

Report on Assessment for GLOBALG.A.P. Certification of Exportable Fruits & Vegetables in Bangladesh



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Message



Additional Secretary
Ministry of Commerce
&
Coordinator, Business Promotion Council

I am pleased to know that with the help of Business Promotion Council (BPC) provided support to Bangladesh Fruits, Vegetables and Allied Products Exporters Association (BFVAPEA) to complete the “Assessment for GLOBALG.A.P. Certification procedure step by step on Exportable Fruits and Vegetables in Bangladesh”. BPC & BFVAPEA also working together to promote agricultural export an implementing necessary initiative to strengthening the capacity of producers and exporters in this sector.

It is our immense pleasure that the Assessment for GLOBALG.A.P. Certification procedure step by step activities on export of horticultural fresh products to different supermarket of EU Countries is ready for disseminating. It is expected that this Assessment for GLOBAL G.A.P Certification procedure will be helpful for producers or cluster of producers and encourage exporters to the production and export of safe and quality fruits and vegetables.

I look forward to the proper use of this guideline and help concern stakeholders exporting fruits and vegetables to developed countries.

(Md. Abdur Rahim Khan)



Message



President,
Bangladesh Fruits, Vegetables & Allied Products
Exporter's Association

Bangladesh Fruits, Vegetables & Allied Products Exporter's Association (BFVAPEA) is a non-profitable organization working as a service provider to exporters, producers, of Bangladesh and importers of global market. The issue of food safety (compliance), quality, standard and labelling is becoming very important in the present decade of the global world. Consumers are dramatically increasing concerning the issue of food safety and their measures in their buying decisions. For increasing export of fresh horticultural produces from Bangladesh through comply with European countries requirement such as GAP, traceability, sanitary and phytosanitary measures (SPS) association have been working along with Ministry of Agriculture and Business Promotion Council, Ministry of Commerce since long ago. Although major export market of horticultural fresh produce for Bangladesh is Europe but still our export is ethnic market base in Europe. There is huge demand of Bangladeshi horticultural fresh produce at different super channel shop in Europe. But due to unavailability of GLOBALG.A.P. certification Bangladesh could not export agricultural fresh produce in European super channel shop yet.

It is my great pleasure to inform you that with the help of Agro Products Business Promotion Council (APBPC), Ministry of Commerce, association has completed the "Assessment for GLOBALG.A.P. Certification on Exportable Fruit and Vegetables in Bangladesh". The content of the assessment report will give the whole of key idea step by step about GLOBALG.A.P. Certification system and procedure on export of horticultural fresh produce in European supermarket as well as others supermarket in international destination. I believe this assessment of GLOBALG.A.P. certification procedure will help not only increase of agricultural fresh produce in super channel shop of international market but also will show the road map of sustainable export of fruits and vegetables from Bangladesh which is very essential for economic development of the country.

I would like to express my thanks to all concerned those who are contributed for preparing the report on assessment for GLOBALG.A.P. Certification on Exportable Fruits and Vegetables in Bangladesh.

(S.M. Jahangir Hossain)

Consultant Opinion

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GLOBALG.A.P. certification is buyer driven compliances that ensure consumers safety and Greater acceptance of their products by domestic and international market chains. Enhances consumer confidence in food quality and safety and assures confidence to the regulatory authorities. Global acceptance for export sale and supply of food processing units, and serves as a tool in meeting requirements of the World Trade Organization (WTO). GLOBALG.A.P. certification Increase demand for produce, Reduced cost of cultivation and improved quality of produce, many retailers are willing to work with producers who are working towards certification. The focus of GLOBALG.A.P. is on food safety and traceability, although it also includes some requirements on worker safety, health and welfare, and conservation of environment.

Bangladesh Fruits, Vegetables & Allied Products Exporter's Association (BFVAPEA) started its GLOBALG.A.P. journey with a vision to capacitate the exporters, farmers, to understand the procedure, process, compliances, critical control points to certify exportable vegetables and fruits in Bangladesh. The process begins when the producer, workers, produce handler, inputs providers, transporters, processor and / or marketer meets with GAP criteria were assessed. To get a certificate producers and exporters requires have dedicated willingness, buyers specific demand, and good footage in production either own farm or with contract farming. Proper record keeping identification of CCP, international safe environment friendly inputs and application process. The process is just beginning by BFVAPEA to aware exporters sensitize to the buyers and learn the international standards through GAP. The assessment conducted by the team hardly without knowledge and actions by the traditional producers. But they already capacitate to practice, keeping records, justice environmental issues, social welfare for wellbeing of the workers, consumers and other relevant stakeholders to produce safe and sustainable products. GLOBALG.A.P. is the most widely accepted private sector food safety certification in the world. As such, this certification helps you reach new markets and grow your business globally while assuring your customers that your good agricultural practices for food safety and your environmental management practices meet industry-recognized GLOBALG.A.P. requirements.

I hope the initiative will enhance the producers to production of exportable horticultural crops as well as exporters on road map of certification system and promote them how to export into the mainstream market in Europe and other countries.



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Chapter I: Introduction

Assessment for GLOBALG.A.P. Certification on Exportable Fruits & Vegetables in Bangladesh

1.1 Background

GLOBALG.A.P. is a private sector body that sets voluntary certification standards and procedures for good agricultural practices. It was originally created by a group of European supermarket chains. Now it is accepted most of the global supermarket chain GLOBALG.A.P. aims to increase consumers' confidence in food safety by developing good agricultural practices which must be adopted by producers. The focus of GLOBALG.A.P. is on food safety and traceability, although it also includes some requirements on worker safety, health and welfare, and conservation of environment. GLOBALG.A.P. is a pre-farm gate standard, which means that the certificate covers the process of the certified product from before the seed is planted until it leaves the farm. GLOBALG.A.P. has so far developed GAP standards for fruits and vegetables.

Through the harmonization of global agricultural standards GLOBALG.A.P. encourages sustainable agriculture and the minimization of the use of agro-chemicals to benefit farmers, retailers and consumers. It's recognized as a leading farm assurance program, translating consumer requirements into Good Agricultural Practice in over 120 countries and includes the requirements for safe food that is produced. Intended to meet compliance requirements and drive greater efficiency in production, improve business performance and reduce waste of vital resources, GLOBALG.A.P. Certification can cover Food safety and traceability, Environment (including biodiversity), Workers' health, safety and welfare, Animal welfare, Includes Integrated Crop Management (ICM), Integrated Pest Control (IPC), Quality Management System (QMS), and Hazard Analysis and Critical Control Points (HACCP), Chain of supervision.

GLOBALGAP Certification is for a farm assurance program, translating consumer requirements into Good Agricultural Practice. Europe GAP is a common standard for farm management practice created in the late 1990s by several European supermarket chains and their major suppliers. GAP is an acronym for Good Agricultural Practices. It is now the world's most widely implemented farm certification scheme. Most European customers for agricultural products now demand evidence of Europe GAP certification as a prerequisite for doing business.

The standard was developed using the Hazard Analysis and Critical Control Points (HACCP) guidelines published by the United Nations Food and Agriculture Organization, and is governed according to the ISO/IEC 17065 for product certification schemes. Unlike other farm certification schemes, it has definitive rules for growers to follow, and each production unit is assessed by independent third-party auditors. These auditors work for commercial certification companies who are licensed by the Europe GAP secretariat to conduct audits and award certificates where merited.

In September 2007, Europe GAP changed its name to GLOBALG.A.P.. The decision was taken to reflect its expanding international role in establishing Good Agricultural Practices between multiple retailers and their suppliers. A series of the standards can be accessed online.

Region wise export performance of fruits and vegetables from Bangladesh

Table 1: Region wise export performance of fruits and vegetables from Bangladesh

Year	Europe %	Middle east %	Asia%	Others%
2013-2014	54.8	30.7	12.5	2.0
2014-2015	49.5	32.5	14.9	2.8
2015-2016	45.6	34.8	17.2	2.4
2016-2017	33.1	46.3	18.5	2.1
2017-2018	25.5	52.9	19.5	2.3
2018-2019	20.3	57.4	19.9	2.4
2019-2020	19.2	57.8	20.3	2.7
2020-2021	18.7	57.0	22.9	1.4
2021-2022	18.2	57.2	23.0	1.6

The food safety, quality, standard and labeling is becoming very important in the present decade of the global world. Consumers are dramatically increasing concerning the issue of food safety and their measures in their buying decisions. From the above figure, we can see that 2013 -2014 export of fresh vegetables and fruits in the Europe region were 54.8% after then export of vegetables and fruits declined in Europe region that was 20.3% in 2018-2019. This decline happened due to impose several rules and regulations by European countries and others major still we are in ethnic market. However, there is a demand of more than 90,000 MT/ year. To catch supper channel supper market shop in Europe and others countries Bangladesh exporters and farmers need to adapted GLOBALG.A.P. certification process which will ensure of increase the export of safe vegetables which comply with the world standard and are environmentally friendly. GLOBALG.A.P. can ensure safety and quality vegetables in food chain; improve natural resources, workers health, working condition, products traceability, capture new market with modification of supply chain system governance and finally create right and high price for farmers and market opportunity for exporters in global destination.

But due to the lack of proper policy guidelines, and introducing the GLOBALG.A.P. certification system on horticultural fresh produce export exporters could not reach yet international upstream super market and Bangladesh is losing the enormous potential of earning foreign currency from export of fruits and vegetables in European countries.

With the help of Agro Products Business Promotion Council (APBPC), Bangladesh Fruits Vegetables & Allied Products Exporters Association (BFVAPEA) is working for promoting the sector. This project was concentrated on processed and procedure of

GLOBAL G.A.P. certification to diversification vegetables export market to Chain super market with the adaptation of GLOBALG.A.P. certification system.

Objectives:

1. First objectives were to assessment GLOBALG.A.P. certification process and procedure in farmers' level on exportable of selected vegetables and fruit in Bangladesh.
2. A second objective was to know that farmers and exporters has the capacity to adaptation of GLOBALG.A.P. Certification system on export of vegetables and fruit in super channel shop of international market.

Outcome:

- i) Adaptation with the GLOBALG.A.P. certification process, which will ensure export of Brinjal, chilli, okra, cucumber and mango from Bangladesh to super market channel shop in Europe country.
- ii) The benefits food quality and safety standard improvement facilitation of market access and reduction in non-compliance risks regarding permitted pesticides, MRLs and other contamination hazards.
- iii) Finally, the procedure will show the rout of vegetables and fruits export in international market specially supermarket channel shop in Europe.

1.2 Benefits of adoption of GLOBALG.A.P.

Certification to GLOBALG.A.P. will demonstrate your commitment to Good Agricultural Practices with the added benefits

- Adding value to your products by complying with a globally recognized standard
- Facilitating access to new local and global customers, markets, suppliers and retailers
- Reducing your exposure to food safety and product safety reputational risks
- Improving the efficiency of farm processes and management
- Encouraging environmentally sustainable farming practices
- Providing access to a secure online certificate that can be used to check producers and validate certificates.

REASONS FOR getting GLOBAL G.A.P. CERTIFICATION

1. Reduce your exposure to food safety and product safety reputational risks.
2. Gain access to local and global markets, suppliers and retailers.
3. Improve the efficiency of your farm management.
4. Save costs by reducing the number of on-farm audits.
5. Comply with legislation on food safety, environmental protection and workers' health and safety, with an easy HACCP system to put into place.
6. Benefit from global recognition with adaptation to local conditions, through GLOBALG.A.P.'s network of 45 National Technical Working Groups.
7. Choose from 160 accredited certification bodies, which all meet the highest integrity requirements.

8. Access all the standard documents online, free of charge, and in multiple languages.
9. Secure access to financing and to capital markets. Benefit from connecting to innovative supply chain solutions.
10. Help shape the continuing development of our standards through public consultation.
11. Demonstrate compliance with the United Nations Global Compact Food and Agribusiness Principles
12. Benchmark yourself as part of the world's most widespread farm assurance standard.
13. It's designed for you—retailers, manufacturers and producers with GLOBAL GAP expertise worked together to create it.

REASONS FOR PRODUCERS TO GET GLOBAL GAP CERTIFICATION

1. Reduce your exposure to food safety and product safety reputational risks.
2. Gain access to local and global markets, suppliers, and retailers.
3. Improve the efficiency of your farm management.
4. Save costs by reducing the number of on-farm inspections and audits.
5. Comply with legislation on food safety, environmental protection, and workers' health and safety with an HACCP system that is easy to put into place.
6. Benefit from global recognition with adaptation to local conditions through GLOBALG.A.P.'s network of 44 national technical working groups.
7. Choose from 160 accredited certification bodies, all of which meet the highest integrity requirements.
8. Secure access to financing and to capital markets. Benefit from connecting to innovative supply chain solutions.
9. Demonstrate compliance with the United Nations Global Compact Food and Agribusiness Principles.
10. Be a part of the world's most widespread farm assurance standard.

Benefits for producer

The Primary Farm Assurance (PFA) standard, under the local G.A.P. brand, helps **producers**, especially smallholder producers or producers new to standards, to:

- Adopt good agricultural practices
- Cut exposure to food safety risks
- Comply with legislation regarding food safety
- Gain access to local and regional markets
- Provide more confidence to retailers/buyers, because
 - Traceability is easier than ever using the local G.A.P. Number (LGN). Retailers can build their supply base around PFA registered growers only
 - PFA provides opportunities to eliminate the middleman
 - PFA offers a structure for quality management
- Access all documents online, free of charge

It is also a cost-effective standard because:

- It does not require certification
- It can be applied to groups via the Option 2 model
- Producers need only progress to the level that the buyer requests
- Via the stepwise approach, producers can gradually approach certification requirements and learn how the GLOBALG.A.P. certification system works

Benefits for Retailers/Buyers

Retailers and buyers, meanwhile, can make use of the PFA standard under the local G.A.P. brand to:

- Source local and regional products that meet the minimum requirements for food safety and hygiene
- Develop a network of reliable producers
- Benefit from GLOBALG.A.P.'s traceability system
- Monitor participating producers' progress in the GLOBALG.A.P. database with the LGN
- Access to assessment reports of participating producers in the GLOBALG.A.P. database
- Work with producers on a stepwise improvement plan for food safety and sustainability to improve the quality of their food supply
- Profit from GLOBALG.A.P. training for your quality management team

1.3 Summary of the concept

The project was aimed to assess of diversification of export market for horticultural fresh produce to higher supper market in different global destination with comply GLOBALG.A.P. certification.

Assessment of GLOBALG.A.P. certification the selected farmers and selected exporters on selected vegetables and the outcome of this piloting was disseminate others producers and traders for expanding the technological knowledge on **GLOBALG.A.P.** certification for increasing export with entry of different supermarket follows the guideline of current project assessment on GLOBALG.A.P. certification process and system. The project has given all aspect knowledge and technical skill, practical experienced and know how on assessment of **GLOBALG.A.P.** certification procedure. Project shown that GLOBALG.A.P. certification assessment process and procedure had not only could help to diversification of export market for global consumer but also it helped how the safe and quality agricultural fresh produce could give the domestic consumers. It has shown that if any farmers could adapt the assessment process for completing the certification system he would definitely get high price and exporters would get the opportunity to export their products new market and country such as united Sates of America and this could be open big door for Bangladesh. It was expected that the project would be sustainable and a milestone in Bangladesh on vegetables export. The proposed project was for 8 months duration from the date of commencement.

1.4 Scope of work

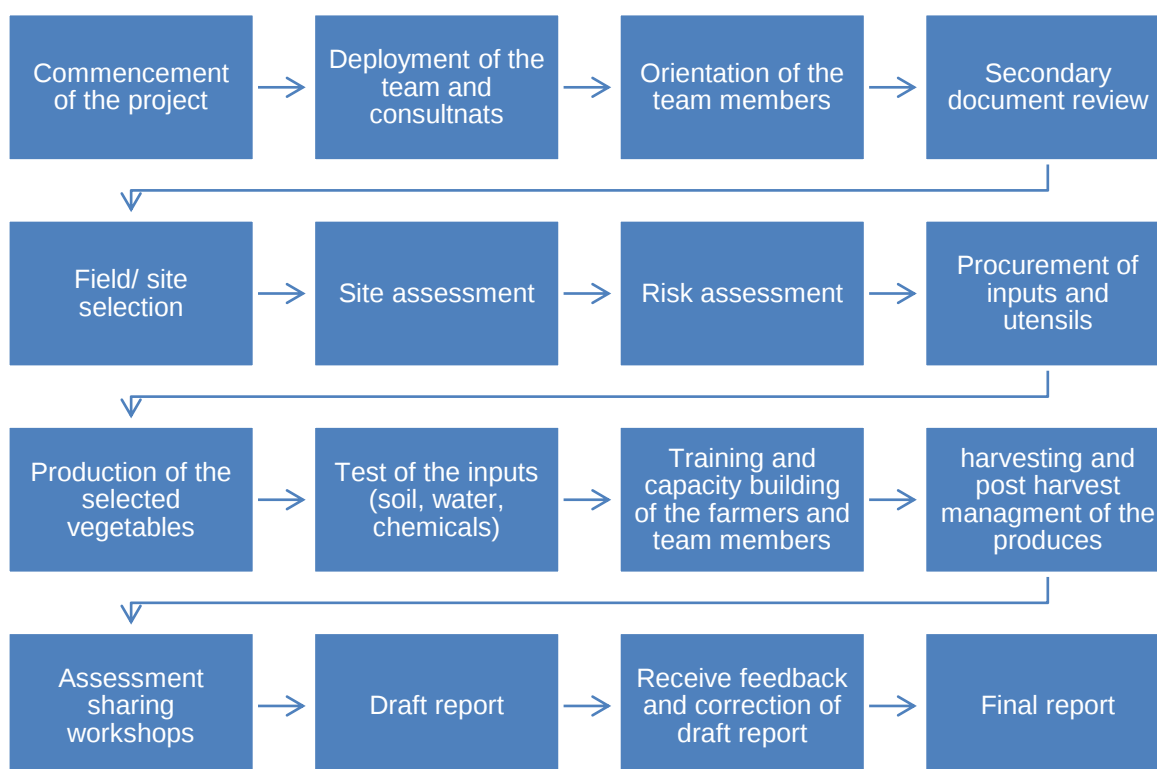
Bangladesh has witnessed a boom in vegetable exports recently, worth \$164.5 million from quantity was 82510 MT fiscal year (2019-2020) compared to \$100.31 million from quantity 51500 MT fiscal year (2018-2019) in all of ethnic market. Major destination export horticultural fresh produce is Europe especially in UK. Bangladesh has a big market in UK. In Europe all the supermarket major demand for their consumer is GLOBALG.A.P. certification with the products. There are technical people of Field Services Wing of DAE they are always working with producers so it will be easier to ensure GLOBALGAB certified vegetables from

selected farmers and selected areas. Scope has got produce with GLOBALG.A.P. standard and compliances through clusters farmers and clusters exporters, has a scope of promote farmers exporters linkages for certified vegetables exports. Have ample opportunity and enough manpower and technical people to monitoring to farmers tracking system for traceability, record keeping book maintain, GAP checklist and management.

Chapter II: Methodology

2 Methodology

At the beginning of the project, with the help of Agro Product Business Promotion Council (APBPC) Ministry of commerce headed BFVAPEA, deployed One local consultant as a farm assurer to accomplish need assessment various level of GAP implementation stakeholders including engaged farmers and exporters. Two field officers were worked in the field, one was Modhupur (for vegetables), Tangail and another one was in Sapahar (for mango), Naogaon. To did this the farm assurer team conducted rigorous research both quantitative and qualitative nature. Task includes onsite farm visit, hub facilities analysis, and interviewed with farmers, staffs, government officials in the project areas. The current projects in cluster total producers were 11 for vegetables production and 3 for mango production and lead exporter was Bangladesh Food Export. The project was run from December 2021 to June 2022.



For vegetable only one vegetable production cluster was selected, which is located at Modhupur in Tangail. Total selected farmers were 11, total land area was 5 acres and total crops were 7 (brinjal, chilli, okra, bottle gourd, bitter gourd, yard long bean and cucumber). Among the 11 vegetable farmers one farmer Md. Alamgir Hussain was selected as a lead farmer.

For fruits only one fruits production cluster was selected, which is located at Sapahar in Naogaon. Total selected farmers were 3, total land area was 18 acres and the

selected crops was mango. Among the 3 mango farmers one farmer Md. Imamul Haque was selected as a lead farmer in mango cluster.

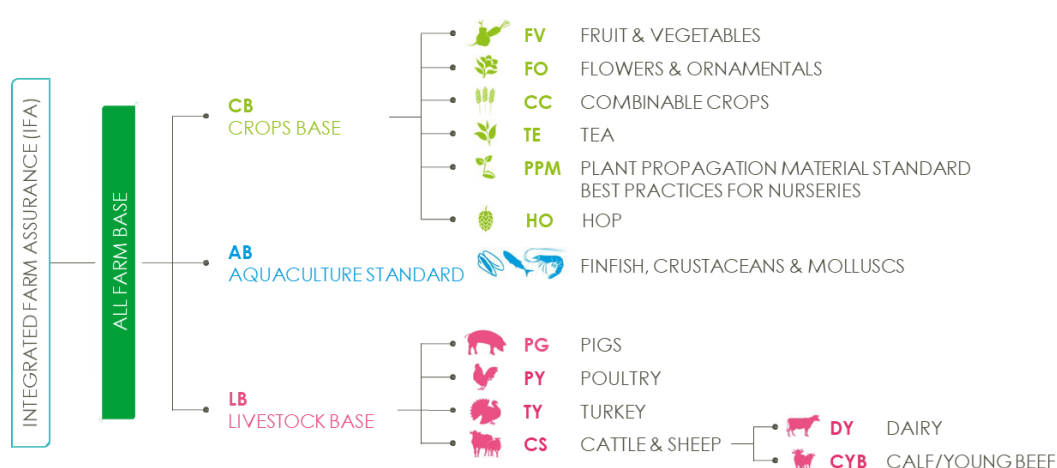
In exporters side total seven enterprises were selected where Bangladesh Food Export Co. was selected as a lead exporter. Lead farmers and lead exporters works directly with the local field officer and farm assurer for production, documentation and assessment.

Chapter III: Results and Discussions

3 About GLOBALG.A.P.

3.1 Preamble

GLOBALG.A.P. implementation and certification process, for **good agricultural practices** and global G.A.P. is the worldwide standard that assures it. **GLOBALG.A.P.** implementation is a process where for the gating certificate the following step and activities should be followed carefully. The GLOBALG.A.P. certification is processes follow individual or cluster or group basis for the producers for both fruits and vegetables in production area. To get GLOBALG.A.P. certification processes each of producers or cluster producers and exporters need to be followed all the requirement of importers for obtaining GLOBALG.A.P. certificate for export. GLOBALG.A.P. certifies following categories of the products.



3.2 Option for GLOBAL G.A.P. certification

For GLOBALG.A.P. certification, the term “producer(s)” refers to persons (individuals) or businesses (company, individual producer or producer group) that are legally responsible for the production processes and the products of the respective scope, sold by those persons or businesses. The term “producer(s)” is also used in these General Regulations to describe livestock transport companies and feed manufacturers.

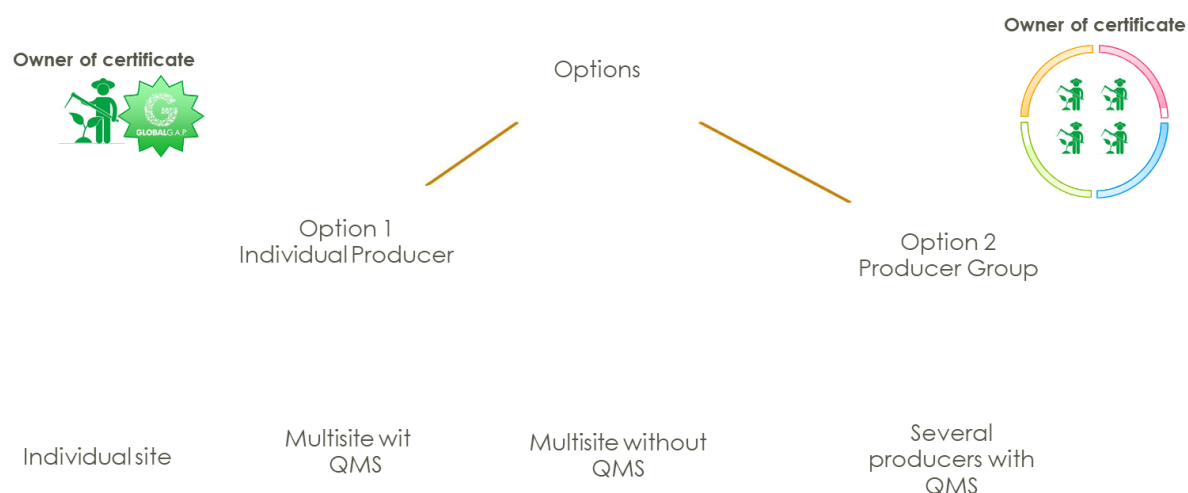
Producers can apply for certification using any of 2 options (individual or group certification under GLOBALG.A.P. or a benchmarked scheme). The options are based on the constitution of the legal entity applying for certification.

OPTION 1: Single Producer Certification – Individual certification

- A single farmer receives a certificate following a successful audit by a GLOBALG.A.P. approved certification body
- An individual producer applies for certification (GLOBALG.A.P. or a benchmarked scheme).
- The individual producer is the certificate holder once certified. An individual producer or one organization owns several production sites that do not function as separate legal entities.

OPTION 2: Producer Group Certification

A group of producers with a shared mandatory Quality Management System (QMS) receives one certificate for the entire group following a successful audit of the QMS and random sample inspections of some of the producers by a GLOBALG.A.P. Approved certification body.



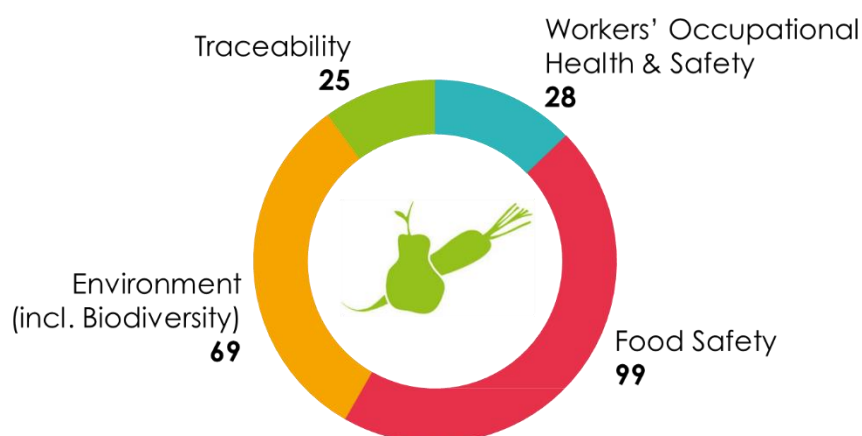
3.3 GLOBALG.A.P. FRUIT & VEGETABLE STANDARD V5.2

The First Choice for Retailers and Producers around the World.

For V5.2 **GLOBALG.A.P. Certification process** there are total control point 221 where 93 control points is major must need to corrected or comply producers or exporters for getting GLOBALG.A.P. certificate at the time of production of exportable fruits and vegetables. There is also 15 control point is recommendation and 114 control points is minor must which is also need to correction at least 95%. All the control point is situated on 4 board group which are as follows.

Traceability-25, Workers' Occupational Health & Safety-28, Environment (incl. Biodiversity)-69, Food Safety-99

Total Number of Control Points: **221**



GLOBALG.A.P. FRUIT & VEGETABLE STANDARD V5.2. that is The First Choice for Retailers and Producers around the World. The consumer standard demand is

- Food Safety
- Traceability
- Quality Assurance
- Workers' Occupational Health & Safety
- Site Management
- Soil Management
- Fertilizer Application Management
- Integrated Pest Management
- Plant Protection Products Management
- Water Management

That can be complied with adaptation of GLOBALG.A.P. certification process on production to marketing. The GLOBALG.A.P. Integrated Farm Assurance (IFA) Standard covers the certification of the whole agricultural production process of the product from before the plant is in the ground (origin and propagation material control points) or from when the animal enters the production process to non-processed product (no processing, manufacturing, or slaughtering is covered, except for the first level in Aquaculture). The IFA Standard offers several benefits to producers: Reducing food safety risks in primary production by encouraging the development and adoption of national and regional farm assurance schemes and with a clear risk assessed HACCP based reference standard serving the consumer and food chain. It also serves as technical communication platform for continuous improvement and transparency through consultation across the entire food chain reducing the cost of compliance by avoiding multiple product audits on mixed farming enterprises by a single “one-stop-shop”, avoiding excess regulators burden by pro- active adoption by industry and by achieving global harmonization, leading to a more level playing field. Increase in the integrity of farm assurance schemes worldwide, by defining and enforcing a common level of auditor competence, verification status, reporting and harmonizing interpretation of compliance criteria The IFA Control Points and Compliance Criteria (CPCC) documents are separated into different modules, each one covering different areas or levels of activity on a production site Legislation relevant to a control points and compliance criterion more demanding than GLOBALG.A.P. overrides the GLOBALG.A.P. requirement. Where there is no legislation (or legislation is not so strict), GLOBALG.A.P. provides a minimum acceptable level of compliance. Legal compliance of all applicable legislation per se is not a condition for certification. The audit carried out by the GLOBALG.A.P. Approved certification body (CB) is not replacing the responsibilities of public compliance agencies to enforce legislation. Existence of legislation relevant to a specific CPCC does not change the level of that control point to Major Must. The CPCC levels have to be kept as defined in the CPCC documents and checklists approved and published on the GLOBALG.A.P. website. Definitions of terminology used in the GLOBALG.A.P. General Regulations and Control Points and Compliance Criteria are available in the ‘General Regulations Part-1, Annex I referenced in the CPCC are guidelines. In the title of those annexes it is stated that they are mandatory. Guidelines referenced in the CPCC document to guide

producers to comply with the requirements are *not* normative documents. Only products included in the GLOBALG.A.P. Product list, published on the GLOBALG.A.P. website, can be registered for certification. The GLOBALG.A.P. product list is not limited and can be extended based on demand. Requests to add new products to the product list shall be sent to the e-mail address: standard_support@GLOBALG.A.P.org with the following information: Product, Scientific name, Any additional information e.g. cultivation, use, alternative names, pictures, etc. This can be supplied via a website link as well. The term “shall” is used throughout the GLOBALG.A.P. IFA Standard documents to indicate those provisions which, reflecting the requirements of GLOBALG.A.P., are mandatory. FoodPLUS GmbH and GLOBALG.A.P. approved certification bodies are not legally liable for the safety of the product certified under this standard and not liable for the data accuracy and completeness in the GLOBALG.A.P. Database entered by the GLOBALG.A.P. approved certification body. Under no circumstances shall Food PLUS GmbH, its employees, or agents be liable for any losses, damage, charges, costs, or expenses of whatever nature (including consequential loss) which any producer may suffer or incur by reason of, or arising directly or indirectly from the administration by Food PLUS GmbH, its employees, or agents or the performance of their respective obligations in connection with the scheme save to the extent that such loss, damage, charges, costs, and/or expenses arise as a result of the finally and judicially determined gross negligence or willful default of such person

3.4 Description of Activities in the assessment process

3.4.1 Site selection:

The location for vegetables was at Modhupur/ in Tangail and Mango location was at Sapaher in Naogaon. Area of vegetables cultivation land 5 acre for mango was 18 acres. The plan of the project was target of production of vegetables tentative 20 MT and tentative export 18 MT and Mango tentative production was 200 MT. During the site selection we ensured the following data:

SL. No.	Factors	Description	Remarks
1	Land site history	Fertile and high land	Comply
2	Irrigation source	Available source of underground water	Comply
3	Access	Available access road for input and product transportation	Comply
4	Environmental	No activity or infrastructure creates environmental hazard (Brick field, chemical factory etc)	Comply

During site selection we have followed the guideline line of GLOBALG.A.P.



Picture: Site selection

3.4.2 Crops selection

For the assessment GLOBALG.A.P. certification process and procedure following crops were selected for assessment: brinjal, chilli, okra, bottle gourd, bitter gourd, yard long bean and cucumber one fruits crop which was mango.



Picture: Crops selection

3.4.3 Farmers and exporters selection

Farmers exporters selection: Both vegetable and mango farmers were selected cluster wise from the target area as per farmers selection criterion. And exporters were selected individually as per their previous export record and interest. For vegetables tentative 11 farmers and for mango at least 3 farmers were selected. At least 7 exporters were selected for export the selected vegetables and mango from this project as normally how they were exporting. Detailed farmers and exporters list is given in Annexure - II



Picture: Farmers and exporters selection

3.4.4 Participatory Risk Assessment and Critical Criteria Point (CCP) analysis at farm level

The farm assurer team was conducted risk assessment (site risk, environmental, chemical, hazards) and CCPs in a participatory manner along with trained project staffs, hub owners and respective farmer. It was monitoring Risk Assessment and Critical Criteria Point (CCP) and implementation of GAP each of cluster farmer.



Picture: Site selection

GLOBALG.A.P. GUIDELINE: RISK ASSESSMENT – GENERAL

Introduction to Risk Assessment

In the GLOBALG.A.P. IFA Standard, a number of risk assessments are required in order to facilitate food safety, workers' health and safety, and environmental protection.

Five Steps to Risk Assessment

A risk assessment is an important step in protecting the products, workers, and business, as well as complying with GLOBALG.A.P. requirements and the law. A risk assessment helps to focus on those risks that really matter in the workplace—the ones with the potential to cause real and serious harm. In many instances, straightforward, simple, effective, and inexpensive measures can readily control risks (e.g. ensuring spillages are cleaned up promptly so that the product cannot be contaminated).

It is not expected that you eliminate all risks, but you are expected and required to protect your products and workers as far as it is reasonably practicable.

This is not the only way to perform a risk assessment. There are other methods that work well, particularly for more complex risks and/or circumstances. However, we believe this method provides a straightforward approach for most producers. Workers and others have a right to be protected from harm caused by a failure to take reasonable control measures. Accidents and ill health can ruin lives and affect the business as well, if output is lost or you have to go to court. Producers are legally required to assess the risks in their workplace so that a plan to control the risks can be put in place.

What is Risk Assessment?

A risk assessment is simply a careful examination of what in your work could cause harm to the product, environment, and/or workers, so that you can evaluate whether you have taken sufficient precautions or should do more to prevent harm.

Don't overcomplicate the process. In many enterprises, the risks are well-known and the necessary control measures are easy to apply. Check that you have taken reasonable precautions to avoid contamination and/or injury.

When thinking about your risk assessment, remember:

- A *hazard* is anything that may cause harm, such as chemicals, electricity, working from ladders, etc.
- The *risk* is the chance, high or low, that these and other hazards, together with an indication of how serious the harm could be, could harm somebody.

How to Assess the Risks in Your Enterprise

Step 1: Identify the hazards.

Step 2: Decide who/what might be harmed and how.

Step 3: Evaluate the risks and decide on precautions.

Step 4: Record the work plan/findings and implement them.

Step 5: Review the assessment and update if necessary.

Step 1: Identify the Hazards

First, you need to identify how the product, environment, and/or workers could be harmed. Here are some tips to help identify the ones that matter:

- Walk around the workplace and look at what could reasonably be expected to cause harm (e.g. situations, equipment, products, practices, etc.).
- Ask the workers (if applicable) or their representatives what they think. They may have noticed things that are not immediately obvious to you.
- Check manufacturers' instructions or data sheets for chemicals and equipment, as these can be very helpful in identifying the hazards and putting them in their true perspective.
- Review prior incidence and accident records, as these often help to identify less obvious hazards. Remember to think about long-term hazards to health (e.g. high levels of noise or exposure to harmful substances) as well as (food) safety hazards.

Step 2: Decide Who/What Might be Harmed and How

For each hazard, need to be clear about who or what might be harmed. This will help to identify the best way of managing the risk.

Remember: Some activities have particular requirements, (e.g. harvesting). Some of hazards will require extra thought, especially in situations where individuals (e.g. cleaners, visitors, contractors, maintenance workers, etc.) may not be in the workplace all the time.

Step 3: Evaluate the Risks and Decide on Precautions

Having spotted the hazards, you then have to decide what to do about them. The law requires you to do everything reasonably practicable to protect people from harm. You can work this out for yourself, but the easiest way is to compare what is being done against what are already defined as good practices.

So first, look at what you are already doing, and think about what controls you have in place and how the work is organized. Then compare that with the good practices and see if there's more you should be doing to bring yourself up to standard. During your evaluation process, consider the following:

- Can I get rid of the hazard altogether?
- If not, how can I manage the risks so that harm is unlikely?

When managing risks, if possible, apply the principles below and, if possible, in the following order:

- Try a less risky option (e.g. switch to using a less hazardous chemical).
- Prevent access to the hazard (e.g. by guarding).
- Organize the work/tasks to reduce exposure to the hazard.
- Issue personal protective equipment (e.g. clothing, footwear, goggles, etc.).
- Provide welfare facilities (e.g. first aid and washing facilities for removal of contamination).

Improving health and safety need not cost a lot. For instance, placing a mirror on a dangerous blind corner to help prevent vehicle accidents is a low-cost precaution considering the risks. Failure to take simple precautions can cost you a lot more if an accident does happen.

Involve staff (if applicable), so that you can be sure that what you propose to do will work in practice and won't introduce any new hazards.

Step 4: Record the Work Plan/Findings and Implement Them

Putting the results of the risk assessment into practice will make a difference when looking after food safety, workers' health and safety, and your business. Writing down the results of the risk assessment and sharing them with your staff encourages you to complete the implementation.

When writing down the results, keep it simple (e.g. contamination at harvest: hand washing facilities at the field).

The risk assessment is not expected to be perfect, but it shall be suitable and sufficient. You need to be able to show that:

- A proper check was made.
- You asked who or what might be affected.
- You dealt with all the significant hazards.
- The precautions are reasonable and the remaining risk is low.
- You involved your staff or their representatives (where applicable) in the process.

A good plan of action often includes a mixture of different responses such as:

- Temporary solution until more reliable controls can be put in place
- Long-term solutions to those risks most likely to cause accidents or ill health
- Long-term solutions to those risks with the worst potential consequences
- Arrangements for training employees on the primary risks that remain and how these risks are to be controlled
- Regular checks to make sure that the control measures stay in place
- Clearly defined responsibilities. Who will lead on what action and by when?

Remember, prioritize and tackle the most important things first. As you complete each action, tick it off your work plan.

Step 5: Review the Risk Assessment and Update if Necessary

Few enterprises stay the same. Sooner or later, you will bring in new equipment, substances, and/or procedures that could lead to new hazards. It makes sense, therefore, to review what you are doing on an ongoing basis. Every year, formally review where you are with respect to recognized good practices to make sure you are still improving, or at least not sliding back.

Look at your risk assessment again:

- Have there been any changes?
- Are there improvements you still need to make?
- Have your workers spotted problems?
- Have you learned anything from incidences or near misses?
- Make sure your risk assessment stays up-to-date.

When you are running a business, it's all too easy to forget about reviewing your risk assessment—until something has gone wrong and it's too late. Why not set a review date for this risk assessment now? Write it down and note it in your diary as an annual event.

During the year, if there is a significant change, don't wait. Check the risk assessment and, where necessary, amend it. If possible, it is best to think about the risk assessment when you're planning a change—that way there is more flexibility.

Source: 'Five Steps to Risk Assessment, Health and Safety Executive' (www.hse.gov.uk/pubns/indg163.pdf), www.hse.gov.uk/pubns/indg163.pdf)

GLOBALG.A.P. GUIDELINE: RISK ASSESSMENT – SITE MANAGEMENT

Control points AF 1.2.1 (M) and AF 1.2.2 (M) require producers to carry out a risk assessment of their production site and to take appropriate action to mitigate any risks identified.

Control Point AF 1.2.1

Is there a risk assessment available for all sites registered for certification (this includes rented land, structures, and equipment) and does this risk assessment show that the site in question is suitable for production, with regards to food safety, the environment, and the health and welfare of animals in the scope of the livestock certification, where applicable?

Compliance Criterion AF 1.2.1

A written risk assessment to determine whether the sites are appropriate for production shall be available for all sites. It shall be ready for the initial inspection and maintained, updated, and reviewed when new sites enter in production, and when risks for existing ones have changed, or at least annually, whichever is shorter. The risk assessment may be based on a generic one but shall be customized to the farm situation.

Risk assessments shall take into account:

- Potential physical, chemical (including allergens), and biological hazards
- Site history (for sites that are new to agricultural production, history of 5 years is advised and a minimum of one year shall be known)
- Impact of proposed enterprises on adjacent stock/crops/environment, and the health and safety of animals in the scope of the livestock certification

Control Point

Has a management plan that establishes strategies to minimize the risks identified in the risk assessment (AF 1.2.1) been developed and implemented?

Compliance Criterion

A management plan addresses the risks identified in AF 1.2.1 and describes the hazard control procedures that justify that the site in question is suitable for production. This plan shall be appropriate to the products being produced, and there shall be evidence of its implementation and effectiveness.

NOTE: Environmental risks do not need to be part of this plan and are covered under AF 7.1.1.

The risk assessment should consider relevant physical, chemical, and microbiological hazards and consider the type of farm operation and the way in which farm output will, eventually, be used. The next table helps to identify the most common factors and hazards to consider when carrying out a site risk assessment. This is not an exhaustive list of factors. Growers shall consider it as guidance designed to help trigger their analysis of farm conditions in order to prepare the risk assessment for the site. They shall not consider these examples as a comprehensive list.

Legislation:

Legislation (national or local) may restrict the farm operations. Local regulations should be checked first to verify legal compliance.

Prior Use of Land:

Factors to be Consider	Example of Risks that can be Involved
Previous crops	Some crops (e.g. cotton production) typically involve heavy use of residual herbicides that can have long-term effects on cereal and other vegetable crops.
Former use	Industrial or military use can cause contamination to land through residues, petroleum contamination, garbage storage, etc. Landfill or mining sites may have unacceptable waste in their subsoil that can contaminate subsequent crops or harm livestock. They may be subject to sudden subsidence endangering persons working on the land. Husbandry may create zones of high microbial content (manure deposit, etc.).

Soil:

Example of Factors to Consider	Example of Risks that can be Involved
Soil structure	Structural suitability for intended use (including susceptibility to erosion) and chemical/microbiological integrity
Erosion	Conditions that cause losses of topsoil by water/wind that may affect crop yields and/or affect land and water downstream
Susceptibility to flooding	Susceptibility to flooding and probable contamination of soil through the flood
Wind exposure	Excessive wind speeds can cause crop losses

Water:

Example of Factors to be Consider	Example of Risks that can be Involved
Water availability	Adequacy throughout the year, or at least the proposed growing season. The amount of water supply shall at least match the consumption of the intended crops. Water shall be available in a sustainable condition.
Water quality	The risk assessment should establish whether water quality is 'fit for purpose'. In some instances, 'fit for purpose' may be defined by a local authority. Evaluate probabilities of upstream contamination (sewage, animal farms, etc.) that may need costly treatments. For certain applications, the grower shall be aware of a minimum microbiological water quality specified by the authority or GLOBALG.A.P. Where this is the case, the requirements are specified in the relevant GLOBALG.A.P. module (WHO Guidelines for Drinking-Water Quality, 2008: E. coli or thermo-tolerant coliform bacteria shall not be detectable in any 100 ml sample). See also FV 1.1.1 under FV 1.1 'Risk Assessment'.
Authorization to use water	Rights or license of use of water: local laws or customs may recognize other users whose needs may pre-empt agricultural use at times. Environmental impact: While legal, some extraction rates could adversely affect flora and fauna associated with or dependent on the water source.

Allergens:

Food allergies have received much attention over the past few years with an estimated 2 % of adults and 5 % of children now suffering from some type of food allergy.

All foods have the potential to cause a food allergy, however there are groups of foods that are responsible for causing the majority of food allergies. In the EU, for example, 14 main allergens which are subject to labeling legislation have been identified: Celery, cereals containing gluten, eggs, fish, lupin (a kind of legume of the Fabaceae family), milk, molluscs, mustard, peanuts, sesame seeds, shellfish, soya, sulfur dioxide (used as an antioxidant and preservative, e.g. in dried fruits), and tree nuts.

Whilst the control of allergens is crucial for food processors and caterers, it is also a relevant issue to be considered by primary producers.

Allergens in fruits and vegetables are not as complicated as other foods. Cooking destroys many of them, and thus cooked fruits are often safe for fruit allergic people to eat. Peanut allergy can be so severe that only very tiny amounts of peanut can cause a reaction. Tree nuts such as Brazil nut, hazelnut, walnut, and pecan can cause symptoms as severe.

Lists of food allergens and information on labeling can be found on national or EU websites

Example of Factors to Consider	Example of Risks that can be Involved
Previous crops	Mechanical harvest of crops in rotation with peanuts (legume grown underground) might introduce rests of peanuts. Transportation of produce in vehicles that have transported products in the group of main allergens may introduce cross- contamination if vehicles are not adequately cleaned.
Product handling	Cross-contamination when packing and/or storing of products in the same facilities with those considered amongst main food allergens

Other impacts:

Example of Factors to Consider	Example of Risks that can be Involved
Impacts on the neighborhood	Dust, smoke, and noise problems caused by the operation of agricultural machinery. Contamination of downstream sites by silt-laden or chemical-laden runoff. Spray drift.
Impacts on the farm	Type of adjacent farming activities. Smoke, fumes, and/or dust from nearby industrial or transport installations, including roads with heavy traffic. Insects attracted by crops, waste products, and/or operations using manure. Depredations by pests from nearby natural or conservation areas.

Sample risk assessment of vegetable is shown:

Sample Risk Assessment: Vegetable

Sl. No.	ACTIVITY / TASK:	Site risk assessment - Potential vectors and routes of contamination and the stages in production				
Sl. No.	Assessment Date:	21 Dec, 2021	Assessment Carried Out By:	Dr. Rafiq Sarkar	Date of Last Review:	
Sl. No.	Types Risk	Risk Assessment Matrix during production				
1	Vector	Route of contamination	Growing – production stage	Harvest	Post-harvest	Storage & Transport
2	Water	Irrigation	Low risk	Low risk	Low risk	Low risk
		Wash water	Low risk	Low risk	Low risk	Low risk
		Link with neighbour toilet facilities - drainage	No risk	No risk	No risk	No risk
		Flooding	No risk	No risk	No risk	No risk
3	Soil	Manure based soil amendments	Low risk	Low risk	Low risk	Low risk
4	Livestock	Farmed livestock in rotation	No risk	No risk	No risk	No risk
		Incursion by farmed livestock	No risk	No risk	No risk	No risk
		Wildlife/pests	Low risk	Low risk	Low risk	Low risk
5	Surfaces	Workers	Low risk	Low risk	Low risk	Low risk
		Visitors	No risk	No risk	No risk	No risk
		Equipment	No risk	No risk	No risk	No risk
	*Note: Not possible to contaminate = N, Manageable contaminants (inputs) = X; Non- Manageable contaminants (inputs) = (X)					

Sample Risk Assessment: Fruits

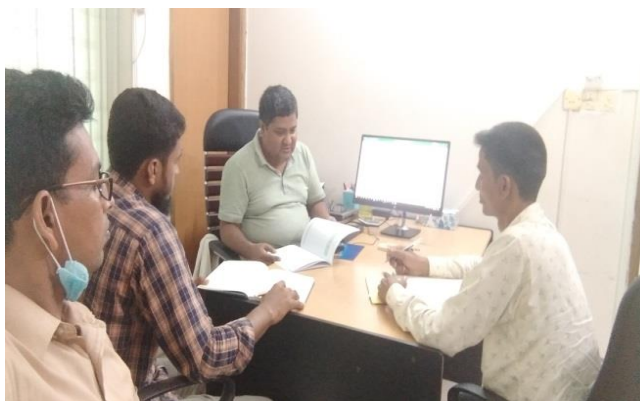
ACTIVITY TASK:	Site risk assessment - Potential vectors and routes of contamination and the stages in production				
Assessment Date:	26-Jan-22	Assessment Carried Out By:	Dr. Rafiq Sarkar	Date of Last Review:	

Risk Assessment: Mango

Sl. No	Risk Assessment Matrix during production				
Vector	Route of contamination	Growing – production stage	Harvest	Post-harvest	Storage & Transport
Water	Irrigation	Low risk	Low risk	Low risk	Low risk
	Wash water	Low risk	Low risk	Low risk	Low risk
	Link with neighbour toilet facilities - drainage	No risk	No risk	No risk	No risk
	Flooding	No risk	No risk	No risk	No risk
Soil	Manure based soil amendments	Low risk	Low risk	Low risk	Low risk
Livestock	Farmed livestock in rotation	No risk	No risk	No risk	No risk
	Incursion by farmed livestock	No risk	No risk	No risk	No risk
	Wildlife/pests	Low risk	Low risk	Low risk	Low risk
Surfaces	Workers	Low risk	Low risk	Low risk	Low risk
	Visitors	No risk	No risk	No risk	No risk
	Equipment	No risk	No risk	No risk	No risk
*Note: Not possible to contaminate = N, Manageable contaminants (inputs) = X; Non-Manageable contaminants (inputs) = (X)					

3.4.5 Conduct training to project field officers, government officials on GLOBALG.A.P.

Following norms, standards and developed training manual the farm assurer team were conducted 2 days training on GAP (GLOBALG.A.P.) to the project team. This training was considered as testing of the production handbook, training modules, GAP check list, risk assessment sheet, farmers record book traceability and other GAP promotional materials.



Picture: Conduct training to project field officers

3.4.6 Training to the farmers and exporters on Production of selected crops follow GLOBALGAP certification

Selected farmers and farm worker trained as per GAP requirement and prepared manual. Training provided by the farmer assurer team arrangement was by the BFVAPEA. Each and every farmer exporter was trained on **GLOBAL GAP** and recorded. Total 8 training was arranged for farmers and farm workers where 4 training was arranged in Modhupur on vegetables and 4 training in sapaher in Naogaon on mango.



Picture: Training to the farmers and exporters

3.4.7 Registration of the wage labors, farmer's employees, and trained

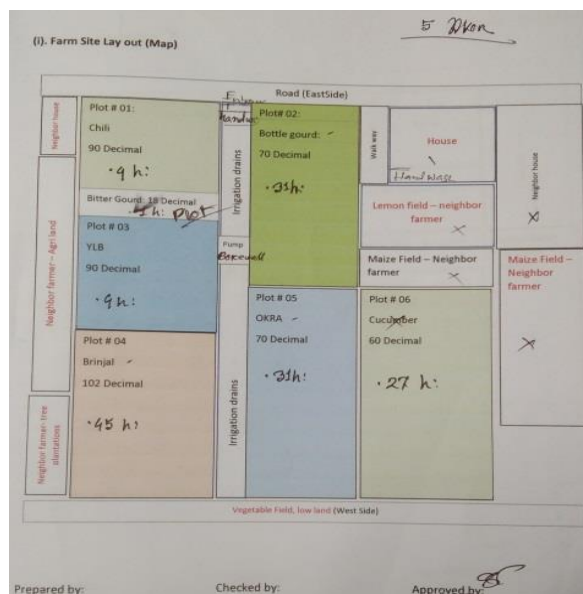
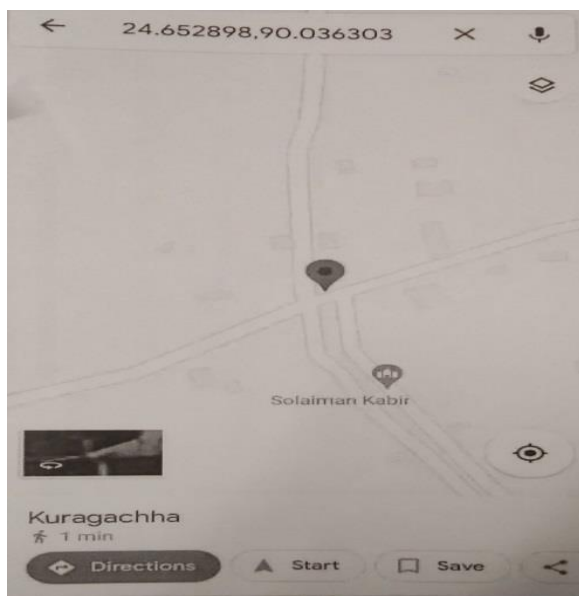
All labour and employees were registered in the digital database and trained, aware about hygiene sanitation, their welfare and rights along with the role and responsibilities of GAP certification and implementation at the field level.



Picture: Registration of the wage labors, farmer's employees, and trained

3.4.8 Development of GIS based Apps for farmer management and field trouble shooting

GIS based appropriate apps was developed for early warning, tracking, farm record keeping, farm trouble shooting, and advisory services of farmers.



GIS based Apps development for farmer management

3.4.9 Site Management:

Site was management with protection of entry of animal, poultry and duck, goat by given fence with the border line of the area. The farm small shade house was established for resting the daily worker in the field side. Sanitary measures were maintained in the entry side for the visitor if someone to inn in the farm.



Picture: Site Management

Sample site management record of chilli and mango are shown below:

Sample Site Management: Vegetable

	Crop	Chilli	Plot #	1
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Sl. No.	Date of land preparation works	Land preparation work name	Name of tools, machines or tillers	Soil treatment
1	15/1/2022	1st tillage	Power tiller	No
2	15/1/2022	2nd tillage	Power tiller	No
3	6/2/2022	3th tillage	Power tiller	No
4	13/2/2022	4th tillage	Power tiller	No

Sample Site Management: Mango

	Crop	Mango	Plot	1
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Sl. No,	Date of land preparation works	Land preparation work name	Name of tools, machines or tillers	Soil treatment
1	20/11/2021	Land Farmed/ jomi chas	Garden Telar tiller	No

3.4.10 Soil Management:

Soil was ploughed with tractor and measurement the Ph status and also has seen the side of soil history from the local agricultural office. Soil was well management before planting the seed or seedling with the recommended fertilizer with recommended doses.

Sample soil related record of chilli and mango are shown below:

Soil and land related record: Vegetable

Sl. No.	Date	Do the soil tested	Name of Organization from where soil tested	Name crops for soil tested	Soil types and Quality of soil	Any Soil treatment
1	22/1/2022	soil sample collection	Soil Resource Development Institute Central Laboratory Krishi khamar Sarak, Dhaka.	All crops (Bottle Gourd, Chili, Bitter gourd, Okra, Brinjal, YLB cucumber	good quality	
2	24/1/2022	Application of Lime				30 kg / acres

Soil and land related record: Mango

Sl. No.	Date	Do the soil tested	Name of Organization from where soil tested	Name crops for soil tested	Soil types and Quality of soil	Possibility of soil erosion, depletion, etc
1	26/1/2022	Yes	Soil Resource Development Institute Central Laboratory Krishi khamar Sarak, Dhaka.	Mango	good quality	no

3.4.11 Identification of the appropriate inputs and suppliers

Renowned and accredited inputs suppliers was identified and linkage building to provide GAP standard inputs (seed, seedlings, fertilizers, chemicals, IPM products, mulch, spun bond, sticky papers, others).

3.4.12 Farmers record book keeping

All the farm activity records were maintained in structured farm record book regularly. A farm record book given in Annexure IV.

Sample farmers record book of the lead farmers of vegetable and fruit is given below:

Sample record of lead farmer: Vegetable

Sl. No.	Farmer's information Category	Information
1	Farmer's code No.	1101
2	NID No.	9315724339223
3	Name of Farmer	Md. Alamgir Hussain
4	Address	Kuragacha, Madhupur, Tangail
5	Name of vegetable	Okra, Brinjal, yard Long Bean, Bottle Gourd, Bitter Gourd, Chilli, Cucumber
6	Season (month)	Kharif 1
7	Cultivated land area	Total land 5 Acre (500 Decimal)
8	Vegetable cultivation area	Okra- 70 Decimal, Brinjal- 102 Decimal, Yard Long Bean 90 Decimal, Bottle Gourd – 70 Decimal, Bitter Gourd- 18 Decimal, Chilli- 90 Decimal, Cucumber- 60 decimal
9	Location of Land	Kuragachha, Madhupur, Tangail, (24.65290, 90.03630)
10	Do the farm have GLOBAL.G.A.P. Certificate	No
11	Appropriate signboard of the farm and all crop specific signage will all direction	Yes
12	Any Training in Agriculture or GAP	2 days Training

Sample record of lead farmer: Fruits

Sl. No.	Farmer's information Category	Information
1	Farmer's code No.	2201
2	NID No.	19916418639000171
3	Name of Farmer	Md. Imamaul
4	Address	Dhopadigirpar, Shapahar, Naogaon
5	Name of vegetable	Mango
6	Season (month)	Kharif 1
7	Cultivated land area	18 Acre (1800 Decimal)
8	Vegetable cultivation area	Mango 18 Acre (1800 Decimal)
9	Location of Land	Dhopadigirpar, Shapahar, Naogaon- 25.157621.88.503672
10	Do the farm have GLOBAL.G.A.P. Certificate	No
11	Appropriate signboard of the farm and all crop specific signage will all direction	Yes
12	Any Training in Agriculture or GAP	2 days Training

3.4.13 Selected fruits and vegetable production process

Selected registered farmers was start vegetable and mango production/farming as per GLOBALGAP criteria and buyer's requirements since from site selection, land preparation soil and water quality testing, seed selection, sowing, transplantation, soil conservation, mulching, crop covering, crop protection and other modern agronomic practices. The aim of the production process was followed GAP from farm to fork to provide safe and sustainable health vegetables to the consumer. Record keeping was maintained and ensure on crop production along with crop management, soil and environmental conservation, optimum use of chemicals, harvest ad post-harvest methods, labour/ employees' welfare, farm by farm assurer team and project field officers.



Selected fruits and vegetable production process

3.4.14 Intercultural Operation:

Inter cultural operation, mulching papers, selected seed from dealers and all the inputs were taken from the registered dealers



Picture: Intercultural Operation

Intercultural operation was carried out as per schedule sample intercultural operation of chilli and mango is shown below:

Intercultural Operation: Vegetable (Chilli)

Sl. No.	Date	Name of intercultural operation	Methods	Quantity	Any substance used	Govt. Approved	Cleaning tools	Use of PPE
1	31/01/2022	cleaning of all drains	hand picking		Sickl	Yes	Yes	mask, hand gloves
2	05-12/02/2022	Bamboo fenching and netting all sides	fenching / netting	150 pess,14 rul. All Vegetables	Iron tar, Kodai, Plass,	Yes	Yes	mask, hand gloves
3	17/12/2022	Mulching	Badding	24 Rul. All Vegetables	Hand and Kodai	Yes	Yes	mask, hand gloves
4	22-24/02/2022	Stick and trenching	bamboo stick		Hand and Kodai	Yes	Yes	mask, hand gloves
5	27/02/2022	Bamboo stick for piler	Puti Hoyasa	800	Hand and Kodai,sabo l	Yes	Yes	mask, hand gloves
6	6/04/2022	weed cleaning/ weeding	Nirani	10	Kachi	Yes	Yes	mask, hand gloves

Intercultural Operation: Fruits (Mango)

Sl. No.	Date	Name of intercultural operation	Methods	Quantity	Any substance used	Govt. Approved	Cleaning tools	Use of PPE
1	22/11/2021	Water Pump Placement	Planted in the ground	1 pess	Iron tar, Kodal, Plass, Hand and Kodal, sabol	Yes	Yes	Yes
2	29-31/11/2021	Garden Clear	hand picking		Sickl	Yes	Yes	Yes
3	14/11/2021	Bamboo fencing all sides	Planted in the ground	30 Pes	Iron tar, Kodal, Plass, Hand and Kodal, sabol	Yes	Yes	Yes
4	04/18-30/2022	Mango Stalks are tied to the Bambu.	hand picking	9500 pes	Bambu and Yarn	Yes	Yes	Yes

3.4.15 Water application and management:

Water source was maintained very carefully for the irrigation of the crops. Water used from the underground and which was always very clean and passing the drain that was protects the field crop from microbial hazard and pesticide contamination. Water quality was tested from accredited laboratory.



Picture: Water Management

Sample irrigation and water management record of chilli and mango is shown below:

Irrigation and water management record: Vegetable (Chilli)

Sl. No.	Date	Source of Water	Water test	Water Quality (WHO guideline)	Govt. Approved	Irrigation tools	Is water Any connection with sewerage line	Layout
1	26-27/1/2022	Pump	Yes	Good, drinkable	Yes	Pump and plastic pipe	No	Yes
2	26/2/2022	pump	Yes	Good, drinkable	Yes	Pump and plastic pipe	No	Yes
3	18-19/03/2022	pump	Yes	Good, drinkable	Yes	Pump and plastic pipe	No	Yes
4	02-03/03/2022	pump	Yes	Good, drinkable	Yes	Pump and plastic pipe	No	Yes
5	17/4/2022	pump	Yes	Good, drinkable	Yes	Pump and plastic pipe	No	Yes

Irrigation and water management record: Fruits (Mango)

Sl. No.	Date	Source of Water	Water test	Water Quality (WHO guidelin)	Govt. Approved	Irrigation tools	Is water Any connection with sewerage line	Layout
1	25/3/2022	Pump/ Underg round	Yes	Good, drinkable	Yes	Pump and plastic pipe	No	Yes
2	17/4/2022	Pump/ Underg round	Yes	Good, drinkable	Yes	Pump and plastic pipe	No	Yes

3.4.16 Fertilizer Application Management:

All type of fertilizer inorganic and organic was applied to the field. The organic fertilizer was used as dry one at the time of land preparation. Inorganic nitrogen, phosphorus and potassium, boron zinc and other micro nutrient was applied in the field by the recommendation of the soil and fertilizer ex pert. The expert was visited the field several time.



Picture: Fertilizer Application Management

Sample fertilizer application record of chilli and mango is shown below:

Fertilizer application record: Vegetable (Chilli)

Sl. No.	Date of application	Name of Fertilizer	Dosage	Quantity	Application method	Source of fertilizers	Content of nutrient	Recommended by
1	1/15/2022	Cowdung		1821 kg	Mixed with soil during tillage	local	Nitrogen, potassium, magnesium, phosphate, calcium	Dr. Rafiq Sarkar
2	1/15/2022	Lime		10 kg	Mixed with soil during tillage		30%	Dr. Rafiq Sarkar
3	1/24/2022	TSP		120 kg	Mixed with soil during tillage	BCIC	43% P ₂ O ₅	Dr. Rafiq Sarkar
4	1/24/2022	MOP		76 kg	Mixed with soil during tillage	BCIC	60%K ₂ O	Dr. Rafiq Sarkar
5	1/24/2022	Urea		77 kg	Mixed with soil during tillage	BCIC	46%Nitrozen	Dr. Rafiq Sarkar
6	1/24/2022	Zinc		8 kg	Mixed with soil during tillage	BCIC	21% Zn	Dr. Rafiq Sarkar
7	1/24/2022	Gypsum		40 kg	Mixed with soil during tillage	BCIC	30% cal, 24% sulphur	Dr. Rafiq Sarkar
8	1/24/2022	Boron		5.4 kg	Mixed with soil during tillage	BCIC	10.5% Bron	Dr. Rafiq Sarkar

Fertilizer application record: Fruits (Mango)

Sl. No.	Date of application	Name of Fertilizer	Dosage	Quantity	Application method	Source	Content of nutrient	Recommended by
1	8/16/2021	TSP	As per recommendation	2000kg	Mixed with soil during tillage	BCIC	43% P ₂ O ₅	Dr. Rafiq Sarkar
2	8/16/2021	MOP	As per recommendation	1000kg	Mixed with soil during tillage	BCIC	60%K ₂ O	Dr. Rafiq Sarkar
3	8/16/2021	DAP	As per recommendation	2000kg	Mixed with soil during tillage	BCIC	30%	Dr. Rafiq Sarkar

3.4.17 Integrated Pest Management:

Pest was management in the field to approach to apply the integrated method and process. Bio-pesticide was used to control the quarantine pest and disease in the farm. Sometime the protection the pathogen and insect the biological control measure has been applied in the field.



Integrated Pest Management

Sample IPM management record of chilli and mango is shown below:

IPM management record: Vegetable (Chilli)

Sl. No.	Application date	IPM/ Organic name	Types of pests	Quantity	Application method	Source of IPM
1	4/1/2022	Yellow sticky,	Insecticides Aphid. Thipes		Tied to the bash pole	ACI

IPM management record: Fruits (Mango)

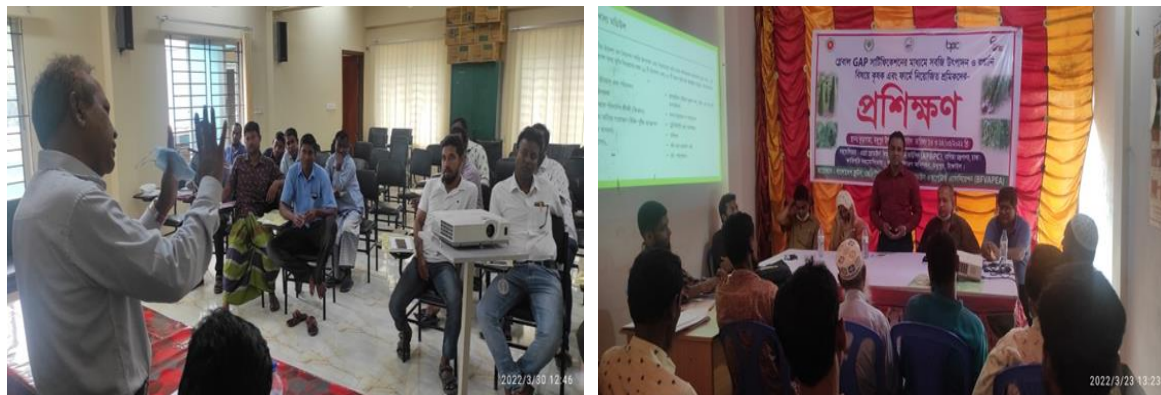
Sl. No.	Application date	IPM/ Organic name	Types of pests	Quantity	Application method	Source of IPM product (organization, manufacturer, brand)
1	20/12/2021	Pheromone trap	Insecticides Aphid. Thieves	300	Tied to the bash pole	ACI

3.4.18 Plant Protection Products Management:

To keep the environmental safety the plant protection products was keep in a several room which was little bit far from the land side. The room always keeps with follow at the roles and regulation of international standard. The reach of plant protection products keeps separately and sign mark dangerous put in the door. Children were not allowed in the area.

3.4.19 Training on appropriate harvesting and post-harvest management

Farmers along with project field officers and DAE local officials was trained on harvest and post-harvest management and farm assurer team was conduct the training with competent post-harvest expert.



Picture: Training on appropriate harvesting and post-harvest management

3.4.20 Facilitate to establish of local collection center operation

3.4.21

As per GAP standard collection center was established by project which was equipped by the necessary tools, accessories, and utensils. Collection center was following HACCP compliances, Good Handling Practices (GHP) to allow GLOBALG.A.P. standards.

3.4.22 Training on Hygiene and sanitation

Training on hygiene and sanitation was arranged for both vegetable and fruits producers. Training was arranged for both at the farm level and household level. Participants of the training was farmers and labors. Main discussion area of the training was hygiene and sanitation in vegetable production, and production level. Necessary awareness materials and activities was provided as per need to perform the training activity.



Picture: Training on Hygiene and sanitation

3.4.23 Training on safe food, nutrition and employee/workers welfare

Farmers and workers were trained on safe food, nutrition, and their welfare by competent nutritionist. Necessary awareness materials and activities needed to perform.



Training on safe food, nutrition and employee/workers welfare

3.4.24 Training of HACCP and GHP to the exporters, farmers and others handler

Exporters, central operators, their employees were trained on HACCP and GHP. Necessary awareness materials and activities needed to perform.

3.4.25 Training on cool chain management and appropriate transportation:

Training was arranged on cool chain management and appropriate transportation selection. Training was arranged on both farmer's level and hub operation level. Participants of the training was vegetable and fruits producers, workers and other persons engaged in operation level. Training covered necessary areas of cool chain

management and selection of appropriate transportation.



Picture: Training on cool chain management and appropriate transportation

3.4.26 Food Safety Issues:

To maintain the food safety the chemical pesticide was not allow to the field. The bio pesticide has been recommended for the crops of the both selected areas.

3.4.27 Workers' Occupational Health & Safety:

Worker was work there with the enjoyed of good environmental condition. If someone was sick he was not allow to work to the field and he or she got the opportunity to work again when he was good health condition and also enjoyed full payment.

3.4.28 Mentoring, counseling and field support services

The farm assurer team was work continuously to guide farmers, regular agronomic practices, soil fertilizer management, water management, inputs applications & methods, pest diseases management, IPM/ICM, and regular record keeping as per GLOBALG.A.P. standards.



Picture: Mentoring, counseling and field support services

3.4.29 Training on appropriate harvesting and post-harvest management

Crop specific hands on training was provided to farmers, hub operators/owners of harvest and post-harvest management. These training arranged by the project at local collection center.

3.4.30 Field supervision and monitoring and reporting

Day to day field was supervised by the farm assurer team and coaching farmers as and when necessary. As per observation, field learning during field visit and verification of documents, a project work performance was prepared by farm assurer (Project consultant) and submitted to the team of BFVAPEA as per required.



Picture: Field supervision and monitoring and reporting

3.4.31 Harvesting and Post-harvest Management

As per requirement and index of maturity the vegetable and fruits are harvested and proper postharvest management has ensured. After harvest the product have been taken by the selected exporter through cool chain van and finally sorting grading and packing was carried out at Central Pack House then exported to the international market. Sample harvest and post-harvest management record of chilli is given below:

Sample Harvest and post-harvest management record: Vegetable (Chilli)

Date	Mature check	Harvest by	Interval	Clean	Quantity of harvest	Kg	post-harvest management	Package	Transportation
18/4/22	Yes	hand picking	Yes	Yes	10	10	Yes	1Karat	Cool chain Van
25/4/22	Yes	hand picking	Yes	Yes	29	39	Yes	3Karat	Cool chain Van
1/5/22	Yes	hand picking	Yes	Yes	60	95	Yes	5Karat	Cool chain Van
8/5/22	Yes	hand picking	Yes	Yes	65	155kg	Yes	6Karat	Cool chain Van

3.5 Beneficiaries, timeframe, financial support, project monitoring and evaluation

3.5.1 Beneficiaries:

Project was indicated exporters to take the initiative to export fruits and vegetables in supper channel shop in international market through ensured GLOBALG.A.P. certification and GLOBALG.A.P. standard farmers where could get the maximum price of their products. In this process it could adopted and replicated in new areas due to create the more demand of horticultural fresh produces in supper channel shop of existing and new market export market.

3.5.2 Time frame:

The project was for 6-months duration from December 2021 to June 2022.

3.5.3 Financial support:

Bangladesh Fruits Vegetables & Allied Products Exporters Association (BFVAPEA) and APBPC was bearing all the expenses on the completed assessment of GLOBALG.A.P. certification system and Where 65% cost was provided by APBPC and 35% provided by BFVAPEA.

3.5.4 Monitoring and evaluation

The team was preparing M&E framework to monitor and evaluate its relevancies, effectiveness, coherence, results, outcomes, impact and sustainability as per GLOBAL GAP certification criteria. There was baseline survey with Focal Group Discussion Meeting, and impact evaluation along with digitized farmers tracking reports time to time.

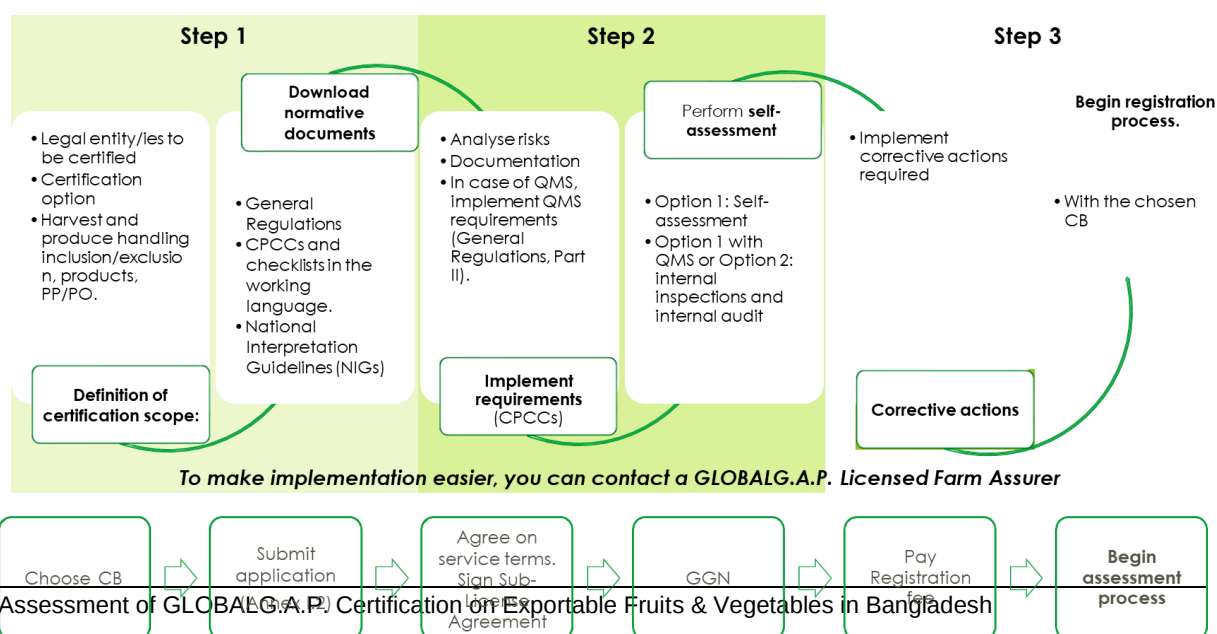


Monitoring and evaluation

3.6 GLOBAL G.A.P Certification Roadmap for Future

Certification Decision, GLOBALG.A.P. Certificate and Certification Cycle

GLOBALG.A.P. is the internationally recognized standard for farm production ensuring the quality and safety of a final product in the agricultural sector and sustainability of farming activities. The Farm Assurers was independent, trained and approved consultants, on-site advisors and expertise was assisted farmers and exporters to navigate the steps necessary to implement Good Agricultural Practices and to obtain GLOBALG.A.P. certification. In this project Farm Assurers used his expertise to make the standard easier to understand and simplify audit preparations.



3.6.1 Checklist and risk assessment

Project Consultant (Farm assurer) was prepared and show the farmers and exporters how could make the checklist for obtaining GLOBALG.A.P. certificate as per the checklist of GLOBALG.A.P. certification version 5.2. During capacity building period, piloting and scaling up it was expected that farmers, hub owners would able fill-up such checklist alone, however farm assurer team was facilitated to do this effectively and efficiently. There were different risk assessments, those shown in Annexure III:

3.6.2 Application for GLOBAL G.A.P certification

The farm assurer was shown to farmers, exporters how could make the application and registration for GLOBAL G.A.P certification to the GLOBAL G.A.P certification body.

3.6.3 Internal assessment and auditing

Consultant team (farm assurer) conducted internal audit and necessary assessment before certification body (external Auditor) comes into the field and report accordingly. Which was helped to farmers and exporters to know how to get GLOBALG.A.P. certification at the bottom level? Each year internal audit would necessary to continue certification process.



3.6.4 Identification of Certification body

Project consultant was advice and teach the farmers and exporters how could find out the appropriate GLOBALG.A.P. Certification body and act as local support and farm assurer on behalf of farmers and exporters for the selected farm. The Netherlands based certification body “Control Union” was selected for certification process.

3.6.5 Auditing for Certification

It is external audit for GLOBALG.A.P. Certification and as a farm assure (Project Consultant) was support all the period of auditing process as completed the GLOBALG.A.P. assessment system as for the future work on it.



Auditing for Certification

3.6.6 Obtain certificate

Once production sites, harvest, audited by certification body informed the status of the auditing farm the GLOBALG.A.P. authority how they would issue the certificate the external auditor has explained all the things to farmers' exporters and involved other stake holders.

3.6.7 Certificate renewal

The system of the GLOBALG.A.P. certificate usually for one year for continue the process and project sustainability every year exporters would audit and farmers renewed it was clearly has explained by the consultant and external auditor.

Chapter IV: Recommendation and Conclusion

As the world's leading standard for safe, sustainable agriculture, GLOBALG.A.P. is an affordable, holistic approach to producing safe and sustainable fresh agriculture. GLOBALG.A.P. certification opens valuable expansion opportunities to large and small producers alike, and helps satisfy the advanced food safety and sustainability specifications of retailers and major buyers in the worldwide marketplace.

GLOBALG.A.P. is the most widely accepted private sector food safety certification in the world. As such, this certification helps you reach new markets and grow your business globally while assuring your customers that your good agricultural practices for food safety and your environmental management practices meet industry-recognized GLOBALG.A.P. requirements. GLOBALG.A.P. is a Global Food Safety Initiative (GFSI) benchmarked standard.

Global Gap fruit and vegetable standards are based on good cultural practices in farming such as soil management, water management, pest control of the produce pre and postharvest, and packing and storage practices. The compliance with the standards about the sourcing of inputs, agro-chemicals its applications, environments issues with international quality standards is outlined by Global GAP certification process. Under Global GAP complies with the Global sets of standards concerning legal compliance, food safety, safety and health of workers, risk assessment on social practices, animal welfare, and environmental and ecological care.

Many retailers are demanding their suppliers and producers to adopt principles of Good Agricultural Practice that are regulated to promote good food hygiene and safety and prioritise consumer health. For this reason, Global GAP has become one of the most popular standards required by retailers and consumers for primary farming. Global GAP offers recognised and respected certification standards on agricultural food crops, livestock, and Aquaculture.

To become Global GAP certified, producers can either apply to a certification body individually or as a group by implementing a quality management system following the Global GAP requirements. It is recommended that producers seek assistance from accredited farm assurer consultants trained and approved by Global GAP, such as Matrix Business Development Ltd. In Dhaka, to prepare the farm's audit by accredited Certification Bodies (CB).

Producers can benefit immensely from implementing Global GAP. They benefit by employing cost-effective processes that improve product quality which requires that producers use certified raw materials and inputs with appropriate application methods. Furthermore, producers are encouraged to use modern farming practices that minimise environmental harm, reduce health risks, and promote safe food production. Moreover, producers get market access and trace their product along the value chain, trade, or collaborate with other Global GAP compliant producers using their Global Gap Number (GGN).

On the other hand, buyers enjoy obtaining certified food safety products with the absence of chemical, biological and physical hazards that value consumers' health. Accessibility to a network of certified producers that are easily traceable, which

promotes integrity, transparency, and cost-effective measures that need no intermediary, is one of the benefits that a buyer enjoys under Global GAP.

To ensure safe food and good health, Global GAP promotes the control of pests to minimum levels by employing Integrated Pest Management (IPM), Integrated Crop Management, Quality Management System (QMS), and Hazard Analysis and Critical Control Point (HACCP). For food producers, it is crucial to be Global GAP when targeting an international market or planning to export food produce. Moreover, Global Gap provides easy access to the local and international market, improved internal audits, and good quality products.

In addition to the existing Global GAP certified standards, In July 2015, Version 5, an Integrated Farm Assurance (IFA) certificate, was published, which subsequently came into effect in 2016. This version 5 has gone under a series of updates until recently in 2020 where an application for V5.4 was logged to make it Good Food Safety Initiative (GFSI) compliant for fruit and vegetable, and Aquaculture. Producers need to note that only V5.3 and V5.4 are GFSI compliant. Therefore, all export producers serving the GFSI market must attain either of these certificates to comply. The difference between V5.3 and V5.4 are procedures and regulations regarding Aquaculture and fruits and vegetable criteria.

As per field experience and necessity of the vegetable exports compliances following recommendations to be ensured for GLOBALG.A.P. certification

- Establish GLOBALGAP strategy and policies within the production and post-harvest management
- Formation of GLOBALGAP committee and functions according to their role and responsibilities
- Do the internal auditing by GLOBALGAP licensed farm assurer
- Maintain all standard operating procedures and risk assessment along with written procedures (SOP)
- Keep all farm records and relevant documents properly as per GLOBALGAP standards
- Assessment of all risk and hazards with critical control points time to time
- Follow GLOBALGAP standards and compliances
- Training and capacity building of the farmers, producers, workers, labours, processors, exporters on GLOBALGAP certification system and its importance.



Conclusion

As the issue of food safety (compliance), quality, standard and labelling is becoming very important in the present decade of the global world. Consumers are dramatically increasing concerning the issue of food safety and their measures in their buying decisions. All the import country is looking the products safety and quality. To increase the export of horticultural fresh produce, Bangladesh has to change the strategy for accessing super channel shop along with ethnic market in international destination .In conclusion, Global GAP benefits fruits and vegetables producers and exporters remarkably by creating access to the international market for export opportunities, obtaining retailer confidence by meeting food safety demands eliminating health risks, and sourcing raw material from a certified pool of suppliers. By winning consumer confidence, farmers' profitability is tremendously increased while auditing assessment increases efficiency towards sustainable, environmentally friendly, and globally recognized food safety standards. We believe that the assessment for GLOBALG.A.P. certification procedure will help not only increase of agricultural fresh produce in super channel shop of international market but also will show the road map of sustainable export of fruits and vegetables from Bangladesh which is very essential for economic development of the country.

Annexure I: Critical control point of GLOBALG.A.P. V-2

Modules A: All farm base

There are total 17 sections in this module. *Control points in this module are applicable to all producers seeking certification, as it covers issues relevant to all farming businesses.*

1. SITE HISTORY AND SITE MANAGEMENT

One of the key features of sustainable farming is the continuous integration of site-specific knowledge and practical experience into future management planning and practices. This section is intended to ensure that the land, buildings, and other facilities which constitute the fabric of the farm, are properly managed to ensure the safe production of food and protection of the environment.

Control point	Compliance	Level
Site History		
Is there a reference system for each field, orchard, greenhouse, yard, plot, location used in production?	Compliance shall include visual identification in the form of: A physical sign at each field/orchard, greenhouse/yard or A farm map, which also identifies the location of water sources, storage/handling facilities, ponds, stables, etc., and that could be cross-referenced to the identification system	Major must
Is a recording system established for each unit of production or other area/location to provide a record of the production and/or agronomic activities undertaken at those locations?	Current records shall provide a history of GLOBALG.A.P. Production of all production areas. No N/A.	Major Must
Site Management		
Is there a risk assessment available for all sites registered for certification (this includes rented land, structures, and equipment) and does this risk assessment show that the site in question is suitable for production, with regards to food safety, the environment, and health and welfare of animals in the scope of the certification where applicable?	A written risk assessment to determine whether the sites are appropriate for production shall be available for all sites. It shall be ready for the initial inspection and maintained updated and reviewed when new sites enter in production and when risks for existing ones have changed, or at least annually, whichever is shorter. The risk assessment may be based on a generic one but shall be customized to the farm situation. Risk assessments shall take into account: Potential physical, chemical (including allergens), and biological	Major Must

Control point	Compliance	Level
	hazards • Site history (for sites that are new to agricultural production, history of 5 years is advised and a minimum of one year shall be known) • Impact of proposed enterprises on adjacent stock/crops/environment, and the health and safety of animals in the scope of the livestock and aquaculture certification	
Has a management plan that establishes strategies to minimize the risks identified in the risk assessment (AF 1.2.1) been developed and implemented?	A management plan addresses the risks identified in AF 1.2.1 and describes the hazard control procedures that justify that the site in question is suitable for production. This plan shall be appropriate to the farm operations, and there shall be evidence of its implementation and effectiveness. NOTE: Environmental risks do not need to be part of this plan and are covered under AF 7.1.1.	Major Must

2. RECORD KEEPING AND INTERNAL SELF-ASSESSMENT/INTERNAL INSPECTION

Important details of farming practices shall be recorded and records kept

Control point	Compliance	Level
Are all records requested during the external inspection accessible and kept for a minimum period of 2 years, unless a longer requirement is stated in specific control points	Producers shall keep up-to-date records for a minimum of 2 years. Electronic records are valid and when they are used, producers are responsible for maintaining back-ups of the information. For the initial inspections, producers shall keep records from at least 3 months prior to the date of the external inspection or from the day of registration, whichever is longer. New applicants shall have full records that reference each area covered by the registration with all of the agronomic activities related to GLOBALG.A.P. documentation required for this area. For livestock, these records shall be available for the current livestock cycle before the initial inspection. This refers to the principle of record keeping. When an individual record is missing, the respective control point dealing with those records is not compliant. No N/A.	Major Must
Does the producer take responsibility to conduct a minimum of	There is documented evidence that in Option 1 an internal self-assessment has been completed under the responsibility of the	Major Must

Control point	Compliance	Level
one internal self-assessment per year against the GLOBALG.A.P. Standard?	producer (this may be carried out by a person different from the producer). Self-assessments shall include all applicable control points, even when a subcontracted company carries them out. The self-assessment checklist shall contain comments of the evidence observed for all non-applicable and non-compliant control points. This has to be done before the CB inspection (see GLOBALG.A.P. General Regulations Part I, section 5.). No N/A, except for multisite operations with QMS and producer groups, for which the QMS checklist covers internal inspections	
Have effective corrective actions been taken as a result of non-conformances detected during the internal self-assessment or internal producer group inspections?	Necessary corrective actions are documented and have been implemented. N/A only in the case no non-conformances are detected during internal self-assessments or internal producer group inspections.	Major Must

3. HYGIENE

Activities such as harvest and product handling, are defined in the applicable Standard module. People are key to the prevention of product contamination. Farm staff and contractors as well as producers themselves stand for the quality and safety of the product. Education and training will support progress toward safe production. This section is intended to ensure good practices to diminish hygiene risks to the product and that all workers understand the requirements and are competent to perform their duties. Further hygiene requirements, specific to certain

Control point	Compliance	Level
Does the farm have a written risk assessment for hygiene?	The written risk assessment for hygiene issues covers the production environment. The risks depend on the products produced and/or supplied. The risk assessment can be a generic one, but it shall be appropriate for conditions on the farm and shall be reviewed annually and updated when changes (e.g. other activities) occur. No N/A.	Minor Must
Does the farm have a documented hygiene procedure and visibly displayed hygiene instructions for all workers and visitors to	The farm shall have a hygiene procedure addressing the risks identified in the risk assessment in AF 3.1. The farm shall also have hygiene instructions visibly displayed for workers (including subcontractors) and visitors provided by way of clear signs (pictures) and/or	Minor Must

Control point	Compliance	Level
the site whose activities might pose a risk to food safety?	in the predominant language(s) of the workforce. The instructions must also be based on the results of the hygiene risk assessment in AF 3.1 and include at a minimum: • The need to wash hands • The need to cover skin cuts • Limitation on smoking, eating, and drinking to designated areas • Notification of any relevant infections or conditions. This includes any signs of illness (e.g. vomiting, jaundice, diarrhea), whereby these workers shall be restricted from direct contact with the product and food-contact surfaces • Notification of product contamination with bodily fluids The use of suitable protective clothing, where the individuals' activities might pose a risk of contamination to the product.	
Have all persons working on the farm received annual hygiene training appropriate to their activities and according to the hygiene instructions in AF 3.2?	An introductory training course for hygiene shall be given in both written and verbal form. All new workers shall receive this training and confirm their participation. This training shall cover all instructions defined in AF 3.2. All workers, including the owners and managers, shall annually participate in the farm's basic hygiene training.	Minor Must
Are the farm's hygiene procedures implemented?	Workers with tasks identified in the hygiene procedures shall demonstrate competence during the inspection and there is visual evidence that the hygiene procedures are being implemented. No N/A.	Major Must

4. WORKERS' HEALTH, SAFETY, AND WELFARE

Control point	Compliance	Level
4.1 Health and Safety		
4.1.1 Does the producer have a written risk assessment for hazards to workers' health and safety?	The written risk assessment can be a generic one but it shall be appropriate to conditions on the farm, including the entire production process in the scope of certification. The risk assessment shall be reviewed and updated annually and when changes that could impact workers' health and safety (e.g. new machinery, new buildings, new plant protection products, modified cultivation practices, etc.) occur. Examples of hazards include but are not	Minor Must

Control point	Compliance	Level
	limited to: Moving machine parts, power take-off (PTO), electricity, farm machinery and vehicle traffic, fires in farm buildings, applications of organic fertilizer, excessive noise, dust, vibrations, extreme temperatures, ladders, fuel storage, slurry tanks, etc. No N/A.	
4.1.2 Does the farm have written health and safety procedures addressing issues identified in the risk assessment of AF 4.1.1	The health and safety procedures shall address the points identified in the risk assessment (AF 4.1.1) and shall be appropriate for the farming operations. They shall also include accident and emergency procedures as well as contingency plans that deal with any identified risks in the working situation, etc. The procedures shall be reviewed annually and updated when the risk assessment changes. The farm infrastructure, facilities, and equipment shall be constructed and maintained in such a way as to minimize health and safety hazards for the workers to the extent practical.	Minor Must
4.1.3 Have all people working on the farm received health and safety training according to the risk assessment in AF 4.1.1?	All workers, including subcontractors, can demonstrate competency in responsibilities and tasks through visual observation (if possible, on the day of the inspection). There shall be evidence of instructions in the appropriate language and training records. Producers may conduct the health and safety training themselves if training instructions or other training materials are available (i.e. it need not be an outside individual who conducts the training). No N/A.	Minor Must
4.2 Training		
4.2.1 Is there a record kept for training activities and attendees?	A record is kept for training activities, including the topic covered, the trainer, the date, and a list of the attendees. Evidence of attendance is required.	Minor Must
4.2.2 Do all workers handling and/or administering veterinary medicines, chemicals, disinfectants, plant protection products, biocides, and/or other hazardous substances and all workers operating dangerous or complex equipment as defined in the risk	Records shall identify workers who carry out such tasks and can demonstrate competence (e.g. certificate of training and/or records of training with proof of attendance). This shall include compliance with applicable legislation. No N/A. For aquaculture, cross-reference with Aquaculture module AQ 4.1.1. In livestock, for workers administering medicines, proof of adequate experience is also required.	Major Must

Control point	Compliance	Level
analysis in AF 4.1.1 have evidence of competence or details of other such qualifications?		
4.3 Hazards and First Aid		
4.3.1 Do accident and emergency procedures exist? Are they visually displayed, and are they communicated to all persons associated with the farm activities, including subcontractors and visitors?	Permanent accident procedures shall be clearly displayed in accessible and visible location(s) for workers, visitors, and subcontractors. These instructions are available in the predominant language(s) of the workforce and/or pictograms. The procedures shall identify the following: • The farm's map reference or farm address • The contact person(s) • An up-to-date list of relevant phone numbers (police, ambulance, hospital, fire-brigade, access to emergency health care on site or by means of transport, supplier of electricity, water, and gas) Examples of other procedures that can be included: • The location of the nearest means of communication (telephone, radio) • How and where to contact the local medical services, hospital, and other emergency services. (<i>Where</i> did it happen? <i>What</i> happened? <i>How</i> many injured people? <i>What</i> kind of injuries? <i>Who</i> is calling?) • The location of fire extinguisher(s) • The emergency exits • Emergency cut-offs for electricity, gas, and water supplies • How to report accidents and dangerous incidents For aquaculture, cross-reference with Aquaculture module AQ 3.1.4.	Minor Must
4.3.2 Are potential hazards clearly identified by warning signs?	Permanent and legible signs shall indicate potential hazards. This shall include, where applicable: Waste pits, fuel tanks, workshops, and access doors of the storage facilities for plant protection products/fertilizers/any other chemicals. Warning signs shall be present and in the predominant language(s) of the workforce and/or in pictograms. No N/A.	Minor Must
4.3.3 Is safety advice for substances hazardous to workers?	When required to ensure appropriate action, information (e.g. website, telephone number, material safety data sheets, etc.) is	Minor Must

Control point	Compliance	Level
health available/accessible?	accessible. For aquaculture, cross-reference with Aquaculture module AQ 3.1.2.	
4.3.4 Are first aid kits available at all permanent sites and in the vicinity of fieldwork?	Complete and maintained first aid kits (i.e. according to local recommendations and appropriate to the activities being carried out on the farm) shall be available and accessible at all permanent sites and readily available for transport (tractor, car, etc.) where required by the risk assessment in AF 4.1.1.	Minor Must
4.3.5 Are there always an appropriate number of persons (at least one person) trained in first aid present on each farm whenever on-farm activities are being carried out?	There is always at least one person trained in first aid (i.e. within the last 5 years) present on the farm whenever on-farm activities are being carried out. As a guideline: One trained person per 50 workers. On-farm activities include all activities mentioned in the relevant modules of this standard.	Minor Must
4.4 Protective Clothing/Equipment		
4.4.1 Are workers, visitors, and subcontractors equipped with suitable protective clothing in accordance with legal requirements and/or label instructions and/or as authorized by a competent authority?	Complete sets of protective clothing, which enable label instructions and/or legal requirements and/or requirements as authorized by a competent authority to be complied which are available on the farm, utilized, and in a good state of repair. To comply with label requirements and/or on-farm operations, this may include some of the following: Rubber boots or other appropriate footwear, waterproof clothing, protective overalls, rubber gloves, face masks, appropriate respiratory equipment (including replacement filters), ear and eye protection devices, life-jackets, etc. as required by label or on-farm operations.	Major Must
4.4.2 Is protective clothing cleaned after use and stored in such a way as to prevent contamination of personal clothing?	Protective clothing is kept clean according to the type of use and degree of potential contamination and in a ventilated place. Cleaning protective clothing and equipment includes separate washing from private clothing. Wash re-usable gloves before removal. Dirty and damaged protective clothing and equipment and expired filter cartridges shall be disposed of appropriately. Single-use items (e.g. gloves, overalls) shall be disposed of after one use. All protective clothing and equipment including replacements filters, etc. shall be stored outside of the plant protection products/storage facility and physically separated from any other chemicals	Major Must

Control point	Compliance	Level
	that might cause contamination of the clothing or equipment. No N/A.	
4.5 Worker Welfare		
4.5.1 Is a member of management clearly identifiable as responsible for the workers' health, safety, and welfare?	Documentation is available that clearly identifies and names the member of management who is responsible for ensuring compliance with and implementation of existing, current and relevant national and local regulations on workers' health, safety, and welfare.	Major Must
4.5.2 Does regular two-way communication take place between management and workers on issues related to workers' health, safety, and welfare? Is there evidence of actions taken from such communication?	Records show that communication between management and workers about health, safety, and welfare concerns can take place openly (i.e. without fear of intimidation or retribution) and at least once a year. The auditor is not required to make judgments about the content, accuracy, or outcome of such communications. There is evidence that the concerns of the workers about health, safety, and welfare are being addressed.	Minor Must
4.5.3 Do workers have access to clean food storage areas, designated rest areas, handwashing facilities, and drinking water?	A place to store food and a place to eat shall be provided to the workers if they eat on the farm. Hand washing equipment and drinking water shall always be provided.	Major Must
4.5.4 Are on-site living quarters habitable and have the basic services and facilities?	The on-farm living quarters for the workers are habitable and have a sound roof, windows and doors, and the basic services of drinking water, toilets, and drains. In the case of no drains, septic pits can be accepted if compliant with local regulations.	Major Must
4.5.5 Is transport for workers (on-farm, to and from fields/orchard) as provided by the producer safe and compliant with national regulations when used to transport workers on public roads?	Vehicles or vessels shall be safe for workers and, when used to transport workers on public roads, shall comply with national safety regulations.	Minor Must

5. SUBCONTRACTORS

A subcontractor is the entity furnishing labor, equipment and/or materials to perform specific farm operation(s) under contract with the producer (e.g. custom grain harvesting, fruit spraying and picking).

Control point	Compliance	Level
5.1 When the producer makes use of subcontractors, do they oversee their activities in order to ensure that those activities relevant to GLOBALG.A.P. CPCC comply with the corresponding requirements?	The producer is responsible for observing the control points applicable to the tasks performed by the subcontractors who carry out activities covered in the GLOBALG.A.P. Standard, by checking and signing the assessment of the subcontractor for each task and season contracted. Evidence of compliance with the applicable control points shall be available on the farm during the external inspection. i) The producer can perform the assessment and shall keep the evidence of compliance of the control points assessed. The subcontractor shall agree that GLOBALG.A.P. approved certifiers are allowed to verify the assessments through a physical inspection or ii) A third-party certification body, which is GLOBALG.A.P. approved, can inspect the subcontractor. The subcontractor shall receive a letter of conformance from the certification body with the following info: 1) Date of assessment 2) Name of the certification body 3) Inspector name 4) Details of the subcontractor 5) List of the inspected control points and compliance criteria. Certificates issued to subcontractors against standards that are not officially approved by GLOBALG.A.P. are not valid evidence of compliance with GLOBALG.A.P.	Major Must

6. WASTE AND POLLUTION MANAGEMENT, RECYCLING, AND RE-USE

Waste minimization shall include review of current practices, avoidance of waste, reduction of waste, re-use of waste, and recycling of waste.

Control point	Compliance	Level
6.1 Identification of Waste and Pollutants		
6.1.1 Have possible waste products and sources of pollution been identified in all areas of the farm?	Possible waste products (e.g. paper, cardboard, plastic, oil) and sources of pollution (e.g. fertilizer excess, exhaust smoke, oil, fuel, noise, effluent, chemicals, sheep-dip, feed waste, algae produced during net cleaning) produced by the farm processes have been listed. For crops, producers shall also take into consideration surplus application mix and tank washings.	Minor Must

Control point	Compliance	Level
6.2 Waste and Pollution Action Plan		
6.2.1 Is there a documented farm waste management plan to avoid and/or minimize wastage and pollution to the extent possible, and does the waste management plan include adequate provisions for waste disposal?	A comprehensive, current, and documented plan that covers wastage reduction, pollution, and waste recycling is available. Air, soil, and water contamination shall be considered where relevant along with all products and sources identified in the plan. For aquaculture, cross-reference with Aquaculture module AQ 9.1.1.	Minor Must
6.2.2 Is the site kept in a tidy and orderly condition?	Visual assessment shall show that there is no evidence of waste/litter in the immediate vicinity of the production site(s) or storage buildings. Incidental and insignificant litter and waste on the designated areas are acceptable as well as the waste from the current day's work. All other litter and waste shall be cleared up, including fuel spills.	Major Must
6.2.3 Are holding areas for diesel and other fuel oil tanks environmentally safe?	All fuel storage tanks shall conform to the local requirements. When there are no local requirements to contain spillage, the minimum is bunded areas, which shall be impervious and be able to contain at least 110 % of the largest tank stored within it, unless it is in an environmentally sensitive area where the capacity shall then be 165 % of the content of the largest tank. There shall be no-smoking signs displayed and appropriate fire emergency provisions made nearby.	Minor Must
6.2.4 Provided there is no risk of pest, disease, and weed carry-over, are organic wastes composted on the farm and recycled?	Organic waste material is composted and used for soil conditioning. The composting method ensures that there is no risk of pest, disease, or weed carry-over. For aquaculture, cross-reference with Aquaculture module AQ 10.2.2.	Recommend
6.2.5 Is the water used for washing and cleaning purposes disposed of in a manner that ensures the minimum health and safety risks and environmental impact?	Waste water resulting from washing of contaminated machinery, e.g. spray equipment, personal protective equipment, hydro-coolers, or buildings with animals, should be collected and disposed of in a way that ensures the minimum impact on the environment and the health and safety of farm staff, visitors and nearby communities as well as legal compliance. For tank washings see CB 7.5.1.	Recommend

7. CONSERVATION

Farming and the environment are inseparably linked. Managing wildlife and landscape is of great importance. The abundance and diversity of flora and fauna benefits the enhancement of species and the structural diversity of land and landscape features.

Control point	Compliance	Level
7.1 Impact of Farming on the Environment and Biodiversity		
7.1.1 Does each producer have a wildlife management and conservation plan for the farm business that acknowledges the impact of farming activities on the environment?	There shall be a written action plan that aims to enhance habitats and maintain biodiversity on the farm. This can be either an individual plan or a regional activity that the farm is participating in or is covered by. It shall pay special attention to areas of environmental interest being protected and make reference to legal requirements where applicable. The action plan shall include knowledge of integrated pest management practices, nutrient use of crops, conservation sites, water supplies, the impact on other users, etc.	Minor Must
7.1.2 Has the producer considered how to enhance the environment for the benefit of the local community and flora and fauna? Is this policy compatible with sustainable commercial agricultural production and does it strive to minimize environmental impact of the agricultural activity?	There should be tangible actions and initiatives that can be demonstrated 1) by the producer either on the production site or at the local scale or at the regional scale 2) by participation in a group that is active in environmental support schemes concerned with habitat quality and habitat elements. There is a commitment within the conservation plan to undertake a baseline audit of the current levels, location, condition, etc. of the fauna and flora on the farm, so as to enable actions to be planned. Within the conservation plan, there is a clear list of priorities and actions to enhance habitats for fauna and flora, where viable, and to increase bio-diversity on the farm.	Recom.
7.2 Ecological Upgrading of Unproductive Sites		
7.2.1 Has consideration been given to the conversion of unproductive sites (e.g. low-lying wet areas, woodlands, headland strips, or areas of impoverished soil, etc.) to ecological focus areas for the encouragement of natural flora and fauna?	There should be a plan to convert unproductive sites and identified areas that give priority to ecology into conservation areas, where viable.	Recom.

Control point	Compliance	Level
7.3 Energy Efficiency		
7.3.1 Can the producer show monitoring of on-farm energy use? Farming equipment shall be selected and maintained for optimum energy efficiency. The use of renewable energy sources should be encouraged	Energy use records exist (e.g. invoices where energy consumption is detailed). The producer/producer group is aware of where and how energy is consumed on the farm and through farming practices. Farming equipment shall be selected and maintained for optimum energy consumption.	Minor Must
7.3.2 Based on the result of the monitoring, is there a plan to improve energy efficiency on the farm?	A written plan identifying opportunities to improve energy efficiency is available.	Recom.
7.3.3 Does the plan to improve energy efficiency consider minimizing the use of non-renewable energy?	Producers consider reducing the use of non-renewable energies to a minimum possible and use renewable ones.	Recom.
7.4 Water Collection/Recycling		
7.4.1 Where feasible, have measures been implemented to collect water and, where appropriate, to recycle taking into consideration all food safety aspects?	Water collection is recommended where it is commercially and practically feasible, e.g. from building roofs, glasshouses, etc. Collection from watercourses within the farm perimeters may need legal permits from the authorities.	Recom.

8. COMPLAINTS

Management of complaints will lead to an overall better production system

Control point	Compliance	Level
Is there a complaint procedure available relating to both internal and external issues covered by the GLOBALG.A.P. Standard and does this procedure ensure that complaints are adequately recorded, studied, and followed up, including a record of actions taken?	A documented complaint procedure is available to facilitate the recording and follow-up of all received complaints relating to issues covered by GLOBALG.A.P. actions taken with respect to such complaints. In the case of producer groups, the members do not need the complete complaint procedure, but only the parts that are relevant to them. The complaint procedure shall include the notification of GLOBALG.A.P. Secretariat via the certification body in the case that the producer is informed by a competent or local authority that they are under investigation and/or has received a sanction in the scope of the certificate. No N/A.	Major Must

9. RECALL/WITHDRAWAL PROCEDURE

Control point	Compliance	Level
9.1 Does the producer have documented procedures on how to manage/initiate the withdrawal/recall of certified products from the marketplace and are these procedures tested annually?	The producer shall have a documented procedure that identifies the type of event that may result in a withdrawal/recall, the persons responsible for making decisions on the possible product withdrawal/recall, the mechanism for notifying the next step in the supply chain and the GLOBALG.A.P. approved certification body, and the methods of reconciling stock. The procedures shall be tested annually to ensure that they are effective. This test shall be recorded (e.g. by picking a recently sold batch, identifying the quantity and whereabouts of the product, and verifying whether the next step involved with this batch and the CB can be contacted. Actual communications of the mock recall to the clients are not necessary. A list of phone numbers and e-mails is sufficient). No N/A.	Major Must

10. FOOD DEFENSE (N/A FOR FLOWERS AND ORNAMENTALS AND PLANT PROPAGATION MATERIAL)

Control point	Compliance	Level
10.1 Is there a risk assessment for food defense and are procedures in place to address identified food defense risks?	Potential intentional threats to food safety in all phases of the operation shall be identified and assessed. Food defense risk identification shall assure that all input is from safe and secured sources. Information of all employees and subcontractors shall be available. Procedures for corrective action shall be in place in case of intentional threat.	Major Must

11. GLOBALG.A.P. STATUS

Control point	Compliance	Level
11.1 Does all transaction documentation include reference to the GLOBALG.A.P. status and the GGN?	Sales invoices and, where appropriate, other documentation related to sales of certified material/products shall include the GGN of the certificate holder <i>and</i> a reference to the GLOBALG.A.P. certified status. This is not obligatory in internal documentation. Where producers own a GLN, this shall replace the GGN issued by GLOBALG.A.P. during the registration process. Positive identification of the certified status is enough on transaction documentation (e.g. "GLOBALG.A.P. certified <product name>"). Non-certified products do not need to be identified as "non-certified". Indication of the certified status is obligatory regardless of whether the certified product was sold as certified or not. This cannot be checked during the initial (first ever) inspection, because the producer is not certified yet and the producer cannot reference to the GLOBALG.A.P. certified status before the first positive certification decision. N/A only when there is a written agreement available between the producer and the client not to identify the GLOBALG.A.P. status of the product and/or the GGN on the transaction documents.	Major Must

12. LOGO USE

Control point	Compliance	Level
12.1 Is the GLOBALG.A.P. word, trademark, GLOBALG.A.P. QR code or logo and the GGN (GLOBALG.A.P. Number) used according to the GLOBALG.A.P. General Regulations and according to the 'Sublicense and Certification Agreement'?	The producer/producer group shall use the GLOBALG.A.P. word, trademark, GLOBALG.A.P. QR code or logo and the GGN, GLN or sub-GLN according to the General Regulations Part I, Annex 1 and according to the 'Sublicense and Certification Agreement'. The GLOBALG.A.P. word, trademark, or logo shall never appear on the final product, on the consumer packaging, or at the point of sale. However, the certificate holder can use any and/or all in business-to-business communications. The GLOBALG.A.P. word, trademark, or logo cannot be in use during the initial (first ever) inspection because the producer is not certified yet and the producer cannot reference to the GLOBALG.A.P. certified status before the first positive certification decision.	Major Must

Control point	Compliance	Level
	N/A for CFM, PPM, GLOBALG.A.P. Aquaculture ova or seedlings, and Livestock, when the certified products are input products, not intended for sale to final consumers and will definitely not appear at the point of sale to final consumers.	

13. TRACEABILITY AND SEGREGATION

Section 13 is applicable to all producers who need to register for parallel production/ownership and to those who buy from other producers (certified or not), the same products they also certify. It is not applicable to producers who certify 100% of the product in their GLOBALG.A.P. scope and do not buy of those products from other producers (certified or not).

Control point	Compliance	Level
13.1 Is there an effective system in place to identify and segregate all GLOBALG.A.P. certified and non-certified products?	A system shall be in place to avoid mixing of certified and non-certified products. This can be done via physical identification or product handling procedures, including the relevant records.	Major Must
13.2 In the case of producers registered for parallel production/ownership (where certified and non-certified products are produced and/or owned by one legal entity), is there a system to ensure that all final products originating from a certified production process are correctly identified?	In the case the producer is registered for parallel production/ownership (where certified and non-certified products are produced and/or owned by one legal entity), all product packed in final consumer packaging (either from farm level or after product handling) shall be identified with a GGN where the product originates from a certified process. It can be the GGN of the (Option 2) group, the GGN of the group member, both GGNs, or the GGN of the individual (Option 1) producer. The GGN shall not be used to label non-certified products. N/A only when the producer only owns GLOBALG.A.P. products (no PP/PO), or when there is a written agreement available between the producer and the client not to use the GGN, GLN, or sub-GLN on the ready to be sold product. This can also be the client's own label specifications where the GGN is not included.	Major Must
13.3 Is there a final check to ensure the correct product dispatch of certified and non-certified products?	The check shall be documented to show that the certified and non-certified products are dispatched correctly.	Major Must

Control point	Compliance	Level
13.4 Are appropriate identification procedures in place and records for identifying products purchased from different sources available for all registered products?	Procedures shall be established, documented and maintained, appropriately to the scale of the operation, for identifying certified and, when applicable, non- certified quantities purchased from different sources (i.e. other producers or traders) for all registered products. Records shall include: • Product description • GLOBALG.A.P. certified status • Quantities of product(s) purchased • Supplier details • Copy of the GLOBALG.A.P. certificates where applicable • Traceability data/codes related to the purchased products • Purchase orders/invoices received by the organization being assessed • List of approved suppliers	Major Must

14. MASS BALANCE

Section 14 is applicable to all GLOBALG.A.P. producers. In the case of producer group members, this information may sometimes be covered under the QMS of the group.

Control point	Compliance criteria	Level
Are sales records available for all quantities sold and all registered products?	Sales details of certified and, when applicable, non-certified quantities shall be recorded for all registered products, with particular attention to quantities sold and descriptions provided. The documents shall demonstrate the consistent balance between the certified and non-certified input and the output. No N/A.	Major Must
Are quantities (produced, stored, and/or purchased) recorded and summarized for all products?	Quantities (including information on volumes or weight) of certified, and when applicable non-certified, incoming (including purchased products), outgoing and stored products shall be recorded, and a summary maintained for all registered products, so as to facilitate the mass balance verification process. The frequency of the mass balance verification shall be defined and be appropriate to the scale of the operation, but It shall be done at least annually per product. Documents to demonstrate mass balance shall be clearly identified. This control point applies to all GLOBALG.A.P. producers. No N/A.	Major Must

Control point	Compliance criteria	Level
Are conversion ratios and/or loss (input-output calculations of a given production process) during handling calculated and controlled?	Conversion ratios shall be calculated and available for each relevant handling process. All generated product waste quantities shall be estimated and/or recorded. No N/A.	Major Must

15. FOOD SAFETY POLICY DECLARATION

The 'Food Safety Policy Declaration' reflects in an unambiguous manner the commitment of the producer to ensure that food safety is implemented and maintained throughout the production processes

Control point	Compliance	Level
15.1 Has the producer completed and signed the 'Food Safety Policy Declaration' included in the IFA checklist?	Completion and signature of the 'Food Safety Policy Declaration' is a commitment to be renewed annually for each new certification cycle. For a producer under Option 1 without QMS, the self-assessment checklist will only be complete when the 'Food Safety Policy Declaration' is completed and signed. In the case of producer groups (Option 2) and producers under Option 1 Multisite with QMS, it is possible that the central management assumes this commitment for the organization and for all its members by completing and signing one declaration at QMS level. In that case, the members of the producer groups and the individual production sites are not required to complete and sign the declaration individually. No N/A, unless Flowers and Ornamentals or Plant Propagation Material certification.	Major Must

16. FOOD FRAUD MITIGATION

Food fraud may occur on primary production when suppliers provide input products/materials that do not match the specifications (e.g. counterfeit plant protection products (PPP) or propagation material, non-food grade packaging material). This may cause public health crises, and therefore producers should take measures to mitigate these risks

Control point	Compliance	Level
16.1 Does the producer have a food fraud vulnerability risk assessment?	A documented risk assessment to identify potential vulnerability to food fraud (e.g. counterfeit PPP or propagation material, non-food grade packaging material) is available, current, and implemented. This procedure may be based on a generic one but shall be customized to the scope of the production.	Minor Must
16.2 Does the	A documented food fraud mitigation plan,	Minor

Control point	Compliance	Level
producer have a food fraud mitigation plan and has it been implemented?	specifying the measures the producer has implemented to address the food fraud threats identified, is available and implemented.	Must

17. NON-CONFORMING PRODUCTS

Control point	Compliance	Level
17.1 Does the producer have a documented procedure for non-conforming products and has it been implemented?	A documented procedure is in place specifying that all non-conforming products shall be clearly identified and quarantined as appropriate. These products shall be handled or disposed of according to the nature of the problem and/or specific customer requirements.	Major Must

Modules B. CROPS BASE
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CB1 TRACEABILITY

Traceability facilitates the recall/withdrawal of foods and flowers and ornamentals and enables customers to be provided with targeted and accurate information concerning implicated products.

Control point	Compliance	Level
CB1.1 Is a GLOBALG.A.P. registered product traceable back to and traceable from the registered farm (and other relevant registered areas) where it has been produced and, if applicable, handled?	There is a documented identification and traceability system that allows GLOBALG.A.P. registered products to be traced back to the registered farm or, in a producer group, to the registered farms of the group, and tracked forward to the immediate customer (one step up, one step down). Harvest information shall link a batch to the production records or the farms of specific producers (refer to General Regulations Part II for information on segregation in Option 2). Produce handling shall also be covered, if applicable. No N/A.	Major Must

CB2 PROPAGATION MATERIAL

The choice of propagation material plays an important role in the production process and, by using the appropriate varieties, can help to reduce the number of fertilizer and plant protection product applications. The choice of propagation material is a precondition of good plant growth and product quality.

Control point	Compliance	Level
CB 2.1 Quality and Health	The purpose of variety registration is to provide growers, processors, retailers, and governments a means of oversight to ensure that health and safety requirements are met, and that information related to the identity of the variety is available to regulators to prevent fraud. Variety registration aims at protecting the buyer of the seed/young plants/harvested material by providing the basic assurance that the starting material used conforms to the official variety description	
CB2.1.1 When seeds or propagation material have been purchased in the past 24 months, is there evidence that guarantees they have been obtained in compliance with variety	A document (e.g. empty seed package, plant passport, packing list, or invoice) that states as a minimum variety name, batch number, propagation material vendor, and, where available, additional information on seed quality (germination, genetic purity, physical purity, seed health, etc.) shall be available.	Minor Must

Control point	Compliance	Level
registration laws (in the case mandatory variety registration exists in the respective country)?	Material coming from nurseries that have GLOBALG.A.P. Plant Propagation Material, equivalent or GLOBALG.A.P. recognized certification is considered compliant.	
CB2.1.2 Has the propagation material used been obtained in accordance to applicable intellectual property laws?	When producers use registered varieties or rootstock, there are written documents available on request that prove that the propagation material used has been obtained in accordance to applicable local intellectual property right laws. These documents may be the license contract (for starting material that does not originate from seed, but from vegetative origin), the plant passport if applicable or, if a plant passport is not required, a document or empty seed package that states, as a minimum, variety name, batch number, propagation material vendor, and packing list/delivery note or invoice to demonstrate size and identity of all propagation material used in the last 24 months. No N/A.	Minor Must
CB2.1.3 Are plant health quality control systems operational for in-house nursery propagation?	A quality control system that contains a monitoring system for visible signs of pest and diseases is in place and current records of the monitoring system shall be available. Nursery means anywhere propagation material is produced, (including in-house grafting material selection). The monitoring system shall include the recording and identification of the mother plant or field of origin crop, as applicable. Recording shall be at regular established intervals. If the cultivated trees or plants are intended for own use only (i.e. not sold), this will suffice. When rootstocks are used, special attention shall be paid to the origin of the rootstocks through documentation.	Minor Must
CB 2.2 Chemical Treatments and Dressings		
CB2.2.1 Is the purchased propagation material (seed, rootstocks, seedlings, plantlets, cuttings) accompanied by information of chemical treatments done by the supplier?	Records with the name(s) of the chemical product(s) used by the supplier on the propagation material (e.g. maintaining records/ seed packages, list with the names of the plant protection product (PPP) used, etc.) are available on request. Suppliers who hold a GLOBALG.A.P. Plant Propagation Material, equivalent or GLOBALG.A.P. recognized certificate are considered compliant with the control point.	Minor Must

Control point	Compliance	Level
	N/A for perennial crops.	
CB2.3 Genetically Modified Organisms (N/A if no Genetically Modified Varieties are Used)		
CB2.3.1 Does the planting of or trials with genetically modified organisms (GMOs) comply with all applicable legislation in the country of production?	The registered farm or group of registered farms have a copy of the legislation applicable in the country of production and comply accordingly. Records shall be kept of the specific modification and/or the unique identifier. Specific husbandry and management advice shall be obtained.	Major Must
CB2.3.2 Is there documentation available of when the producer grows GMOs?	If GMO cultivars and/or products derived from genetic modification are used, records of planting, use or production of GMO cultivars and/or products derived from genetic modification are maintained.	Minor Must
CB2.3.3 Have the producer's direct clients been informed of the GMO status of the product?	Documented evidence of communication shall be provided and shall allow verification that all material supplied to direct clients is according to customer requirements.	Major Must
CB2.3.4 Is there a plan for handling genetically modified (GM) material (i.e. crops and trials) identifying strategies to minimize contamination risks (e.g. such as accidental mixing of adjacent non-GM crops) and maintaining product integrity?	A written plan that explains how GM materials (e.g. crops and trials) are handled and stored to minimize risk of contamination with conventional material and to maintain product integrity is available.	Minor Must
CB2.3.5 Are GM crops stored separately from other crops to avoid adventitious mixing?	A visual assessment of the integrity and identification of GM crops storage shall be made.	Major Must

C B3 SOIL MANAGEMENT AND CONSERVATION

Good soil husbandry ensures the long-term fertility of the soil, aids yield, and contributes to profitability. Not applicable in the case of crops that are not grown directly on the soil (e.g. hydroponic or potted plants).

Control point	Compliance	Level
CB3.1 Does the producer have a soil management plan?	The producer shall demonstrate that consideration has been given to the nutritional needs of the crop and to maintaining soil fertility. Records of analyses and/or crop-specific literature shall be available as	Minor Must

Control point	Compliance	Level
	evidence. Flowers and ornamentals producers shall perform calculations at least once for every single crop harvested and on a justified regular basis (e.g. every 2 weeks in closed systems) for continuously harvested crops. (Analysis may be conducted with on-farm equipment or mobile kits). No N/A.	
CB3.2 Have soil maps been prepared for the farm?	The types of soil are identified for each site, based on a soil profile or soil analysis or local (regional) cartographic soil-type map.	Recommend.
CB3.3 Is there, where feasible, crop rotation for annual crops?	When rotations of annual crops to improve soil structure and minimize soil borne pests and diseases are done, this can be verified from planting date and/or PPP application records. Records shall exist for the previous 2-year rotation.	Minor Must
CB3.4 Have techniques been used to improve or maintain soil structure and avoid soil compaction?	There is evidence of techniques applied (e.g. use of deep-rooting green crops, drainage, sub soiling, use of low-pressure tires, tramlines, permanent row marking, avoiding in-row plowing, smearing, poaching,) that are suitable for use on the land and, where possible, minimize, isolate, or eliminate soil compaction, etc.	Minor Must
CB3.5 Does the producer use techniques to reduce the possibility of soil erosion?	There is evidence of control practices and remedial measures (e.g. mulching, cross line techniques on slopes, drains, sowing grass or green fertilizers, trees and bushes on borders of sites, etc.) to minimize soil erosion (e.g. water, wind).	Minor Must
CB3.6 Has the producer taken into account the nutrient contribution of organic fertilizer applications?	An analysis from the supply is carried out or recognized standard values are used, which take into account the contents of NPK nutrients (nitrogen (N), phosphorus (P), potassium (K)) in organic fertilizer applied in order to avoid soil contamination.	Minor Must
CB3.7 Does the producer keep records on seed/planting rate, sowing/planting date?	Records of sowing/planting, rate/density, and date shall be kept and be available.	Minor Must

CB 4 FERTILIZER APPLICATION

The fertilization decision-making process involves consideration of crop demands. Nutrients shall be available for crops in the growing substrate or soil and fertilization is often necessary. Correct application to optimize use and storage procedures to avoid loss and contamination shall be followed.

Control point	Compliance	Level
CB4.1 Advice on Quantity and Type of Fertilizer		
CB4.1.1 Are recommendations for the application of fertilizers (organic or inorganic) provided by competent and qualified persons?	Where the fertilizer records show that the technically responsible person determining quantity and type of the fertilizer (organic or inorganic) is an external adviser, training and technical competence shall be demonstrated via official qualifications, specific training courses, etc., unless employed for that purpose by a competent organization (e.g. official advisory services). Where the fertilizer records show that the technically responsible person determining quantity and type of fertilizer (organic or inorganic) is the producer or designated employee, experience shall be complemented by technical knowledge (e.g. access to product technical literature, specific training course attendance, etc.) and/or the use of tools (software, on farm detection methods, etc.).	Minor Must
BC4.2 Records of Application	4.2.1 to 4.2.6: Do records of all applications of soil and foliar fertilizers, both organic and inorganic, include the following criteria	
BC4.2.1 Field, orchard or greenhouse reference and crop?	Records shall be kept of all fertilizer applications, detailing the geographical area and the name or reference of the field, orchard, or greenhouse where the registered product crop is located. Records shall also be kept for hydroponic situations and where fertilization is used. No N/A.	Minor Must
BC4.2.2 Application dates?	The exact dates (day, month and year) of the application are detailed in the records of all fertilizer applications. No N/A.	Minor Must
CB 4.2.3 Applied fertilizer types?	The trade name, type of fertilizer (e.g. NPK), and concentrations (e.g. 17-17-17) are detailed in the records of all fertilizer applications. No N/A.	Minor Must
CB4.2.4 Applied quantities?	The amount of product to be applied in weight or volume relative to a unit of area or number of plants or unit of time per volume of fertilization is detailed in the records of all fertilizer applications. The actual quantity applied shall be recorded, as this is not necessarily the same as the recommendation. No N/A.	Minor Must
4.2.5 Method of application?	The method and/or equipment used are detailed in the records of all fertilizer applications.	Minor Must

Control point	Compliance	Level
	In the case the method/equipment is always the same, it is acceptable to record these details only once. If there are various equipment units, these are identified individually. Methods may be e.g. via irrigation or mechanical distribution. Equipment may be e.g. manual or mechanical. No N/A.	
CB4.2.6 Operator details?	The name of the operator who has applied the fertilizer is detailed in the records of all fertilizer applications. If a single individual makes all of the applications, it is acceptable to record the operator details only once. If there is a team of workers performing the fertilization, all of them need to be listed in the records. No N/A.	Minor Must
CB4.3 Fertilizer Storage		
CB4.3.1 Separately from PPPs?	The minimum requirement is to prevent physical cross-contamination between fertilizers (organic and inorganic) and PPPs by using a physical barrier (wall, sheeting, etc.). If fertilizers that are applied together with PPPs (i.e. micronutrients or foliar fertilizers) are packed in a closed container, they can be stored with PPPs.	Minor Must
CB4.3.2 In a covered area?	The covered area is suitable to protect all inorganic fertilizers (e.g. powders, granules, or liquids) from atmospheric influences (e.g. sunlight, frost and rain, high temperature). Based on a risk assessment (fertilizer type, weather conditions, storage duration and location), plastic coverage could be acceptable. It is permitted to store lime and gypsum in the field. As long as the storage requirements on the material safety data sheet are complied with, bulk liquid fertilizers can be stored outside in containers.	Minor Must
CB4.3.3 In a clean area?	Inorganic fertilizers (e.g. powders, granules, or liquids) are stored in an area that is free from waste, does not constitute a breeding place for rodents, and where spillage and leakage may be cleared away.	Minor Must
CB4.3.4 In a dry area?	The storage area for all inorganic fertilizers (e.g. powders, granules, or liquids) is well ventilated and free from rainwater or heavy condensation. Storage cannot be directly on the soil except for lime/gypsum.	Minor Must
CB4.3.5 In an appropriate manner that reduces the risk of contamination of	All fertilizers are stored in a manner that poses minimum risk of contamination to water sources. Liquid fertilizer stores/tanks shall be surrounded by an impermeable barrier to contain a capacity to	Minor Must

Control point	Compliance	Level
water sources?	110 % of the volume of the largest container, if there is no applicable legislation.	
CB4.3.6 Not together with harvested products?	Fertilizers shall not be stored with harvested products.	Major Must
4.3.7 Is there an up-to-date fertilizer stock inventory or stock calculation listing incoming fertilizer and records of use available?	The stock inventory (type and amount of fertilizers stored) shall be updated within a month after there is a movement of the stock (in and out). A stock update can be calculated by registration of supply (invoices or other records of incoming fertilizers) and use (treatments/applications), but there shall be regular checks of the actual content so as to avoid deviations with calculations.	Minor Must
CB4.4 Organic Fertilizer		
CB4.4.1 Does the producer prevent the use of human sewage sludge on the farm?	No treated or untreated human sewage sludge is used on the farm for the production of GLOBALG.A.P. registered crops. No N/A.	Major Must
CB4.4.2 Has a risk assessment been carried out for organic fertilizer, which, prior to application, considers its source, characteristics and intended use?	Documented evidence is available to demonstrate that a food safety and environmental risk assessment for the use of organic fertilizer has been done, and that at least the following have been considered: • Type of organic fertilizer • Method of treatment to obtain the organic fertilizer • Microbial contamination (plant and human pathogens) • Weed/seed content • Heavy metal content • Timing of application, and placement of organic fertilizer (e.g. direct contact to edible part of crop, ground between crops, etc.). This also applies to substrates from biogas plants.	Minor Must
CB4.4.3 Is organic fertilizer stored in an appropriate manner that reduces the risk of contamination of the environment?	Organic fertilizers shall be stored in a designated area. Appropriate measures, adequate according to the risk assessment in AF 1.2.1, have been taken to prevent the contamination of water sources (e.g. concrete foundation and walls, specially built leak-proof container, etc.) or shall be stored at least 25 meters from water sources.	Minor Must
CB4.5 Nutrient Content of Inorganic Fertilizers		
4.5.1 Is the content of major nutrients (NPK) of applied fertilizers known?	Documented evidence/labels detailing major nutrient content (or recognized standard values) is available for all fertilizers used on crops grown under GLOBALG.A.P. within the last 24-month	Minor Must

Control point	Compliance	Level
	period.	
4.5.2 Are purchased inorganic fertilizers accompanied by documented evidence of chemical content, which includes heavy metals?	Documented evidence detailing chemical content, including heavy metals, is available for all inorganic fertilizers used on crops grown under GLOBALG.A.P. within the last 12-month period.	Recommend.

CB5 WATER MANAGEMENT

Water is a scarce natural resource and irrigation should be designed and planned by appropriate forecasting and/or by technical equipment allowing for the efficient use of irrigation water. For information about responsible water use, see Annex CB 1.

Control point	Compliance	Level
CB5.1 Predicting Irrigation Requirements		
5.1.1 Are tools used routinely to calculate and optimize the crop irrigation requirements?	The producer can demonstrate that crop irrigation requirements are calculated based on data (e.g. local agricultural institute data, farm rain gauges, drainage trays for substrate growing, evaporation meters, water tension meters for the percentage of soil moisture content). Where on-farm tools are in place, these should be maintained to ensure that they are effective and in a good state of repair. N/A only for rain-fed crops.	Minor Must
CB5.2 Efficient Water Use on Farm		
CB5.2.1 Has a risk assessment been undertaken that evaluates environmental issues for water management on the farm and has it been reviewed by the management within the previous 12 months?	There is a documented risk assessment that identifies environmental impacts of the water sources, distribution system and irrigation and crop washing usages. In addition, the risk assessment shall take into consideration the impact of own farming activities on off-farm environments, where information is known to be available. The risk assessment shall be completed, fully implemented and it shall be reviewed and approved annually by the management. See 'Annex AF 1 GLOBALG.A.P. Guideline: Risk Assessment - General' and 'Annex CB 1 GLOBALG.A.P. Guideline: Responsible On-Farm Water Management for Crops' for further guidance. No N/A.	Major Must (obligatory as Major Must from 1 July 2017)
CB5.2.2 Is there a water management plan available that identifies water sources and measures to	There is a written and implemented action plan, approved by the management within the previous 12 months, which identifies water sources and measures to ensure efficient use and application.	Major Must (obligatory as Major

Control point	Compliance	Level
ensure the efficiency of application and which management has approved within the previous 12 months?	The plan shall include one or more of the following: Maps (see AF 1.1.1), photographs, drawings (hand drawings are acceptable), or other means to identify the location of water source(s), permanent fixtures and the flow of the water system (including holding systems, reservoirs or any water captured for re-use). Permanent fixtures, including wells, gates, reservoirs, valves, returns, and other above-ground features that make up a complete irrigation system, shall be documented in such a manner as to enable location in the field. The plan shall also assess the need for the maintenance of irrigation equipment. Training and/or retraining of personnel responsible for the oversight or performance duties shall be provided. Short and long-term plans for improvement, with timescales where deficiencies exist, shall be included. This can either be an individual plan or a regional activity that the farm may be participating in or is covered by such activities.	Must from 1 July 2017)
CB5.2.3 Are records for crop irrigation/fertilization water usage and for the previous individual crop cycle(s) with total application volumes maintained?	The producer shall keep records of the usage of crop irrigation/fertilization water that include the date, cycle duration, actual or estimated flow rate, and the volume (per water meter or per irrigation unit) updated on a monthly basis, based on the water management plan and an annual total. This can also be the hours of systems operating on a timed flow basis.	Minor Must
CB5.3 Water Quality		
CB5.3.1 Is the use of treated sewage water in pre-harvest activities justified according to a risk assessment?	Untreated sewage is not used for irrigation/fertilization or other pre-harvest activities. Where treated sewage water or reclaimed water is used, water quality shall comply with the WHO published 'Guidelines for the Safe Use of Wastewater and Excreta in Agriculture and Aquaculture 2006'. Also, when there is reason to believe that the water may be coming from a possibly polluted source (i.e. because of a village upstream, etc.) the producer shall demonstrate through analysis that the water complies with the WHO guideline requirements or the local legislation for irrigation water. No N/A.	Major Must
CB5.3.2 Has a risk assessment on	A risk assessment that takes into consideration, at a minimum, the following shall be performed	Minor Must

Control point	Compliance	Level
physical and chemical pollution of water used on pre-harvest activities (e.g. irrigation/fertilization, washings, spraying) been completed and has it been reviewed by the management within the last 12 months?	and documented: • Identification of the water sources and their historical testing results(if applicable) • Method(s) of application (see Annex CB 1 for examples) • Timing of water use (during crop growth stage) • Contact of water with the crop • Characteristics of the crop and the growth stage • Purity of the water used for PPP applications PPP must be mixed in water whose quality does not compromise the effectiveness of the application. Any dissolved soil, organic matter or minerals in the water can neutralize the chemicals. For guidance, producers must obtain the required water standards from the product label, the literature provided by the chemical manufacturers, or seek advice from a qualified agronomist. The risk assessment shall be reviewed by the management every year and updated any time there is a change made to the system or a situation occurs that could introduce an opportunity to contaminate the system. The risk assessment shall address potential physical (e.g. excessive sediment load, rubbish, plastic bags, bottles) and chemical hazards and hazard control procedures for the water distribution system.	
CB5.3.3 Is water used on pre-harvest activities analyzed at a frequency in line with the risk assessment (CB 5.3.2) taking into account current sector specific standards?	Water testing shall be part of the water management plan as directed by the water risk assessment and current sector specific standards or relevant regulations for the crops being grown. There shall be a written procedure for water testing during the production and harvest season, which includes frequency of sampling, who is taking the samples, where the sample is taken, how the sample is collected, the type of test, and the acceptance criteria. N/A for sub-scope Flowers and Ornamentals.	Minor Must
CB5.3.4 According to the risk assessment in CB 5.3.2 and current sector specific standards, does the	If according to the risk assessment and current sector specific standards there is a risk of contamination, the laboratory analysis provides a record of the relevant identified chemical and physical contaminants.	Minor Must

Control point	Compliance	Level
laboratory analysis consider chemical and physical contamination, and is the laboratory accredited against ISO 17025 or by competent national/local authorities for testing water?	Analysis results from an appropriate laboratory accredited against ISO 17025 or equivalent standard, or laboratories approved for water testing by the competent national/local authorities are available. N/A for sub-scope Flowers and Ornamentals.	
CB5.3.5 Are corrective actions taken based on adverse results from the risk assessment before the next harvest cycle?	Where required, corrective actions and documentation are available as part of the management plan as identified in the water risk assessment and current sector specific standards. N/A for sub-scope Flowers and Ornamentals.	Minor Must
CB5.4 Supply of Irrigation/ fertilization Water		
CB5.4.1 Where legally required, are there valid permits/licenses available for all farm water extraction, water storage infrastructure, on-farm usage and, where appropriate, any subsequent water discharge?	There are valid permits/licenses available issued by the competent authority for all farm water extraction; water storage infrastructure; all on-farm water usage including but not restricted to irrigation, product washing or flotation processes; and where legally required, for water discharge into river courses or other environmentally sensitive areas. These permits/licenses shall be available for inspection and have valid dates.	Minor Must
CB 5.4.2 Where the water permits/licenses indicate specific restrictions, do the water usage and discharge records confirm that the management has complied with these?	It is not unusual for specific conditions to be set in the permits/licenses, such as hourly, daily, weekly, monthly, or yearly extraction volumes or usage rates. Records shall be maintained and available to demonstrate that these conditions are being met.	Major Must
CB5.5 Water Storage Facilities		
CB 5.5.1 Are water storage facilities present and well maintained to take advantage of periods of maximum water availability?	Where the farm is located in areas of seasonal water availability, there are water storage facilities for water use during periods when water availability is low. Where required, they are legally authorized, in a good state of repair, and appropriately fenced/secured to prevent accidents.	Recom.

CB 6. INTEGRATED PEST MANAGEMENT

Integrated pest management (IPM) involves the careful consideration of all available pest control techniques and the subsequent integration of appropriate measures that discourage the development of pest populations and keeps plant protection products and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment. An IPM toolbox (Annex CB 2) has been developed to provide alternative actions for the application of IPM techniques in the commercial production of agricultural and horticultural crops. Given the natural variation on pest development for the different crops and areas, any IPM system shall be implemented in the context of local physical (climatic, topographical etc.), biological (pest complex, natural enemy complex, etc.), and economic conditions.

Control point	Compliance	Level
CB6.1 Has assistance with the implementation of IPM systems been obtained through training or advice?	Where an external adviser has provided assistance, training and technical competence shall be demonstrated via official qualifications, specific training courses, etc., unless this person has been employed for that purpose by a competent organization (e.g. official advisory services). Where the technically responsible person is the producer, experience shall be complemented by technical knowledge (e.g. access to IPM technical literature, specific training course attendance, etc.) and/or the use of tools (software, on-farm detection methods, etc.).	Minor Must
CB6.2 Prevention?	The producer shall show evidence of implementing at least 2 activities per registered crop that include the adoption of production practices that could reduce the incidence and intensity of pest attacks, and thereby reducing the need for intervention.	Major Must
CB6.3 Observation and Monitoring?	The producer shall show evidence of a) implementing at least 2 activities per registered crop that will determine when and to what extent pests and their natural enemies are present, and b) using this information to plan what pest management techniques are required.	Major Must
CB6.4 Intervention?	The producer shall show evidence that in situations where pest attacks adversely affect the economic value of a crop, intervention with specific pest control methods will take place. Where possible, non-chemical approaches shall be considered. N/A when the producer did not need to intervene.	Major Must
CB6.5 Have anti-resistance	When the level of a pest, disease or weed requires repeated controls in the crops, there is	Minor Must

Control point	Compliance	Level
recommendations, either on the label or other sources, been followed to maintain the effectiveness of available PPPs?	evidence that anti-resistance recommendations (where available) are followed.	

CB7 PLANT PROTECTION PRODUCTS

In situations where a pest attack will adversely affect the economic value of a crop, it may be necessary to intervene using specific pest control methods, including PPPs. The correct use, handling and storage of plant protection products are essential.

Control point	Compliance	Level
CB71.1 Is a current list kept of PPPs that are authorized in the country of production for use on crops being grown?	A list is available for the commercial brand names of PPPs (including their active ingredient composition or beneficial organisms) that are authorized on crops being, or which have been, grown on the farm under GLOBALG.A.P. within the last 12 months.	Minor Must
CB7.1.2 Does the producer only use PPPs that are currently authorized in the country of use for the target crop (i.e. where such an official registration scheme exists)?	All the PPPs applied are officially and currently authorized or permitted by the appropriate governmental organization in the country of application. Where no official registration scheme exists, refer to the GLOBALG.A.P. guideline on this subject (Annex CB 3) as well as the 'FAO International Code of Conduct on the Distribution and Use of Pesticides'. Refer also to Annex CB 3 for cases where the producer takes part in legal field trials for final approval of PPPs by the local government. No N/A.	Major Must
CB7.1.3 Is the PPP that has been applied appropriate for the target as recommended on the product label?	All the PPPs applied to the crop are suitable and can be justified (according to label recommendations or official registration body publication) for the pest, disease, weed or target of the PPP intervention. If the producer uses an off-label PPP, there shall be evidence of official approval for use of that PPP on that crop in that country. No N/A.	Major Must
7.1.4 Are invoices of PPPs kept?	Invoices or packing slips of all PPPs used and/or stored shall be kept for record keeping and available at the time of the external inspection. No N/A.	Minor Must
7.2 Advice on Quantity and Type of Plant Protection Products		
7.2.1 Are the persons selecting the PPPs	Where the PPP records show that the technically responsible person making the	Major Must

Control point	Compliance	Level
competent to make that choice?	choice of the PPPs is an external qualified adviser, technical competence shall be demonstrated via official qualifications or specific training course attendance certificates. Fax and e-mails from advisers, governments, etc. are permissible. Where the PPP records show that the technically responsible person making the choice of PPPs is the producer or designated employee, experience shall be complemented by technical knowledge that can be demonstrated via technical documentation (e.g. product technical literature, specific training course attendance, etc.).	
CB7.3 Records of Application		
CB7.3.1 Are records of all PPP applications kept and do they include the following minimum criteria: • Crop name and/or variety • Application location • Date and end time of application • Product trade name and active ingredient • Pre-harvest interval	All PPP application records shall specify: • The crop and/or variety treated. No N/A. • The geographical area, the name or reference of the farm, and the field, orchard or greenhouse where the crop is located. No N/A. • The exact dates (day/month/year) and end time of the application. The actual date (end date, if applied more than one day) of application shall be recorded. Producers need not record end times, but in these cases it shall be considered that application was done at the end of the day recorded. This information shall be used to cross-check compliance with the pre-harvest intervals. No N/A. • The complete trade name (including formulation) and active ingredient or beneficial organism with scientific name. The active ingredient shall be recorded or it shall be possible to connect the trade name information to the active ingredient. No N/A. • The pre-harvest interval has been recorded for all PPP applications where a pre-harvest interval is stated on the product label or, if not on label, as stated by an official source. No N/A unless Flowers and Ornamentals certification.	Major Must
CB7.3.2 Operator?	Full name and/or signature of the responsible operator(s) applying the PPPs shall be recorded. For electronic software systems, measures shall be in place to ensure authenticity	Minor Must

Control point	Compliance	Level
	of records. If a single individual makes all the applications, it is acceptable to record the operator details only once. If there is a team of workers doing the application, all of them need to be listed in the records. No N/A.	
CB7.3.3 Justification for application?	The name of the pest(s), disease(s) and/or weed(s) treated is documented in all PPP records. If common names are used, they shall correspond to the names stated on the label. No N/A.	Minor Must
CB7.3.4 Technical authorization for application?	The technically responsible person making the decision on the use and the doses of the PPP(s) being applied has been identified in the records. If a single individual authorizes all the applications, it is acceptable to record this person's details only once. No N/A.	Minor Must
CB7.3.5 Product quantity applied?	All PPP application records specify the amount of product to be applied in weight or volume or the total quantity of water (or other carrier medium) and dose in g/l or internationally recognized measures for the PPP. No N/A.	Minor Must
CB7.3.6 Application machinery used?	The application machinery type (e.g. knapsack, high volume, U.L.V., via the irrigation system, dusting, fogger, aerial, or another method) for all the PPP applied (if there are various units, these are identified individually) is detailed in all PPP application records. If it is always the same unit of application machinery (e.g. only 1 boom sprayer), it is acceptable to record the details only once. No N/A.	Minor Must
CB7.3.7 Weather conditions at time of application?	Local weather conditions (e.g. wind, sunny/covered and humidity) affecting effectiveness of treatment or drift to neighboring crops shall be recorded for all PPP applications. This may be in the form of pictograms with tick boxes, text information, or another viable system on the record. N/A for covered crops.	Minor Must
CB7.3.8 Does the producer take active measures to prevent pesticide drift to neighboring plots?	The producer shall take active measures to avoid the risk of pesticide drift from own plots to neighboring production areas. This may include, but is not limited to, knowledge of what the neighbors are growing, maintenance of spray equipment, etc.	Minor Must
CB7.3.9 Does the producer take active measures to prevent	The producer shall take active measures to avoid the risk of pesticide drift from adjacent plots e.g. by making agreements and organizing communication with producers from	Recom.

Control point	Compliance	Level
pesticide drift from neighboring plots?	neighboring plots in order to eliminate the risk for undesired pesticide drift, by planting vegetative buffers at the edges of cropped fields, and by increasing pesticide sampling on such fields. N/A if not identified as risk.	

CB 7.4 Pre-Harvest Interval (N/A for Flowers and Ornamentals)		
CB7.4.1 Have the registered pre-harvest intervals been complied with?	The producer shall demonstrate that all pre-harvest intervals have been complied with for PPPs applied to the crops, through the use of clear records such as PPP application records and crop harvest dates. Specifically in continuous harvesting situations, there are systems in place in the field, orchard or greenhouse (e.g. warning signs, time of application, etc.) to ensure compliance with all pre-harvest intervals. Refer to CB 7.6.4. No N/A, unless Flowers and Ornamentals production.	Major Must
CB 7.5 Disposal of Surplus Application Mix		
CB7.5.1 Is surplus application mix or tank washings disposed of in a way that does not compromise food safety and the environment?	Applying surplus spray and tank washings to the crop is a first priority under the condition that the overall label dose rate is not exceeded. Surplus mix or tank washings shall be disposed of in a manner that does compromise neither food safety nor the environment. Records are kept. No N/A.	Minor Must
CB7.6 Plant Protection Product Residue Analysis		
7.6.1 Can the producer 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?	The producer or the producer's customer shall have available a list of current applicable MRLs for all market(s) in which produce is intended to be traded (domestic and/or international). The MRLs shall be identified by either demonstrating communication with clients confirming the intended market(s), or by selecting the specific country(ies) (or group of countries) in which produce is intending to be traded, and presenting evidence of compliance with a residue screening system that meets the current applicable MRLs of that country. Where a group of countries is targeted together for trading, the residue screening system shall meet the strictest current applicable MRLs in the group. Refer to 'Annex CB 4 GLOBALG.A.P. Guideline: CB 7.6 Residue Analysis'.	Major Must

7.6.2 Has action been taken to meet the MRLs of the market in which the producer is intending to trade the produce?	Where the MRLs of the market in which the producer is intending to trade the produce are stricter than those of the country of production, the producer or the producer's customer shall demonstrate that during the production cycle these MRLs have been taken into account (i.e. modification where necessary of PPP application regime and/or use of produce residue testing results).	Major Must
7.6.3 Has the producer completed a risk assessment covering all registered crops to determine if the products will be compliant with the MRLs in the country of destination?	The risk assessment shall cover all registered crops and evaluate the PPP use and the potential risk of MRL exceedance. Risk assessments normally conclude that there is a need to undertake residue analysis and identify the number of analyses, when and where to take the samples, and the type of analysis according to 'Annex CB 5 GLOBALG.A.P. Guideline: CB 7.6.3 Maximum Residue Limit Exceedance Risk Assessment'. The Annex CB 5 B 'Mandatory Minimum Criteria of a Residue Monitoring System (RMS)' is obligatory. A risk assessment that concludes that there is no need to undertake residue analysis shall have identified that there is: • A track history of 4 or more years of analytical verification without detecting incidences (e.g. exceedances, use of non-authorized PPPs, etc.) • No or minimal use of PPPs • No use of PPPs close to harvesting (spraying to harvest interval is much bigger than the PPP pre-harvest interval) • A risk assessment validated by an independent third party (e.g. CB inspector, expert, etc.) or the customer Exceptions to these conditions could be those crops where there is no use of PPPs and the environment is very controlled, and for these reasons the industry does not normally undertake PPP residue analysis (mushrooms could be an example).	Major Must
7.6.4 Is there evidence of residue tests, based on the results of the risk assessment?	Based on the outcome of the risk assessment, current documented evidence or records shall be available of PPP residue analysis results for the GLOBALG.A.P. registered product crops, or of participation in a PPP residue monitoring system that is traceable to the farm and compliant with the minimum requirements set in Annex CB 5. When residue tests are required	Major Must

	as a result of the risk assessment, the criteria relating to sampling procedures, accredited labs, etc., shall be followed. Analysis results have to be traceable back to the specific producer and production site where the sample comes from.	
7.6.5 Correct sampling procedures are followed?	Documented evidence exists demonstrating compliance with applicable sampling procedures. See 'Annex CB 4 GLOBALG.A.P. Guideline: CB 7.6 Residue Analysis'.	Minor Must
7.6.6 The laboratory used for residue testing is accredited by a competent national authority to ISO 17025 or equivalent standard?	There is clearly documented evidence (on letterhead, copies of accreditations, etc.) that the laboratories used for PPP residue analysis have been accredited or are in the process of accreditation to the applicable scope by a competent national authority to ISO 17025 or an equivalent standard. In all cases, the laboratories shall show evidence of participation in proficiency tests (e.g. FAPAS must be available). See 'Annex CB 4 GLOBALG.A.P. Guideline: CB 7.6 Residue Analysis'.	Minor Must
7.6.7 An action plan is in place in the event of an MRL is exceeded?	There is a clearly documented procedure of the remedial steps and actions (this shall include communication to customers, product tracking exercise, etc.) to be taken where a PPP residue analysis indicates an MRL (either of the country of production or the countries in which the harvested product is intended to be traded, if different) is exceeded. See 'Annex CB 4 GLOBALG.A.P. Guideline: CB 7.6 Residue Analysis'. This may be part of the recall/withdrawal procedure required by AF 9.1.	Major Must
CB 7.7 Plant Protection Product Storage		
7.7.1 Are PPPs stored in accordance with local regulations in a secure place with sufficient facilities for measuring and mixing them, and are they kept in their original package?	The PPP storage facilities shall: • Comply with all the appropriate current national, regional and local legislation and regulations • Be kept secure under lock and key. No N/A. • Have measuring equipment whose graduation for containers and calibration verification for scales been verified annually by the producer to assure accuracy of mixtures, and are equipped with utensils (e.g. buckets, water supply point, etc.), and they are kept clean for the safe and efficient handling of all PPPs that can be applied. This also applies to the filling/mixing area if this is different. No	Major Must

	N/A. Contain the PPPs in their original containers and packs. In the case of breakage only, the new package shall contain all the information of the original label. Refer to CB 7.9.1. No N/A.	
7.7.2 Sound?	The PPP storage facilities are built in a manner that is structurally sound and robust. Storage capacity shall be appropriate for the highest amount of PPPs that need to be stored during the PPP application season, and the PPPs are stored in a way that is not dangerous for the workers and does not create a risk of cross-contamination between them or with other products. No N/A.	Minor Must
7.7.3 Appropriate to the temperature conditions?	The PPPs are stored according to label storage requirements. No N/A.	Minor Must
7.7.4 Well ventilated (in the case of walk-in storage)?	The PPP storage facilities have sufficient and constant ventilation of fresh air to avoid a build-up of harmful vapors. No N/A.	Minor Must
7.7.5 Well lit?	The PPP storage facilities have or are located in areas with sufficient illumination by natural or artificial lighting to ensure that all product labels can be easily read while on the shelves. No N/A.	Minor Must
7.7.6 Located away from other materials?	The minimum requirement is to prevent cross-contamination between PPPs and other surfaces or materials that may enter into contact with the edible part of the crop by the use of a physical barrier (wall, sheeting, etc.). No N/A.	Minor Must
7.7.7 Is all PPP storage shelving made of non-absorbent material?	The PPP storage facilities are equipped with shelving that is not absorbent in case of spillage (e.g. metal, rigid plastic, or covered with impermeable liner, etc.).	Minor Must
7.7.8 Is the PPP storage facility able to retain spillage?	The PPP storage facilities have retaining tanks or products are bonded according to 110 % of the volume of the largest container of stored liquid, to ensure that there cannot be any leakage, seepage, or contamination to the exterior of the facility. No N/A.	Minor Must
7.7.9 Are there facilities to deal with spillage?	The PPP storage facilities and all designated fixed filling/mixing areas are equipped with a container of absorbent inert material such as sand, floor brush and dustpan, and plastic bags that must be in a fixed location to be used exclusively in case of spillage of PPPs. No N/A.	Minor Must

7.7.10 Are keys and access to the PPP storage facility limited to workers with formal training in the handling of PPPs?	The PPP storage facilities are kept locked and physical access is only granted in the presence of persons who can demonstrate formal training in the safe handling and use of PPPs. No N/A.	Minor Must
7.7.11 Are PPPs approved for use on the crops registered for GLOBALG.A.P. certification stored separately within the storage facility from PPPs used for other purposes?	PPPs used for purposes other than for registered and/or certified crops (i.e. use in garden etc.) are clearly identified and stored separately in the PPP store.	Minor Must
7.7.12 Are liquids not stored on shelves above powders?	All the PPPs that are liquid formulations are stored on shelving that is never above those products that are powder or granular formulations. No N/A.	Minor Must
7.7.13 Is there an up-to-date PPP stock inventory or calculation of stock with incoming PPPs and records of use available?	The stock inventory (type and amount of PPPs stored, number of units, e.g. bottles, is allowed) shall be updated within a month after there is a movement of the stock (in and out). The stock update can be calculated by registration of supply (invoices or other records of incoming PPPs) and use (treatments/applications), but there shall be regular checks of the actual content to avoid deviations with calculations.	Minor Must
7.7.14 Is the accident procedure visible and accessible within 10 meters of the PPP/chemical storage facilities?	An accident procedure containing all information detailed in AF 4.3.1 and including emergency contact telephone numbers shall visually display the basic steps of primary accident care and be accessible by all persons within 10 meters of the PPP/chemical storage facilities and designated mixing areas. No N/A.	Minor Must
7.7.15 Are there facilities to deal with accidental operator contamination?	All PPP/chemical storage facilities and all filling/mixing areas present on the farm have eye washing amenities, a source of clean water at a distance no farther than 10 meters, and a first aid kit containing the relevant aid material (e.g. a pesticide first aid kit might need aid material for corrosive chemicals or alkaline liquid in case of swallowing, and might not need bandages and splints), all of which are clearly and permanently marked via signage. No N/A.	Minor Must
CB7.8 Plant Protection Product Handling (N/A if no Plant Protection Product Handling)		
7.8.1 Does the producer offer all workers who have	The producer provides all workers who are in contact with PPPs the option of being voluntarily submitted to health checks annually	Minor Must.

contact with PPPs the possibility to be submitted to annual health checks or with a frequency according to a risk assessment that considers their exposure and toxicity of products used?	or according to health and safety risk assessment (see AF 4.1.1). These health checks shall comply with national, regional, or local codes of practice, and use of results shall respect the legality of disclosure of personal data.	
7.8.2 Are there procedures dealing with re-entry times on the farm?	There are clear, documented procedures based on the label instructions that regulate all the re-entry intervals for PPPs applied to the crops. Special attention should be paid to workers at the greatest risk, i.e. pregnant/lactating workers, and the elderly. Where no re-entry information is available on the label, there are no specific minimum intervals, but the spray must have dried on the plants before workers re-enter the growing area.	Major Must
7.8.3 If concentrate PPPs are transported on and between farms, are they transported in a safe and secure manner?	All transport of PPPs shall be in compliance with all applicable legislation. When legislation does not exist, the producer shall in any case guarantee that the PPPs are transported in a way that does not pose a risk to the health of the worker(s) transporting them.	Minor Must
7.8.4 When mixing PPPs, are the correct handling and filling procedures followed as stated on the label?	Facilities, including appropriate measuring equipment, shall be adequate for mixing PPPs, so that the correct handling and filling procedures, as stated on the label, can be followed. No N/A.	Minor Must
7.9 Empty Plant Protection Product Containers		
7.9.1 Are empty containers 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 returned to the application equipment tank or disposed of in accordance with CB	Pressure-rinsing equipment for PPP containers shall be installed on the PPP application machinery or there shall be clear written instructions to rinse each container at least 3 times prior to its disposal. Either via the use of a container-handling device or according to a written procedure for the application equipment operators, the rinsate from the empty PPP containers shall always be put back into the application equipment tank when mixing, or disposed of in a manner that does compromise neither food safety nor the environment. No N/A.	Major Must

7.5.1?		
7.9.2Is re-use of empty PPP containers for purposes other than containing and transporting the identical product being avoided?	There is evidence that empty PPP containers have not been or currently are not being re-used for anything other than containing and transporting identical product as stated on the original label. No N/A.	Minor Must
7.9.3Are empty containers kept secure until disposal is possible?	There is a designated secure store point for all empty PPP containers prior to disposal that is isolated from the crop and packaging materials (i.e. permanently marked via signage and locked, with physically restricted access for persons and fauna).	Minor Must
7.9.4Does disposal of empty PPP containers occur in a manner that avoids exposure to humans and contamination of the environment?	Producers shall dispose of empty PPP containers using a secure storage point, a safe handling system prior to the disposal, and a disposal method that complies with applicable legislation and avoids exposure to people and the contamination of the environment (watercourses, flora and fauna). No N/A.	Minor Must
7.9.5Are official collection and disposal systems used when available, and in that case are the empty containers adequately stored, labeled, and handled according to the rules of a collection system?	Where official collection and disposal systems exist, there are records of participation by the producer. All the empty PPP containers, once emptied, shall be adequately stored, labeled, handled, and disposed of according to the requirements of the official collection and disposal schemes, where applicable.	Minor Must
7.9.6Are all local regulations regarding disposal or destruction of containers observed?	All the relevant national, regional and local regulations and legislation, if such exist, have been complied with regarding the disposal of empty PPP containers.	Major Must
7.10 Obsolete Plant Protection Products		
7.10.1 Are obsolete PPPs securely maintained and identified and disposed of by authorized or approved channels?	There are records that indicate that obsolete PPPs have been disposed of via officially authorized channels. When this is not possible, obsolete PPPs are securely maintained and identifiable.	Minor Must

7.11 Application of Substances other than Fertilizer and Plant Protection Products		
7.11.1 Are records available for all other substances, including those that are made on-farm, used on crops, and/or soil that are not covered under the sections on fertilizer and PPPs ?	If preparations, such as plant strengtheners, soil conditioners, or any other such substances are used on certified crops, be they home-made or purchased, records shall be available. These records shall include the name of the substance (e.g. plant from which it derives), the crop, the field, the date, and the amount applied. In case of purchased products, also the trade or commercial name, if applicable, and the active substance or ingredient, or the main source (e.g. plants, algae, mineral, etc.) shall be recorded. If in the country of production, a registration scheme for this substance(s) exists, it has to be approved. Where the substances do not require registration for use in the country of production, the producer shall make sure that the use does not compromise food safety. Records of these materials must contain information about the ingredients where available, and if there is a risk of exceeding MRLs, CB 7.6.2 must be met.	Minor Must

CB8 EQUIPMENT

Control point	Compliance	Level
8.1 Is equipment sensitive to food safety (e.g. PPP sprayers, irrigation/fertigation equipment, post-harvest product application equipment) maintained in a good state of repair, routinely verified and, where applicable, calibrated at least annually, and are records of measures taken within the previous 12 months available?	The equipment is kept in a good state of repair with documented evidence of up-to-date maintenance sheets for all repairs, oil changes, etc. undertaken. E.g. PPP sprayers: See Annex CB 6 for guidance on compliance with visual inspection and functional tests of application equipment. The calibration of the PPP application machinery (automatic and non-automatic) has been verified for correct operation within the last 12 months and this is certified or documented either by participation in an official scheme (where it exists) or by having been carried out by a person who can demonstrate their competence. If small handheld measures not individually identifiable are used, then their average capacity has been verified and documented, with all such items in use having been compared to a standard measure at least annually. Irrigation/fertilization equipment: As a	Minor Must

Control point	Compliance	Level
	minimum, annual maintenance records shall be kept for all methods of irrigation/fertilization machinery/techniques used.	
8.2 Is equipment sensitive to the environment and other equipment used on the farming activities (e.g. fertilizer spreaders, equipment used for weighing and temperature control) routinely verified and, where applicable, calibrated at least annually?	The equipment used is kept in a good state of repair with documented evidence of up-to-date maintenance sheets for all repairs, oil changes, etc. undertaken. E.g. fertilizer spreader: There shall exist, as a minimum, records stating that the verification of calibration has been carried out by a specialized company, supplier of fertilization equipment or by the technically responsible person of the farm within the last 12 months. If small handheld measures not individually identifiable are used, then their average capacity has been verified and documented, with all such items in use having been compared to a standard measure at least annually.	Minor Must
8.3 Is the producer involved in an independent calibration-certification scheme, where available?	The producer's involvement in a calibration scheme is documented. In the case the producer uses an official calibration system cycle longer than one year, the producer still requires internal annual verification of the calibration as per CB 8.1.	Recommend.
8.4 Is the PPP equipment stored in such a way as to prevent product contamination?	The equipment used in the application of PPPs (e.g. spray tanks, knapsacks) is stored in a secure way that prevents product contamination or other materials that may enter into contact with the edible part of the harvested products.	Minor Must

C -FV MODULES (FRUIT AND VEGETABLES)

FV1 SITE MANAGEMENT

Control point	Compliance	Level
FV1.1 Risk Assessment		
FV1.1.1 Does the risk assessment for the farm site carried out as identified in AF 1.2.1 make particular reference to microbial contamination?	As part of their risk assessment for the farm site (see AF 1.2.1), producers shall identify the locations of nearby commercial animal operations, composting and potential sources for ingress by domestic and wild animals, and other contamination routes such as floodwater intrusion and dust.	Major Must
FV1.1.2 Has a management plan that establishes and	A management plan addresses the risks identified in FV 1.1.1 and describes the hazard control procedures that justify that the	Major Must

Control point	Compliance	Level
implements strategies to minimize the risks identified in FV 1.1.1 been developed and implemented?	site in question is suitable for production. This plan shall be appropriate to the products being produced and there shall be evidences of its implementation and effectiveness.	

FV2 SOIL MANAGEMENT (N/A IF NO SOIL FUMIGATION IS PRACTICED)

Control point	Compliance	Level
FV2.1 Soil Fumigation (N/A if no Soil Fumigation)		
2.1.1 Is there a written justification for the use of soil fumigants?	There is written evidence and justification for the use of soil fumigants including location, date, active ingredient, doses, method of application and operator. The use of methyl bromide as a soil fumigant is not permitted.	Minor Must
2.1.2 Is any pre-planting interval complied with prior to planting?	Pre-planting interval shall be recorded.	Minor Must

FV3 SUBSTRATES (N/A IF SUBSTRATES ARE NOT USED)

Control point	Compliance	Level
FV3.1 Does the producer participate in substrate recycling programs for substrates where available?	The producer keeps records documenting quantities recycled and dates. Invoices/loading dockets are acceptable. If there is no participation in a recycling program available, it should be justified.	Recommend.
FV3.2 If chemicals are used to sterilize substrates for reuse, have the location, the date of sterilization, type of chemical, method of sterilization, name of the operator, and pre-planting interval been recorded?	When the substrates are sterilized on the farm, the name or reference of the field, orchard, or greenhouse is recorded. If sterilized off farm, then the name and location of the company that sterilizes the substrate are recorded. The following are all correctly recorded: The dates of sterilization (day/month/year), the name and active ingredient, the machinery (e.g. 1000 l tank, etc.), the method (e.g. drenching, fogging, etc.), the operator's name (i.e. the person who actually applied the chemicals and did the sterilization), and the pre-planting interval.	Major Must
FV3.3 If a substrate of natural origin is used, can it be demonstrated that it does not come from	Records exist that attest the source of the substrate of natural origin being used. These records demonstrate that the substrate does not come from designated conservation	Minor Must

Control point	Compliance	Level
designated conservation areas?	areas.	

FV4 PRE-HARVEST (REFER TO 'ANNEX FV 1 GLOBALG.A.P. GUIDELINE: MICROBIOLOGICAL HAZARDS DURING GROWING AND HANDLING')

Control point	Compliance	Level
4.1 Quality of Water Used on Pre-Harvest Activities (This Applies to Water Used on all Farm Activities and on the Product Itself Before it is Harvested).		
4.1.1 Is there evidence of a risk assessment covering the microbiological quality of the water used in all pre-harvest operations?	A written risk assessment of microbiological quality of the water is conducted. It includes water source, proximity to potential sources of contamination, application timing (growth stage of the crop), application method, and placement of application (harvestable part of the crop, other parts of the crop, ground between crops, etc.).	Major Must
4.1.2a In case of leafy greens (also called potherbs, greens, vegetable greens, leafy greens, or salad greens); is water used on pre-harvest activities analyzed as part of the risk assessment and at a frequency in line with that risk assessment (FV 4.1.1) and no less than indicated in Annex FV 1?	GLOBALG.A.P. producers shall comply with the local applicable limits for microbiological contaminants in the water used on pre-harvest activities, and in their absence use the WHO recommendations as a reference for the decision-making process for preventive and/or corrective actions (see Annex FV 1). Compliance with the applicable thresholds shall be verified through water tests carried out in a frequency as indicated by the decision tree in Annex FV 1 (risk assessment). Water testing regime shall reflect the nature and extent of the water system as well as the type of product. Where substantially different water sources are used, they shall be considered separately with regard to sampling. Where one water source services multiple systems or farms it may be possible to treat this as the single origin for sampling purposes. Samples from field level shall be taken from places that are more representative of the water source, usually as close to the point of application as possible.	Major Must
4.1.2b For all crops not mentioned under FV 4.1.2a; is water used on pre-harvest activities analyzed as part of the risk assessment, at a	GLOBALG.A.P. producers shall comply with the local applicable limits for microbiological contaminants in the water used on pre-harvest activities, and in their absence use the WHO recommendations as a reference for the decision-making process for preventive and/or corrective actions (see Annex FV 1).	Minor Must (will become a Major Must as soon as

Control point	Compliance	Level
frequency in line with that risk assessment (FV 4.1.1), and no less than indicated in Annex FV 1?	Compliance with the applicable thresholds shall be verified through water tests carried out in a frequency as indicated by the decision tree in Annex FV 1 (risk assessment). Water testing regime shall reflect the nature and extent of the water system as well as the type of product. Where substantially different water sources are used, they shall be considered separately with regard to sampling. Where one water source services multiple systems or farms, it may be possible to treat this as the single origin for sampling purposes. Samples from field level shall be taken from places that are more representative of the water source, usually as close to the point of application as possible.	<i>additional guidance by GLOBALG.A.P. for other crops is published.)</i>
4.1.3 In the case the risk assessment or the water tests require it, has the producer implemented adequate actions to prevent product contamination?	When the risk assessment based on the water testing indicates risks of product contamination, action shall be required. Possible strategies to reduce the risk of product contamination arising from water use include, but are not limited to: • Treating water before use • Preventing water coming into contact with the harvestable portion of the crop • Reducing the vulnerability of the water supply • Allowing sufficient time between application and harvest to ensure an appropriate decline in pathogen populations Producers implementing these strategies shall have an adequate and reliable validation process to demonstrate that product contamination is being avoided.	Major Must
4.1.4 According to the risk assessment, FV 4.1.1, and current sector specific standards, does the laboratory analysis consider microbiological contamination, and is the laboratory accredited against	Analyses are carried out by an appropriate laboratory accredited against ISO 17025 or equivalent standard, and capable of performing microbiological analyses, or by laboratories approved for water testing by the competent national/local authorities. No N/A.	Minor Must

Control point	Compliance	Level
ISO 17025 or by competent national/local authorities for testing water?		
4.2 Application of Organic Fertilizer of Animal Origin		
4.2.1 Does the interval between the application of organic fertilizer and the product harvest not compromise food safety?	Records show that the interval between use of composted organic fertilizers and harvest does not compromise food safety (see also CB 4.4.2). When raw animal manure is used, producers shall conduct a risk assessment (CB 4.4.2) and incorporate the raw manure into the soil. - For tree crops: Prior to bud burst, or exceptionally it may be incorporated in a shorter interval based on the risk assessment but never shorter than 60 days prior to harvest; - For all other crops: At least 60 days prior to harvest for all other crops. In the case of leafy greens (also called potherbs, greens, vegetable greens, leafy greens, or salad greens) it cannot be applied after planting even if the growing cycle is longer than 60 days. Refer to Annex FV 1.	Major Must
4.3 Pre-Harvest Check		
4.3.1 Is there lack of evidence of excessive animal activity in the crop production area that is a potential food safety risk?	Appropriate measures shall be taken to reduce possible contamination within the growing area. Example subjects to be considered include: Livestock near the field, high concentrations of wildlife in the field, rodents, and domestic animals (own animals, dog walkers, etc.). Where appropriate buffer areas, physical barriers, fences should be used.	Minor Must

FV5 HARVEST AND POST-HARVEST (PRODUCT HANDLING) ACTIVITIES

Four main activities may take place after the growing season: harvest, handling at the point of harvest (on field), handling in a packinghouse (in facility), and storage/cooling. Although not all of these activities are carried out on every farm, the need to follow the appropriate hygiene principles and to maintain the tools, equipment and facilities are common and equally important for all these activities with regard to food safety. Producers shall evaluate the requirements aggregated in this section considering all the applicable activities on the farm. Control points covered in FV 5.1.1 to FV 5.8.10 may be applicable during harvest and/or handling at the point of harvest (on field) and/or handling in packinghouse (facility) and/or during storage/cooling. All these points shall be evaluated in all cases when and where applicable.

Control point	Compliance	Level
FV5.1 Principles of Hygiene (Refer to 'Annex FV 1 GLOBALG.A.P. Guideline: Microbiological Hazards During Growing and Harvest')		
5.1.1 Has a hygiene risk assessment been performed for the harvest, pre- and post-farm gate transport process, and post-harvest activities including product handling?	There is a documented hygiene risk assessment covering physical, chemical (incl. allergens) and microbiological contaminants, spillage of bodily fluids (e.g. vomiting, bleeding), and human transmissible diseases, customized to the products and processes. It shall cover all harvest and product handling activities carried out by the producer, as well as personnel, personal effects, equipment, clothing, packaging material, transport, vehicles, and product storage (also short-term storage at farm). The hygiene risk assessment shall be tailored to the activities of the farm, the crops, and the technical level of the business and be reviewed every time risks change and at least annually. No N/A.	Major Must
5.1.2 Are there documented hygiene procedures and instructions for the harvest and post-harvest processes including product handling (also when they take place directly on the field, orchard, or greenhouse) designed to prevent contamination of crop, crop production areas, food contact surfaces, and harvested product?	Based on the risk assessment, there are documented hygiene procedures for the harvesting and post-harvesting processes. Procedures shall include evaluating whether workers are fit to return to work after illness.	Major Must
5.1.3 Are the hygiene procedures and instructions for the harvest and post-harvest activities, including product handling, implemented?	The operation shall nominate the farm manager or other competent person as responsible for the implementation of the hygiene procedures by all workers and visitors. When the risk assessment determines that specific clothing (e.g. smocks, aprons, sleeves, gloves, footwear. See Annex FV 1, 5.4.2) shall be used, it shall be cleaned when it becomes soiled to the point of becoming a risk of contamination, and shall be effectively	Major Must

Control point	Compliance	Level
	maintained and stored. Visual evidence shows that no violations of the hygiene instructions and procedures occur. No N/A.	
5.1.4 Have workers received specific training in hygiene before harvesting and handling produce?	There shall be evidence that the workers received specific induction and annual training regarding the hygiene procedures for the harvesting and product handling activities. Workers shall be trained using written (in appropriate languages) and/or pictorial instructions to prevent physical (e.g. snails, stones, insects, knives, fruit residues, watches, mobile phones, etc.), microbiological and chemical contamination of the product during harvesting. Training records and evidence of attendance shall be available.	Major Must
5.1.5 Are signs that communicate the primary hygiene instructions to workers and visitors, including at least instructions to workers, to wash their hands before returning to work clearly displayed?	Signs with the main hygiene instructions shall be visibly displayed in the relevant locations and include clear instructions that hands shall be washed before handling produce. Workers handling ready-to-eat products shall wash their hands prior to start of work, after each visit to a toilet, after handling contaminated material, after smoking or eating, after breaks, prior to returning to work, and at any other time when their hands may have become a source of contamination.	Major Must
5.1.6 Are smoking, eating, chewing, and drinking confined to designated areas segregated from growing areas and products?	Smoking, eating, chewing, and drinking are confined to designated areas away from crops awaiting harvest and are never permitted in the produce handling or storage areas, unless indicated otherwise by the hygiene risk assessment. (Drinking water is the exception).	Major Must
5.2 Sanitary Facilities		
5.2.1 Do harvest workers who come into direct contact with the crops have access to appropriate handwashing equipment and make use of it?	Wash stations shall be available and maintained (hand soap, towels) in a clean and sanitary condition to allow workers to clean their hands. Personnel shall wash their hands prior to start of work, after each visit to a toilet, after handling contaminated material, after smoking or eating, after breaks, prior to returning to work, and at any other time when their hands may have become a source of contamination. Water used for hand washing shall at all times meet the microbial standard for drinking water. If this is not possible, sanitizer (e.g. alcohol-based	Major Must

Control point	Compliance	Level
	gel) shall be used after washing hands with soap and water with irrigation water quality. Hand washing stations shall be provided inside or close to toilet facilities. No N/A.	
5.2.2 Do harvest workers have access to clean toilets in the vicinity of their work?	Field sanitation units shall be designed, constructed, and located in a manner that minimizes the potential risk for product contamination and allows direct accessibility for servicing. Fixed or mobile toilets (including pit latrines) are constructed of materials that are easy to clean and they are in a good state of hygiene. Toilets are expected to be in a reasonable proximity (e.g. 500 m or 7 minutes) to place of work. Failure point = no or insufficient toilets in reasonable proximity to place of work. Not applicable is only possible when harvest workers don't come in contact with marketable produce during harvesting (e.g. mechanical harvesting). Toilets shall be appropriately maintained and stocked. (For guidance, see Annex FV 1, 5.4.1)	Minor Must
5.2.3 Do workers handling the product on the field or in a facility have access to clean toilets and hand washing facilities in the vicinity of their work?	Hand washing facilities, containing non-perfumed soap, water to clean and disinfect hands, and hand-drying facilities shall be accessible and near to the toilets (as near as possible without the potential for cross-contamination). Workers shall wash their hands prior to start of work, after each visit to a toilet, after using a handkerchief/tissue, after handling contaminated material, after smoking, eating, or drinking, after breaks, prior to returning to work, and at any other time when their hands may have become a source of contamination. When handling takes place in a facility, toilets shall be maintained in a good state of hygiene and shall not open directly onto the produce handling area, unless the door is self-closing.	Major Must
5.2.4 Are the harvest containers used exclusively for produce and are these containers, the tools used for harvesting and the harvest equipment appropriate for their intended use and	Reusable harvesting containers, harvesting tools (e.g. scissors, knives, pruning shears, etc.) and harvesting equipment (e.g. machinery) are cleaned and maintained. A documented cleaning (and, when indicated by the risk assessment, disinfection) schedule is in place to prevent produce contamination. Produce containers are only used to contain harvested product (i.e. no agricultural	Major Must

Control point	Compliance	Level
cleaned, maintained, and able to protect the product from contamination?	chemicals, lubricants, oil, cleaning chemicals, plant or other debris, lunch bags, tools, etc.).	
5.2.5 Are there suitable changing facilities for the workers?	The changing facilities should be used to change clothing and protective outer garments as required.	Recommend.
5.2.6 Are vehicles used for transport of harvested produce and/or packed product and any equipment used for loading, cleaned, and maintained where necessary according to risk?	Farm vehicles used for loading and transport of harvested produce and/or packed products are cleaned and maintained so as to prevent produce contamination (e.g. soil, dirt, animal manure, spills, etc.).	Major Must
5.3 Water Quality		
5.3.1 If ice (or water) is used during any operations relating to harvest or cooling, does it meet the microbial standards for drinking water, and is it handled under sanitary conditions to prevent produce contamination?	Any ice or water used in relation to harvest or cooling shall meet microbial standards for drinking water and shall be handled under sanitary conditions to prevent produce contamination. The only exception is in the case of cranberry fields that are harvested by flooding, where producers shall at a minimum guarantee that the water is not a source of microbiological contamination.	Major Must
5.4 Packing and Storage Areas (N/A When There is no Product Packing and/or Storing)		
5.4.1 Is harvested produce protected from contamination?	All harvested produce (regardless stored bulk or packed) shall be protected from contamination. In the case of produce packed and handled directly in the field, it shall all be removed from the field during the day (not stored on the field overnight in open-air conditions), in accordance with the harvest hygiene risk assessment results. Food safety requirements shall be complied with if produce is stored on a short time basis at the farm.	Major Must
5.4.2 Are all collection/storage/distribution points of packed produce, also those in the field, maintained in	To prevent contamination, all on- and off-farm storage and produce handling facilities and equipment (i.e. process lines and machinery, walls, floors, storage areas, etc.) shall be cleaned and/or maintained according to a documented cleaning and maintenance	Major Must

Control point	Compliance	Level
clean and hygienic conditions?	schedule that includes defined minimum frequency. Records of cleaning and maintenance shall be kept.	
5.4.3 Are packing materials appropriate for use, and are they used and stored in clean and hygienic conditions so as to prevent them from becoming a source of contamination?	Packaging material used shall be appropriate for the food safety of the products packed. To prevent product contamination, packing materials (including re-useable crates) shall be stored in a clean and hygienic area.	Major Must
5.4.4 Are bits of packaging material and other non-produce waste removed from the field?	Bits of packaging material and non-produce waste shall be removed from the field.	Minor Must
5.4.5 Are cleaning agents, lubricants, etc. stored to prevent chemical contamination of produce?	To avoid chemical contamination of produce, cleaning agents, lubricants, etc. shall be kept in a designated secure area, away from produce.	Minor Must
5.4.6 Are cleaning agents, lubricants, etc. that may come into contact with produce approved for application in the food industry? Are label instructions followed correctly?	Documented evidence exists (i.e. specific label mention or technical data sheet) authorizing use for the food industry of cleaning agents, lubricants, etc. that may come into contact with produce.	Minor Must
5.4.7 Are all forklifts and other driven transport trolleys clean and well maintained and of a suitable type to avoid contamination through emissions?	Internal transport should be maintained in a manner to avoid produce contamination, with special attention to fume emissions. Forklifts and other driven transport trolleys should be electric or gas-driven.	Recommend.
5.4.8 Is rejected and contaminated produce not introduced in the supply chain and is waste material effectively controlled?	Produce that poses a microbial food safety hazard is not harvested or is culled. Culled produce and waste materials are stored in clearly designated and segregated areas designed to avoid contamination of products. These areas are routinely cleaned and/or disinfected according to the cleaning schedule.	Major Must

Control point	Compliance	Level
in a way that it does not pose a risk of contamination?	Only daily accumulations of rejected produce and waste materials are acceptable.	
5.4.9Are breakage safe lamps and/or lamps with a protective cap used above the sorting, weighing, and storage area?	In case of breakage, light bulbs, and fixtures suspended above produce or material used for produce handling are of a safety type or are protected/shielded so as to prevent food contamination.	Major Must
5.4.10Are there written procedures for handling glass and clear hard plastic in place?	Written procedures exist for handling glass and/or clear hard plastic breakages, which could be a source of physical contamination and/or damage the product (e.g. in greenhouses, produce handling, preparation, and storage areas).	Minor Must
5.5 Temperature and Humidity Control		
5.5.1 Are temperature and humidity controls (where applicable) maintained and documented?	If produce is stored either on-farm or in a packinghouse, temperature and humidity controls (where necessary to comply with quality requirements and also for controlled atmosphere storage) shall be maintained and documented.	Minor Must
5.6 Pest Control		
5.6.1Is there a system for monitoring and correcting pest populations in the packing and storing areas?	Producers shall implement measures to control pest populations in the packing and storing areas appropriate to the farm condition. No N/A.	Major Must
5.6.2Is there visual evidence that the pest monitoring and correcting process are effective?	A visual assessment shows that the pest monitoring and correcting process are effective. No N/A.	Major Must
5.6.3Are detailed records kept of pest control inspections and necessary actions taken?	Monitoring is scheduled and there are records of pest control inspections and follow-up action plan(s).	Minor Must
5.7 Post-Harvest Washing (N/A When no Post-Harvest Washing)		
5.7.1 Is the source of water used for final product washing potable or declared suitable by the competent	The water has been declared suitable by the competent authorities and/or a water analysis has been carried out at the point of entry into the washing machinery within the last 12 months. The levels of the parameters analyzed are within accepted WHO thresholds or are	Major Must

Control point	Compliance	Level
authorities?	accepted as safe for the food industry by the competent authorities.	
5.7.2 If water is re-circulated for final product washing, has this water been filtered and are pH, concentration and exposure levels to disinfectant routinely monitored?	Where water is re-circulated for final produce washing (i.e. no further washing done by the producer before the product is sold), it is filtered and disinfected, and pH, concentration, and exposure levels to disinfectant are routinely monitored. Records are maintained. Filtering shall be done using an effective system for solids and suspensions that have a documented routine cleaning schedule according to usage rates and water volume. Where recording of automatic filter backwash events and changes in dosage rates by automated sanitizer injectors may be impossible, a written procedure/policy shall explain the process.	Major Must
5.7.3Is the laboratory carrying out the water analysis a suitable one?	The water analysis for the product washing is undertaken by a laboratory currently accredited to ISO 17025 or its national equivalent or one that can demonstrate via documentation that it is in the process of gaining accreditation.	Minor Must
5.8 Post-Harvest Treatments (N/A When no Post-Harvest Treatments)		
5.8.1Are all label instructions observed?	There are clear procedures and documentation available, (e.g. application records for post-harvest biocides, waxes, and plant protection products) that demonstrate compliance with the label instructions for chemicals applied.	Major Must
5.8.2Are all the biocides, waxes, and plant protection products used for post-harvest protection of the harvested crop officially registered in the country of use?	All the post-harvest biocides, waxes, and plant protection products used on harvested crop are officially registered or permitted by the appropriate governmental organization in the country of application. They are approved for use in the country of application and are approved for use on the harvested crop to which they are applied as indicated on the labels of the biocides, waxes and crop protection products. Where no official registration scheme exists, refer to 'Annex CB 3 GLOBALG.A.P. Guideline: Plant Protection Product Use in Countries that Allow Extrapolation' on this subject and the 'FAO International Code of Conduct on the Distribution and Use of Pesticides'.	Major Must
5.8.3Is an up-to-date list maintained of post-harvest plant protection products that are used, and	An up-to-date documented list that takes into account any changes in local and national legislation for biocides, waxes, and plant protection products is available for the commercial brand names (including any active	Minor Must

Control point	Compliance	Level
approved for use, on crops being grown?	ingredient composition) that are used as post-harvest plant protection products for produce grown on the farm under GLOBALG.A.P. within the last 12 months. No N/A.	
5.8.4Is the technically responsible person for the application of post-harvest plant protection products able to demonstrate competence and knowledge with regard to the application of biocides, waxes, and plant protection products?	The technically responsible person for the post-harvest biocides, waxes, and plant protection products applications can demonstrate a sufficient level of technical competence via nationally recognized certificates or formal training.	Major Must
5.8.5 Is the source of water used for post-harvest treatments potable or declared suitable by the competent authorities?	The water has been declared suitable by the competent authorities and/or within the last 12 months a water analysis has been carried out at the point of entry into the washing machinery. The levels of the parameters analyzed are within accepted WHO thresholds or are accepted as safe for the food industry by the competent authorities.	Major Must
5.8.6Are the biocides, waxes and plant protection products used for post-harvest treatment stored away from produce and other materials?	To avoid the chemical contamination of the produce, biocides, waxes, and plant protection products, etc. are kept in a designated secure area, away from the produce.	Major Must
5.8.7Are all records of post-harvest treatments maintained and do they include the minimum criteria listed below? • Identity of harvested crops (i.e. lot or batch of produce) • Location • Application dates	The following information is recorded in all records of post-harvest biocide, wax, and plant protection product applications: • The lot or batch of harvested crop treated • The geographical area, the name or reference of the farm, or harvested crop-handling site where the treatment was undertaken • The exact dates (day/month/year) of the applications • The type of treatment used for product application (e.g. spraying, drenching, gassing etc.) • The complete trade name (including	Major Must

Control point	Compliance	Level
- Type of treatment - Product trade name and active ingredient - Product quantity	formulation) and active ingredient or beneficial organism with scientific name. The active ingredient shall be recorded or it shall be possible to connect the trade name information to the active ingredient. The amount of product applied in weight or volume per liter of water or other carrier medium No N/A.	
5.8.8 Name of the operator?	The name of the operator who has applied the plant protection product to the harvested produce is documented in all records of post-harvest biocide, wax, and plant protection product applications.	Minor Must
5.8.9 Justification for application?	The common name of the pest/disease to be treated is documented in all records of post-harvest biocide, wax, and plant protection product applications.	Minor Must
5.8.10 Are all of the post-harvest plant protection product applications also considered under points CB 7.6?	There is documented evidence to demonstrate that the producer considers all post-harvest biocides and plant protection products applications under control point CB 7.6, and acts accordingly.	Major Must
5.9 Labeling		
5.9.1 Is product labeling, where final packing takes place, done according to the applicable food regulations in the country of intended sale and according to any customer specifications?	Where final packing takes place, product labeling shall follow the applicable food regulations in the country of intended sale and any customer specifications.	Major Must
5.9.2 Where the risk assessment indicates potential food allergen cross-contamination, are the products labeled to identify them?	Where the risk assessment indicates potential cross-contamination, the product shall be labeled according to country of production and destination legislation regarding food allergens. Cross-contamination risk (potential and intentional) shall be considered where food allergens have, for example, been packed on the same line or using the same equipment. Harvesting and packing equipment and personal protective equipment	Major Must

ANNEX II: List of Producers and Exporters

List of Vegetable Producers:

Sl. No	Name of participant	Type of participants	Mobile No.	Address
1	Md. Alamgir Hossain	Farmer	01739905745	Kuragach, Madhupur, Tangail
2	Md. Samim Hossin	Farmer/Daily Workers	01746968269	Kuragach, Madhupur, Tangail
3	Md. Usuf Alli	Farmer/Daily Workers	01779464823	Kuragach, Madhupur, Tangail
4	Md. Anichur Rahoman	Farmer/Daily Workers	01720482346	Kuragach, Madhupur, Tangail
5	Md. Mostofa	Farmer/Daily Workers	01783978568	Kuragach, Madhupur, Tangail
6	Md. Bellal	Farmer/Daily Workers	01745544500	Kuragach, Madhupur, Tangail
7	Md. Forman	Farmer/Daily Workers	01787303039	Kuragach, Madhupur, Tangail
8	Md. Hhairul Islam	Farmer/Daily Workers	01981368355	Kuragach, Madhupur, Tangail
9	Md. Aynal Hossain	Farmer/Daily Workers	01943948734	Kuragach, Madhupur, Tangail
10	Md. Subhan	Farmer/Daily Workers	01781553036	Kuragach, Madhupur, Tangail
11	Md. Robul	Farmer/Daily Workers	01964060014	Kuragach, Madhupur, Tangail

List of Fruit Producers (Mango)

Sl. No	Name of participant	Type of participants	Mobile No.	Address
1	Md. Imamul Haque	Farmer/Daily Workers	1733139504	Dhopadigirpar, Shapahar, Naogaon
2	Md. Arun Biswas	Farmer/Daily Workers	01716726570	Dhopadigirpar, Shapahar, Naogaon
3	Md. Razzak	Farmer/Daily Workers	01714228596	Dhopadigirpar, Shapahar, Naogaon

List of Exporters:

Sl. No.	Name of Company	Name of Owner	Mobile	Email
01	M/S Bangladesh Food Export Com. 28/1/C Toynbee Circular Road (3 rd Floor) , Motihjeel, Dhaka	Mr. Zahid Hasan Jinnah	01819-189980	jinnah@aitbd.net
02	M/S Morison Enterprise 5/1 Malakartola Lane, Sutrapur, Dhaka	Mr. Enayet Hossain	01712-136054	morisonenterprise@yahoo.com
03	M/S Lee Enterprise 28/1/C Toynbee Circular Road (9 rd Floor) , Motihjeel, Dhaka-100	Mr. MD. Abul Hossain	01711-522248	Leeenterprise_2010@yahoo.com
04	M/S Sonargoan International 28/1/C Toynbee Circular Road (3 rd Floor) , Motihjeel, Dhaka-1000	Mr. S.M Jamal Uddin	01711-739857	jinnah@aitbd.net
05	M/S N.H.B Corporation 28/G/1, Toynbee Circular Motihjeel C/A , Dhaka- 1000	Mr. Nazmul Haidar Bhuinyan	01843-675051	Nhbcorporation12@gmail.com
06	M/S R.R Enterprise 28/1/C Toynbee Circular Motihjeel C/A , Dhaka- 1000	Mr. Rajib Dey	01767-410949	rrenterprise.rajib@gmail.com
07	M/S Sporsha BD Trade 41, Ruplal Das Lane , Shyam Bazar, Dhaka- 1100	Mr. Surajit Saha	01715-316333	sporshabdtrade@gmail.com

ANNEX III: All Farm Base- Risk Assessment

AF 1 GLOBALG.A.P. GUIDELINE: RISK ASSESSMENT – GENERAL

Introduction to Risk Assessment

In the GLOBALG.A.P. IFA Standard, a number of risk assessments are required in order to facilitate food safety, workers' health and safety, and environmental protection. This guidance document provides support to producers.

Five Steps to Risk Assessment A risk assessment is an important step in protecting the products, workers, and business, as well as complying with GLOBALG.A.P. requirements and the law. A risk assessment helps you to focus on those risks that really matter in the workplace—the ones with the potential to cause real and serious harm. In many instances, straightforward, simple, effective, and inexpensive measures can readily control risks (e.g. ensuring spillages are cleaned up promptly so that the product cannot be contaminated). It is not expected that you eliminate all risks, but you are expected and required to protect your products and workers as far as it is reasonably practicable. This is not the only way to perform a risk assessment. There are other methods that work well, particularly for more complex risks and/or circumstances. However, we believe this method provides a straightforward approach for most producers. Workers and others have a right to be protected from harm caused by a failure to take reasonable control measures. Accidents and ill health can ruin lives and affect the business as well, if output is lost or you have to go to court. Producers are legally required to assess the risks in their workplace so that a plan to control the risks can be put in place.

What is Risk Assessment?

A risk assessment is simply a careful examination of what in your work could cause harm to the product, environment, and/or workers, so that you can evaluate whether you have taken sufficient precautions or should do more to prevent harm. Don't overcomplicate the process. In many enterprises, the risks are well-known and the necessary control measures are easy to apply. Check that you have taken reasonable precautions to avoid contamination and/or injury.

When thinking about your risk assessment, remember:

- A *hazard* is anything that may cause harm, such as chemicals, electricity, working from ladders, etc.
- The *risk* is the chance, high or low, that these and other hazards, together with an indication of how serious the harm could be, could harm somebody.

How to Assess the Risks in Your Enterprise

Step 1: Identify the hazards

Step 2: Decide who/what might be harmed and how.

Step 3: Evaluate the risks and decide on precautions.

Step 4: Record the work plan/findings and implement them.

Step 5: Review the assessment and update if necessary

Step 1: Identify the Hazards

First, you need to identify how the product, environment, and/or workers could be harmed. Here are some tips to help identify the ones that matter:

- Walk around the workplace and look at what could reasonably be expected to cause harm (e.g. situations, equipment, products, practices, etc.).
- Ask the workers (if applicable) or their representatives what they think. They may have noticed things that are not immediately obvious to you.
- Check manufacturers' instructions or data sheets for chemicals and equipment, as these can be very helpful in identifying the hazards and putting them in their true perspective.
- Review prior incidence and accident records, as these often help to identify less obvious hazards. Remember to think about long-term hazards to health (e.g. high levels of noise or exposure to harmful substances) as well as (food) safety hazards.

Step 2: Decide Who/What Might be Harmed and How

- Remember: the For each hazard, you need to be clear about who or what might be harmed. This will help you identify best way of managing the risk
- Some activities have particular requirements, (e.g. harvesting).
- Some hazards will require extra thought, especially in situations where individuals (e.g. cleaners, visitors, contractors, maintenance workers, etc.) may not be in the workplace all the time.

Step 3: Evaluate the Risks and Decide on Precautions

- Having spotted the hazards, you then have to decide what to do about them. The law requires you to do everything reasonably practicable to protect people from harm. You can work this out for yourself, but the easiest way is to compare what is being done against what are already defined as good practices.
- So first, look at what you are already doing, and think about what controls you have in place and how the work is organized. Then compare that with the good practices and see if there's more you should be doing to bring yourself up to standard. During your evaluation process, consider the following:
 - Can I get rid of the hazard altogether?
 - If not, how can I manage the risks so that harm is unlikely?

When managing risks, if possible, apply the principles below and, if possible, in the following order:

- Try a less risky option (e.g. switch to using a less hazardous chemical).
- Prevent access to the hazard (e.g. by guarding).
- Organize the work/tasks to reduce exposure to the hazard.
- Issue personal protective equipment (e.g. clothing, footwear, goggles, etc.).
- Provide welfare facilities (e.g. first aid and washing facilities for removal of contamination)

Improving health and safety need not cost a lot. For instance, placing a mirror on a dangerous blind corner to help prevent vehicle accidents is a low-cost precaution considering the risks. Failure to take simple precautions can cost you a lot more if an accident does happen. Involve staff (if applicable), so that you can be sure that what you propose to do will work in practice and won't introduce any new hazards.

Step 4: Record the Work Plan/Findings and Implement Them

Putting the results of the risk assessment into practice will make a difference when looking after food safety, workers' health and safety, and your business. Writing down the results of the risk assessment and sharing them with your staff encourages you to complete the implementation.

When writing down the results, keep it simple (e.g. contamination at harvest: hand washing facilities at the field). The risk assessment is not expected to be perfect, but it shall be suitable and sufficient. You need to be able to show that:

- A proper check was made.
- You asked who or what might be affected.
- You dealt with all the significant hazards.
- The precautions are reasonable and the remaining risk is low.
- You involved your staff or their representatives (where applicable) in the process.
- A good plan of action often includes a mixture of different responses such as:
 - Temporary solution until more reliable controls can be put in place
 - Long-term solutions to those risks most likely to cause accidents or ill health
 - Long-term solutions to those risks with the worst potential consequences
 - Arrangements for training employees on the primary risks that remain and how these risks are to be controlled
- Regular checks to make sure that the control measures stay in place
- Clearly defined responsibilities. Who will lead on what action and by when?
- Remember, prioritize and tackle the most important things first. As you complete each action, tick it off your work plan.

Step 5: Review the Risk Assessment and Update if Necessary

Few enterprises stay the same. Sooner or later, you will bring in new equipment, substances, and/or procedures that could lead to new hazards. It makes sense, therefore, to review what you are doing on an ongoing basis. Every year, formally review where you are with respect to recognized good practices to make sure you are still improving, or at least not sliding back. Look at your risk assessment again:

- Have there been any changes?
- Are there improvements you still need to make?
- Have your workers spotted problems?
- Have you learned anything from incidences or near misses?
- Make sure your risk assessment stays up-to-date.

When you are running a business, it's all too easy to forget about reviewing your risk assessment—until something has gone wrong and it's too late. Why not set a review date for this risk assessment now? Write it down and note it in your diary as an annual event. During the year, if there is a significant change, don't wait. Check the risk assessment and, where necessary, amend it. If possible, it is best to think about the risk assessment when you're planning a change—that way there is more flexibility. Source: 'Five Steps to Risk Assessment, Health and Safety Executive'.

AF 2 GLOBALG.A.P. GUIDELINE: RISK ASSESSMENT – SITE MANAGEMENT

Control points AF 1.2.1 (M) and AF 1.2.2 (M) require producers to carry out a risk assessment of their production site and to take appropriate action to mitigate any risks identified.

Control Point AF 1.2.1

Is there a risk assessment available for all sites registered for certification (this includes rented land, structures, and equipment) and does this risk assessment show that the site in question is suitable for production, with regards to food safety, the environment, and the health and welfare of animals in the scope of the livestock certification, where applicable?

Compliance Criterion AF 1.2.1

A written risk assessment to determine whether the sites are appropriate for production shall be available for all sites. It shall be ready for the initial inspection and maintained, updated, and reviewed when new sites enter in production, and when risks for existing ones have changed, or at least annually, whichever is shorter. The risk assessment may be based on a generic one but shall be customized to the farm situation.

Risk assessments shall consider:

- Potential physical, chemical (including allergens), and biological hazards
- Site history (for sites that are new to agricultural production, history of 5 years is advised and a minimum of one year shall be known)
- Impact of proposed enterprises on adjacent animals in stock/ crops/ environment, and the health and safety of the scope of the livestock certification.

Control Point AF 1.2.2

Has a management plan that establishes strategies to minimize the risks identified in the risk assessment (AF 1.2.1) been developed and implemented?

Compliance Criterion AF 1.2.2

A management plan addresses the risks identified in AF 1.2.1 and describes the hazard control procedures that justify that the site in question is suitable for production. This plan shall be appropriate to the products being produced, and there shall be evidence of its implementation and effectiveness.

NOTE: Environmental risks do not need to be part of this plan and are covered under AF 7.1.1.

The risk assessment should consider relevant physical, chemical, and microbiological hazards and consider the type of farm operation and the way in which farm output will, eventually, be used. The next table helps to identify the most common factors and hazards to consider when carrying out a site risk assessment. This is *not an exhaustive list of factors*. Growers shall consider it as guidance designed to help trigger their analysis of farm conditions in order to prepare the risk assessment for the site. They shall not consider these examples as a comprehensive list.

1. Legislation:

Legislation (national or local) may restrict the farm operations. Local regulations should be checked first to verify legal compliance.

2. Prior Use of Land:

Example of Factors to Consider	Example of Risks that can be Involved
Previous crops	Some crops (e.g. cotton production) typically involve heavy use of residual herbicides that can have long-term effects on cereal and other vegetable crops.
Former use	Industrial or military use can cause contamination to land through residues, petroleum contamination, garbage storage, etc. Landfill or mining sites may have unacceptable waste in their subsoil that can contaminate subsequent crops or harm livestock. They may be subject to sudden subsidence endangering persons working on the land. Husbandry may create zones of high microbial content (manure deposit, etc.).

3. Soil:

Example of Factors to Consider	Example of Risks that can be Involved
Soil structure	Structural suitability for intended use (including susceptibility to erosion) and chemical/microbiological integrity
Erosion	Conditions that cause losses of topsoil by water/wind that may affect crop yields and/or affect land and water downstream
Susceptibility to flooding	Susceptibility to flooding and probable contamination of soil through the flood
Wind exposure	Excessive wind speeds can cause crop losses

4. Water:

Example of Factors to Consider	Example of Risks that can be Involved
Water availability	Adequacy throughout the year, or at least the proposed growing season. The amount of water supply shall at least match the consumption of the intended crops. Water shall be available in a sustainable condition.
Water quality	The risk assessment should establish whether water quality is 'fit for purpose'. In some instances, 'fit for purpose' may be defined by a local authority. Evaluate probabilities of upstream contamination

Example of Factors to Consider	Example of Risks that can be Involved
	(sewage, animal farms, etc.) that may need costly treatments. For certain applications, the grower shall be aware of a minimum microbiological water quality specified by the authority or GLOBALG.A.P. Where this is the case, the requirements are specified in the relevant GLOBALG.A.P. module (WHO Guidelines for Drinking-Water Quality, 2008: <i>E. coli</i> or thermo-tolerant coliform bacteria shall not be detectable in any 100 ml sample). See also FV 1.1.1 under FV 1.1 'Risk Assessment'.
Authorization to use water	Rights or license of use of water: local laws or customs may recognize other users whose needs may pre-empt agricultural use at times. Environmental impact: While legal, some extraction rates could adversely affect flora and fauna associated with or dependent on the water source.

5. Allergens:

Food allergies have received much attention over the past few years with an estimated 2 % of adults and 5 % of children now suffering from some type of food allergy. All foods have the potential to cause a food allergy, however there are groups of foods that are responsible for causing the majority of food allergies. In the EU, for example, 14 main allergens which are subject to labeling legislation have been identified: Celery, cereals containing gluten, eggs, fish, lupin (a kind of legume of the Fabaceae family), milk, molluscs, mustard, peanuts, sesame seeds, shellfish, soya, sulfur dioxide (used as an antioxidant and preservative, e.g. in dried fruits), and tree nuts. Whilst the control of allergens is crucial for food processors and caterers, it is also a relevant issue to be considered by primary producers. Allergens in fruits and vegetables are not as complicated as other foods. Cooking destroys many of them, and thus cooked fruits are often safe for fruit allergic people to eat. Peanut allergy can be so severe that only very tiny amounts of peanut can cause a reaction. Tree nuts such as Brazil nut, hazelnut, walnut, and pecan can cause symptoms as severe. Lists of food allergens and information on labeling can be found on national or EU websites (see AF 1.2.1, AF 1.2.2, and FV 5.9.1).

Example of Factors to Consider	Example of Risks that can be Involved
Previous crops	Mechanical harvest of crops in rotation with peanuts (legume grown underground) might introduce rests of peanuts. Transportation of produce in vehicles that have transported products in the group of main allergens may introduce cross- contamination if vehicles are not adequately cleaned.
Product handling	Cross-contamination when packing and/or storing of products in the same facilities with those considered amongst main food allergens

6. Other impacts

Example of Factors to Consider	Example of Risks that can be Involved
Impacts on the neighborhood	Dust, smoke, and noise problems caused by the operation of agricultural machinery. Contamination of downstream sites by silt-laden or chemical-laden runoff. Spray drift.
Impacts on the farm	Type of adjacent farming activities. Smoke, fumes, and/or dust from nearby industrial or transport installations, including roads with heavy traffic. Insects attracted by crops, waste products, and/or operations using manure. Depredations by pests from nearby natural or conservation areas.

Risk assessment template

Document Title:		Name of the risk :	
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RISK ASSESSMENT MATRIX						
Likelihood vs. Severity/Magnitude = Risk Rating						
	Extent of risk (High low medium)	Who will be affected	What type of harm could be	Likelihoods of the risk	Control measure/ solution actions	others
5	Almost Certain	H				
4	Likely	M				
3	Possible	L				
2	Unlikely	L				
1	Rare	L				
	1	2	3	4	5	
Extreme risk (E): Hazard is significant and to be ELIMANATED.		High risk (H): Hazard is significant and the process be ALTERED and hazard REDUCED.		Additional Notes: M, H and E risk require additional control measures. H and E require control measures that either completely eliminate the risk or reduce the identified hazard to tolerable levels		
Medium Risk (M): There is the potential to be harmful. Engineer out/administrative control.		Low risk (L): Low potential harm. The hazard must be managed.				

00	Date:		Ref:	Risk Assessment	Prepared by:		Approved by:
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ACTIVITY TASK:							Ref:			
Assessment Date:		Assessment Carried Out By:		Date of Last Review:		Next Review Due:				
This is a risk assessment for ...				ALARP (Y or N) – As Low as Reasonably Practicable – Has the risk been reduced as low as reasonably practicable with the controls put in place? Yes or No						
Severity on a scale of 1 to 5 (where 5 is the most severe):	How severe the consequence if the activity / hazard results in the adverse effects		Likelihood on a scale of 1 to 5 (where 5 is the most likely):		How likely are the chances of the hazard causing injury after the controls have been put in place					
People Involved or Affected by the Activity:	Operator	☒	Other Workers	☒	Visitors / Client	☒	Public	☒	Others (Please specify)	

Hazard Ref.	Activity / Hazards (What can cause harm?)	Adverse Effects (What can happen?)	Controls to be taken (These are what you should be doing to ensure the hazard is either eliminated or reduced As Low as Reasonably Practicable)	Severity	Likelihood	Risk Classification	ALARP (Y or N)	Hierarchy of Control: 1 Eliminate 2 Alter 3 Contain 4 Educate 5 Supervise 6 PPE	Comments (Why can't you eliminate or reduce the risk further?)

Compiled by _____ Date _____
 Approved _____

00	Date:		Ref:	Risk Assessment	Prepared by:		Approved by:
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Annexure IV: Farm record templates

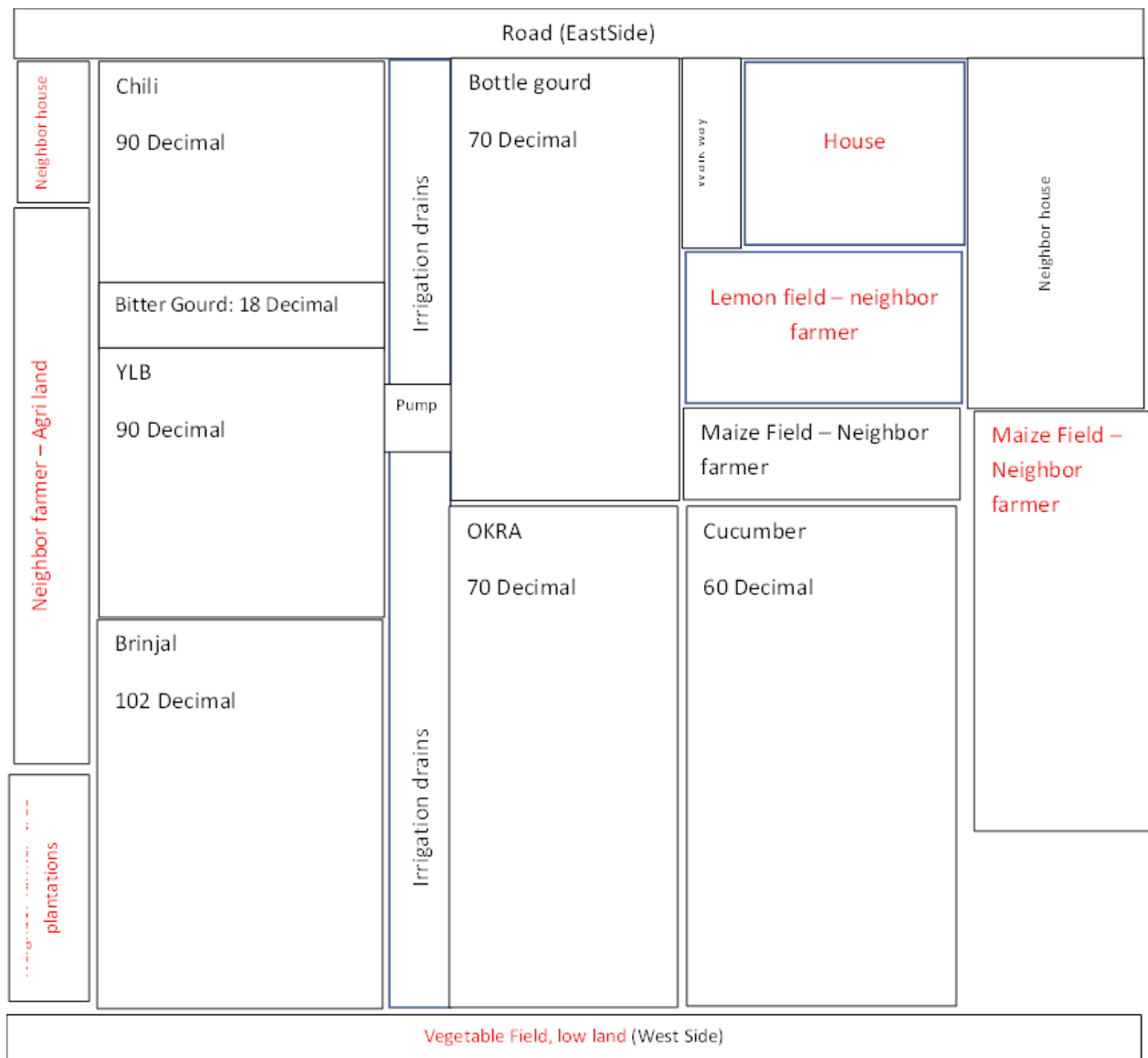
1. Company Profile

Name of the Company	:	
Address	:	
Contact Person	:	
Phone No.	:	
Email	:	
Web	:	
Type of Business	:	
e-Trade license No.	:	
TIN	:	
VAT/ BIN	:	
Export Registration Certificate (ERC)	:	
BFVAPEA No.	:	
Certificate of registration as Horticultural Products Exporter	:	

2. Farmers profile and Contract with farmer/ producer

Farmer's information		
1	Farmer's code No.	
2	NID No.	
3	Name of Farmer	
4	Address	
5	Name of vegetable	
6	Season (month)	
7	Cultivated land area	
8	Vegetable cultivation area	
9	Location of Land	
10	Do the farm have GLOBAL.G.A.P. Certificate	
11	Appropriate signboard of the farm and all crop specific signage will all direction	
12	Any Training in Agriculture or GAP	
	Note: Control point / Compliance criteria	

3. Site Layout



4: Site Record / Farm record

Site Record / Farm record (AF1.2.1)											
Date	Name of farmer/ owner	Crops in last 3 years/ season			Ownership of land	Area of land	Any land title	Source of irrigation	Comments	Signature	
		1	2	3							

5. Site management

Site Management		
A	Site lay-out	Infrastructure e.g., irrigation, toilets, storage, handling facilities Note: Report to be attached (Farm Layout and site map to be attached)
B	Plotting of each crop with area of land	
C	Availability of Electricity	
D	Drinking water and irrigation water facilities	
E	Toilet and WASH facilities	
F	Water irrigation drainage facilities	Water test report
G	Shade house facilities	
H	What is the risk associated with land for crop production? (Physical, biological, chemical, environmental, hygiene sanitation, etc)	Done: Yes/ No To be conducted: Note: Risk assessment report to be attached
I	If there is any risk, what are the risk mitigation/address plan	Note: Report to be attached
J	Is there hygiene, washing, cleaning, hygiene facilities and safe for all human and animals	Note: Those facilities, tools has to be labelled

Prepared By

Farm Manager

Authority

6. Site Risk assessment

SL	Head	Why	Risk				correction	Comments
			No	Low	Med:	High		
1	<u>Site Risk assessment</u> a) The site has no flood, environmental risk found, industrial affluent risk b) Land not linked any sewerage, toilet and other similar contaminations c) It is a piece of absolute agricultural farm land d) Neighbour farms are producing vegetables but different family and variety, seems no PEST risk due to bio-security e) No hazardous contamination found						1. Fence entire site to protect human bio-security, demarcation, and site isolation and protection from cattle and local chicken	

Prepared By

Farm Manager

Authority

7. Hygiene Risk assessment

SL	Head	Why	Risk				correction	Comments
			No	Low	Med:	High		
1	Hygiene Risk assessment a)Workers attended training focused on hygiene, provided in their language, but the importance is not reinforced.						1.Records need to keep documenting dates and attendance at training progress, as well as copies of all training materials.	

8. Soil Management

SL	Head	Why	Risk				correction	Comments
			No	Low	Med:	High		
1	Soil Management a)Manure based soil amendments						1.Soil, Water test need to be done, according to these report action will be taken	

9. Soil/Land related records

Soil/Land related records							
Date	Do the soil tested	Name of Organization from where soil tested	Name crops for soil tested	Soil types and Quality of soil	Possibility of soil erosion, depletion, etc	Comments	Signature

Note: Hazard analysis (risk assessment), Soil test report, recommendation to be attached

Prepared By

Farm Manager

Authority

10. Laboratory test reports (all)

Laboratory test on soil water and MRL for selected fruits and vegetables.

11. Seeds and propagation materials

Production related records									
Seed/ Seedlings/ propagation materials									
Date	Date of land preparation, seed sowing, transplantation	Variety	Quantity	Source of seed/ seedling/ materials	Govt. Authorized	Seed treatment If treated – what chemical used, its sources, certified, and records	Cost	Remarks	Signature

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Farm Manager

Authority

12. Fertilizers

Production related records										
Fertilizer related information										
Date of apply	Name Fertilizer	Quantity	Apply method	Source of fertilizer	Content of Nutrint	Cost	Recommend by	Govt. Approved	Storage facility	Sig
If organic, risk assessment, nutrient analysis (NPK contents etc.)										

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Farm Manager

Authority

13. Irrigation

Production related records									
Irrigation and Water Management									
Name of crop									
Date	Source of Water	Water test	Water Quality (WHO guideline)	Govt. Approved	Irrigation tools	Layout	Cost		Signature

Note: Risk assessment plan, action plan, layout, map and records are required

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Farm Manager

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14. IPM + Pesticides

Production related records								
Name of crop								
Application date	IPM/ Organic name	Types of pest	Quantity	Application method	Source of IPM product (organization, manufacture, brand)	Govt. Approved	Cost	Signature

Note: Risk assessment plan, pest prevention plan, action plan, IPM expert and records are required

- Risk assessment plan, pest prevention plan, action plan, ensure use of PPE, have IPM/ICM expert and records are required
- Pesticides application certificate is required
- All used product should have MRL level and recorded

Prepared By

Farm Manager

Authority

[illegible]

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Farm Manager

Authority

15. Personal Protecting Equipment's (PPE)

All necessary PPE for relevant activity as per risk assessment and guideline.

16. Intercultural operation

Production related records- Intercultural Operation							
Name of crop							
Date	Name of intercultural operation	Methods	Quantity	Cost	Govt. Approved	Comments	Signature

Farm Manager

Authority

17. Environment

Environment and ecology											
Sl. No.	Is farming practices setting friendly	Labour welfare	Use of PPE during work (name ,use etc..)	Hand washing available	Toilet facility	Layout for irrigation and other	Link with sewerage and dumping	Link with road	Distance from market, collection center	Come.	Sig.

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Farm Manager

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18. Traceability and segregation

For Traceability and segregation need to maintain proper record and separation mechanism as per protocol and guideline.

19. Employee profile

All employee profile must be kept in place including permanent and temporary workers as per HR policy and guideline.

20. Training

Staff Training Record

Name	Loca	Previous training received -1				Previous training received -2				Previous training received -3			
		Type	Date	Training offered	training require	Type	Date	Train offer	training required	Type	Date	Trai	training need

Prepared by:

Checked by:

Approved by:

Training Record Format

Title of the Training:

Venue:

Duration of the training

From

To:

Total hours:

Training conducted/facilitated by:

Sl. No	Name of participant	Types of participants	Mobile phone No.	Participant s signature	Remarks

Prepared by:

Checked by:

Approved by:

21. Worker's Health, Safety and Welfare

SL	Head	Why	Risk				correction	Comments
			No	Low	Med:	High		
1	<u>Worker Health, Safety and welfare risk assessment</u> a)Machinery such as tractors, trucks and harvesters, and cutting and piercing tools. b)Hazardous chemicals: pesticides, fertilizers, antibiotics and other chemical products.						a)Facilitate training on Worker Health, Safety and welfare and follow up/monitoring	

22. Hazard and First Aid

SL	Head	Why	Risk				correction
			No	Low	Med:	High	
1	<u>Hazard and First Aid</u> a) A risk assessment has been conducted to determine first aid requirements appropriate to workplace (e.g., distances, response times for emergency services, mobile/remote work). b) Approved first aid kits and equipment are provided, maintained and accessible. c) First aid kits have additional provisions relevant to site (e.g., snake bite treatment, remote location work). d) Correct type of fire extinguishers is provided, located and signed appropriately, and regularly maintained.						

23. First Aid and Fire Safety File

SL	Head	Why	Risk				correction	Comments
			No	Low	Med:	High		
1	<u>First Aid and Fire Safety File</u>	Any employee can get sick, so they need to protection and environment for them to work properly and enjoy the work						

24. Harvest

Production related records Harvesting								
Name of crop								
SL	Date	Methods of harvest	Quantity of harvested produce	Cost	Price	Grades (GAP certified)	Comments	Signature

Keep all documents and records

25. Post-harvest file

Pre-Harvest Field Assessment Checklist

Name and address of farm:

Task	Yes or No	Observations	Corrective actions (CA) taken	Date	Initials
Check pre-harvest interval due to use of pesticides					
Check pre-harvest interval due to use of Fertilizers					
Check pre-harvest interval due to use of irrigation					
Check pre-harvest interval due to use of any chemicals					
All harvesting equipment cleaning washing and drying (crate, knives, hand gloves, tray etc..)					
Check maturity of vegetables or fruits					
All hygiene sanitation utensils and products ready					
Field readiness for harvest					
Is there any evidence or observations of animals in the field?					
Is there faecal material in the field?					
Is there faecal material in direct contact with fresh produce?					
Do areas of "no harvest" need to be established?					
Is this field safe to be Harvested?					
Cleaning of collection centre					
Transportation to be ready					
Labour training and ready to work					
Worker's training on hygiene before harvesting and handling produce					

Prepared by:Checked by..... Approved by:

26. Delivery and Transportation file

All relevant delivery and transportation register and documents to be maintained as per policy, guideline and government rules.

27. Packing list

PACKING LIST

EXPORTER NAME & ADDRESS

M/S.BANGLADESH FOOD EXPORT CO.
28/1/C,TOYENBEE CIRCULAR ROAD
MOTIJHEEL C/A,DHAKA,BANGLADESH.
TEL:880-2-7162654,9564267.

CONSIGNEE NAME AND ADDRESS

BANGLA LINK VEG. LTD.

68 BATH STREE WALSALL
WS1 3DE UNITED KINGDOM

ATTN: R.N.B. CARGO LTD

INVOICE NO.JB/ /2022

DT:4/25/2022

CONT.NO.

DT:

EXP.NO.

DT:

SHIPPED:BY AIR FROM DHAKA TO

LONDON

SHIPPING MARKS	SL.NO.	DESCRIPTION OF GOODS	NO.OF BOXES	NET WEIGHT
J.B	1	Chili	6	30
	2	Bottle Gourd	56	280
	3	Lubiya/Borboti	30	150
	4	Brinjal	105	210
	5	Okra	25	50
	6	Cucumber		
	7	Bitter gourd	30	30
	8			
	9			
	10	Loti		
	11	Seem/Ury		
	12	Peyara		
	13	Supari		
	14	Payapy		
	15	Potal		
	16	LaShak		
	17	Morich		
	18	k/shak		
	19	F/Amm		
	20	Amra		
		Total	252 Box	750 Kg

28. Complaints, Recall / withdrawal procedure file

Complaints, Recall / withdrawal documents must be maintained as per complaints, recall / withdrawal protocol and guideline.

29. Waste and pollution management file

SL	Head	Why	Risk				correction	Comments
			No	Low	Med:	High		
1	<u>Waste and Pollution Management risk assessment</u> a)Protection of surface and groundwater resources b)Irrigation						a)Irrigation pump need to establish to Protection of surface and groundwater resources and irrigation	

30. Visitors and Movement records

Visitors and Movement records									
Name of crop site									
SL	Date	Name of visitor with address and designation	Issues for visit	Whom to be met	Time to visit			Comments	Signature
					Time to enter	Time to leave	others		

Prepared By

Farm Manager

Authority

AGRO PRODUCTS BUSINESS PROMOTION COUNCIL (APBPC)

Ministry of Commerce

BFIDC Building (8th Floor) 73 Motijheel C/ADhaka-1000

Email: apbpc11@gmail.com

Web: WWW.bpc.org.bd



**BANGLADESH FRUITS, VEGETABLES & ALLIED PRODUCTS
EXPORTERS ASSOCIATION (BFVAPEA)**

Rahmania International Complex

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