Food and Agriculture Organization of the United Nations

SUSTAINABLE DEVELOPMENT GOALS

First physical meeting of the FAO Technical Working Group on the Progressive Management Pathway for Improving Aquaculture Biosecurity (PMP/AB TWG 3/2022)

Gaeta, Italy
28 June - 01 July 2022

TOOLKIT 4: Risk Analysis (IRA and value chain RA)

Richard Arthur, Brett McKinnon, Saraya Tavornpanich, Sharon McGladdery

GCP/GLO/352/NOR: "Responsible use of fisheries and aquaculture resources for sustainable development"

Description

- Guidance on when/how to apply risk analysis methods to improve biosecurity in the aquaculture sector, including hazard identification, risk assessment, risk management and risk communication.
- Guidance on risk analysis tools including: Hazard Analysis and Critical Control Points (HACCP), Import Risk Analysis (IRA), and Gap Analysis/Value Chain Analysis.
- Guidance on use of these tools for developing or updating National Strategy on Aquatic Organism Health (NSAOH).

Description (continued)

- This supports PMP/AB Stages 1, 2, 3 and 4
  - Stage 1: Conduct sector-level risk analysis and farm-level HACCP plans to support development of a National Strategy on Aquatic Organism Health (NSAOH)
  - Stage 3: Conduct Import Risk Analysis (IRA) to support implementation of border controls

- Supports PMP/AB activities in all stages, including:
  - developing or updating National Strategy on Aquatic Organism Health (NSAOH)
  - preparing of national pathogen list
  - risk profiling and early warning
  - emergency preparedness
  - prioritizing diseases of commodities

Description (continued)

- This supports good national and sectoral aquatic biosecurity by preventing the introduction of pathogens that pose risk of serious disease losses to aquaculture production, through risk-based management strategies.
- This applies, most notably, to pathogens currently absent from a country or region (exotic pathogens) through trade-based control measures, as well as the prevention and control of enzootic pathogens that affect aquaculture production

Scope

- Step-wise guidance to the private sector and government Competent Authorities for applying risk analysis methodology using HACCP, sector-level risk assessment, and IRA for safer introductions, transfers and domestic movements of live aquatic organisms and their products.
- Proposed Outline of Document (to be developed – to include practical, stepwise approach for implementation of each of the tools.)

1. Introduction/Background
2. Sector-level risk analysis (Gap Analysis/Value Chain Analysis)
3. HACCP
4. IRA

Assessment tools and other requirements

- Supports and is supported by most components of a NSAOH

- List of requirements to implement risk assessment for each tool to be developed.

Training requirements: Physical, virtual, hybrid

- Multidisciplinary team (aquaculture expertise, pathogen and biosecurity expertise, HACCP, Gap Analysis/Value Chain Analysis and IRA expertise; plus expertise in aquatic organism genetic and ecological/environmental risk assessment).
- Physical course: probably 3 individual training courses of 3-4 days each
- Virtual course: to be discussed. Separate courses likely will be needed for each area. (FAO risk analysis training course to be updated).

Technical competencies of members of SubTWG

- Brett MacKinnon
- Richard Arthur
- Saraya Tavornpanich
- Sharon McGladdery
- Victoria Alday (?)

Relevant documents – see Handout

- HACCP: few directly related to aquaculture systems
- Gap Analysis/Sector Value Chain Analysis: – few directly related to aquaculture biosecurity (e.g. MacKinnon, unpublished)
- IRA:

  – many guidance documents (FAO, OIE, NACA, APEC, Australia, New Zealand, etc.)

  -Many examples of completed IRAs – ranging from superficial to extensive.