farm found compliant** |
| **7.4.4A** | The plants and all propagules are free of any visible signs of disease and pests. Whenever there are visible signs of pests and diseases, there is a written justification and the corrective action raised. Instructions of quarantine, fumigation or destruction if given by the inspectors are complied with. | √ |  |  | **rootstock in the farm found compliant** |
| **7.4.5A** | Suppliers of nursery stock give supplier quality guarantees which must be documented. | √ |  |  | **rootstock in the farm found compliant** |
| **7.4.6A** | The accompanying documentation includes: Quality certificate, terms of delivery or signed letters. | √ |  |  | **rootstock in the farm found compliant** |
| **7.4.7A** | Operators producing their own seeds show proof of seed certification process. Multiplication of seed is traceable to breeder’s seed in compliance with the Seed Act Cap. 326 of the Laws of Kenya. |  |  | √ | **No breeding done in the farm** |
| **7.5** | **Genetically modified organisms (GMOs)** |  |  |  |  |
| **7.5.1A** | Where GMOs are used, their use is strictly in compliance with both the local regulations and that of the importing country. |  |  | √ | **No use of GMOs in the farm** |
| **7.5.2A** | The operator has copies of appropriate legislation governing growth and use of GMOs in both the country of production and that of the final consumer. |  |  | √ | **No use of GMOs in the farm** |
| **7.5.3A** | Production of GMOs is done in agreement indicating total volumes/surfaces with individual customers/consumers prior to planting and which is in writing and the attendant documentation done. |  |  | √ | **No use of GMOs in the farm** |
| **7.5.4A** | The operator notifies all his customers on his own developments relating to the use and or production of products derived from GMOs. Such notifications are well documented. |  |  | √ | **No use of GMOs in the farm** |
| 7.5.5A | GMOs and conventional plant materials have separate storage. |  |  | √ | **No use of GMOs in the farm** |
| **8** | **Site history and management** |  |  |  |  |
| **8.1** | **Site selection** |  |  |  |  |
| **8.1.1A** | Farm plans and activities are drawn and done in accordance with Environmental Impact Assessments (EIA). Crop production areas are indicated in relation to staff housing, toilets, drinking water points, waste disposal sites, wastewater treatment points, utility stores and social facilities. | √ |  |  | **Farm plans and activities are drawn** |
| **8.1.2A** | The records and justifications showing the suitability of the site for agricultural activity are available. | √ |  |  | **Site risk assessment available 18.01.2023** |
| **8.1.3A** | Selected site is not close to an area contaminated with industrial, domestic, faucal or organic wastes. | √ |  |  | **Site risk assessment available 18.01.2023** |
| **8.1.4A** | A recording system is established for each field, orchard or green house such that each is uniquely identified with a code. | √ |  |  | **Site risk assessment available 18.01.2023** |
| **8.1.6A** | There is a farm plan showing the areas covered by each crop and all the agronomic activities in the areas. | √ |  |  | **farm plan available** |
| **8.1.7B** | There is unique identification or visual reference system for each production area, sector or greenhouses and farm map prepared. | √ |  |  | **compliant** |
| **8.1.8B** | Records of data showing non-conformity with the quality requirements specified in relevant standards are followed up with a written account of corrective measures taken. There is a corrective action plan giving strategies on how to deal with identified controllable risks in new agricultural sites. |  |  | √ | **Initial Audit,** |
| **8.1.9B** | The severity and probability of each identified risk is indicated as well as the measures to control them. | √ |  |  | **The site risk assessment identifies the severity and probability.** |
| **8.1.10A** | The site is not used for agricultural activities when the risk assessments identify non-controllable aspects that are critical to human health and the environment. |  |  | √ | **There are no non-conforming aspects identified** |
| **8.2** | **Crop Rotation** |  |  |  |  |
| **8.2.1B** | Where rotations are practiced, there is a rotation plan or program, which shall be documented. |  |  | **√** | **crop rotation plan not applicable** |
| **8.2.2B** | Where rotations are not practiced there is a written documented justification for lack of the practice. |  |  | √ | **Annual crop** |
| **8.2.3B** | Rotations are exempted where crops grown are perennial or where substrates are used. |  |  | √ | **Annual crops** |
| **9.1** | **Mapping** |  |  |  |  |
| **9.1.1C** | The Operator has prepared soil maps for the entire farm. A soil survey is done, and a map developed on the basis of the soil profiles and soil analyses. | √ |  |  | **Done based on the soil analysis report.** |
| **9.1.2C** | Planning rotations and growing plans is on the basis of the soil maps. | √ |  |  | **No rotation plan based on soil profiles and map** |
| **9.2** | **Cultivation** |  |  |  |  |
| **9.2.1A** | A Good agricultural practice (GAP) policy covering all aspects is maintained. | √ |  |  | **GAP policy available** |
| **9.2.2C** | The method of tillage of choice is one that preserves soil structure and minimizes soil compaction. | √ |  |  | **Minimum tillage, mulching,** |
| **9.2.3C** | Use of machinery that minimizes the formation of hard pans is particularly encouraged on the farm. |  |  | √ | **No use of heavy machines** |
| **9.3** | **Soil erosion** |  |  |  |  |
| **9.3.1A** | The operator puts in place measures and practices that minimize the risk of soil loss from the farm e.g. terracing, cultivation along the contours, use of cover crops etc. i.e. good agricultural practices. | √ |  |  | **Cultivation along the contour helps to minimize soil erosion** |
| **9.3.3A** | There is no cultivation on slopes greater than 35 %, along riverbanks, lake shores, or in designated water catchment areas. | √ |  |  | **Cultivation is done in area that is perfect for crop production.** |
| **9.3.4A** | Soil drainage systems are developed, well-maintained and adequate enough to deal with rainfall and run offs. | √ |  |  | **The field has crops and this reduces speed of the run off. The beds prepared on the farm reduces the speed of run off** |
| **9.4** | **Soil fumigation** |  |  |  |  |
| **9.4.1C** | Alternatives to the use of fumigants are explored before resorting to their use. |  |  | √ | **No soil fumigation done** |
| **9.4.2B** | Use of fumigants are minimized and when used there is evidence for use including location, date, active ingredients, doses, method of application, operator name and written justification for their use. |  |  | √ | **No soil fumigation** |
| **9.4.4A** | Only chemicals registered by a recognized authority are used in any production process. They are used in accordance with the prescription for purpose fit for use and will keep up to date with the most current list of acceptable chemicals locally and internationally. |  |  | √ | **No soil fumigation done** |
| **9.5** | **Substrates** |  |  |  |  |
| **9.5.1C** | Operators who use substrates are advised to recycle them and there is documentation to show the suitability of such substrates. |  |  | √ | **No use of soil substrates** |
| **9.5.2B** | Where substrates are used and recycled, there is documentation on quantities used, and dates of recycling. If substrates are used but not recycled, justification is given. |  |  | √ | **No use of soil substrates** |
| **9.5.3A.** | Recycled substrates are treated/sterilized before re-use.Substrates sterilization is done in an environmental friendly way |  |  | √ | **No use of soil substrates** |
| **9.5.4A** | Where substrates are used, steaming is preferred option for sterilization. |  |  | √ | **No use of soil substrates** |
| **9.5.5A** | Where chemicals are used to sterilize substrate for reuse, the following is recorded: location of sterilization, date, type of chemical used, method of sterilization and person performing sterilization. |  |  | √ | **No use of soil substrates** |
| **9.5.6.A** | There is documentation to show the location of the treatment, the method of treatment, dates of sterilization, the active ingredients if any and their application rates, the machinery, the operator etc. particularly where chemicals are used to sterilize. |  |  | √ | **No use of soil substrates** |
| **10** | **Plant nutrition and fertilizer use** |  |  |  |  |
| **10.1** | **Advice on quantity and type of fertilizer** |  |  |  |  |
| **10.1.1A** | A written fertilizer plan is developed basedonsoil, water and/or plant analysis which is regularly conducted to evaluate the fertilization plan.  Chemical fertilizers is applied selectively and only on the basis of careful observation of the crop together with soil and, where necessary Organic fertilizers and composted waste are used for the improvement of the soil. |  |  | √ | **No fertilizers additives done on crop** |
| **10.1.2A** | No fertilizer organic or inorganic is applied within six meters of any water channel or source. |  |  | √ | **No fertilizers additives done on crop** |
| **10.1.3A** | There is no direct drainage to any water source of runoff water from land where fertilizer has been applied. |  |  | √ | **No fertilizers additives done on crop** |
| **10.1.4B** | The person in charge of fertilizer application and the operators demonstrates understanding on matters relating to fertilizers and fertilizer use. |  |  | √ | **No fertilizers additives done on crop** |
| **10.1.5A** | Trained and competent employees are responsible for fertilization programme. |  |  | √ | **No fertilizers additives done on crop** |
| **10.1.6A** | There is proof of that competence and where it is lacking, training is given by qualified personnel. |  |  | √ | **No fertilizers additives done on crop** |
| **10.1.7A** | Inorganic fertilizers used on the farm have a fertilizer profile detailing chemical content. |  |  | √ | **No fertilizers additives done on crop** |
| **10.2** | **Records of application** |  |  |  |  |
| **10.2.1B** | Records of fertilizer application detail the geographical areas, name and reference of the field, greenhouse where the crop is located. |  |  | √ | **No fertilizers additives done on crop** |
| **10.2.2A** | A recording system is established for each application of fertilizers: date, type (trade name), quantity, method, type of machinery used for the application, method of application and the name of the operator of each application is recorded. |  |  | √ | **No fertilizers additives done on crop** |
| **10.2.3A** | The date of any application of soil/foliar/nutrient solution fertilizers is documented (recorded). |  |  | √ | **No fertilizers additives done on crop** |
| **10.2.4A** | A work instruction for the fertilizer application is clearly written and signed by a competent person able to interpret the crop soil analysis. The instruction indicates who, when, where and how to apply. |  |  | √ | **No fertilizers additives done on crop** |
| **10.2.5.A** | Documents of the exact amounts applied are signed by a supervising authority. |  |  | √ | **No fertilizers additives done on crop** |
| **10.3** | **Application machinery** |  |  |  |  |
| **10.3,1A** | The fertilizer application machinery is well maintained and calibrated regularly to ensure accurate delivery. |  |  | √ | **No fertilizers additives done on crop** |
| **10.3.2A** | All machinery, including spraying machines, have a log book, showing maintenance, regular calibration checks, dates of service. | √ |  | √ | **No fertilizers additives done on crop** |
| **10.4** | **Nutrient requirements** |  |  |  |  |
| **10.4.1C** | A cropping care plan is developed to ensure minimum nutrient loss. | √ |  |  | **Cropping plan available.** |
| **10.4.2C** | The grower, based on the risk assessments and soil analyses, makes a cropping plan and fertilization program that aims at minimizing nutrient loss. | √ |  |  | **Fertilizer plan done based on soil analysis.** |
| **10.4.3B** | Plant and soil analysis is regularly conducted to evaluate the fertilization plan. | √ |  |  | **Soil analysis report** |
| **10.4.4C** | The application of fertilizer is based on a calculation of the nutrient requirements of the crop and on the appropriate routine analyses of nutrient levels in the soil, the crop or nutrient solution. |  |  | √ | **No fertilizer application** |
| **10.4.5C** | The fertilizer application meets the needs of the crop and maintain fertility and the quantities must comply with the fertilizer crop plan. |  |  | √ | **No fertilizer application** |
| **10.5** | **Timing and frequency** |  |  |  |  |
| **10.5.1A** | The quantity of fertilizer applied is calculated to optimize benefits and minimize nutrient losses and is based on soil analysis. |  |  | √ | **No fertilizer application** |
| **10.5.2A** | The grower takes into consideration the stage of growth of the crop as well as the weather conditions prevailing at the time of the intended application |  |  | √ | **No fertilizer application** |
| **10.5.3A** | The quantities of the applied nitrogen falls within the national limits where they exist and or international limits and such quantities are worked out on an annual basis. |  |  | √ | **No fertilizer application** |
| **10.5.4A** | A nitrogen management plan is established and nitrogen quantities calculated and applied on the basis of the plan. |  |  | √ | **No fertilizer application** |
| **10.5.5A** | There is a documented plan that covers the nitrogen analysis at the start and end of each crop or per site in a rotation program. |  |  | √ | **No fertilizer application** |
| **10.5.6C** | Growers understand that establishment of a healthy crop reduces the need for spray and that excessive application of nitrogen can render crops more susceptible to diseases and pests. |  |  | √ | **No fertilizer application** |
| **10.6** | **Fertilizer storage** |  |  |  |  |
| **10.6.1** | Fertilizer is covered and bunded. The fertilizer is not placed directly on the floor... The store is located away from water source. The store is rodent-proof | √ |  |  | **The store is covered, bunded, fertilizer stored on pallets, stored away from water source. The store is also rodent proof.** |
| **10.6.2A** | There is a well-managed fertilizer stock inventory indicating the contents of the store, types and amounts. The inventory is regularly updated. |  |  | √ | **No fertilizer stocks kept** |
| **10.6.3A** | Fertilizers are stored separately from pesticides, produce, food and feedstuffs, nursery stocks and any living quarters. They are adequately protected from weather elements in a clean and dry area. |  |  | √ | **No fertilizer stocks kept** |
| **10.6.4A** | Where stored together with pesticides, they are in separate compartments and are well labeled. |  |  | √ | **No fertilizer stocks kept** |
| **10.6.5A** | Fertilizers are stored away from concentrated acids; such acids are stored separately in lockable rooms. |  |  | √ | **No fertilizer stocks kept** |
| **10.6.6A** | All hazard and risk areas are clearly indicated and correct hazard warnings posted in clear and understandable forms in English and Kiswahili and the local language where applicable. The warnings signs are prominently displayed both inside and outside at the entrance to the store. | √ |  |  | **All hazards and risk areas are clearly identified** |
| **10.7** | **Organic fertilizers** |  |  |  |  |
| **10.7.1C** | The use of organic manure is encouraged for maintenance and improvement of soil fertility. It is composted and stored in an appropriate manner to contain the risk of contamination of the environment. This is in a designated area away from water sources. | √ |  |  | **rganic manure applications done on site.** |
| **10.7.2**C | Where organic fertilizer is useda documented risk assessment is carried out before use and considers the source and characteristics of the fertilizer risks of disease transmission, weed seed, and method of composting. |  | √ |  | **there was no documented risk assessment carried out before use that took into account the source and characteristics of the fertilizer risks of disease transmission, weed seed, and method of composting.** |
| **10.7.3C** | Where organic fertilizer is used a documented risk assessment is carried out before use and considers the source and characteristics of the fertilizer, risks of disease weed and seed transmission and method of composting. |  | √ |  | **there was no documented risk assessment carried out before use that took into account the source and characteristics of the fertilizer risks of disease transmission, weed seed, and method of composting.** |
| **10.7.4A** | There are records on site, crop and date of application as well as the analysis results and the nutrient calculations of the organic matter | √ |  |  | **Records of organic manure applications done on site.** |
| **10.7.5B** | The analysis is carried out by a nationally recognized laboratory to determine the content of NPK in the organic manure/fertilizer. | √ |  |  | **Analysis done.** |
| **10.7.7A** | No raw or untreated human sludge is used on the farm. | √ |  |  | **No raw /untreated human sludge applications done on site.** |
| **10.7.9A** | The application of such organic manures takes cognizance of their nutrient contribution of NPK and bases on the nutrient management plan. | √ |  |  | **Analysis done. Used as basis for applications** |
| **10.7.10A** | There are records on site, crop and date of application as well as the analysis results and the nutrient calculations of the organic matter. | √ |  |  | **Analysis done. Used as basis for applications** |
| **10.7.11B** | The analysis is carried out by a nationally recognized laboratory to determine the content of NPK in the organic manure/fertilizer. | √ |  |  | **Analysis done. Used as basis for applications** |
| **11** | **Irrigation and fertigation** |  |  |  |  |
| **11.1** | **Water management** |  |  |  |  |
| **11.1.1B** | Operators are conversant with concepts of soil-water relations, which enable water requirements to be accurately estimated. | √ |  | √ | **Water and soil conservation plan maintained** |
| **11.1.2B** | There is a documented irrigation plan to optimize water usage and minimize wastage. |  |  | √ | **Crop is rainfed** |
| **11.1.3C** | Water management is supported by documentation on calculations of crop water requirements, and is supported by data records e.g. rain gauges, evaporation pan readings etc. |  |  | √ | **Crop is rainfed** |
| **11.1.4A** | All operators maintain valid water abstraction permits where applicable and in accordance with the Water Act Cap. 372, 2002. |  |  | √ | **Crop is rainfed** |
| **11.1.5A** | Growers put in place measurement devices and maintain records of water consumption particularly of ground water. |  |  | √ | **Crop is rainfed** |
| **11.1.6B** | Records indicate the date and volume per unit area of the irrigation unit. Where there are irrigation programs, the calculated and actual irrigated water volume is recorded as well. |  |  | √ | **Crop is rainfed** |
| **11.2** | **Irrigation and fertigation method** |  |  |  |  |
| **11.2.1B** | All operators demonstrate understanding of the most water efficient means of irrigation and fertigation for their particular types of crop production. |  |  | √ | **Crop is rainfed** |
| **11.2.2A** | The most efficient and practical water delivery system is used to ensure the best utilization of water. Efficient irrigation systems are used to make rational use of water. |  |  | √ | **Crop is rainfed** |
| **11.2.3B** | Field personnel are trained to recognize and rectify irrigation deficiencies such as pipe bursts to ensure remedial action is taken promptly to avoid water wastage. |  |  | √ | **Crop is rainfed** |
| **11.2.4A** | Irrigation/Fertigation water is abstracted only from sustainable sources. All abstraction is done with the approval of all the bodies mandated to take care of such natural resources. |  |  | √ | **Crop is rainfed** |
| **11.2.5C** | The operator endeavors to harvest rainwater and recycle water used within their farms to reduce reliance on natural sources. |  |  | √ | **Crop is rainfed** |
| **11.3** | **Quality of irrigation water** |  |  |  |  |
| **11.3.1B** | There is a complete and regular risk assessment of irrigation/fertigation water reviewed at least annually or when changes to water sources or delivery system occur and encompasses potential microbiological, chemical or physical pollution of the water sources |  |  | √ | **Crop is rainfed** |
| **11.3.2B** | The water quality analysis is performed by a laboratory of known and recognized competence and with the capacity to analyze for NPK, Electrical conductivity, microbial, mineral and chemical contaminants, pH, biological activity, heavy metals contaminants. |  |  | √ | **Crop is rainfed** |
| **11.3.3B** | The results of such analyses are well documented and where corrective actions are recommended, the nature of the corrective actions are stated, documented and acted upon. |  |  | √ | **Crop is rainfed** |
| **11.3.4B** | The results of such analyses are compared with the relevant national or international standards. |  |  | √ | **Crop is rainfed** |
| **11.3.5A** | Any adverse results obtained are acted upon and the corrective actions well documented. |  |  | √ | **Crop is rainfed** |
| **11.3.6A** | The quality of the water both at the intake and exit points is analyzed on a regular basis (at least every three months) and the quality records kept. Determination of the contaminants, types and amounts present in the water supply and, where applicable, in the runoff water is considered as a basic step in developing a management plan. |  |  | √ | **Crop is rainfed** |
| **11.3.7A** | Untreated sewage water and effluent is not used for irrigation purposes. |  |  | √ | **Crop is rainfed** |
| **11.3.8C** | Construction and maintenance of artificial wetlands is encouraged as they provide very efficient and cost effective cleaning and decontamination of wastewater. |  |  | √ | **Crop is rainfed** |
| **11.3.9A** | Where applicable dams are constructed so as to feed water to downstream users from their floors, not spillways. |  |  | √ | **Crop is rainfed** |
| **11.3.10.** | The operator provides training to managers and workers in the implementation of the Agricultural Production Plans, water quality management and water resource conservation protocols and procedures. |  |  | √ | **Crop is rainfed** |
| **12.1** | **CROP PROTECTION** |  |  |  |  |
| **12.1** | **Pest and diseases** |  |  |  |  |
| **12.1.3A** | The operator monitors the pest and diseases in the facility to ensure that the plants receive all necessary treatments which are appropriate according to the pest or disease. | √ |  |  | **Scouting records in place** |
| **12.1.4** | The following principles are observed for propagation materials: |  |  |  |  |
| **12.1.4.1** | **Sanitation** |  |  |  |  |
| 1. An approved written procedure detailing Sanitation is available. 2. Entry to propagation facility is restricted and a foot bath with a disinfectant provided at the entrance to prevent spread of soil borne diseases. 3. The operator has access to and uses an accredited laboratory (internal or external) where plants are checked for diseases, and where soil and water is analysed 4. Relevant standard for irrigation water, drinking water and for other operations is adhered to. 5. A double door system is introduced where applicable in all propagation facilities to minimize entry of pests and diseases. 6. Cutting tools are disinfected regularly. The disinfectant are changed regularly. 7. Loose dust in propagation facility is minimized 8. Water used in propagation facilities is free from physical, microbial and chemical contaminants.eg treatment with either chlorine, calcium hypochlorite, copper sulphate, aluminium sulphate, UV light or by ultra-filtration before use. 9. Personal protective equipment for every propagation facility should is provided to prevent cross-contamination 10. Movement from one propagation facility to another is avoided. 11. pH of Irrigation water is monitored regularly and adjusted accordingly as it affects availability of nutrients and multiplication of certain plant disease causing organisms. 12. Tools and equipment in contact with propagation materials such as trays/crates/bags should be disinfected. |  |  | √ | **No in-house propagation done** |
| **12.1.4.2**. | **Control of diseases and pests** |  |  |  |  |
| 1. Diagnostic tools for various diseases and pests of economic importance should be available to screen plant materials and prevent pest and disease spread. 2. Soils and propagation facility is disinfected (fumigated/steamed) or use other applicable technologies before setting up propagation facility and after growing a number of cycles of propagation materials. 3. Ways of obtaining clean planting materials such as tissue culture are explored 4. Rigorous and periodic scouting are carried out and where infection is detected early, infected plants are removed followed by destruction of rouged plants and treatment of infected areas with disinfectants. 5. All persons entering propagation facilitieswear clean and appropriate protective clothing as per PPE policy to minimize introduction and spread of pests |  |  | √ | **No In-house propagation done** |
| **12.1.5** | Cleaning of benches, working knives and hands is carried out using disinfectants. |  |  | √ | **No In-house propagation done** |
| **12.1.6** | Plants that are suspected of, or diagnosed as having diseases are isolated, treated or destroyed. |  |  | √ | **No In-house propagation done** |
| **12.1.7** | Cultivation systems are in a clean medium. |  |  | √ | **No In-house propagation done** |
| **12.1.8** | Plants are grown in a system that does not allow cross contamination with surrounding soils. |  |  | √ | **No In-house propagation done** |
| **12.1.9** | Propagation facility floors and pathways are covered to minimize contamination. |  |  | √ | **No In-house propagation done** |
| **12.1.10** | Operators ensure that plants are taken care of to minimize diseases and pest risks to other plants in the breeding/ propagating/growing facility and the surrounding farms. |  |  | √ | **No In-house propagation done** |
| **12.1.11** | Breeders/ propagators provide a hygiene protocol listing procedures and practices used to ensure clean diseases free material. |  |  | √ | **No In-house propagation done** |
| **12.2** | **Pest and Disease Management** |  |  |  |  |
| **12.2.1A** | Operators demonstrate up to date knowledge of the properties of the range of recommended crop protection products currently available, chemical, biological and other forms of control. | √ |  |  | **Current list of approved pesticides available** |
| **12.2.2A** | Management strategies to keep pest levels below economically damaging thresholds are devised using the most appropriate combination of biological (use of natural enemies), cultural, mechanical/physical, monitoring (scouting) and chemical (plant protection products) methods. They are based on a thorough evaluation of the situation, taking into account integrated pest management systems. | √ |  |  | **IPM mechanism is employed Chemical pest control is in place** |
| **12.2.3B** | The presence of pest and diseases is predictable and control is achieved by an integrated strategy. Consequently, as part of a responsible approach, a long term strategy for control is drawn up for each crop including:   1. past history of infestation; 2. indication of main threats; 3. understanding and implementation, where possible, on non-chemical options; including rotations, crop hygiene, resistant varieties, cultural and biological control; 4. Avoidance of production of fruits and vegetables under stresses as some diseases become severe in stressed plants. | √ |  |  | **Site history Records of application available** |
| **12.2.4A** | An effective crop protection programme is implemented. | √ |  |  | **Spray program , Crop protection plan and schedule showing list of approved plant protection products provided** |
| **12.2.5A** | The implementation of the Integrated Pest Management on a preventative basis, where technically feasible and economically viable, is supervised by a technically competent person. | √ |  |  | **Use of sticky traps** |
| **12.3** | **Pest Control Products Use** |  |  |  |  |
| **12.3.1** | **Soil fumigation** |  |  |  |  |
| **12.3.1B** | Alternatives to chemical soil fumigants are explored before resorting to their use. |  |  | √ | **No soil fumigation done** |
| **12.3.2B** | Use of fumigants are minimized and when used there are documented records for use including location, date, active ingredients, doses, method of application and operators name and written justification for their use. |  |  | √ | **No soil fumigation** |
| **12.3.3A** | Only pest control products registered by a competent authority are used in any production process. They are used in accordance with the prescription for purpose fit for use. Operators keep up to date with the most current list of acceptable pest control products locally and internationally as applicable. |  |  | √ | **No soil fumigation done** |
| **12.3.2** | **Resistance management** |  |  |  |  |
| **12.3.2.1A** | Products are chosen to avoid over reliance or continued use of any single chemical grouping, thus reducing the emergence of pesticide resistance. | √ |  |  | **Different chemicals are use from PCPB list** |
| **12.3.3B** | **Application conditions** | √ |  |  |  |
| **12.3.3B** | Pesticides are not applied in adverse weather conditions such as wind, rain or during overhead irrigation. Spraying during high mid-day temperatures is avoided. | √ |  |  | **Applied in the morning and in late in the afternoon** |
| **12.3.4A** | **Procurement of pesticides** |  |  |  |  |
| **12.3.4.1A** | Purchasing is only be done for pesticides that are:   1. Registered as per the Pest Control Act(Cap 346).. Current list of approved pesticides registered by the PCPB can be obtained on request, also available from the PCPB website. 2. from licensed distributors; 3. Labeled by the manufacture as per the Pest Control Products Act, Cap 346 4. Accompanied with material data sheet. 5. Purchase receipts of all pest control products are maintained for at least 12 months. | √ |  |  | **Approved pesticide list from PCPB maintained, pesticides purchased from licensed distributors and purchase receipts kept**  **Material safety data sheets kept** |
| **12.3.4.2A** | A register of the types and characteristics of all pesticides used on the farm is maintained. | √ |  |  | **Register maintained** |
| **12.3.5** | **Transport of pesticides and hazardous chemicals** |  |  |  |  |
| **12.3.5.1A** | Written procedure for transport of pesticides is developed and communicated to all involved in the transport whether on the farm or on transit. | √ |  |  | **Procedures are available** |
| **12.3.5.2A** | Drivers and turn-boys are trained in emergency procedures in the event of accident, fire, spillage and direct contact with persons. Proof of training by a recognized organization is required. |  |  | √ | **Chemicals are not transported in bulk thus no need of vehicle** |
| **12.3.5.3A** | Pesticides are transported together with food, animal feed or general consumer goods. They are transported in a suitable, self-contained box or container. |  |  | √ | **Chemicals are not transported in bulk thus no need of vehicle** |
| **12.3.5.4A** | Vehicles used to transport pesticides are furnished with suitable equipment and materials such as protective clothing, fire extinguisher, sand, shovel, among others, to deal with emergencies. |  |  | √ | **Chemicals are not transported in bulk thus no need of vehicle** |
| **12.3.6.0** | **Storage of pest control products,** |  |  |  |  |
| **12.3.6.1** | Pest control products stores are licensed by the competent authority |  |  |  |  |
| **12.3.6.2A** | Chemicals are stored in suitably constructed stores of sound structure, enclosed/secured/locked and well ventilated which meet minimum technical requirements and conditions. | √ |  |  | **The chemical store meets the requirements** |
| **12.3.6.3A** | Only approved pesticides in original labeled containers are held in the store. No other commodities are stored with pesticides | √ |  |  | **Only approved pesticides and their original container** |
| **12.3.6.4A** | Pesticides are kept in a separate room and secure from children and animals, foodstuffs, fires, stoves or lamps. In the case of the cupboards, the shelf has a front lip to prevent containers from falling out on opening the doors. Access is limited to suitably trained and authorized personnel. | √ |  |  | **Pesticides are kept far away**  **from reach of children, animal**  **foodstuff** |
| **12.3.6.5A** | Large quantities of pesticides are kept in a purpose built store, separate from other buildings or section in a building that can be securely locked. Plans of an approved pesticide store are obtained from authorized institution. |  |  | √ | **Chemicals are kept in smaller quantities** |
| **12.3.6.6A** | Warning in English, Kiswahili and local language where applicable are placed on the outside of the pesticide store. Warnings and/or symbols such as― **NO SMOKING, NO NAKED FLAMES** among others, are displayed both inside and outside, the pesticide store. | √ |  |  | **Warning signs are place on the outside door of the pesticide store** |
| **12.3.6.7A** | Stock is inspected regularly and stock records maintained. | √ |  |  | **Records of stock inventory are maintained** |
| **12.3.6.8A** | Storekeepers receive training regarding the toxicity of pesticides, their storage, handling and dispensing. | √ |  |  | **Storekeeper has received training** |
| **12.3.6.9A** | Written procedures are developed for handling events such as accidents, fire, spillage or poisoning of personnel. These are displayed in languages understood by users in accessible areas. | √ |  |  | **Accident and emergency procedures displayed** |
| **12.3.6.10A** | Stores are equipped with adequate and appropriate firefighting equipment. Maintenance records on fire extinguishers are maintained. | √ |  |  | **Stores are well equipped with spillage kit** |
| **12.3.6.11A** | Shelves in stores are made of non-absorbent and non-flammable material. Materials to deal with leakage and spillage are available in the store. These may include sand, shovel, broom and empty disposal bin. | √ |  |  | **Shelves are made of non-absorbent material** |
| **12.3.6.12A** | There are adequate washing facilities near the store. | √ |  |  | **Handwash and emergency eye wash** |
| **12.3.6.13A** | The store is bunded to contain any spillages and contaminated water used for cleaning or firefighting. | √ |  |  | **Store is bunded** |
| **12.3.6.14A** | Drainage is done to a sump or adequate waste water treatment facility situated far from all water sources and does not drain into riparian land. The facilities are adequately marked or labeled. | √ |  |  | **The facilities are adequately labeled.** |
| **12.3.6.15A** | All personnel working in pesticide stores have access to suitable Personal Protective Equipment. | √ |  |  | **Personnel Protective Equipment available to store keepers** |
| **12.3.6.16A** | Pesticides and fertilizers are stored separately, and away from detergents or disinfectants. | √ |  |  | **Pesticides are stored separately and away from detergents** |
| **12.3.6.17A** | Pesticide store is located away from water sources | √ |  |  | **Store located away from water sources.** |
| **12.3.7** | **Selection of pest control products** |  |  |  |  |
| **12.3.7.1A** | Pesticides used comply with the local regulations. | √ |  |  | **PCPB approved List available** |
| **12.3.7.2A** | The operator consults regularly and is aware of any restrictions on pesticides used and has documentations on such restrictions. | √ |  |  | **Approved pesticide list available, PCPB List available** |
| **12.3.7.3 A** | Pesticides classified as ―Extremely Hazardous‖ and ―Highly Hazardous‖ (WHO Class Ia and Ib) are only used in justified circumstances and where no viable, economic alternative exists and are used by competent/licensed spray operator | √ |  |  | **Labelling and classification of pesticides** |
| **12.3.7.4 A** | The technical person responsible for pesticide choice and application is competent by training. | √ |  |  | **Trained** |
| **12.3.7.5A** | There is written justification to show that the choice of pesticide is appropriate for the intended purpose. | √ |  |  | **Pesticides used for intended use only** |
| **12.3.7.6A** | Over reliance on pesticides with similar mode of action is avoided where repetitive applications are required to eliminate pest resistance | √ |  |  | **Chemicals are alternated** |
| **12.3.7A** | The application rate of pesticides per given area and the dilution rates complies with recommendations on the product label. Where a choice exists, a product that is safer to handle and has less environmental impact is chosen. | √ |  |  | **Pesticides used as per product label** |
| **12.3.7.8A** | There is documentation to show that the correct dosage of the pesticide for the intended crop has been followed in line with label instructions on calculations and preparation | √ |  |  | **Dosage recorded in the pesticide application record** |
| **12. 3.7. 9A** | Selection and the use of a pesticide is such that non target organisms such as bees are not harmed. | √ |  |  | **Only pesticides approved are used** |
| **12.3.8** | **Dispensing of pesticides and hazardous chemicals** |  |  |  |  |
| **12.3.8.1A** | There is a separate area for dispensing of pesticides and hazardous chemicals fitted with:   1. workbench; 2. Running water supply is within at least 5 meters from the dispensing areas; 3. wash basin plus eyebath; 4. accurate measuring equipment; 5. suitable containers for pre-mixing of pesticides/chemicals; 6. Clear marking on all equipment indicating they are for use with pesticides/chemicals only. | √ |  |  | **Chemical mixing area available** |
| **12.3.8.2A** | Adequate and appropriate personal protective clothing and equipment is worn by those persons doing the dispensing. | √ |  |  | **Personnel Protective Equipment available** |
| **12.3.9** | **Advice on quantity of pesticide application** |  |  |  |  |
| **12.3.91A** | Recommendations on application of the pest control products are given by persons of demonstrable competence attained through training and the relevant documentation availed. | √ |  |  | **Advice given by the Technical Advisor** |
| **12.3.9.2B** | Determination of the quantities factor in the velocity of application, the surface area to be applied, pressure of the application system and the speed of application. The related documentations are done. | √ |  |  | **Calibration records available** |
| **12.3.10** | **Application of pesticides and protection of workers** |  |  |  |  |
| **12.3.10.1A** | Employers demonstrate that employees are given information, instruction, training and guidance to carry out their work and to be aware of the risks to health from exposure to pesticides and the precautions to be taken. | √ |  |  | **Farm workers have received any training on pesticide handling, safe and effective use of pesticides** |
| **12.3.10.2A** | Signs to restrict personnel access to area under pesticide application or treated with pesticides are displayed. | √ |  |  | **Warning signs restricting entry available** |
| **12.13.10.3A** | All spray operators and supervisors are suitably trained on the application and risks of pesticides by a recognized institution or body. A training Schedule for the operators and supervisors is established. | √ |  |  | **Spray operators trained** |
| **12.3.10.4A** | All spray operators wear personal protective clothing and equipment suitable for the task at hand provided by the employer without charge. Spray operators do not wear personal home clothing when spraying. Provision of secure well-ventilated storage is provided for personal clothing. PPEs have designated area for washing, drying and storing. Appropriate dressing rooms and double individual lockers for each worker is provided. | √ |  |  | **All operators have PPEs** |
| **12.3.10.5A** | All workers involved in application and handling of pesticides are provided with waterproof overalls as well as appropriate respirators, which are changed regularly according to manufacturers’ recommendations. Application is be timed so as to avoid the hottest hours of the day. Minimum safety band to natural water bodies/employees is observed. | √ |  |  | **All Operators have been provided with respirators.** |
| **12.3.10.6A** | After applying pesticides, spray operators remove all protective clothing and take a shower. Facilities for this including soap, towel and water are made available | √ |  |  | **Bathroom available** |
| **12.3.10.7A** | All waterproof personnel protective clothing and equipment are rinsed immediately after use in an area where the rinsing water can be channeled to chemical waste water treatment facility. Protective overalls if continuously used are laundered after use and stored in a hygienic well-ventilated location on the farm. | √ |  |  | **PPE Cleaning records are maintained** |
| **12. 3.10.8A** | All staff involved in the use and application of organo-phosphate and carbamate pesticides undego a medical checkup at least twice per year but preferably every three months. Such check-up include sampling of blood cholinesterase levels compared with baseline level determined before being assigned the task and after a time away from pesticide exposure i.e. a period of leave. The findings are communicated to the persons examined in a readily understandable manner. Complete documentary records are available for audit purposes. In the event of adverse results, the doctor’s advice is followed. Guidelines on organo-phosphorus poisoning, monitoring and treatment are available within the farm. Spray operators not applying these organo-phosphate and carbamate pesticides go through a medical checkup at least once a year. | √ |  |  | **All sprayers have undergone medical check up** |
| **12. 3.10.9A** | All equipment used for spraying is regularly inspected, well maintained, calibrated and serviced. Any defective equipment is repaired and/or replaced immediately and be verified by a competent person. | √ |  |  | **Calibration records maintained** |
| **12.3.10.1A** | Each application is accompanied by clear instructions on the specific crop location, where the crop protection application is to be done, the requisite dosage and the application technique signed by the authorizing officer. | √ |  |  | **Scouting records kept** |
| **12.3.10.1A** | All workers not wearing protective clothing within the vicinity to be sprayed are removed from the area. Warning signs are displayed at greenhouse entry/exit points and field gates stating time and date of application, pesticide being used and indicating when entry will be safe without the use of protective clothing. | √ |  |  | **Warning signs displayed** |
| **12.3.10.1A** | Material safety data sheets of all pesticides used are kept on file. | √ |  |  | **Material safety data sheets kept** |
| **12.3.10.1A** | Spray mixing and application is carried out by trained personnel. No expectant and nursing mothers or persons under the age of 18 years handles, mixes or applies pesticides. Female workers are discouraged from handling pesticides. | √ |  |  | **Spray mixing and application done by trained personnel** |
| **12.3.10.1A** | Partly used containers are returned to the store with caps and lids properly replaced. All returns are documented | √ |  |  | **Partially used containers are returned to the store** |
| **12.3.10.1A** | Pesticides with a high leaching potential or high aquatic toxicity are not used within 200 metres of open water sources, dams, lakes, rivers. | √ |  |  | **Pesticides are not used within 200 metres of open water** |
| **12.3.10.1A** | Documented re-entry policy and procedure is put in place as preventive measure to avoid employees health risks | √ |  |  | **Documented re-entry procedures maintained** |
| **12.3.10.1A** | Pesticide application method ensure that non target organisms such as bees are not harmed. | √ |  |  |  |
| **12.3.10.1A** | The pre harvest interval is stated for all the crop protection products applied and the first harvestable date indicated/recorded. | √ |  |  |  |
| **12.3.11** | **Pre-harvest intervals** |  |  |  |  |
| **12.3.11.1A** | The crop protection policy provides safeguards to ensure that only pesticides approved for use on the crop are applied in accordance with the label rates and pre-harvest intervals. Procedures guarantee that harvesting cannot commence before the pre-harvest intervals have expired. | √ |  |  | **Only approved pesticides are applied and as per product label** |
| **12.3.11.2A** | The pre-harvest intervals are observed for the respective crop chemicals used through use of records such as pest control products application records and the crop harvest dates. | √ |  |  | **Pre harvest interval is observed and documented in the pesticides application record** |
| **12.3.11.3A** | Regular audits and training are conducted to check consistency in the process and underpin the practice. | √ |  |  | **Training on safe handling of pesticides done to operators** |
| **12.3.11.4A** | For crops that are continuously harvested over an extended period of time, there is a plan for the crop protection practice that does not compromise pre-harvest intervals. | √ |  |  | **Crop protection program in place** |
| **12.3.11** | **Records of application** |  |  |  |  |
| **12.3.11.1A** | Pest control products application records specifies the name and variety of crop treated, the geographical area, name and or reference of the farm, the block where the crop is located as well as the trade name, active ingredients of the applied products, amount, the date and time of application, toxicology ratings, location of the crop and weather conditions. The records also include the name of the spray operators and supervisors, equipments used, dosage rates, crops and reason/justification for use and re-entry intervals and signed by an authorized technical person. | √ |  |  | **Records of pesticide application kept** |
| **12.3.11.2A** | Detailed spray records include; treated area and any incidents such as equipment failure, spillages of chemicals etc. The records must also give the name of the pest, disease(s) or weed(s) treated. | √ |  |  | **Records of pesticide application kept** |
| **12.3.11.4A** | The re-entry interval is stated for all the crop protection products applied and the re-entry time indicated and recorded. | √ |  |  | **Re-entry intervals observed and documented** |
| **12.3.11.5A** | A list of spray operators indicating status of the most recent attendance at spray training course and records of the work rotation program, regular medical checks and the cholinesterase tests are available. | √ |  |  | **Spray operators training done** |
| **12.3.11.6A** | A spray supervisor’s log book is maintained and includes records of PPEs and dates of issue. | √ |  |  | **PPE issue / cleaning record in place** |
| **12.3.11.7A** | All spraying machines have a logbook showing maintenance, regular calibration checks, dates of service etc. | √ |  |  | **Calibration records are maintained** |
| **12.3.11.8A** | An accident and incident diary record of all accidents and emergency incidences such as spillage, poisoning cases, sicknesses, absences from work and the remedial actions taken is maintained. | √ |  |  | **Accident and Incident record maintained** |
| **12.3.11.9A** | Notices are posted giving emergency procedures, contact persons and institutions (in case of fire, spillages, and direct contact of chemicals with humans or animals). | √ |  |  | **Emergency procedures and contacts are posted** |
| **12.3.11.1A** | There are trained first Aid Personnel within the premises and a record of training kept on file. | √ |  |  | **First Aiders available** |
| **12.3.11.1A** | There is a record of obsolete or expired pesticides and empty containers. | √ |  |  | **Records in place** |
| **12.3.11.12A** | Other records and documentation to be kept in addition to those required by the laws to include:   1. agrochemical stock record; 2. a list of personnel who have access to pesticide stores, those responsible for transport, mixing and handling of pesticides and records of their relevant trainings; 3. a list of all the chemicals used in the farm; 4. a list of ― “Hazardous” and ― “Highly Hazardous” (WHO Class Ia and Ib) pesticides in use on the farm including; source, application and disposal records and classification. Information about Pesticide, product labeling requirements are as shown in annex E. | √ |  |  | **Records of stock inventory, List of personnel handling and mixing chemicals and their relevant trainings kept** |
| **12.3.12A** | **Application equipment** | √ |  |  |  |
| Measuring equipment and facilities are adequate for mixing of the pest control products so that the correct handling and filling procedures as is stated on the label can be followed. Application equipment is dedicated to intended use for the purpose of controlling pesticide cross contamination | √ |  |  | **Mixing procedures in places** |
| **12.3.13** | **Disposal of Surplus Pesticides** |  |  |  |  |
| **12.3.13.1A** | Written procedures for safe disposal of dilute pesticides and empty containers shall be developed, approved and communicated to all those handling such products. The procedures must include fail-safe measures to prevent pollution of ground water and soil from leakage or spillage. | √ |  |  | **Procedures for safe disposal of dilute pesticides available** |
| **12.3.13.2A** | Disposal of concentrates, obsolete and expired pest control products is done through approved NEMA agents and records kept. Obsolete and expired pest control products are clearly segregated and marked “obsolete and expired pest control products” | √ |  |  | **Disposed through NEMA approved channels** |
| **12.3.13.3A** | The distance of disposal sites from surface water and from boreholes complies with NEMA regulations. | √ |  |  | **Soak and waste disposal pits located away from surface water** |
| **12.3.13.3A** | Disposal sites are securely fenced, locked and labeled with warning signs. | √ |  |  | **Disposal sites are well fenced** |
| **12.3.13.4A** | If surplus mix is sprayed on untreated part of the crop, recommended dosage is not exceeded and the treatment recorded appropriately. | √ |  |  | **Dosage observed and documented** |
| **12.3.13.5A** | Personal protective gear are available for all staff involved in pesticide disposal. | √ |  |  | **PPE available** |
| **12.3.13.6.A** | A record of disposal of expired pesticides, excess pesticides, pesticide containers is kept. | √ |  |  | **Records kept** |
| **12.3.13.7A** | Where disposal services are outsourced, the disposal agent must be approved by NEMA and waste disposal record is be kept. | √ |  |  | **Disposed through approved channels** |
| **12.3.14** | **Empty pest control products containers** |  |  |  |  |
| **12.3.14.1A** | All pest control products containers are not reused. | √ |  |  | **Punctured and kept awaiting disposal** |
| **12.3.14.2A** | There is a secure storage point for empty containers and safe handling system to ensure non-exposure to persons and animals. All containers are clearly and adequately labelled. | √ |  |  | **Kept in the empty chemical containers storage drum** |
| **12.3.14.3A** | The disposal system complies to the legislation governing the same and takes due regard to the safety of flora and fauna. | √ |  |  | **Disposed in a safe manner** |
| **12.3.14.4A** | All empty pesticide containers are triple rinsed and the rinsate poured into the spray tank and the container punctured and crushed. Plastic containers are disposed according to the NEMA regulations | √ |  |  | **Empty container triple rinsed. Procedure available** |
| **12.3.15B** | **Unwanted pest control products** | √ |  |  |  |
| **12.3.15B** | There is documentation regarding redundant products which may be accepted back by the supplier if in good condition and in sealed, original packing. The redundant products are labeled and separated securely within the store. Where unaccepted they are disposed of as per NEMA regulations. | √ |  |  | **Obsolete pesticides record maintained.** |
| **12.3.16A** | **Application of pesticides by shippers / cargo handlers and consolidators** |  |  |  |  |
| **12.3.16A** | Where shippers / cargo handlers and consolidators are licensed to use pesticides in their operations for pest management the provisions of section 12 applies to them with the necessary amendments. |  |  | √ | **Shippers and cargo handlers not incorporated** |
| **12.3.17** | **Pesticide residue Monitoring** |  |  |  |  |
| **12.3.17.1C** | There is deliberate effort based on risk assessment to minimize pesticide residues through periodical residue analysis. Pre-harvest and post-harvest sampling and analysis is highly recommended. Operators are in possession of up to date National Maximum Residue Levels (MRLs) requirements or as set by the importing country | √ |  |  | **MRL risk assessment, MRL exceedance and sampling plan in place. MRL Analysis report in place** |
| **12.3.17.2C** | The operator is able to provide objective evidence/records kept of such residue testing done by an accredited laboratory. Residue test records is traceable back to the batch/consignments, grower and to produce production site. | √ |  |  | **MRL residue test done, Laboratory accreditation certificates maintained** |
| **12.3.17.3C** | The operator is able to produce evidence of residue testing and document the results of such analyses for at least 12 Months. | √ |  |  | **Residue tests done and maintained** |
| **12.3.17.4C** | The operator has established a written action plan in the event of the Maximum Residue Level (MRLs) being exceeded. | √ |  |  | **MRL exceedance and sampling plan in place** |
| **13.0** | **Harvesting and postharvest handling of produce** |  |  |  |  |
| **13.0** | Workers are trained and supervised closely to ensure that the produce is harvested in the right way and at the correct maturity. Training and supervision procedures are documented. Smoking, eating, chewing and drinking is permitted in designated areas away from immediate vicinity of harvesting, grading, packing, or storage operations. Signs are displayed to this effect. | √ |  |  | **All personnel/farmers have been trained and records maintaned** |
| **13.0.1A** | **Product Integrity** | √ |  |  |  |
| Operators has ensured the integrity of product consignment throughout the handling phases including storage, transportation, repackaging where necessary, and loading into a freight vessel | √ |  |  | **Traceability records are maintained** |
| **13.0.2** | **Machinery** |  |  |  |  |
| Machinery that comes into contact with produce are of a design that prevent contamination of the product, be readily cleaned and well maintained | √ |  |  | **Cleaning and Maintenance records kept** |
| **13.1** | **Harvesting hygiene** | √ |  |  |  |
| **13.1.1A** | The firm/grower has a documented hygiene procedure for handling of produce premised on the basis of a risk assessment. | √ |  |  | **Documented hygiene procedures kept** |
| **13.1.2A** | There is a regular risk assessment of the hygiene aspect of the harvesting procedures/operations. | √ |  |  | **Harvesting/ Hygiene risk assessment in place** |
| **13.1.3A** | The containers, harvesting tools and other harvesting equipments that are continuously used are appropriately cleaned, disinfected and maintained in tandem with the risk assessments. Produce handling containers are strictly for the produce and not any other use e.g. chemicals, plant debris, etc. Colour codes, symbols or any other means may be used to distinguish containers for various uses. | √ |  |  | **Harvesting/facility cleaning schedule and records are kept** |
| **13.1.4A** | A planned washing program ensures that ,harvesting containers such as plastic field buckets or crates that can be easily cleaned are used and are free from contamination | √ |  |  | **Cleaning schedule maintained** |
| **13.1.5A** | Cleaning water is free from microbial and, chemical contaminants, and other foreign matter. | √ |  |  | **Water for cleaning has been analysed and records kept** |
| **13.1.6A** | Supervision procedures and training programs ensure that all workers involved in handling of produce observe personal hygiene. Personal hygiene facilities including field toilets with hand washing facilities are provided and kept clean. | √ |  |  | **Facilities cleaning schedule maintained.** |
| **13.1.7A** | To avoid contamination of produce, the operator ensures that field workers involved in handling of fresh produce are in good health and that field workers with communicable diseases are not knowingly assigned duties in fields operations. Employees are instructed to report to the operator if they are suffering from any illness either on arrival for work or during working hours. | √ |  |  | **Hygiene checklist maintained** |
| **13.2** | **Field holding facility** |  |  |  |  |
| **13.2.1.A** | The operator has ensured that produce at temporary or mobile holding or grading facilities is handled hygienically. Thorough inspection is done at such areas to ensure they are well maintained, kept clean and only used for fresh produce. Records of inspection is maintained. | √ |  |  | **Facility inspection checklist available** |
| **13.2.2A** | Procedures of handling, storage and stock control of produce and packaging materials is done in a manner that sustains a high status of hygiene and cleanliness. Produce and Packaging materials are held in areas protected from rodent, insect and other pest ingress.  The facility is designed to protect the produce and the packaging material from any adverse weather. | √ |  |  | **Produce handling and hygiene procedures in place** |
| **13.2.3A** | Packaging material are of food grade and of such a design as to protect the produce from any contamination or compromise integrity of the produce. |  |  | √ | **No packing done in the farm** |
| **13.3** | **Pack house premises** |  |  |  |  |
| **13.3.1A** | Pack houses are compliant with all relevant national laws relating to working conditions including environmental, fire, electrical, mechanical and structural safety. Pack houses are in good structural condition and surrounding area is free from rubbish, unserviceable equipment, weeds etc. The pack house is not used for activities not related to packing of produce. | √ |  |  |  |
| **13.3.2A** | The operator processes and packs produce in premises registered by the relevant competent authority. Growers packing and processing their own produce may do so as part of the licensed production process, where such processes are limited to their own produce | √ |  |  |  |
| **13.3.3** | Access to premises is restricted to authorized personnel only and signs displayed to that effect. | √ |  |  |  |
| **13.5** | **Design and Construction of pack house** |  |  |  |  |
| **13.5.1A** | Construction of the pack house is such as to prevent the entry of domestic animals, insects, birds, rodents, among others. Effective control measures are in operation and be fully documented. | √ |  |  | **Design prevented entry of birds animals etc** |
| **13.5.2A** | Floors, doors and wall surfaces are made of impervious, non-absorbent, non-toxic, washable materials, which are easy to clean and disinfect. Floors are durable and allow easy drainage without leaving wet areas. Windows and doors open and close easily. | √ |  |  |  |
| **13.5.3A** | Ceiling and overhead fixtures are designed, constructed and finished to prevent the accumulation of dirt, growth of undesirable moulds, shedding of paint flakes or particles and also reduce condensation. | √ |  |  |  |
| **13.5.4A** | Windows and other openings are constructed and finished to prevent the accumulation of dirt. Those that can be opened to the outside environment are fitted with insect proof screens of appropriate mesh size. | √ |  |  |  |
| **13.5.5.A** | There is a glass and hard plastics handling policy to govern their use within the premises whenever they are used | √ |  |  |  |
| **13.5.6C** | Where glass is used, there is a form of screening to prevent any broken glass contaminating the produce. All use of glass (windows, lights etc.) is recorded and a system of inspection implemented to ensure that any breakages are rectified. | √ |  |  |  |
| **13.5.7A** | Lighting over inspection, grading and cold store areas is adequate to allow effective inspection of produce. All fixtures are protected to prevent the risk of broken glass contaminating the produce. | √ |  |  |  |
| **13.5.8A** | The pack house has adequate ventilation in order to provide adequate air circulation and temperature control. | √ |  |  |  |
| **13.5.9A** | The height of grading tables and other facilities for work is appropriate for the comfort of the workers. | √ |  |  |  |
| **13.5.10A** | Loading and dispatch areas is roofed and proofed so as to prevent the nesting of birds. | √ |  |  |  |
| **13.6A** | **Forklift** |  |  |  |  |
| Forklifts with internal combustion engines are not used in restricted spaces holding produce as they can result in taint of produce. Electric forklifts is preferred and only used by fully trained operators. |  |  | √ | **No use of forklifts** |
| **13.7A** | **Incompatible goods** |  |  |  |  |
|  | All non-food items e.g. cleaning agents, lubricants etc. are stored in designated secure areas away from the fresh produce and outside the packhouse.  Incompatible fresh produce are not to be stored together to prevent taint, ethylene damage or cross contamination of produce. | √ |  |  | **Cleaning agents were stored away from produce** |
| **13.8** | **Risk assessment in the pack house process** |  |  |  |  |
| A risk assessment or audit is done along the produce process flow and its associated systems. This assessment considers not only areas where food safety hazards may occur but also areas where quality aspects of the produce are likely to be affected. This includes preventing contamination from foreign bodies such as pieces of string, glass, metal, hair, nails, knives, other produce. These assessments are documented and periodically reviewed. The operator has in place a detailed and precise process flow that ensures that every unit or batch of the produce received is clearly marked in a manner that enables the produce to be easily traced from receipt through handling process to dispatch point. Such a system is monitored and reviewed periodically for effectiveness. | √ |  |  | **Internal audits are done in the packhouse once every quarter** |
| **13.8.1** | **Produce receipt** |  |  |  |  |
| **13.8.1A** | The produce is received by trained and competent personnel capable of carrying out independent inspection of it and deciding on whether to accept or reject (with a reason), or, accept with a provision for further sorting. The condition of produce at the time of receipt and delivery is documented to indicate unconditional acceptance, further sorting or rejection. | √ |  |  | **Produce was being received by trained Quality assurance persons** |
| **13.81.2.4A** | Every unit of produce is clearly and indelibly marked to identify its source, such that its identification marks cannot be altered, adulterated or obliterated. | √ |  |  |  |
| **13.8.2A** | Operators receiving the fruits and vegetables from out growers periodically collect samples for analysis to verify the produce pesticide residue status at receipt stage. | √ |  |  |  |
| **13.8.3A** | Records of such analyses are maintained confidentially and the necessary authority takes appropriate action where the MRLs are exceeded. | √ |  |  |  |
| **13.8.4A** | The receiving room for the produce is adequately lit and equipped with facilities for produce inspection. | √ |  |  |  |
| **13.9** | **Produce inspection** |  |  |  |  |
| **13.9.1A** | Although inspection of produce for quality is a continuous process in certain designated areas, inspection is mandatory at:   1. reception at the pack house 2. quality-control during processing; 3. final quality check when ready for dispatch; 4. Loading area. | √ |  |  | **In process checks records were maintained** |
| **13.9.2A** | Final product check involves the following:   1. identity of product, lot/batch number, grower and/or pack house identity, date and packing code; 2. essential information such as class, variety and post-harvest treatment;   NOTE: Operators provides documented traceability for produce and operations. | √ |  |  | **Finished goods checks records were maintained** |
| **13.10** | **Quality control** |  |  |  |  |
| **13.10.1A** | The operator has a quality assurance system. Quality control unit is within the vicinity of the pack house and is equipped with quality control facilities, equipment, procedures, standards and records as required. | √ |  |  | **There was a quality assurance department headed by a quality manager** |
| **13.10.2A** | All measuring devices have the necessary accuracy as required for inspection purposes. All equipment used for weighing, sizing, temperature monitoring or any other measuring devices are calibrated regularly and records maintained. | √ |  |  | **Weighing scales and temperature probes had valid calibration status** |
| **13.10.3A** | For each daily shipment, samples of the produce is kept and their quality and condition assessed and recorded on a daily basis for at least 2 days beyond anticipated shelf life of the product. Records are kept for a specified period. | √ |  |  | **Samples were retained for each batch** |
| **13.10.4A** | Quality systems are audited at least annually or more frequently base on risk assessment. The audit is documented and made available for inspection by recognized institutions when required . | √ |  |  | Audits done once every quarter,report for Q3 was maintained |
| **13.10.5A** | The policy and procedure of addressing customer complaints is documented and implemented. All customer complaints are investigated and action taken as appropriate, to prevent recurrence. | √ |  |  |  |
| **13.10.6A** | Records of data showing non-compliance with the quality requirements specified in the quality system is followed up with a written account of corrective measures taken. | √ |  |  |  |
| **13.10.7A** | Operators ensure personal hygiene of produce handlers. | √ |  |  |  |
| **13.11** | Produce handling |  |  |  |  |
| **13.11.1A** | Produce at different stages of preparation are kept separate. The floor layout allows for a smooth flow of produce from reception to finishing area, with adequate separation of raw materials from finished products. Waste materials are removed regularly and placed in a designated area. Produce is handled in specially designed and equipped facilities of appropriate and recognized standard .Products that are to be consumed raw are handled with high care to avoid any contamination. | √ |  |  |  |
| **13.11.2A** | Produce is processed on a "First In, First Out" (FIFO) basis unless there are quality, maturity or hygiene attributes identified for particular batches on receipt that indicate otherwise. Where produce is processed on a non-FIFO basis, the reasons for it is documented.  Produce traceability is ensured throughout the process chain and records maintained. | √ |  |  |  |
| **13.12** | **Pack house hygiene** |  |  |  |  |
| **13.12.1A** | Pack house operations is geared towards implementing quality management systems and good hygiene practices (GHP). | √ |  |  |  |
| **13.12.2A** | Routine and general cleaning procedures for the facilities and equipment are documented, monitored and evaluated for effectiveness.  13.12.8A Pack house cleaning equipment are designated for that purpose and coded. | √ |  |  |  |
| **13.12.3A** | There is a documented and up to date risk assessment that covers the hygiene aspects of the produce handling operation. | √ |  |  |  |
| **13.12.4A** | A hygiene procedure is implemented on the basis of the risk assessments. | √ |  |  |  |
| **13.12.5A** | The pack house has provision for clean toilets, appropriate waste disposal bins and hand washing facilities in the vicinity of their place of work. | √ |  |  |  |
| **13.12.6A** | Work table tops, knives and cutting boards are of stainless metal and plastic construction only. These are maintained in sound condition and kept clean at all times. | √ |  |  |  |
| **13.12.7A** | Basic instructions on hygiene are appropriately displayed in the pack house. | √ |  |  |  |
| **13.13.1** | **Health status** |  |  |  |  |
| **13.13.1.1A** | Personnel working in a pack house for edible produce have undergone full medical check-ups once every six months and the records of the examination well documented. | √ |  |  |  |
| **13.13.1.2A** | People known, or suspected, to be suffering from, or to be a carrier of a disease or illness likely to be transmitted through produce, are not allowed to enter any food handling area if there is a likelihood of their contaminating produce. Such an affected person are only allowed to work on fresh produce after a medical officer clears their condition and certifies them as fit. Any person so affected has reported illness or symptoms of illness to the management. | √ |  |  |  |
| **13.13.1.3A** | Medical examination of a produce handler is carried out if clinically or epidemiologically indicated. | √ |  |  |  |
| **13.13.4** | **Personal behaviour** |  |  |  |  |
| People engaged in produce handling activities refrain from behaviour which could result in contamination of produce, for example:  i) smoking;  ii) spitting;  iii) chewing or eating;  iv) Sneezing or coughing over unprotected produce.  Personal effects such as jewellery, watches, pins or other items should not be worn or brought into food handling areas if they pose a threat to the safety and suitability of produce. | √ |  |  | **This was evident from signages seen in the packhouse** |
| **13.13.5** | **VISITORS** |  |  |  |  |
| Where appropriate, visitors to produce manufacturing, processing or handling areas wear protective clothing and adhere to the other personal hygiene provisions in this section.  Access to post-harvest handling areas is restricted. No unauthorized person is allowed access to the pack house. Authorized visitors entering the pack house are only allowed in after briefing on the importance of hygiene and are be provided with appropriate protective clothing and adhere to the other personal hygiene provisions in this section. A record of visitors to the pack house is maintained. | √ |  |  |  |
| **13.14** | **Post-harvest washing** |  |  |  |  |
| **13.14.1A** | Water for washing produce is potable including recycled Water. |  |  | √ | **No post- harvest washing** |
| **13.14.2A** | Based upon risk assessments, water for post-harvest washing is analysed on a regular basis by a competent laboratory to ascertain its freedom from microbial, chemical and physical contaminants. |  |  | √ | **No post-harvest washing** |
| **13.14.3B** | All waste water is, where possible, re-cycled through constructed wetlands. |  |  | √ | **No post-harvest washing** |
| **13.14.4A** | Records of data showing non-conformance with the quality requirements specified in relevant standards is followed up with a written account of corrective measures taken. |  |  | √ | **No post-harvest washing** |
| **13.15** | **Post-harvest treatments** |  |  |  |  |
| **13.15.1A** | Use of post-harvest treatments is justified and documented. |  |  | √ | **No post-harvest treatment done in the farm** |
| **13.15.2A** | Use of post-harvest chemicals is controlled and all such cases are recorded and used in compliance with the product label requirements. Permitted post-harvest chemicals and food grade waxes are used if no alternative exists to maintain good produce quality. |  |  | √ | **No post-harvest treatment done in the farm** |
| **13.15.3** | There is a record of all the post-harvest treatment products in use. All post-harvest treatment products used are approved by competent authority. |  |  | √ | **No post-harvest treatment done in the farm** |
| **13.15.4A** | The technically responsible persons for post-harvest treatments demonstrates competence attained through training. |  |  | √ | **No post-harvest treatment done in the farm** |
| **13.15.5A** | The batch/lot of treated produce is appropriately documented as is the geographical area, the name or reference of the farm or produce handling site where the treatment was undertaken. |  |  | √ | **No post-harvest treatment done in the farm** |
| **13.15.6A** | Date of application, type of treatment used for product application, the trade name, active ingredients of the products used/applied, volume or weight is recorded in the post-harvest crop protection products application records. The operator name is also recorded in the same records. |  |  | √ | **No post-harvest treatment done in the farm** |
| **13.17** | **Cold chain Management** |  |  |  |  |
| **13.17.1A** | The operator has used Cold chain facilities that are of satisfactory structural conditions and of adequate cleanliness. | √ |  |  |  |
| **13.17.2A** | Produce is maintained under recommended temperature and humidity at all times. | √ |  |  | **Monitoring of the temperature in the coldstore was doen twice a day evident from maintained records** |
| **13.17.3A** | Harvested produce is moved from the field into cool, preferably refrigerated conditions as quickly as possible, ideally within 2 hours of harvest. Produce temperature is reduced uniformly as fast as possible. | √ |  |  |  |
| **13.17.4B** | Pre-coolers are maintained in accordance with the manufacturer’s recommendations. The cold store doors are capable of being opened from the inside while the door screens shall permit vehicle loading with minimum increase in produce temperature | √ |  |  |  |
| **13.17.5A** | The cold stores are cleaned, disinfected, and, if found necessary through risk assessment, fumigated on a regular basis and records maintained | √ |  |  |  |
| **13.17.6A** | Transportation system includes facilities for maintaining produce temperature at the recommended level. Records are kept at every phase of dispatch. Refrigerated transport is highly recommended. | √ |  |  |  |
| **13.18** | **Produce Transport** |  |  |  |  |
| **13.18.1A.** | The transport vessel is cleaned, disinfected, and, if found to be necessary by risk assessment, fumigated on a regular basis and records maintained. | √ |  |  | **Transport vehicle checklist in place** |
| **13.18.2A** | Transportation of produce is done in such a manner so as to avoid mechanical damage due to bruising or stacking. | √ |  |  | **Transport vehicle checklist in place** |
| **13.19** | **Temperature monitoring** |  |  |  |  |
| **13.19.1A** | Equipment for temperature measurement with the required calibration status is in place to provide regular monitoring. Records of all monitoring results and any corrective actions are maintained. | √ |  |  | **Monitoring of the temperature in the coldstore was doen twice a day evident from maintained records** |
| **13.19.2A** | Produce temperature is monitored based on recommended temperatures, and situations outside normal holding temperatures are reacted to and corrected as fast as possible. Records are kept of all of the monitoring results and any corrective actions | √ |  |  |  |
| **13.19.3A** | Produce handlers such as drivers and freight forwarders receive written instructions on maintaining temperature levels. | √ |  |  |  |
| **13.20** | **Packaging** |  |  |  |  |
| **13.20.1A** | Packaging material for food are of food grade quality and of such a design as to protect the produce from any contamination. Packaging material ensures product quality, safety and integrity and are in conformance to the Kenya Standards for Packaging of produce. | √ |  |  |  |
| **13.20.2A** | Where used, cartons are assembled correctly with tabs fully locked in position. No staples are used in produce packaging. The pre-cooling vents are correctly aligned. | √ |  |  |  |
| **13.20.3C** | Where required, fumigation or heat treatment of pallets and containers is done in accordance with the relevant legislation. |  |  | √ |  |
| **13.20.4A** | The Operators has ensured packaging and other materials in contact with the produce do not cause contamination. | √ |  |  |  |
| **13.20.5A** | Procedures of storage and stock control of packaging materials are done in a manner that will sustain a high status of hygiene and cleanliness. Packaging material are held in areas protected from rodent, insect and other pests. The facility is designed to protect the packaging material from any adverse weather. | √ |  |  |  |
| **13.20.6A** | Whilst adhering to their customer's requirements, management has committed to the use of environmentally friendly packaging materials that is in conformance to the corresponding legal provisions. | √ |  |  |  |
| **13.20.7B** | Written instructions to the value chain handlers including but not limited to transporters, loaders, consolidators, and freight forwarders has been given to avoid produce damage, ensure proper stacking and securing of packaged produce. | √ |  |  |  |
| **13.20.8A** | Cartons if used, are assembled correctly with tabs fully locked in position. Proper stacking of cartons is done to avoid produce damage. | √ |  |  |  |
| **13.20.9A** | Safety hazards associated with the packaging materials are included in the risk assessment and measures put in place for the control of each identified hazard. The risk assessment is documented. | √ |  |  |  |
| **13.21A** | **Cleaning materials** |  |  |  |  |
| **13.21A** | Materials used for cleaning are approved for use and are stored and maintained in a designated secure area away from produce and other non-cleaning chemicals. Adequate facilities are provided for cleaning and disinfecting of work tools and equipment. Cleaning chemicals used for food contact surfaces are food grade. | √ |  |  | **Record for material used for cleaning are kept. Food grade soap is used.** |
| **14** | **WORKER HEALTH, SAFETY AND WELFARE** |  |  |  |  |
| **14.1** | **Health** |  |  |  |  |
| **14.1.1A** | Health requirements are followed to ensure that personnel who come into direct contact with produce during or after harvesting are not likely to contaminate them. Visitors wear protective clothing and adhere to other hygiene provisions in this code where appropriate. | √ |  |  | **Health and safety procedures are in place** |
| **14.1.2A** | Potable water that complies with the set standards is available to staff at all times. Containers or outlets of water unsuitable for drinking is appropriately marked. | √ |  |  | **Water analysed done and records maintained** |
| **14.1.3A** | The work station is provided with sufficiently well stocked first aid kits and have personnel trained in first aid on hand to deal with emergencies. | √ |  |  | **Well stocked first aid kits are kept and first aiders available** |
| **14.1.4A** | Written accident and emergency procedures on how to deal with serious injuries requiring medical attention are displayed clearly, permanently and prominently with contact person telephone number or institution. the procedures include basic steps of primary accidents. | √ |  |  | **Emergency procedures and contacts displayed** |
| **14.1.5A** | Workerschanging rooms, eating and resting areas, sufficient clean toilets, hand washing facilities and food grade soap are provided. | √ |  |  | **Designated rest and eating areas and other facilities provided** |
| **14.1.6C** | The operator has undertaken a survey of health conditions of the personnel in accordance with the operator health policy. | √ |  |  | **Health and safety policies and procedures displayed** |
| **14.1.7A** | The operator has promoted safe and hygienic work culture that establishes controls to address and minimize risks identified. | √ |  |  | **Health and safety risk assessment done** |
| **14.2** | **Safety measures** | √ |  |  |  |
| Workers’ Representatives and Management has established and implemented a coherent policy for Occupational Safety, Health and Working Environment that conforms to the National legislations. This policy should also include issues relating to the proper handling of pesticides and chemicals. | √ |  |  | **Workers health and welfare representative in available** |
| **14.2.1A** | Machinery used is suitable for its purpose, equipped with operational safety devices with regular inspections and maintenance carried out and records maintained. Essential equipment are made available. | √ |  |  | **Equipment maintenance record available** |
| **14.2.2A** | Employees are trained on safety use of equipment. Training records are kept and available for audit. | √ |  |  | **Health and safety training done** |
| **14.2.3A** | Readily available fire extinguishers and other appropriate firefighting equipment are easily accessible and regularly maintained. Fire alarms are fitted to each floor above the exit and there is evidence of evacuation drills. | √ |  |  | **Firefighting equipment in place** |
| **14.2.4A** | There are clearly marked emergency exits, which are fitted with fire safety break locks or remain unlocked during working hours. | √ |  |  | **Emergency exits marked** |
| **14.2.5A** | Relevant safety rules and precautionary safety measures are clearly displayed. The emergency plan and accident procedures is availed to all employees and displayed in common notice-boards. Sign-posts for risk prone areas are displayed appropriately. | √ |  |  | **Fire emergency procedures displayed** |
| **14.3** | **Worker welfare** |  |  |  |  |
| The operator has ensured that food provided to workers meets public and hygiene regulations. The operator provides safety and hygiene information on use of common areas such as canteen, bathroom, changing room, parking lots among others. | √ |  |  | **Safety and hygiene instructions provided** |
| **14.3.1 A** | The operator has guaranteed hygiene facilities and / or sanitary units**.** Workers have ready access to flush toilets or waste water treatment facility latrines which is separate for both sexes and adequate to their numbers. Waste water treatment facility latrines are not located on riparian land or near water sources. | √ |  |  | **Sufficient toilets available** |
| **14.3.2A** | Adequate hand washing facilities are conveniently accessible to the toilet facilities and be kept in a clean and hygienic condition. Signs to remind workers to wash their hands after toilet use are in place. | √ |  |  | **Hand washing facilities and signs available** |
| **14.3.3C** | Where possible, suitable rest rooms and a canteen with cooking, eating and storage facilities is provided by the employer. The eating and storage facilities are separated from the working areas. | √ |  |  |  |
| **14.3.4B** | Employees whose work entails standing for long periods are provided with facilities for sitting to enable them to take periods of rest. |  |  | √ | **No workers stationed in one place** |
| **14.3.5C** | Operators has provided occupational health and safety training to the workers on the farm in addition to family planning, first aid, basic health care, hygiene, accident prevention, preventative medicine and HIV/AIDS awareness. | √ |  |  | **Health and safety training done** |
| **14.3.6B** | Employees working with machinery or processes likely to cause bodily injury are fully instructed as to the possible dangers and the precautions to be observed. | √ |  |  |  |
| **14.3.7A** | All machinery has been fully guarded where applicable and well maintained Records are kept of all machinery maintenance and servicing. | √ |  |  |  |
| **14.3.8A** | Precautions include safe installation and use of electricity and gas, special instructions on smoking and the disposal of cigarette butts, provision and regular servicing of firefighting equipment and regular fire drills for employees. | √ |  |  |  |
| **14.3.9A** | Signs are displayed with regard to the following requirements.   1. All sores and cuts are adequately covered with waterproof dressing: 2. hand washing for sanitary facilities with soap, hot air or paper (not cotton) towels are available; 3. no powder is used on hands as this may contaminate produce; 4. finger nails are clipped short; 5. protective clothing including overalls, head covering which contain all hair are worn at all times in packing areas; 6. Personal protective equipment is regularly laundered and kept in a clean and well-maintained condition and in an area separate from animals and separate from children's nappies 7. smoking, eating and drinking is prohibited in all food handling areas; 8. personnel are advised to keep personal belongings away from production lines and that: there should be; 9. no false nails, eye lashes or hair pieces; 10. no nail varnish; 11. no watches or jewelry except single plain band wedding ring; 12. no chewing gum; and 13. No open shoes are allowed in the pack house. Only closed shoes are allowed. | √ |  |  | **Basic hygiene instructions and health, safety instructions displayed** |
| **15.0** | **LABOUR, EMPLOYMENT AND SOCIAL ISSUES** |  |  |  |  |
| **15.1** | **Wages** |  |  |  |  |
| **15.1.1A** | All employees are paid at the agreed time and in full or by some mutually acceptable monetary means. Information regarding wages is made available to employees in a detailed and understandable form. The wages meet the legal or industry minimum whichever is higher. | √ |  |  |  |
| **15.1.2** | To ensure the welfare of workers, all operators abide by the regulation of wages and conditions of Employment Act, and any other laws which affect the welfare of workers | √ |  |  |  |
| **15.1.3A** | No deductions of any sort other than the statutory requirements is made from employee's wages without mutual agreement. | √ |  |  |  |
| **10.1.4A** | Workers are selected for a particular job and paid in accordance with their ability to carry out specific tasks. All workers receive equal pay for equal work. Hiring, compensation and access to benefits is on the basis of ability and job responsibilities. | √ |  |  |  |
| **15.1.5A** | There is clear and fair guidelines on payments of bonuses and incentives and administered fairly and communicated transparently to all staff concerned. | √ |  |  |  |
| **15.1.6A** | Where overtime is required due to seasonal demands, payment is made as per the legal requirement. Agreed and stipulated mid-day and work breaks is observed. | √ |  |  |  |
| **15.1.7A** | The employer has made the mandatory deductions and remited monthly contributions in accordance with legal provisions. | √ |  |  |  |
| **15.1.8C** | The employer may provide reasonable housing accommodation with adequate clean water, washing and toilet facilities for each of his employees within easy access; or the employer may pay to the employee such a sum as housing allowance in addition to wages or salary as per legal or industry minimum. | √ |  |  |  |
| **15.2** | **Staff recruitment and promotions** |  |  |  |  |
| **15.2.1A** | Staff are recruited and promoted based on their ability to perform work. | √ |  |  |  |
| **15.2.2A** | Female staff, interns and apprentices are not employed in areas identified as hazardous as per the farm / company risk assessment. Interns and apprentices are supervised. | √ |  |  |  |
| **15.2.3 A** | Expectant mothers are not dismissed, discriminated against or expected to undertake work that may harm the mother or the unborn child. | √ |  |  |  |
| **15.3** | **Induction and training** |  |  |  |  |
| **15.3.1A** | All personnel receive basic and relevant induction, training and orientation. | √ |  |  |  |
| **15.3.2A** | All Personnel receive job specific training to allow them to work safely and fulfill their roles and responsibilities. | √ |  |  |  |
| **15.4** | **Work contracts** |  |  |  |  |
| **15.4.1A** | All employees, including those sub-contracted, are given a written, legally binding employment contract signed by both parties detailing their obligations, rights and entitlements. Employees are given their individual job descriptions, terms and conditions. Subsequent changes in terms and conditions are negotiated and communicated to employees. |  |  |  |  |
| **15.4.2B** | Work contracts may be executed for a fixed term, for a period of time to complete a task or for an indefinite period to accomplish an occasional task. Tasks allocated per day are based on what can be reasonably completed by an averagely experienced worker on a standard working day. | √ |  |  |  |
| **15.4.3A** | Use of fixed-term contracts or "casual labour" to evade labour or NSSF laws are avoided. | √ |  |  |  |
| **15.5** | **Work hours and leave days** |  |  |  |  |
| **15.5.1B** | Employers provide transport or transport allowance when employees work outside normal working hours or when public transport is not available and the employee does not live within easy or safe walking distance of the workplace. | √ |  |  |  |
| **15.5.2A** | In every period of seven (7) days a period of rest comprising at least one rest day (paid) is provided. | √ |  |  |  |
| **15.5.3A** | All permanent and contract staff are entitled to minimum 21 annual leave days as per the Employment Act. The leave above is in addition to all public holidays, weekly rest days and any sick leave taken by an employee. The leave is taken at times mutually agreed between the employer and employee. | √ |  |  |  |
| **15.4B** | All seasonal workers/sub-contractors are entitled to leave on a pro-rata basis. | √ |  |  |  |
| **15.5B** | An employee is entitled to sick leave and this is only to be granted on production of a certified letter of incapacity signed by a recognized medical practitioner as per the employment act CAP 226. | √ |  |  |  |
| **15.6** | **Expecting and Nursing Mothers** |  |  |  |  |
| **15.6.1A** | Women are not discriminated against during ante or post-natal periods with regard to recruitment, selection or termination of a particular job. | √ |  |  |  |
| **15.6.2A** | Expectant mothers are given due consideration and be assigned duties appropriate to their physical condition. Where risk is identified, action is taken to minimize or eliminate the danger; In particular, pregnant women do not come into contact with pesticides or dangerous chemicals. | √ |  |  |  |
| **15.6.3B** | There are safe facilities for nursing mothers to feed infants and a caretaker to keep the children while mothers are working. Extra time is given to nursing mothers to feed their infants. | √ |  |  |  |
| **15.7** | **Termination** |  |  |  |  |
| **15.7.1A** | Each farm /company has legally validated internal regulations of working and labour conditions, in which should include, among others, proper regulation of warnings and procedure for dismissals. | √ |  |  |  |
| **15.7.2A** | Gross misconduct as set out in the Employment Act, has grounds for summary dismissal. The termination of work contract is formalized in accordance with the law. | √ |  |  |  |
| **15.8** | **Workman's compensation** |  |  |  |  |
| **15.8.1A** | Any member of the workforce who is injured in the course of his work is entitled to compensation in accordance with the WIBA 2007. | √ |  |  |  |
| **15.8.2A** | Compensation claimed is disallowed if it is proved that the injury was attributable to the serious and willful misconduct of the employee. | √ |  |  |  |
| **15.9** | **Freedom of association and participation** |  |  |  |  |
| **15.9.1 B** | Workers have the right with regard to the national law to establish and to join labour unions of their own choice, without prior permission. Where no unions are in place workers have a right to form a workers welfare committee. | √ |  |  |  |
| **15.9.2C** | Workers representatives are not be subjected to discrimination and have access to all workplaces necessary to carry out their representation functions. | √ |  |  |  |
| **15.9.3C** | The operator provides assistance to facilitate workers committees /union. | √ |  |  |  |
| **15.9.4C** | Workers committee/union participates in collective bargaining. | √ |  |  |  |
| **15.9.5C** | A negotiated collective bargaining is in accordance with the labour institutions act 2007 and labour relations act 2007. | √ |  |  |  |
| **15.10** | **Grievance and disciplinary procedures** |  |  |  |  |
| **15.10.1A** | All workers have the right to be heard on matters relating to contractual terms, dismissals and general welfare. The management in collaboration with the workers' representatives is required to establish and implement a coherent policy with regard to labour and social issues. | √ |  |  |  |
| **15.10.2A** | Clear written firm rules, grievance and disciplinary procedures are developed; implemented, communicated, explained to the workers and be accepted by all parties involved. | √ |  |  |  |
| **15.10.3A** | Complaints regarding labour and working conditions are handled as per the firm grievance handling procedure. | √ |  |  |  |
| **15.10.4A** | Employer has provided a formal procedure for solving disputes in the workplace within a specified time frame. | √ |  |  |  |
| **15.11** | **Forced labour** |  |  |  |  |
| **15.11.1A** | The operator has not made use of forced labour or coerce anyone to work against his/her will. |  |  | √ | No use of forced labour |
| **15.11.2A** | Workers are not required to lodge or deposit their original identity papers with their employer. |  |  | √ | No use of forced labour |
| **15.11.3A** | The workers decide to join and leave the company on personal and voluntary basis. |  |  | √ | No use of forced labour |
| **15.12** | **Discrimination / Harassment** |  |  |  |  |
| **15.12.1A.** | The operator has not engaged in or support discrimination, intimidation or coercion in any form based on ethnic origin, religion, gender, union membership or political affiliation. |  |  | √ |  |
| **15.12.2A** | Physical harassment, corporal punishment and/or mental / psychological oppression or torture, sexual harassment and verbal abuse, are not tolerated and the operator has ensured that measures are in place to prevent such practices. Deduction of wages as disciplinary measure is not done. |  |  | √ |  |
| **15.12.3A** | Workers are selected and hired in accordance with their ability to carry out their tasks. No distinction is made on the basis of race, gender, age, religion, nationality, physical disability, ethnic and social origin, marital status, union membership or political opinion or affiliation. Policy on harassment and ''equal opportunity'' in the work place is developed and implemented. |  |  | √ |  |
| **15.12.4A** | Employees have access to training on equal terms. |  |  | √ |  |
| **15.13** | **Child labor/minors** |  |  |  |  |
| **15.13.1A** | No children (persons under 18 years of age) are employed for any duty or task whether gainfully or otherwise in the workplace. Exceptions may be made in smallholder operations where young family members may help out on the farm. Work that is likely to jeopardize the health, physical or mental development is be carried out by persons less than 18 years of age. |  |  | √ | **No child labour** |
| **15.13.2A** | Work does not restrict educational opportunities for children. |  |  | √ |  |
| **15.14** | **OUT-GROWERS/ OUT GROWER ASSOCIATIONS / SUBCONTRACTORS** |  |  |  |  |
| **15.14.1A** | The Operator has formulated and implemented a fair purchasing policy with their out growers. | √ |  |  |  |
| **15.14.2A** | There are written, legally binding agreements between the operators and all out-growers covering product, volumes, frequencies of collection, pricing, grades and obligations. | √ |  |  | **Written contract was in place for Jack Muchai** |
| **15.14.3B** | The operator takes responsibility for providing full technical advice where such need is perceived to out-growers prior to starting crop production. | √ |  |  |  |
| **15.14.4B** | Arrangements for deductions from final payments made for training and supply of other inputs are clearly specified in written form before these services are provided. | √ |  |  |  |
| **15.14.5A** | The operator has ensured that out-growers are aware of, and implement the relevant principles and requirements of this code of practice. | √ |  |  |  |
| **15.14.6B** | The buyer is able to justify the pricing policy regarding the out-growers/Associations. | √ |  |  |  |
| **15.14.7B** | All out-growers are paid in cash or by a mutually agreed monetary arrangement and be supported with proper and adequate documentation. | √ |  |  |  |
| **15.14.8.B** | A firm is responsible for its operations including contracted activities conducted by its subcontractors. | √ |  |  |  |
| **15.14.9A** | Subcontractors working on farm / company site are briefed on farm occupational safety and health procedures. | √ |  |  |  |
| **15.15** | **Visitors** |  |  |  |  |
| **15.15.1C** | All visits by non-company personnel are recorded in a visitor’s book or similar register. | √ |  |  |  |
| **15.15.2C** | Visitors are accompanied at all times by a company representative. | √ |  |  | **All visitors are accompanied the representative** |
| **15.15.3A** | Visitors are provided with suitable protective clothing or equipment when entering areas where they might be exposed to hazardous or injurious conditions. | √ |  |  | **Visitor are provide with protective clothing** |
| **15.16** | **Records** |  |  |  |  |
| **15.16.1** | Records and documentation kept in addition to those required by the laws include:   1. a record of work contracts for permanent and seasonal workers; 2. a record of all the daily rolls for all casual workers; 3. A record of all the monetary receipts in accordance with the pay roll and any receipts of payment of any kind. | √ |  |  | **All relevant / applicable records are mantained** |
| **16** | **Environmental management** |  |  |  |  |
| **16.1** | **Environmental impact assessment** |  |  |  |  |
| **16.1.1A** | Environmental impact assessment and licensing to determine the impact of the intended operations on the environment precedes the activity where applicable. | √ |  |  | **Environmental impact risk assessment has been developed** |
| **16.1.2B** | The operator has demonstrable competence with regard to minimizing the potential negative impacts such as nutrient loss of the farming activity on the environment. | √ |  |  | **Planting/ production along the contour has helped to deal with adverse effects of the erosions** |
| **16.1.3A** | There are visible and documented initiatives to support environmental conservation schemes. | √ |  |  | **Environmental conservation documents** |
| **16.1.4A** | Theoperator has safeguarded soil, water and air and ensured general conservation of the environment. Written policy, practice and procedures to support this is maintained. | √ |  |  | **Environmental management policies and procedures documented** |
| **16.1.5A** | The operator has put in place a system for monitoring and evaluation of use of water, pesticides and fertilizers and energy. | √ |  |  | **Irrigation record, pesticides application and fertilizer application records available** |
| **16.2** | **Pesticides use and disposal** |  |  |  |  |
| **16.2.1A** | The operator has sufficient environmental protection procedures in place to demonstrate that there are no pesticide residues disposed into the environment. | √ |  |  | **Environmental management plan and waste disposal procedures in place** |
| **16.3** | **Packaging resource minimization** |  |  |  |  |
| **16.3.1A** | The Operator has provided a description of all materials used for product packaging and shipping in the Environment management plan. | √ |  |  |  |
| **16.3.2A** | The Operator has provided auditable records of materials used in product packaging and shipping, including the type and quantities of materials used. | √ |  |  |  |
| **16.3.3C** | The Operator has assessed the potential for:   1. reducing the volume of packaging per unit of product delivered; 2. increasing the use of certified recycled or compostable materials; 3. obtaining materials from certified sustainable sources; or 4. Reusing packaging materials. Based on this assessment, the Operator shall develop a plan of action to minimize packaging and packaging-related waste, with auditable timelines and performance benchmarks. | √ |  |  |  |
| **16.4** | **Energy resource use and management** |  |  |  |  |
| **16.4.1A** | The Operator has a written policy, practice and procedures in place describing action to improve and optimize energy uses and to ensure that hydrocarbon fuels and electricity are used efficiently. Renewable energy sources are recommended. | √ |  |  |  |
| **16.4.2.A** | The Operator has provided in the Environment management plan a summary of electricity and fuel consumption activities associated with its agricultural production processes. | √ |  |  |  |
| **16.4.3A** | The Operator has provided a description of any on-site electricity or fuel generation activities, and describe conservation measures and methods employed to optimized efficiency. | √ |  |  |  |
| **16.4.4A** | The Operator has provided auditable records of fuel and electricity used in agricultural production processes, storage operations and administrative support facilities, including electricity and fuels used in applications such as: water pumping, greenhouse lighting and climate control, cold storage facilities, farm equipment operation and packing operations. | √ |  |  |  |
| **16.4.5A**. | The Operator has analysed his fuel and electricity usage, and developed a plan for increasing energy efficiency, with timelines and performance milestones. | √ |  |  |  |
| **16.4.6A** | The Operator has determined and documented the energy demand by the enterprise for developing an energy efficiency plan with goals and implementation activities towards increased efficiency, reduced dependency on non-renewable sources and increased use of renewable energy. Records are maintained on all aspects of energy management | √ |  |  |  |
| **16.5** | **Integrated Waste and pollution management, recycling and re-use** |  |  |  |  |
| **16.5.1A** | All possible waste products produced by the farm processes are identified and documented. | √ |  |  | **Waste and pollution management plan in place.** |
| **16.5.2A.** | There are written procedures to minimize wastage and for the safe, hygienic disposal of rejected produce and rubbish. Organic material from produce whose pre-harvest interval have not been observed are not fed to animals. | √ |  |  | **Waste and pollution management plan in place** |
| **16.5.3A** | There is a documented plan to minimize waste, reduce pollution and recycle wastes. The plan is implemented and confirmed by visible actions and measures. | √ |  |  | **Documentation available** |
| **16.5.4A** | Wastewater treatment and disposal systems such as constructed wetlands, bio beds etc. are advised and are environmentally friendly, subjected to EIA and regular analysis done as per NEMA regulations. |  |  | √ | **No waste water treatment and wetlands in the farm** |
| **16.5.5A** | Written procedures for minimizing and disposal of non-hazardous waste are developed and communicated to all concerned persons and relevant authorities. | √ |  |  | **Waste and pollution management plan in place** |
| **16.5.6A** | The farm or premises is clear of litter and has adequate provisions for waste disposal. | √ |  |  | **A waste disposal pit present in the farm** |
| **16.5.7A** | Burning of wastes is done in a controlled manner. Burning for hazardous material is carried out in a NEMA approved and licensed incinerator.There are designated areas for burning or burial of non-hazardous waste which cannot be recycled or composted. | √ |  |  | **Burning of wastes is not done at the farm** |
| **16.5.8A** | Only approved non-ozone depleting refrigerants are used. The operator has carried out reafforestation activities with native species on the margin of natural water sources/or in protective forest reserve area defined by NEMA where appropriate. | √ |  |  | **Different trees are planted** |
| **16.5.9A** | Documented Identification of all waste generated as well as source of pollution at each stage of production process is provided. | √ |  |  | **Waste and pollution management plan in place** |
| **16.5.10A** | Documented management plan for reducing generation of wastes and pollutions sources and training in waste management for personnel for adequate handling of waste materials is available. | √ |  |  | **Waste and pollution management plan in place** |
| **16.5.11A** | Risk assessment for storage, transport and disposal of wastes is carried out periodically. | √ |  |  | **Waste and pollution management plan in place** |
| **16.5.12A** | Wastewater disposal systems such as soak-waste water treatment facilities or constructed wetlands are environmentally acceptable. Waste is handled in appropriate ways to avoid risk and unnecessary environmental impact. | √ |  |  | **Waste water is disposed-off to the soak pit** |
| **16.5.13A** | The operator has put in place a system for treatment of domestic sewerage water, and Warehouse for storage of pesticide wastes and other hazardous wastes. |  |  | √ | **No sewage water treatment** |
| **16.5.14A** | Old sump oil is not allowed to contaminate the environment and has been disposed of in a safe manner. It may be used as fuel but only in a suitable combustion system. |  |  | √ | **No use of oil in the farm** |
| **16.5.16A** | Waste material such as plastic sheet, cardboard, wood etc. is recycled. |  |  | √ | **Recycled** |
| **16.5.17A** | Only packaging material which can be reused or recycled in the importing country is used. |  |  | √ | **No use of packaging material in the farm** |
| **16.5.18A** | Every effort is made to reduce the use of natural materials that have not been grown specifically for commercial use (timber etc.). | √ |  |  |  |
| **16.5.19A** | The operator has implemented improved methods of waste management. | √ |  |  |  |
| **16.6** | **Water sources** |  |  |  |  |
| **16.6.1A** | There is no disposal of hazardous chemicals, empty containers or other waste material within 500m of open water sources, 250 of a borehole or on riparian land. | √ |  |  | **Empty containers are stored in chemical store awaiting disposal** |
| **16.6.2A** | There is no waste water treatment facility, latrine, flush toilets or septic tanks within 500m of an open water source, 250m of a borehole or on riparian land. |  |  | √ | **No water treatment** |
| **16.6.3A** | Riparian land is conserved according to the relevant National Environmental Regulations. | √ |  |  | **There is no cultivation along the riparian land** |
| **16.6.4A** | Rivers are not dammed or diverted without permission from the relevant competent authority for water resources. Lakes are not restricted by bunds or dykes. | √ |  |  | **No diversion of any kind done** |
| **16.7** | **Wastewater Treatment** |  |  |  |  |
| **16.7** | The Operator has ensured that wastewater from production and domestic sources are treated separately. Rinsate from the cleaning of agricultural machinery are contained to prevent mixing with domestic wastewater. |  |  | √ | **No water treatment done in the farm** |
| **16.8** | **Bio-diversity and ecological conservation** |  |  |  |  |
| **16.8.1A** | There is a documented conservation policy or statement which complies with the local legislation governing wildlife and conservation issues. | √ |  |  | **Wildlife conservation plan is maintained** |
| **16.8.2A** | All non-cropped areas are managed so as to encourage wildlife. Tree planting areas is defined so that unnecessary disturbance is avoided and to enable environmental upgrading. Where land is cleared by burning, precautions are in place to avoid the spread of fire to other areas. | √ |  |  | **Planting of trees done** |
| **16.8.3A** | The operator bordering designated environmental sites has acknowledged and respected the sites. Natural game corridors is maintained to allow wild animals access to water and to other land areas | √ |  |  | **Wildlife conservation plan is maintained** |
| **16.8.4A** | The operator has implemented a permanent programme aimed at improving landscape and bio-diversity within the farm and its perimeter. | √ |  |  | **There is documented plan to ensure biodiversity within the farm** |
| **16.8.5A** | The Producer has not engaged in the following activities:   1. Clearing of Areas of High Ecological Value for purposes of planting or other activities of the Agricultural Production Operation. 2. Alteration of natural water bodies and water channels. 3. Activities that negatively impact threatened or endangered habitats or species. | √ |  |  | **The production area is suitable and does not alternate natural water source and does not in a negative way impact the inhabitants** |
| **16.8.6A** | The Producer has trained workers in the implementation of the Environmental management Plan’s stated ecological procedures and practices, and maintained records of such training. | √ |  |  | **Awareness done** |
| **16.9** | **Soil conservation** |  |  |  |  |
| **16.9.1A** | A good agricultural practice (GAP) policy is maintained covering all aspects. | √ |  |  | **Gap policy is available** |
| **16.9.2A** | Where applicable riparian land boundaries are established and riparian regulations observed. |  |  | √ | **Site is far from the riparian** |
| **16.9.3A** | The use of organic manure and composted waste is encouraged for maintenance of soil fertility. | √ |  |  | **Organic manure is used** |
| **17** | **Waste and pollution management, recycling and re-use** |  |  |  |  |
| **17.1A** | There are written procedures for the safe, hygienic disposal of rejected produce and rubbish. Organic waste materials from crops which have been treated with pesticides can be fed to animals if GAP has maintained and preharvest intervals complied with. | √ |  |  | **Documented policies and procedures in place** |
| **17.2A** | Wastewater disposal systems such as soak pits or constructed wetlands are advised and are environmentally friendly and subject to EIA. | √ |  |  | **Soak pit present** |
| **17.3A** | All possible waste products produced by the farm processes are identified and documented, as are the potential sources of pollution. | √ |  |  | **Waste and pollution management plan in place** |
| **17.4A** | Written procedures for minimizing and disposal of non-hazardous waste are developed and communicated. | √ |  |  |  |
| **17.5A** | There is a documented plan to minimize waste, reduce pollution and recycle wastes. | √ |  |  |  |
| **17.6A** | The plan is implemented and confirmed by visible actions and measures. | √ |  |  |  |
| **17.7A** | The firm and its premises is clear of litter. The premises has adequate provisions for waste disposal. | √ |  |  |  |
| **18** | **COMPLAINT HANDLING PROCEDURES** |  |  |  |  |
| **18.1.A** | The operator has committed to adequately address complaints that may arise with regard to the activities of the firm/farm. | √ |  |  | **Complaint procedures available** |
| **18.2A** | There is an established and documented complaint handling procedure addressing all issues relating to the farm’s / company’s activities. | √ |  |  | **Documented complaint handling procedure in place** |
| **18.3A** | The procedure has stated all the steps taken to address arising complaints and all the recommended corrective actions stated and have been acted upon. | √ |  |  | **All steps addressed in the complaint procedure.** |
| **18.4A** | The complaint handling procedure are regularly reviewed to enhance effectiveness.  The evaluation system is used to determine the reason for clients' complaints and the corrective and preventive action undertaken. | √ |  |  | **The procedure in reviewed regularly and where complaints are raised; the corrective action procedure is available** |
| **18.5A** | The procedure is available to customers as required. | √ |  |  | **The procedure is available to clients when required.** |
| **19.0** | **Legal and Contractual Obligations** |  |  |  |  |
| **19.1** | **Legal Compliance.** |  |  |  |  |
| **19.1** | The operator has complied with applicable national laws and regulations and with applicable international treaties and agreements.   1. The operator does not have outstanding (unresolved) issues of non-compliance with all applicable national laws and regulations and with applicable international agreements. 2. The operator knows and complies with the applicable laws and all applicable licenses, permits and other legal requirements are valid. 3. Number of final, binding and non-controvertible decisions of the applicable judicial authority against the operator related to the violation of applicable national laws and regulations and with applicable international agreements. 4. A mechanism for ensuring that all identified laws and regulations are implemented. 5. An appropriately scaled system for tracking any changes in the law. | √ |  |  | **Complies with legal requirements.** |
| **19.2** | **Intellectual property (IP) rights and royalties** |  |  |  |  |
| **19.2.1A** | Operators respects the IP rights related to the germplasm used in breeding programs |  |  | √ | **No breeding is done** |
| **19.2.2B** | The Breeder/ propagator continues to inform and train their employees in order to respect IP rights, applicable legislation and this code of conduct. |  |  | √ | **No breeding is done** |
| **19.2.3B** | Royalties are set within internationally acceptable ranges as negotiated by the parties. |  |  | √ | **No breeding is done** |
| **19.2.4C** | Arbitration |  |  |  |  |
| In case of any unresolved disagreements between parties in the fruits and vegetables value chain, arbitration has been done through applicable laid down regulations and procedures. | √ |  |  | **Complaint procedure available** |
| **19.3A** | **Registration and certification of nurseries** |  |  |  |  |
|  | Breeders, propagators and growers are registered by the competent authority following compliance inspection. Documentation that the nursery is regularly audited by the relevant regulatory agency is provided. |  |  | √ | **No breeding done** |
| **19.4**. | **Ownership and transfer** |  |  |  |  |
| **19.4.1** | If the holder of the permit advertises a variety for sale, the advertisement has specified the permit number allocated to the permit by the regulatory agency. |  |  | √ | **No breeding done** |
| **19.4.2**. | Plants offered for sale are healthy and certified to be healthy by an authorized person in the company. |  |  | √ | **No breeding done** |
| **19.4.3** | The person carrying out quality assurance and inspection is competent and qualified to. The materials is accompanied by a declaration of freedom from pests and diseases. |  |  | √ | **No breeding done** |
| **19.4.4**. | The holder of the permit has given written notice to the receiver of plants (buyer) after selling:   1. the number allocated to the permit by the relevant government agency, 2. the common characteristics of the variety, 3. the standard of care appropriate for the variety 4. Information on any known condition of the variety that might affect its future development should be disclosed to a prospective purchaser prior to sale. |  |  | √ | **No breeding done** |
| **19.4.5** | A Breeder, propagator or grower has provided their guarantee policies to prospective buyers that shall include plant health assurance in compliance to the Plant Protection Act, Cap 324 of the laws of Kenya and to the International Plant Protection Convention (IPPC). This obligates parties trading in plant materials to ensure that transfer of technologies excludes transfer of pest and disease across trading parties and that operators prevents entry and spread of pest and disease in protecting the country for sustainable agricultural production and environmental safety. The buyer-seller contracts has provided the compensation terms and conditions on pest and disease/ plant health problems traceable to the breeder materials. |  |  | √ | **No breeding done** |