



Food and Agriculture  
Organization of the  
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# AQUACULTURE IMPROVEMENT PROJECTS: DRIVING CHANGE BEYOND THE FARM LEVEL

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*Aquaculture improvement projects aim to make positive, regional-scale changes in the sector and have resulted in some notable successes, such as the formation of the Hainan Tilapia Sustainability Alliance.*

Market-based and non-state governance approaches – in the form of eco-certifications – have emerged as valuable and widely accepted ways to address sustainability issues within the aquaculture sector. However, these standards tend to exclude producers with limited resources. Excluding salmon farming, the overall percentage of aquaculture production certified or adhering to these standards remains a fraction of the total volume produced. Most certification schemes tend to focus on improving farm-level practices and do not address the cumulative impacts of multiple farms and the shared risks they are subject to.





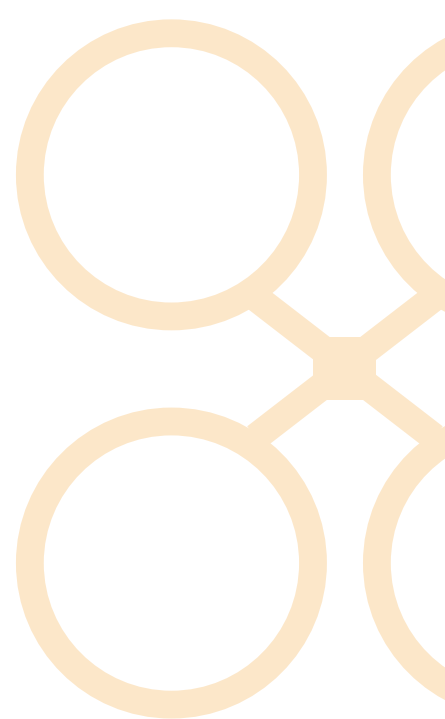
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Farm members of the HTSA

# WHAT IS AN AQUACULTURE IMPROVEMENT PROJECT?

**Scope and application:** An aquaculture improvement project (AIP) is a way for a group of stakeholders to come together to tackle high priority sustainability issues by improving the management practices and policies of all farms operating within a specified area defined by the shared use of a waterbody. To achieve this, AIPs have been adapted from the collaborative approach used by fishery improvement projects.

**Driving improvements beyond the farm level:** To successfully address cumulative impacts and shared risks, AIPs need to operate at a scale beyond the farm level and include most farms in a defined area sharing a waterbody – an approach often referred to as zonal management or a landscape/jurisdictional level approach. The origin of these beyond-farm level AIPs is more than ten years old, following their introduction by organizations such as the Sustainable Fisheries Partnership. After the successful formation of the Hainan Tilapia Sustainability Alliance (HTSA) that established a code of good practice on best management practices at the farm and zonal levels (HTSA, 2016) further AIPs have been introduced in major shrimp-producing regions in Indonesia, Thailand and Viet Nam. AIPs registered on the AIP Directory are summarized in Figure 1. These AIPs have multiple objectives, but all ultimately aim to better understand and manage shared risks such as disease outbreaks and cumulative environmental impacts, and to support effective policy.



**AIP structure:** AIPs are designed to be used wherever there is a sustainability issue or concern and a willingness to address it by producers. An AIP has structured process and development stages and includes components which should be made public, namely:



Participation – An AIP should draw upon market forces and a wide range of aquaculture stakeholders who can affect change.



Assessment – The AIP should develop a needs assessment to identify the environmental challenges and scope of the project.



Workplan – The AIP must develop a workplan with time-bound objectives to address the key issues identified in the assessment.



Reporting – AIPs must publicly report progress on their activities and outcomes on a regular basis.

There is no universally agreed sustainability definition or standard for aquaculture in general and there are only standards for a small number of aquaculture commodities. Therefore, AIPs do not necessarily lead towards certification. Most current AIPs focus on tackling specific priority sustainability issues identified during the assessment, but the results are not necessarily certified.

AIP SUMMARY		MAR 2020	SEP 2020	MAY 2021
# of AIPs		5	8	8
TOTAL PRODUCTION <i>(all AIPs tonnes)</i>		102,000	102,644	172,545
SPECIES GROUPS		Shrimp Tilapia	Shrimp Tilapia	Shrimp Tilapia
COUNTRIES		China Indonesia Thailand	China Indonesia Thailand Vietnam	China Indonesia Thailand Vietnam

**Figure 1.** Summary of AIPs registered on the AIP Directory.



© Asian Seafood Improvement Collaborative

Shrimp farmer in Bac Lieu, Viet Nam



© Asian Seafood Improvement Collaborative

Shrimp farmer in Sidoarjo, Indonesia

## WORKING ALONGSIDE FARM- LEVEL STANDARDS

The relationships between AIPs and third-party aquaculture sustainability certifications are not mutually exclusive. AIPs are inclusive in nature and include all operators. In addition, as they can help to raise the environmental performance of multiple (and often uncertified) farms, including small-scale farms, they have the potential to support an individual farm's journey towards certification if they choose to pursue it.

A pilot project supported by ISEAL 'Streamlining the Path towards Sustainability in the Aquaculture Industry' is using the Aquaculture Stewardship Council (ASC)'s Improver Programme to provide a pathway to transition farms into AIPs under two models: AIPs to ASC certification (AIP2ASC) and AIPs to Better Management Practices (AIP2BMP) (ASC, 2021). Other AIPs are moving towards recognition by third-party standards, like the Asian Seafood Improvement Collaborative in which participants work in conjunction with NGOs, seafood buyers and certification bodies to foster improvements in disease management in the shrimp sector. Meanwhile projects working toward the Global Aquaculture Alliance's<sup>1</sup> biosecurity area management standard – which aims to reduce shared disease risk and improve aquatic health management – could use the standard to support the creation of an AIP.

<sup>1</sup> The Global Aquaculture Alliance was rebranded as the Global Seafood Alliance (GSA) on 13 September 2021.

The My SHRImp application is a free download area-level data tool that minimizes risk by providing early warnings for *Enterocytozoon hepatopenaei* (EHP), acute hepatopancreatic necrosis disease (AHPND) and white spot disease, and assists shrimp farm planning. The tool, developed by FAI farms in association with three AIPs, was piloted under the Shrimp Health Resources Improvement Project (SHRImp) in Thailand.



## DEMONSTRATING PROGRESS

AIPs should demonstrate progress, as this will give them credibility throughout the seafood supply chain and provide evidence of improvements to potential buyers. To support this, a dedicated platform to share information on AIPs – The AIP Directory – has been created. This independent platform enables AIPs to publish their workplans and report on progress every six months. Highlights include:



The formation of a producer organization – the HTSA – that is strengthening regional management and promoting a zonal approach to aquaculture management through a code of good practice.



The development and launch of digital, area-based management tools and applications that inform farm siting and industry planning and improve disease management – all of which can be used by multiple industries worldwide.

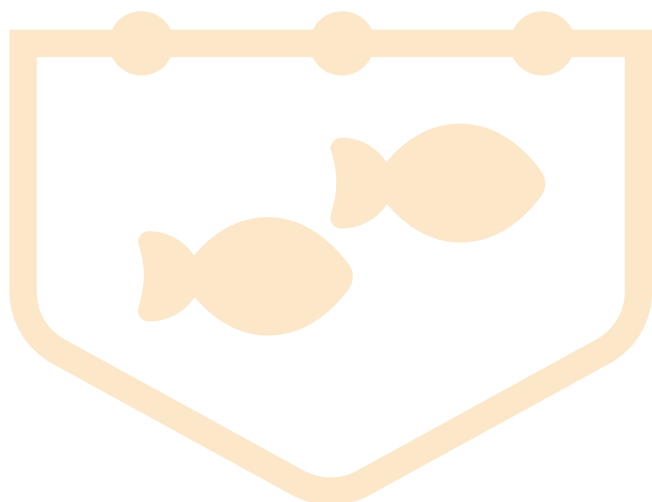
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# ACKNOWLEDGEMENTS

This brief was prepared by Paul Bulcock (Aquaculture Information Manager, Sustainable Fisheries Partnership).

Required citation: FAO. 2022. *Aquaculture improvement projects: driving change beyond the farm level*. Bangkok.

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