

## SUPPLEMENTARY MATERIAL

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**Assessing global good agricultural practices standard adoption: insights from fruit and vegetable farmers in Pakistan**

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### Annexure 1

## RESEARCH SURVEY FOR PHD PROJECT UNDER TITLE

### “Customization of International Food and Environmental Safety Standards to address Food and Environmental Safety Issues in Pakistan”

**Survey Title: Identification of implementable/ unimplementable Clauses of Global GAP according to generic conditions of Pakistan.**

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## **Introduction**

Pakistan is a developing country with great potential in food and non-food industries. Various agricultural and environmental standards like GGAP (Global Good Agricultural Practices), YUM GAP (YUM Good Agricultural Practices), MacDonald's GAP (MacDonald's Good Agricultural Practices), ISO 9001 (Quality Management System), HACCP (Hazard Analysis Critical control points), ISO 14001, EMS (Environment Management System) are being implemented in Pakistan from decades. These international standards are mandatory for industries to implement and get certification to access high-end markets. True implementation of these standards gives access to high-end markets and helps industries decrease food safety and environmental issues. These standards are not being truly implemented due to many factors, including lack of awareness, cost of implementation and their mismatch with Pakistan Laws, etc. So, for the sake of certifications, a window dressing of fake implantation is presented on audit day. There is a great need for harmonization and benchmarking of these standards to make local standards that are according to the generic conditions of Pakistan and easy to implement. Implementing these easy standards will gradually improve the true implementation of international food and environment safety standards.

### **Purpose of Survey:**

This survey is being done to categorize which clauses are implementable and which are not implementable of Global GAP (good agriculture practices) according to the generic conditions of Pakistan. Different industries need help in successfully implementing the Global GAP standard. This survey aims to visit different industries and take their feedback in a two-step survey. In the first step, they will give their opinion when either the clause is implementable or not. In 2nd step, another questionnaire will be developed based on only those questions that are not implantable according to them. Reasons for unimplementable would be recorded in 2<sup>nd</sup> survey.

### **Guideline to conduct Survey**

The questions of this survey are derived from clauses of the Global GAP standard. Some clauses apply to your industry/farm, and some may not be applicable. Please read the question carefully and select one of the 5 options after every question, i.e., 1: Strongly Agree 2: Agree 3: Not Applicable 4: Disagree 5: Strongly Disagree. Encircle the right option. Please give your opinion after keeping the generic conditions of Pakistan. Consider the clause that either it is truly implementable or not. After completing this survey, please do your signature and stamp on every page of this document to ensure the ethnicity of this survey.

# Respondent Information

**Name of Company / Farm:** \_\_\_\_\_

**Year of Establishment:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Product:** \_\_\_\_\_

**Annual Turnover:** \_\_\_\_\_

**Name of Respondent:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Date of Survey:** \_\_\_\_\_

# Chapter 1 All Farm Base

**Q.1 It is possible to install a reference system permanently.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.2 Recording system can be established, and records can be kept for 2. Years.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.3 Risk assessment can be conducted, and site selection can be made according to risk assessment with its management plan for each risk that is implementable.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.4 Self-assessment can be done, and corrective actions can be taken.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.5 Genuine risk assessment for hygiene can be performed, and according to this risk assessment, hygiene procedures can be made and implemented along with hygiene training for all workers (at least once a year) with records**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.6 Risk assessment for workers' health and safety hazards can be conducted. According to this assessment, health and safety procedures and hygiene training for all workers (at least once a year) with records can be implemented.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.7 Workers dealing with chemicals can show evidence of competence or details of other such qualifications.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.8 Company/ Farmer can make accident and emergency procedures and display them with warning signs for hazardous materials. It can provide safety advice to hazardous substances for worker health and safety along First Aid kit with at least one person trained in first aid for every 50 persons.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.9 Suitable protective clothing can be provided to all workers/visitors/subcontractors. It can be washed per schedule, and washing records can be kept.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.10 Management can designate a person for worker health and safety and arrange a two-way communication meeting (at least once a year).**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.11 Management can provide clean food storage areas, designated rest areas, handwashing facilities, and drinking water and, where applicable onsite quarters with all necessities with safe transport as per rules and regulations of the country.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.12 When sub-contractors are used, can they work with the rules and regulations of GGAP?**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.13 Is it possible to make a Waste list with its management plan and Site can be kept tidy and orderly?**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.14 Holding areas for diesel and other fuel oil tanks can be environmentally safe.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.15 Organic wastes can be composted on the farm and recycled without risk of pest, disease, or weed carry-over.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.16 Water used for cleaning, like washing and cleaning, can be disposed of environmentally friendly.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.17 Wildlife management & conservation plan and a policy that describes how to enhance the environment for the benefit of the local community and flora and fauna can be made**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.18 Consideration can be given to the conversion of unproductive sites**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.19 Keeping records of on-farm energy use and planning for efficient use is possible. A plan can be made to improve energy efficiency, considering minimizing the use of non-renewable energy.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.20 Where Feasible, measures can be implemented to collect water and, where appropriate, to recycle, taking into consideration all food safety aspects**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.21 Complaint procedure with its recording system and recall / Withdrawal procedure can be made, and a Mock test can be done.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.22 Risk assessment for food defense can be conducted.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.23 Transaction documentation can include reference to the GLOBALG.A.P. Status and the GGN**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.24 GLOBALG.A.P. Word, trademark, GLOBALG.A.P. QR code or logo, and the GGN (GLOBALG.A.P. Number) can be used according to the GLOBALG.A.P. General Regulations and according to the 'Sublicense and Certification Agreement'.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.25 An effective system in place to identify and segregate all GLOBALG.A.P. Certified and non-certified products can be made and implemented. In the case of producers registered for parallel production/ownership (where certified and non-certified products are produced and owned by one legal entity), a system can be in place to ensure that all final products originating from a certified production process are correctly identified. A system for final checks to ensure the correct product dispatch of certified and non-certified products can be in place. Appropriate identification procedures can be in place, and records for identifying products purchased from different sources can be made available for all registered products.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.26 Sales records are available for all quantities sold, and all registered products can be kept and are available. Mass balance and conversation ratios are possible to record.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.27 Producer can complete and sign the ‘Food Safety Policy Declaration’ in the IFA checklist.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.28 Food fraud vulnerability risk assessment can be done, and its mitigation plan can be made and implemented**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.29 Documented procedure for non-conforming products can be made and can be implemented**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree



## Chapter 2 Crop Base

### **Q.1 It is possible to maintain traceability as per standard.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

### **Q.2 When sowing is done (direct or transplantation) farmer can maintain records.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

### **Q.3 Clauses regarding GMOs are implementable.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

### **Q.4 Soil management plan and soils map can be prepared**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

### **Q.5 Crop Rotation can be done in case of annual crops**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

### **Q.6 Practices can be done to improve soil structure and avoid soil compaction and erosion.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

### **Q.7 Producers can consider the nutrient contribution of organic fertilizer applications.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

### **Q.8 Records of seed/planting rate and sowing/planting date can be kept.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

### **Q.9 Competent and qualified persons can provide 9 Recommendations for applying fertilizers (organic or inorganic)ns.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.10 Fertilizer application records, including Field, orchard or greenhouse reference and crop, Application dates, applied fertilizer types, applied quantities, Method of application, and Operator details, are maintainable.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.11 Fertilizers can be stored separately from PPPs, in a covered area, in a clean area, in a dry area, in an appropriate manner that reduces the risk of contamination of water sources and not together with harvested products.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.12 Updated stock inventories of fertilisers and PPPs can be maintained.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.13 Producer can prevent using human sewage sludge and untreated sewerage water on the farm.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.14 Risk assessment can be carried out for organic fertilizer, which, before application, considers its source, characteristics and intended use.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.15 Organic fertilizer can be stored in an appropriate manner that reduces the risk of contamination of the environment.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.16 Content of major nutrients (NPK) of applied fertilisers can be known.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.17 Purchased inorganic fertilisers could be accompanied by documented evidence of chemical content, which includes heavy metals.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.18 Tools can be used routinely to calculate and optimize crop irrigation requirements.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.19 A risk assessment can be undertaken with its management plan to address all the risks associated with water used in irrigation.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.20 Records for crop irrigation/fertigation water usage and the previous individual crop cycle(s) with total application volumes can be maintained.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.21 Use of treated sewage water in pre-harvest activities can be justified according to a risk assessment.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.22 Water used in pre-harvest activities can be analyzed at a frequency in line with the risk assessment considering current sector-specific standards.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.23 Water testing can be done from ISO 17025-certified labs.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.24 Corrective actions can be taken based on adverse results from the risk assessment before the next harvest cycle.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.25 Where legally required, valid permits/licenses (abyana) can be taken.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.26 water storage facilities can be made and maintained to take advantage of periods of maximum water availability.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.27 Assistance with implementing IPM systems can be obtained through training or advice, and records of Prevention, Observation and Monitoring, and Intervention can be made.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

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**Q.28 Anti-resistance recommendations, either on the label or other sources, can be followed to maintain the effectiveness of available PPPs.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.29 A current list of PPPs that are authorized in the country of production can be kept for use on crops being grown.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.30 Producer can only use PPPs currently authorized in the country of use for the target crop (i.e., where such an official registration scheme exists). The PPP that has been applied is appropriate for the target as recommended on the product label.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.31 Invoices of PPPs can be kept.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.32 Records of all PPP applications can be kept, and these include Crop name and variety, Application location, Date and end time of application, Product trade name and active ingredient, Pre-harvest interval, Operator, Justification for application, technical authorization for application, Product quantity applied, Application machinery used. Only a competent person can recommend PPP.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.33 Weather conditions at the time of application can be recorded.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.34 Producer take active measures to prevent pesticide drift to neighboring plots.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.35 Registered pre-harvest intervals can be complied with.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.36 Surplus application mix or tank washings can be disposed of in a way that does not compromise food safety and the environment.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.37 Producer can demonstrate that information regarding the maximum residue levels (MRLs) of the country (ies) of destination (i.e., market(s) in which the producer intends to trade) is available.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.38 Action can be taken to meet the MRLs of the market in which the producer intends to trade the produce.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.39 Producer can complete a risk assessment covering all registered crops to determine if the products will comply with the MRLs in the destination country.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.40 Residue tests can be done based on the risk assessment results with the correct sampling procedure and from ISO-17025 certified lab.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.41 An action plan can be in place if an MRL is exceeded.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.42 PPPs can be stored in original packing and according to local regulations with sufficient facilities for measuring and mixing them in a secure store room that should be: Sound, Appropriate to the temperature conditions, well ventilated (in the case of walk-in storage), Well lit, located away from other materials, with keys and access to the PPP storage facility limited to workers with formal training in the handling of PPPs.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.43 PPS can be stored on shelving made of non-absorbent material, with the facility able to retain and deal with spillage. PPPs approved for use on the crops registered for GLOBALG.A.P; Certification can be stored separately within the storage facility from PPPs used for other purposes; powders can be stored above the liquids on shelves.**

Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly

**Q.44 Accident procedure can be made visible and accessible within 10 meters of the PPP/chemical storage facilities, and facilities to deal with accidental operator contamination can be provided.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.45 Annual health checks for workers dealing with PPPs can be conducted.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.46 Procedures dealing with re-entry times on the farm can be made.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.47 If concentrate PPPs are transported on and between farms, they can be transported in a safe and secure manner**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.48 When mixing PPPs, the correct handling and filling procedures can be followed as stated on the label. Reusing empty PPP containers for purposes other than containing and transporting identical products can be avoided, and these empty containers can be kept secure until disposal is possible. Disposal of empty PPP containers can occur in a manner that avoids exposure to humans and contamination of the environment. Official collection and disposal systems can be used when available. In that case, the empty containers can be adequately stored, labelled, and handled according to the rules of a collection system. All local regulations regarding the disposal or destruction of containers can be observed.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.49 Empty containers can be rinsed either via the use of an integrated pressure-rinsing device on the application equipment or at least 3 times with water before storage and disposal, and is the rinsate from empty containers can be returned to the application equipment tank or disposed of by standard.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.50 Obsolete PPPs can be securely maintained, identified, and disposed of by authorized or approved channels.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.51 Records can be maintained, and they can be available for all other substances, including those made on-farm, used on crops, and soil not covered under the sections on fertilizer and PPPs.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.52 Equipment used for PPPs and other activities like weighing and temperature control can be maintained in good maintenance, and their annual calibration can be performed with records. PPPs equipment can be stored in such a way as to prevent product contamination.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

## Chapter 3 Fruit and Vegetable Base

**Q.1 Risk assessment for the site can include risks for microbial contamination (also for the microbiological quality of the water used in all pre-harvest operations) with its management plan.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.2 When substrates are used, all the regulations, like its written justification, records of application, recycling programs, and, if reused, records of sterilization, can be maintained.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.3 For leafy vegetables and other crops where needed as per risk assessment, water analysis can be conducted from ISO-17025 certified lab. Based on the analysis results, corrective actions can be taken where required.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.4 Interval between applying organic fertilizer and the product harvest can be maintained to not compromise food safety.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.5 Excessive animal activity can be limited in the crop production area, which is a potential food safety risk.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.6 Hygiene risk assessment can be performed for the harvest, pre- and post-farm gate transport process, and post-harvest activities, including product handling.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.7 Based on this risk assessment, documented hygiene procedures and instructions for the harvest and post-harvest can be made with annual training before harvesting and handling produce.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.8 Hygiene procedures could be implemented.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree



**Q.9 Signs to wash hands and other basic hygiene can be displayed for all concerns.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.10 Smoking, eating, chewing, and drinking can be confined to designated areas segregated from growing areas and products.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.11 Hand-washing facilities can be provided to harvest workers who come into direct contact with the crops.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.12 Clean toilets with hand washing facilities can be provided to harvest and product handling workers near their work.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.13 Harvest containers can be used only for produce, and these can be cleaned, maintained, and can protect the product from contamination.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.14 Suitable changing facilities can be provided to workers.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.15 Vehicles used for post-harvest activities can be cleaned and maintained according to risk.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.16 When ice is used, it can meet the microbial criteria.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.17 Harvested produce can be protected from contamination.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.18 All collection/storage/distribution points of packed produce and those in the field can be maintained clean and hygienic.**

1: Strongly Agree Disagree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly

**Q.19 Packing materials can be appropriate for use, and they can be stored in clean and hygienic conditions to prevent contamination.**

1: Strongly Agree Disagree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly

**Q.20 Bits of packaging material and other non-produce waste can be removed from the field.**

1: Strongly Agree Disagree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly

**Q.21 Cleaning agents, lubricants, etc., can be stored to prevent chemical contamination of produce.**

1: Strongly Agree Disagree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly

**Q.22 Only cleaning agents, lubricants, etc., can be used (that may come into contact with produce) approved for application in the food industry and when a used label can be followed correctly.**

1: Strongly Agree Disagree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly

**Q.23 All forklifts and other driven transport trolleys can be cleaned and well maintained and of a suitable type to avoid contamination through emissions.**

1: Strongly Agree Disagree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly

**Q.24 Rejected and contaminated produce is not introduced into the supply chain, and the waste material can be effectively controlled so that it does not pose a risk of contamination.**

1: Strongly Agree Disagree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly

**Q.25 Breakage-safe lamps and lamps with a protective cap can be used above the sorting, weighing, and storage area.**

1: Strongly Agree Disagree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly

**Q.26 Written procedures for handling glass and clear hard plastic can be made.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.27 System for pest control can be installed, and detailed records can be maintained.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.28 Only water can be used for the potable final product washing or declared suitable by the competent authorities. If water is re-circulated for final product washing, this water can be filtered, and pH, concentration and exposure levels to disinfectant can be routinely monitored.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.29 Water analysis can be done in a suitable laboratory.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.30 all label instructions can be observed when post-harvest treatments are done. Only those biocides, waxes, and plant protection products can be used for post-harvest protection of the harvested crop officially registered in the country of use.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.31 An up-to-date list of post-harvest plant protection products that are used and approved for use on crops being grown can be maintained.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.32 Only that technically responsible person for applying post-harvest plant protection products can be designated who can demonstrate competence and knowledge about applying biocides, waxes, and plant protection products.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.33 Only that water source can be used for post-harvest treatments that are potable or declared suitable by the competent authorities.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.34 Biocides, waxes and plant protection products used for post-harvest treatment can be stored away from produce and other materials.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.35 All records of post-harvest treatments can be maintained, and they can include the minimum criteria listed below: Identity of harvested crops (i.e., lot or batch of produce), Location Application dates, Type of treatment, Product trade name and active ingredient, Product quantity, Name of the operator, Justification for application.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.36 Product labelling, where final packing takes place, can be done according to the applicable food regulations in the intended sale country and to any customer specifications.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

**Q.37 Where the risk assessment indicates potential food allergen cross-contamination, products can be labelled to identify them.**

1: Strongly Agree    2: Agree    3: Not Applicable    4: Disagree    5: Strongly Disagree

## Results

### Chapter 1

Total Questions	= 29
1: Strongly Agree	=
2: Agree	=
3: Not Applicable	=
4: Disagree	=
5: Strongly Disagree	=

### Chapter 2

Total Questions	= 52
1: Strongly Agree	=
2: Agree	=
3: Not Applicable	=
4: Disagree	=

### Chapter 3

Total Questions	= 37
1: Strongly Agree	=
2: Agree	=
3: Not Applicable	=
4: Disagree	=