



Global Movements Towards Pesticide Risk Reduction: **Regional Initiatives**

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APAARI

**Strengthening Agri-food research and innovations
for sustainable agricultural development in Asia and the Pacific**
Apolitical, membership based, multistakeholder platform



- Established in 1990
- FAO initiative

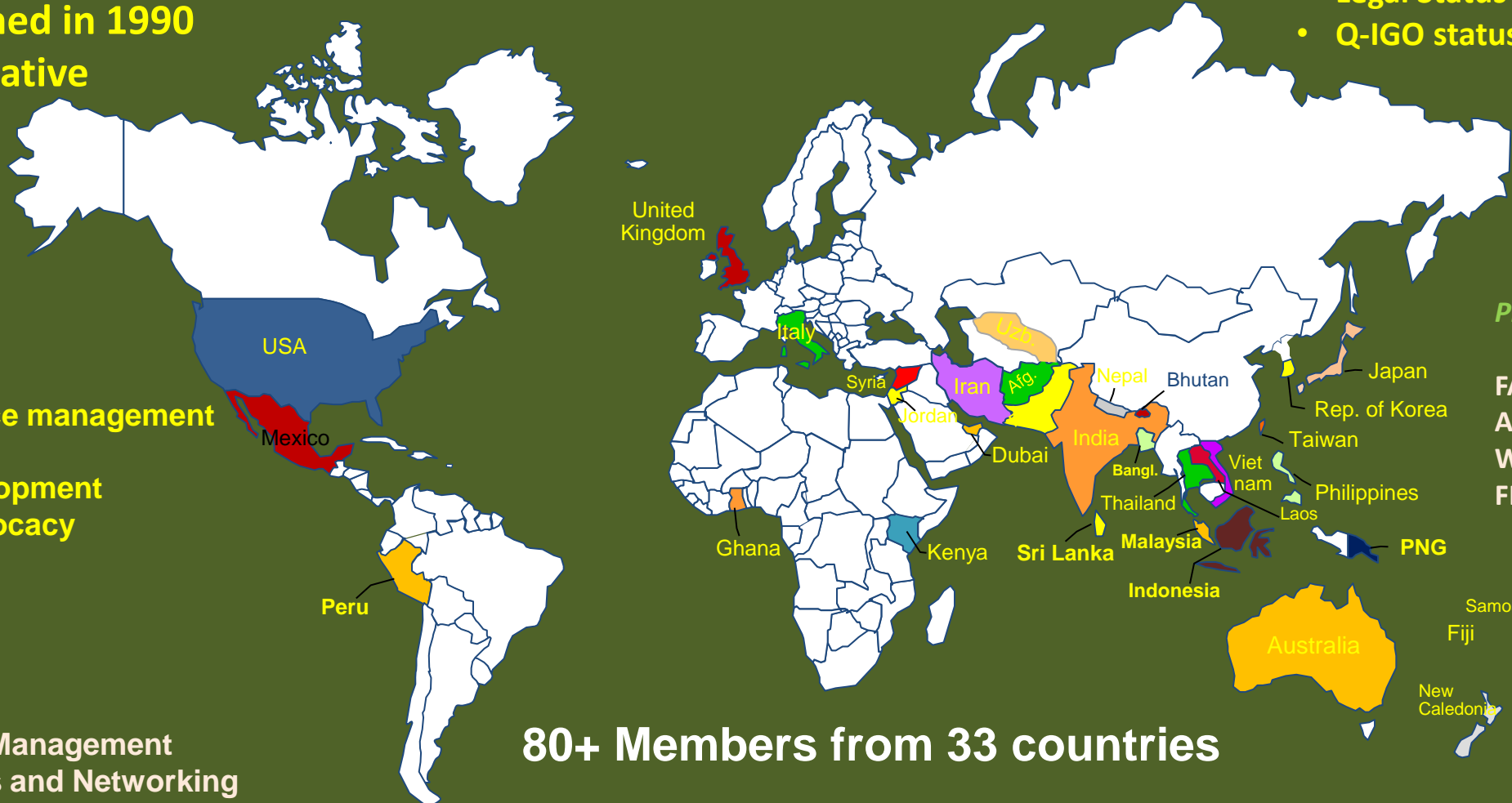
- Legal Status being Revisited,
- Q-IGO status in pipe-line

Thematic areas

- Natural resource management
- Risk mitigation
- Inclusive development
- Policy and advocacy

Key Programmes

- Knowledge Management
- Partnerships and Networking
- Capacity Development
- Policy and Advocacy



Projects sponsors

FAO , STDF, EU, AFD,
ACIAR/IFPRI, USDA,
World Bank, GFAiR,
FICCI

80+ Members from 33 countries

KPMG Growth Strategy being implemented from 2023

APAARI's Contributions for Safe Trade and Sustainable Agriculture



Asia Pesticides Residue Mitigation through the Promotion of Biopesticides and Enhancement of Trade opportunities (STDF)

Improving Phytosanitary Trade Compliance in Bangladesh (USDA)

Integrated Approach to Enhancing SPS Capacity in Bangladesh (USDA)

Asia-Pacific Biopesticides Community of Practice (APAARI)

Community of Practice (CoP) on Public Private Partnerships (APAARI)

Agroecology in Asia and market access (EU)

STDF/PG/634 - Asia Pesticides Residue Mitigation through the promotion of Biopesticides and Enhancement of Trade opportunities



- This project developed an innovative approach to **minimize chemical pesticides and promote biopesticides use** facilitating safe trade in the region.
- 170+ government officers equipped with knowledge and skills throughout the project

Objective

- Increase awareness of how pesticide residue issues impact trade and develop methods for overcoming these trade barriers

Beneficiary countries

- Bangladesh, Cambodia, Indonesia, Lao PDR, Malaysia, Sri Lanka, Thailand, Vietnam

Funding Agency

- Standards and Trade Development Facility (STDF)/World Trade Organization (WTO)

Implementing Agencies

- Asia-Pacific Association of Agricultural Research Institutions (APAARI) and AgAligned Global

Partners

- Singapore Food Agency, Asia Farmers Association for Sustainable Rural Development (AFA), CropLife Asia

Key Outcomes

1. New MRL data and improved knowledge to interpret this data on the use of biopesticides

- **Field trials and laboratory analyses** were successfully completed for pesticide residue studies, leading to **18 field residue mitigation studies** and improved participants' capacities.
- The studies demonstrated a **50% reduction in pesticide MRL values by substituting biopesticides at the pre-harvest stage**.
- **Protocols were developed for four major crops of important to trade:** cabbage, sweet basil, dragon fruit, and chili pepper.



Key Capacities Built



2. Increased knowledge and skills on improved practices to manufacture microbial pesticides

- Participants' skills improved on Biopesticide production through an **online lecture series (YouTube)** and **practical training** in Vietnam.

- [Microbial Biopesticide Production in Detail | APAARI, STDF-YouTube](#)
- [Microbial biopesticides manufacturing - Part 1 | APAARI, STDF – YouTube](#)
- [Microbial biopesticides manufacturing - Part 2 | APAARI, STDF – YouTube](#)



3. Enhanced capacities for regulatory harmonization of biopesticides and biocontrol agents:

- Beneficiary countries reviewed biopesticide regulations and the 2014 ASEAN Guidelines and adopted respect to countries on Biological Control Agents. Lao PDR and Cambodia did not have regulations, initiated to adopt ASEAN guidelines.
- USDA and this STDF project together completed pesticide residue mitigation studies in Bangladesh

Awareness and Outreach

4. Extension and outreach activities facilitated for creating awareness of and dissemination of project outputs.

The [Policy Brief](#) developed emphasizes using biopesticides to reduce residues and facilitate safe trade

- Use of biopesticides in combination with conventional products, as part of sound Integrated Pest Management (IPM) programs, offers win-win opportunities to facilitate safe trade and protect the planet.
- Biopesticides can help small-scale farmers avoid pesticide Maximum Residue Limit (MRL) issues affecting agri-food trade, while promoting environmental sustainability and ensuring food safety for consumers.



Improving Phytosanitary Trade Compliance in Bangladesh (Phase 01)- USDA



Objective

- To develop SPS Information Management System (SPS-IMS) web portal to consolidate WTO SPS-related information, facilitating market access and supporting international trade compliance.

Funding Agency

- United States Agency for International Development (USAID)

Implementing Agencies

- Asia-Pacific Association of Agricultural Research Institutions (APAARI)
- United states Department of Agriculture

Partners

- AgAligned Global
- Bangladesh Agricultural Research Institute

Key Outcomes



- Pesticides Residue research experiments conducted on cabbage and continue to complete in the STDF project.
- Biopesticides efficacy studies during the experiments on cabbage pests (Neem oil was the most effective).
- Capacities of Bangladesh stakeholders enhanced with the help of AgAligned Global on conducting pesticides residue research.
- Revised biopesticides registration guidelines draft was prepared by constituting local working group guided by USDA consultant.
- Above Guidelines are approved by two national committees (sub PTAC and PTAC) and submitted to Government of Bangladesh.

Integrated Approach to Enhancing SPS Capacity in Bangladesh (Phase 02)-USDA



Objectives

1. To enhance capacities in market access negotiations, SPS Diplomacy and related policies to align with international standards and obligations, and enhancing the institutional memory through web-portal (SPS IMS).
2. Enhance the capacity of the GoB to develop and implement biopesticide regulations

Funding Agency

- United States Agency for International Development (USAID)

Implementing Agencies

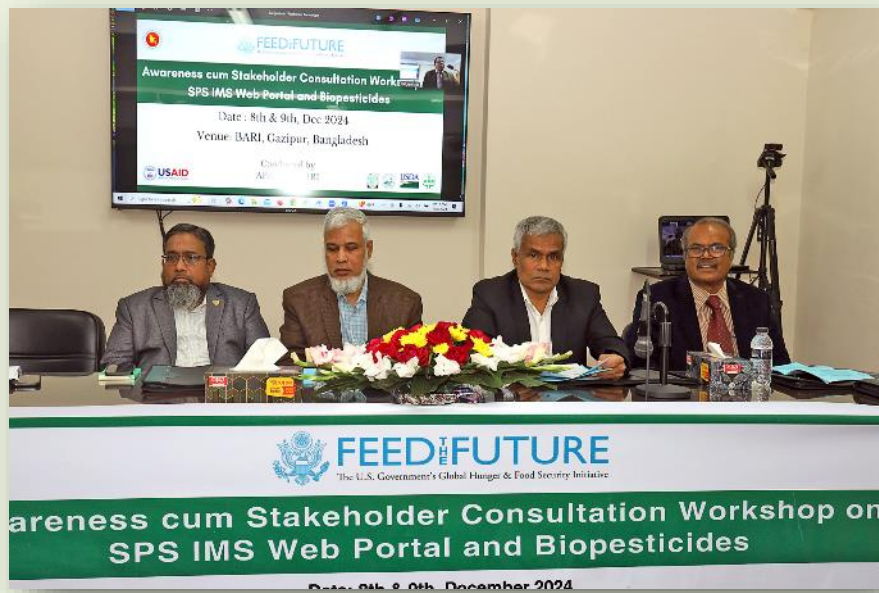
- Asia-Pacific Association of Agricultural Research Institutions (APAARI)
- United states Department of Agriculture

Partners

- Centre for Agriculture and Biosciences International (CABI)

Project Phase 02

- To achieve the objectives, an "Awareness and Consultation Workshop on SPS IMS and Biopesticides in Bangladesh" was recently conducted as an initiative of the project.



Project Phase 02 – Moving Forward

- Major activities are lined up under two objectives;

Objective 01

- **High level policy dialogue** with MOA, MOC and stakeholders on SPS National strategies
- **Integrate the SPS IMS** with stakeholders
- **Review existing SPS policies** and suggest implementation strategies
- Stakeholder and collaborator meetings

Objective 02

- **Awareness & Consultation on biopesticides use, GAP for safe production and trade in Bangladesh**
- **Policy advocacy for biopesticides promotion and MRL deferral to align with international standards**
- **MOA discussions on accelerating biopesticides inclusion in revised pesticides regulations**
- **Training stakeholders on biopesticide registration guidelines**
- **Training & analyzing on residue and efficacy research findings**

Asia-Pacific Biopesticides Community of Practice (ABCoP)



- APAARI launched the Asia-Pacific Biopesticide Community of Practice (ABCoP) in 31st of May 2024 as a part of the STDF/PG/634 project's sustainability plan.
- “[ABCoP 2024 - The Rewind](#)” was published, documenting and highlighting the key discussion points, and ABCoP 2025 commenced on 29th January 2025.



Objectives of ABCoP

- **Sustain regional and international collaboration** in improving biopesticide adoption, usage, and facilitating safe trade in the Asia-Pacific region
- **Provide a platform for engaging with diverse perspectives and fostering knowledge exchange.**

Key Takeaways from ABCoP 2024

- **Research and Developments:** Innovative research method in Africa and Latin America; safeguarding specialty crops using biopesticides
- **Private Sector Insights:** Biopesticide status and challenges
- **Public-Private Partnership-** Success stories
- **Innovative Tools:** CABI BioProtection Portal and Lex-agri's Solution Finder
- **Efficacy Challenges and Solutions:** Tiered system approach (AVPMA) to address efficacy challenges,
- **Global Harmonization Efforts:** Through joint review systems, highlighting potential integration opportunities for biopesticides.

Community of Practice (CoP) on Public Private Partnerships



Key Insights:

- **Facilitate Dialogue & Trust-Building:** Establish a neutral platform for public and private stakeholders to openly discuss challenges, expectations, and opportunities.
- **Identify & Address Policy Barriers:** Provide a space to highlight policy constraints and propose practical solutions for enhancing the business environment.
- **Promote Innovation & Investment:** Encourage collaboration on technology adoption, digital solutions, and sustainable agricultural practices.
- **Capacity Building:** Offer workshops, webinars, and case studies to enhance stakeholder knowledge on regulatory frameworks, market trends, and partnership models.
- **Strengthen Collaboration & Policy Advocacy:** Develop joint policy recommendations for improving the ease of doing business in the agricultural sector.



Agroecology-based Market an and Biopesticides



- EC/EU requested APAARI to lead an Agroecology project in Asia
- Focus on Regional Multi-actor Research Network on Agroecology by promoting sustainable agroecological practices through farmer to farmer exchange visits facilitating safe production, consumption and trade in the region
- Use of Biopesticides is being considered to factor into AE
- In the process of revision for including **AE markets concepts** to enhance the potential trade of Agroecological products through value chain enhancements.

THANKS

