

Factsheet final findings Global Challenges Programme Call 2



SUPERSEAS: Supermarket supported area-based management and certification of aquaculture in Southeast Asia

Summary

A key response to environmental challenges associated with aquaculture has been the promotion of management approaches that move from the farm-level to area-based management. Area-based management has the potential to integrate and coordinate farm-level environmental and social issues at a wider ecological scale and provide opportunities for certifying smallholders currently excluded from Northern markets. As an inclusive business model, these areas can also ensure access to finance including smallholders.

The objective of SUPERSEAS is to improve the design of area-based management for aquaculture production in order to reduce the economic and environmental risks associated with smallholder aquaculture, and improve the terms under which smallholders are incorporated in domestic, regional and international retail-led value chains. The research is organized into three PhDs focusing on (1.) management principles and governance, (2.) finance and risk transfer, and (3.) value chain governance. Countries of study are Thailand, Vietnam and China.

Final Research Findings

1- There is a general trend of the promotion of area-management by international public actors. However, we also see efforts to integrate area-level approaches to management coming from the private sector. While there has been increased interest across these range of actors to address systemic risks in aquaculture production, there is little research on how area-based approaches are organized, how effective they are in Southeast Asia, or what benefits they can bring to farmers, value chain actors and consumers alike.

2- It is clear that many existing area-based approaches are based on top-down planning, most often associated with remote GIS-based techniques for defining zones or areas. Very little research has been producer-centered, taking into account environmental risks in- and outside of their farms. Defining these boundaries is a key target of research.

3- There is very little experience and knowledge with risk transfer around Southeast Asian aquaculture. Nevertheless, there is considerable potential for risk transfer both by insurers and financiers in and outside aquaculture value chains. Overcoming the reluctance of those engaged in risk transfer is based on lack of timely information. Determining what information is required, in what form and with what degree of 'acceptable uncertainty' is core to the research.

Final (outcomes) achieved

Area-based management is a formative concept which first requires empirical research, so the project is no longer action research with an adaptive research cycle. The project has multiple levels of influence; through national and international policy, private standards and industry through retail and producer organizations. Together with our partners we determine how we can shape narratives and practices. The team has outlined the expected output and potential outcomes per PhD. In this process, project partners discussed opportunities for influence or communication of project results.

Messages to

A) Actors from private sector:

- Since supermarkets face risks in terms of matching demand for aquaculture products with supply, we assume it is in their interest to create inclusive arrangements for groups or areas that incorporate producers in their supply chains.

- A key element of risk-assurance tools is that they can reduce information gaps between what the presumed and actual production risks are. Once validated information is available, external (insurance company) and mutual (farmer-led) insurance arrangements can be developed.

B) Civil society and practitioners organizations:

- Risk-assurance tools, including certification, have traditionally been developed for farm scale, with the danger of placing a disproportionate burden of compliance on smallholder farmers. However, new assurance models appear more promising, including government-led monitoring programs of common resources supported by yield-gap models.

C) Policy makers:

- In existing conceptualizations of area-management the starting point is often understanding the ecological functions of a landscape. However, an understanding of the social connectivity between farmers is equally important as it is these social relations interacting with environmental risks which shape shared environmental risk management.

Knowledge products

- Article “Inclusive environmental performance through ‘beyond-farm’ aquaculture governance” (November 2019)
- Article “[Moving beyond the shrimp farm: Spaces of shared environmental risk?](#)” (September 2018)
- Article “[Institutionalizing area-level risk management: Limitations faced by the private sector in aquaculture improvement projects](#)” (July 2019)
- Article “[Understanding the potential of eco-certification in salmon and shrimp aquaculture value chains](#)” (August 2018)
- Blog post “[Emerging components of area-based management in aquaculture](#)” (June 2018)
- Article “[Not just for the wealthy: Rethinking farmed fish consumption in the Global South](#)” (March 2018)
- Video “[Sustainable seafood - Do consumers matter?](#)” (February 2018)
- Blog post “[Certify buyers, not producers](#)” (January 2018)
- Book chapter “[Certify sustainable retailers?](#)” (August 2017)
- Interview “[What are effective means for organizing aquaculture? A sneak preview from the field](#)” (March 2017)
- Article “[Aquaculture: Are farmed fish just for the wealthy?](#)” (October 2016)
- Article “[Reversing the burden of proof for sustainable aquaculture](#)” (July 2016)
- Article “[Contribution of Fisheries and Aquaculture to Food Security and Poverty Reduction](#)” (March 2016)

Knowledge networks

Simon Bush is on the technical advisory board of the Monterey Bay Aquarium Seafood Watch Program and of the Dutch [Sustainable Trade Initiative's \(IDH\) Aquaculture Program](#). There he has discussed the work of SUPERSEAS, and advocated the results to date where relevant. His work with the [Seafood Watch Program](#) has also led to a sub-project under SUPERSEAS to establish an aquaculture governance framework including area-based management.

Co-creation

The PhD researchers interviewed project partners and external stakeholders at the start of the project to choose study sites. Partners were invited to a kick-off meeting in Malaysia, a European workshop in Utrecht and most recently a midterm meeting in Vietnam. The various meetings throughout the project have facilitated feedback to the researchers after their scoping trip and partners identified opportunities for taking up potential research results including: the [FAO Committee on Fisheries](#) process, feeding into the [Aquaculture Stewardship Council group certification](#) standard development, the [IDH Landscape approach program](#) and [aquaculture program](#), input into the [Sustainable Fisheries Partnership aquaculture program](#). The researchers also had considerable engagement with various organizations in the field. For example, the Chinese NGO China Blue Sustainability Institute during fieldwork.

Consortium Partners

- [Wageningen UR - Environmental Policy Group](#) (The Netherlands)
- [WorldFish](#) (Bangladesh & Malaysia)
- [Mekong Delta Development and Research Institute, Can Tho University](#) (Vietnam)
- [Prince of Songkla University](#) (Thailand)
- [Sustainable Fisheries Partnership](#) (USA)
- [BRAC](#) (Bangladesh)
- [Aqua-Spark](#) (The Netherlands)
- [Vietnam Pangasius Association](#) (Vietnam)
- [GIZ](#) (Germany)
- Stark Consulting (Switzerland)
- [York Centre for Asian Research \(YCAR\), York University](#) (Canada)
- [Bao Minh Insurance Company](#) (Vietnam)
- Suratthani Shrimp Farmers Club (Thailand)

Contact person

Prof. Dr. Simon Bush, Simon.bush@wur.nl

Project websites

- [F&BKP Research Project page](#)
- [SUPERSEAS website](#)