



Enhancement of the Regulatory Functions of the Plant Quarantine Wing (PQW), Ministry of Agriculture, Risk -Based Management

*People's Republic of Bangladesh
Taskorder 2 Report
Contract# 22BTFA-C2150
Venture 37 and GCI International Inc.*

Executive Summary

GCI International Inc. was contracted as part of the Bangladesh Trade Facilitation (BTF) Project, to support the enhancement of performance of the Plant Quarantine Wing, as the Plant Health Regulator of Bangladesh, in adopting a risk-based approach.

This report reviews the activities and deliverables achieved during the period 1 December 2022 – 31 January 2023, primarily through the contribution of the international expert Dr. Ringolds Arnitis, International Plant Health Expert, with the overall oversight by Prof. Samuel Godefroy, GCI Chief Operating Officer.

A mission to Bangladesh was accomplished by Dr. Ringolds Arnitis from 5-14 January, 2023 and allowed to offer expert advice in person as well as to deliver training and awareness raising session.

Training material on Cross-border Trade Risk Management was developed and delivered to members of the Plant Quarantine Wing (PWQ) of the Department of Agricultural Extension (DAE). The content of training sessions, included PowerPoint presentations, resource material as well as support for group activities.

A thorough review was carried out of the current risk-based approach, applied for border control and pest management with 12 recommendations made for the consideration by the BTF team.

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1. Background and Objectives

GCI International Inc. was contracted as part of the Bangladesh Trade Facilitation (BTF) Project, to support the enhancement of performance of the Plant Quarantine Wing, as the Plant Health Regulator of Bangladesh, in adopting a risk-based approach.

The work was carried out by International Expert Dr. Ringolds Arnitis, with the oversight of Prof. Samuel Godefroy.

This report offers an overview of the work delivered under Taskorder 2, for a period spanning from 1 December 2022 to 31 January 2023.

2. Preparation of Mission and Review of Training Material

- ❖ Written feedback was provided to the BTF team, as well as during a remote/online meeting. The review covered the Foundation Training on Cross-border Trade Risk Management to be delivered to the Plant Quarantine Wing of the Department of Agricultural Extension.
- ❖ Agreement was reached on the content of the training to be delivered in Bangladesh in January 2023.

Level of Effort: **1 day**

3. Risk Profile Matrix

- ❖ Review of the Draft Risk Profile Matrix and provide written recommendations about the draft structure and content

Level of Effort: **2 days**

The draft Risk Profile Matrix developed by the BTF team in collaboration with the Plant Quarantine Wing (PQW) of the Department of Agricultural Extension (DAE) was reviewed, with comments provided by Dr. Arnitis.

A **new template for the Risk Profile Matrix** was further developed, based on best practices and experience from other countries. It identified risk areas, risk criteria, and indicators related to plants and plant products.

The new proposal and concept were based on the requirements of the WTO Trade Facilitation Agreement, in particular in accordance with Article 7.4 regarding usage of **Harmonized System codes for risk management** and International Standard of Phytosanitary Measures (ISPMs) of the International Plant Protection Convention (IPPC).

According to the IPPC, inspection of consignments of plants and other regulated articles moving in international trade and, where appropriate, inspection of other regulated articles to prevent the introduction and/or spread of pests is a National Plant Protection Organization (NPPO) function.

International Standard on Phytosanitary Measures (**ISPM 20**) "Guidelines for a phytosanitary import regulatory system" describes the structure and operation of a phytosanitary import regulatory system and the rights, obligations and responsibilities which should be considered in establishing, operating, and revising the said system. Inspection which is the most widely used phytosanitary measure at import, is supported by two specific ISPMs (ISPMs 23 "Guidelines for inspection" and ISPM 31 "Methodologies for sampling of consignments"). Inspection is also mentioned in many other adopted ISPMs.

Maximizing resources in a manner that best manages plant health risks is a priority for many national plant protection organizations (NPPOs). **ISPM 32** "Categorization of commodities according to their pest risk" provides criteria for national plant protection organizations (NPPOs) of importing countries on how to categorize commodities according to **their pest risk** when considering import requirements. This categorization should help identify whether further pest risk analysis is required and if phytosanitary certification or import inspection is needed.

However, there is a **lack of guidance in relation with border risk management** of plant and plant products moving in international trade that optimizes risk mitigation and facilitates the movement of low-risk compliant trade.

Several countries addressed this need, through the development of tools and **risk-based** import inspection systems. By developing a **Risk Profile Matrix** for Bangladesh, the country would be adopting the same approach.

Proposed input on the risk profile matrix includes:

3.1 Risk area (plants, plant products and other regulated articles)/ Categories of commodities (with Customs codes) according to their pest risk (ISPM 32)

- ❖ **Category 1.** Commodities that have been processed to the point where they do not remain capable of being infested with quarantine pests (e.g., preserved fruits) (list available)
- ❖ **Category 2.** Commodities that have been processed but remain capable of being infested with some quarantine pests (e.g., chopped fruit) (list available)
- ❖ **Category 3.** Commodities that have **not** been processed with the intended use being for a purpose other than propagation, for example, fresh fruit for consumption
- ❖ **Category 4.** Commodities have **not** been processed with an intended use of **planting**.

Following the risk-based inspection paradigm means that the type or frequency of Inspection (low, medium, high) will be related to the risks attributed to each commodity (risk-based inspection). Therefore, each commodity class should be related to a risk category:

- ❖ CLASS 1: Plants for planting, except subterranean parts and seeds should be related to the Category 4 commodities.
- ❖ CLASS 2: Bulbs, tubers and roots: subterranean parts assigned for propagation.
- ❖ CLASS 3: Seeds i.e., true seeds in their botanical definition assigned for propagation.
- ❖ CLASS 4 Fruits and vegetables: fresh parts of plants assigned to consume or processing and not for planting.
- ❖ CLASS 5 Ornamental cut flowers and foliage: cut portions of plants, including the inflorescences, assigned to decoration and not for planting.
- ❖ CLASS 6 Woods, barks, cork: processing, semi-processing or not processing.
- ❖ CLASS 7 Wood Packaging Material (WPM) and support material and similar products of vegetal origin and any other material used to transport, protect and/or adapt regulated articles
- ❖ CLASS 8 Soils, peat, and other materials of support.
- ❖ CLASS 9 Grains: refer to cereals, oleaginous, leguminous seeds and other seeds intended to be consumed and not for planting.
- ❖ CLASS 10 Any other regulated article that it is not included in the previous classes (used machinery, etc.)

3.2 Criteria which may be used for planning of risk-based import inspections (documentary checks, verification of identity and integrity, visual examinations) regarding the commodity/consignment

- ❖ Country of origin,
- ❖ The mitigation measures taken by the exporting country/GAP, treatment, certification schemes, pest surveillance,
- ❖ Commodity and intended use/live plant planting/ fresh fruit consumption/ processing,
- ❖ Place/area of production/Pest Free Areas (PFA) or country, Pest Free Production Site (PFPS), Pest Free Production Places (PFPP)
- ❖ Consignment size and configuration/bulk, bags-less risk
- ❖ Volume, frequency and timing of shipments/seasonal
- ❖ Experience with origin/importer
- ❖ Means of conveyance and packaging
- ❖ Available financial and technical resources (including pest diagnostic capabilities) of NPPO of Bangladesh/technical
- ❖ Previous handling and processing
- ❖ Sampling design characteristics necessary to achieve the inspection objectives/how
- ❖ Difficulty of pest detection on a specific commodity
- ❖ Experience and the results of previous inspections/non-compliance

An example of the results of the Risk Profile Matrix may be as follows:

Risk area (plants, plant products, other regulated articles) for Category 4 products, (e.g. HS code 0601- Bulbs, tubers, tuberous roots, corms, crowns and rhizomes, dormant, in growth or in flower; chicory plants and roots other than roots of heading 1212), Class of commodities (bulbs), with the intended use of planting, **leads to high risk** i.e., 100% inspection

The initial input provided by Dr. Arnitis will be further elaborated upon by the BTF team, PQW Officials as well as Bangladeshi Phytosanitary Specialist, Dr. Bulbul, towards the continued development of Risk Profiles for products and other countries. Advice was also provided to Dr. Bulbul in relation with other areas such as invasive alien species and food security,

4. Training Plan, Outline and Material

- ❖ A Training plan and outline for the Foundation Training Module on Cross-border Trade Risk Management for PQW was developed

Level of Effort: **2 days**

The program of the training module was discussed at various occasions with the BTF team, prior to the anticipated mission planned for Dr. Arnitis in January 2023. The training program was set to cover the most important elements of risk identification, risk assessment, risk management including risk-based import inspections, requirements for

risk profiles equipment and the tools necessary to apply the risk-based approach, as well as consideration of links with export certification systems.

- ❖ The content of the training material agreed upon with the BTF team was subsequently prepared, including PowerPoint slide decks, resource materials, and plans for group activities for each of the session

Level of Effort: **6 days**

According to the Training program six presentations and one group exercise was prepared based on ISPMs, experience and best practices from other countries.

15 pre/post evaluation questions with multiple choices of answers were also prepared. The topics for these questions included:

- Overview of IPPC; Main features of IPPC; Why IPPC is important? Risk Management provision in IPPC;
 - Developing Risk Areas, Risk Criteria & Risk Indicators for Plants & Plant Products;
 - Risk-based import controls. Profiles Leading to Targeting;
 - Phytosanitary Import Inspection;
 - Group Exercise: Documentary/identity check;
 - Risk Treatment;
 - Risk Management in Export: A Special Perspective
- ❖ Material for training is accessible through the following links:
 - [Developing Risk Areas, Risk Criteria & Risk Indicators for Plants & Plant Products. Categorization of commodities according to their risk;](#)
 - [Risk management in Export: A Special Perspective;](#)
 - [Risk based import controls. Profiles Leading to Targeting;](#)
 - [Risk Treatment. Risk management.](#)

5. Mission to Bangladesh 5-13 January 2023

- ❖ A mission was carried out by Dr. Arnitis to Bangladesh from 5 to 13 January, 2023. This mission enabled to deliver training and offer knowledge sharing in relation with the development of the Risk Profile Matrix
- ❖ Group learning sessions were organized for staff of the PQW on Cross-border Trade Risk Management

Level of Effort: **8 days**

During the mission, GCI expert Dr. Ringolds Arnitis had engagement with the BTF Team and PQW-DAE Officials on Institutionalizing Risk Management for plant health management.

A 3-Day Workshop on Risk Management for plant products, was held in collaboration with a national Phytosanitary Specialist, Dr. Bulbul and focused on the development of Risk Profiles and the establishment of the Risk Profile Matrix by identifying some risk areas, risk criteria, and indicators related to plants and plant products.

A 3-Day Workshop on Cross-border Trade Phytosanitary Risk Management was also organized with the participation of Dr. Arnitis from 9-11th January 2023. The workshop was attended by the more than 20 participants from the PQW Risk Management Unit team and other PQW Officers.

The training program covered the most important elements of risk identification, risk assessment, risk management including risk-based import inspections, requirements for risk profiles, equipment and tools necessary to apply the risk-based approach, as well as considerations of linkages of this approach with export certification.

The training led to the issuance of certificates to participants, distributed by the Head of the Plant Quarantine Wing (PQW) and the Director General of the Department of Agricultural Extension (DAE).

6. Subsequent Interventions

Upon request from the BTF team, aspects to be covered by the Risk Profile Matrix and import inspections was prepared for further consideration.

- ❖ [Plants, plant parts and plant products which must be accompanied by phytosanitary certificate at import and which must be subject to phytosanitary import control;](#)
- ❖ [List of plants, plant products and other objects subject to phytosanitary certificates and those for which such certificates are not required for their introduction into the Union territory.](#)

7. Recommendations

7.1 Recommendations about a Risk Management curriculum and course titles for Plant Health and Control

In order to develop and maintain the Risk Profile Matrix, it is necessary to ensure permanent leadership of the PQW and DAE and establish a **Risk Management Unit** in PQW with permanent duties which may include:

- ❖ Collection of data and information, along with its analysis, on cross-border trade from various national and international sources (horizon scanning);
- ❖ Review of national and international plant health requirements (e.g., IPPC, WTO, FAO), and development of relevant guidelines and manuals supportive of cross-border trade of plant and plant products;
- ❖ Records and analysis of non-compliance events for import into and export from Bangladesh and for other countries;
- ❖ Development of risk criteria and risk indicators based on classes of commodities, border crossing points, pests, diseases, country of origin, country of shipment, means of transportation, supplier, importer, seasons, etc.;
- ❖ Development of risk profiles;
- ❖ Development and application of guidelines/SOP regarding cross-border trade risk management;
- ❖ Development of inspection and examination and sampling plans;
- ❖ Communication and exchange of information regarding risk with Customs and other concerned national and international agencies;
- ❖ Organization and delivery of trainings for inspectors on risk-based inspections;
- ❖ Organization of stakeholder awareness raising sessions to implement risk management.

7.2 Recommendations to Enhance Risk-Based Border Management

- 7.2.1 **It is recommended** that the PQW develops import inspection plans which should be based on prioritization of risks.
- 7.2.2 **It is recommended** that the relevant procedures and protocols be fully supported with with pre-set forms to capture inspection results, laboratory testing results, monitoring data and assessment information. The reliance on such a structured approach will enable to secure harmonized data collection and reporting systems.
- 7.2.3 **It is recommended** that the PQW RMU consider the ISPMs and develop a list of criteria for risk assessment and risk management.
- 7.2.4 **It is recommended** that the PQW adopt a proactive approach for the management of threats with the possible prediction of such threats and the elimination of pest risk before they could damage the agriculture and environment.
- 7.2.5 A **Pest Risk Analysis (PRA)** also helps provide technical justification for applying phytosanitary measures and setting import requirements. Therefore, **PRAs should be carried out on permanent basis** and be anchored in the plant health system in addition to the risk-based planning, which includes categorization of commodities and consignments according to different criteria.
- 7.2.6 **It is recommended** that Bangladesh adopts the practice advocated by ISPM 32, in determining any phytosanitary regulations, with the practice of the principles of technical justification (based on PRAs), supported by the consideration of managed risks, minimal impact, harmonization and sovereignty into account.
- 7.2.7 **It is recommended** that Phytosanitary import inspection performed on consignments upon their arrival at border inspection posts **be more targeted**.
- Inspections should include documentary checks on all regulated consignments, including electronic documents such as ePhyto. The verification of consignment identity and integrity and visual examination (phytosanitary inspection) may be performed at an appropriate frequency **dependent on the risk posed by each consignment** and inside the country where appropriate inspection posts are available.*
- The **frequency of verification of consignment identity and integrity** should be subject to reduction and may be limited to the verification of a consignment's Customs seal where this is justified by a reduced risk posed by the consignment.*
- The frequency of visual examination (phytosanitary inspection) should be determined and modified on the basis of phytosanitary risks. This approach should enable the PQW to allocate resources for high-risk consignments.*
- 7.2.8 **It is recommended** that a computerized phytosanitary information system be deployed to support the application of the risk-based approach to verification of consignments performed upon their arrival at border inspection posts, including verification of identity, integrity and visual examination (phytosanitary inspection).
- 7.2.9 **It is recommended** that adequate infrastructure be developed and deployed at Border Control Posts (BCP) as a prerequisite for Plant health risk management. BCPs should be equipped according to the internationally recognized standards (including ISPMs) and best practices.

- 7.2.10 **It is recommended** that adequate coordination be developed between the NPPO and other government services involved in import control, with a particular emphasis on the Customs services. This is in application of the requirements of “Article 5.1.1: Administration” of ISPM 20. This is critical in order to ensure proactive management of threats since the Customs are usually the first line of response at the BCPs. Therefore, regular meetings between the NPPO and customs, including the development of the relevant information exchange and cooperation mechanisms are an important part of risk management.
- 7.2.11 **It is recommended that clear Standard Operating Procedures (SOPs)**, related to import control be developed to help outline the different steps of import inspection following the risk-based approach. Categorization of consignments according to their phytosanitary risk may lead to reduced number of full inspections (documentary, identity and visual examinations), with possible reliance on documentary checks and inspection only.
- 7.2.12 **It is recommended to continue the organization of training** in risk-based border management destined to all PQW inspectors, based on the elaborated risk-based import control model.
- 7.2.13 **It is recommended to proceed with the update of the relevant legislation, regulations, and policies** pertaining to the principles of risk management at the border, such that the modernized phytosanitary import inspections remain anchored in risk (risk-based approach), on a sustainable fashion.

Legislation should create the authorities to apply a risk-based approach, including to administer import procedures and protocols, documentary, identity/integrity and visual examination as well as sampling, cooperation with Customs, application of IT systems and categorization of consignments according to their risk.

Conclusion and Next Steps

Applying these recommendations will no doubt result in the enhancement of the plant health risk management approach, optimize the resources associated with inspection functions and support the protection of Bangladesh crops and environment.

It will be important to continue the investment in such system enhancements. For this reason, carrying out regular Phytosanitary Capacity Evaluation (PCE) that may help further identify gaps in the PQW structure and management will be instrumental to enhance and maintain export certification and import control systems as well as pest surveillance, data collection and risk assessment.