

Asia–Africa BlueTech Superhighway

Work package 3: Climate-Smart Technologies for Reducing Aquatic Food Loss and Waste

Scaling affordable and accessible climate-smart food preservation, processing and storage technologies to reduce aquatic food loss and waste.

Target countries: Kenya, Mozambique and Tanzania

Lead: Aditya Parmar, WorldFish

Vision

Improved livelihoods and food security through novel technologies in aquatic food distribution systems.

Objectives

- Reduce postharvest loss and waste by 50% in selected value chains.
- Increase income by 30% for small-scale, resource-poor, fish workers and processors.
- Improve and ensure quality and safety of postharvest fish.
- Strengthen the policy and institutional environment for postharvest fish loss and waste reduction.

Expected outcomes

- Detailed assessments completed in two target countries understanding the scale and drivers of fish waste and loss in Asia and Africa.
- At least two sustainable technologies are adapted and piloted in each target country to minimize fish loss and waste.
- At least one sustainable technology is scaled in each target country that has proven to be effective in reducing fish loss and waste.
- Improved incomes of up to 40,000 people, over 80% of whom are women, by using climate-smart technologies to enhance fish processing.
- Institutional frameworks required for adopting and scaling postharvest technology in the fisheries sector understood and the vulnerability of the postharvest sector to climate change and variability in Asia and Africa assessed.



Strategy

This project will tackle aquatic food loss and waste by fostering partnerships with a range of stakeholders, including governmental and non-governmental organizations, to leverage expertise and resources. It focuses on conducting comprehensive assessments to understand and address the drivers of fish loss and waste, piloting innovative, climate-smart technologies in processing, storage and preservation, and building local capacity through workshops and training. Climate-Smart Technologies for Reducing Aquatic Food Loss and Waste emphasizes sustainability and scalability, with rigorous monitoring and evaluation to inform strategies and share learnings in key regions in the target countries.

Partnerships

- Coastal and Marine Resource Development (COMRED)
- Kenya Marine and Fisheries Research Institute (KMFRI)
- Norwegian Food Research Institute (Nofima)
- Pwani University
- Simply Solar Technology Consulting
- Tanzania Fisheries Research Institute (TAFIRI)
- University of Dar es Salaam
- University of Pretoria
- Wildlife Conservation Society (WCS)
- World Resources Institute (WRI)

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.

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