

Asia–Africa BlueTech Superhighway

Work package 2: Integrated Multi-Trophic Aquaculture

Adapting and implementing Integrated Multi-Trophic Aquaculture tailored to local contexts in Asia and Africa.

Target countries: Kenya, Nigeria and Bangladesh

Lead: Leila Basti, WorldFish

Vision

All coastal and marine resources are used sustainably with improved food and nutrition security facilitated by the development and scaling of IMTA systems.

Objectives

- Demonstrate context-specific profitable and sustainable IMTA systems fit for scaling.
- Empower local institutions through partnerships and co-leadership of project activities.
- Strengthen capacities of national staff, farmers groups and market aggregators for scaling IMTA.

Expected outcomes

- The three target countries receive comprehensive environmental, farmer and market assessments on the viability of finfish–seaweed–bivalve production with specific emphasis on identified agroecologies.
- At least two combinations of finfish–seaweed–bivalve production are piloted in each country where it is safe to do so.
- At least one combination of finfish–seaweed–bivalve production is scaled (in number, not size) in each target country.
- 50,000 people (at least 50% of whom are women) utilize and benefit from finfish–seaweed–bivalve production.
- At least ten coastal communities per target country are informed about the methods and benefits of finfish–seaweed–bivalve production.



Strategy

To support the implementation of IMTA systems, the work package will conduct a comprehensive situation analysis, examining technical, environmental, climate, social, economic, institutional and market factors. Additionally, the project will validate context-specific business models for the sustainable production of aquatic foods through IMTA. Finally, it will disseminate innovations in IMTA within and beyond the target countries through communications and demonstrations to encourage greater adoption.

Partnerships

- Kenya Marine and Fisheries Research Institute (KMFRI)
- Lagos State University (LASU)
- Fisheries and Marine Resource Technology (FMRT) at Khulna University (KU)
- Bangladesh Fisheries Research Institute (BFRI) Brackish Water Station in Khulna and Marine Fisheries and Technology Station in Cox's Bazar
- Chattogram Veterinary and Animal Science University (CVASU)
- Department of Fisheries (Nigeria, Kenya, Bangladesh)

Asia–Africa BlueTech Superhighway (AABS)

- A seven-year initiative, from 2023 to 2030, to transform aquatic food systems in Asia and Africa by leveraging South–South collaboration.
- AABS is implemented by WorldFish in collaboration with a host of partners.
- It aims to improve food and nutrition security, create increased employment and income opportunities and sustainably manage marine and coastal resources to mitigate and adapt to climate change.

Phase 1: 2023–2027 in Bangladesh, Kenya, Mozambique, Nigeria and Tanzania

AABS has four synergized work packages:

1. Digital Coasts
2. Integrated Multi-Trophic Aquaculture
3. Climate-Smart Technologies for Reducing Aquatic Food Loss and Waste
4. Incentives for Coastal Conservation and Fisheries Management

Donor: UK International Development, under the UK's Climate and Ocean Adaptation and Sustainable Transition (COAST) program of the [Blue Planet Fund](#)



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About WorldFish

WorldFish is a leading international research organization working to transform aquatic food systems to reduce hunger, malnutrition and poverty. Collaborating with global, regional and national partners, WorldFish delivers scientific innovations, evidence to inform policy, and knowledge to enable equitable and sustainable impact for millions who depend on fish for their livelihoods. As a member of CGIAR, WorldFish contributes to building a food- and nutrition-secure future and restoring natural resources. Headquartered in Penang, Malaysia, with country offices across Africa, Asia and the Pacific, WorldFish strives to create resilient and inclusive food systems for shared prosperity.

Citation

This publication should be cited as: WorldFish 2024. Asia–Africa BlueTech Superhighway: Leveraging South–South collaboration to deliver a triple win for nature, people and climate. Penang, Malaysia: WorldFish. Work Package 2 Brief.

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