

WØRLD ECONOMIC FORUM

Milkfish Nurseries Inclusive Business Experience in the Philippines

About the Philippine Fisheries and Aquaculture Industry

The fisheries sector is one of the largest contributors to the agricultural performance of the Philippines, accounting for 16.4% of the sector's GDP contribution. The aquaculture subsector has the largest output, with 2.3 million MT in 2019, translating to around 53% of the country's total fish production and almost 2.7% of global fish production. The market for fish in the Philippines continues to thrive - the country has the highest fish per capita consumption globally at 38 kilograms per year. However, the increasing price of feeds, the unsustainability of fishing, and climate change continue to challenge the sector.

The resilience and potential growth of the Philippine aquaculture sector lie with the establishment of new markets, the strengthening of the industry's competitiveness, and the reduction of farmer's risk-with public-private collaboration playing a central role in bringing these to fruition. With this in mind, the PPSA brought together the Bureau of Fisheries and Aquatic Resources (BFAR), Tambuvog Development Center (a nongovernment organization advocating for sustainable fisheries), and Feedmix Specialist II (a market leader for integrated aquaculture) to develop an inclusive nursery project aimed at strengthening market linkages between fisherfolk and institutional buyers.

Developing an Integrated and Inclusive Project

The PPSA's Fisheries Working Group led by Feedmix - agreed to implement an aquaculture value chain project involving fisherfolks along Tayabas Bay in the Quezon province. The sites chosen for the project are the municipalities of Padre Burgos (where the marine cage farming operations of Feedmix are located) and Agdangan (where the target fisherfolk organizations' are located).

All three major activities in aquaculture were explored - hatchery, nursery, and grow-out, but the Working Group agreed that a milkfish nursery operation would be the most feasible to implement. It has a short production cycle, lesser investment requirement, and is technically less demanding. It is also relatively easy to identify a market for milkfish as (1) it is one of the more popular commercial species and (2) there is a gap in fingerling supply, translating to the greatest potential benefit for the fisherfolk involved.



A Multi-Stakeholder Approach

The Convenor

The PPSA facilitated the design of the Inclusive Business project, with financial support from the Inclusive Business Action Network (iBAN) and technical input from the ICCO Cooperation. ICCO Cooperation directed the development of the Inclusive Business model, and guided by current farm-level practices, ICCO's experience in establishing similar models across Southeast Asia, and input from Tambuyog Development Center and Feedmix Specialist II.



Bisig Mangingisda ng Sildora (BMS – a fisherfolk association) will operate a nursery to produce fingerlings that will be supplied to Feedmix. The group recently gained access to an eight-hectare fishpond previously under the auspices of BFAR. BMS applied and was granted access and control of the property, but work is still needed on the transfer of the Fishpond Lease Agreement to BMS. The ponds also need rehabilitation, the cost of which has been estimated at PHP 2.5 million (around USD 50,000). Feedmix agreed to pay for this cost in exchange for a regular supply of fingerlings over a stipulated period.

Feedmix Specialist II provided the fisherfolk with funds to rehabilitate the ponds, technical input, training on how to efficiently operate milkfish nursery ponds for fingerlings production, and feeds on credit. Feedmix will buy all the fingerlings produced by BMS. Funds provided to BMS by Feedmix will be considered advance payment and will be deducted from the sale of fingerlings. The supply of the fries needed by BMS will be provided by Feedmix to support production during the lean season. Details of this arrangement are still in negotiation between the parties.

Service Providers

The Bureau of Fisheries and Aquatic Resources (BFAR) will provide technical assistance and supervision to the fisherfolk associations involved. Support from BFAR is especially crucial when the fisherfolk are applying for insurance with the Philippine Crop Insurance Corporation (PCIC) as it reduces the perceived risk being taken on by PCIC. BFAR will also provide some project funds to the intervention, including those to finance the capacity building activities run by Tambuyog for the fisherfolk. As a service provider, BFAR also played a crucial role in ensuring the project is aligned with BFAR's *Masaganang Ani at Mataas na Kita* Program and with the New Thinking in Agriculture and Fisheries approach of Secretary William Dar (Department of Agriculture). The Aquaculture Division of BFAR will also facilitate the involvement of the agency's local offices when needed.

The Philippine Crop Insurance Corporation (PCIC) is mandated to provide insurance protection to the country's agricultural producers – particularly to subsistence farmers – against losses of their crop and non-crop assets on account of natural calamities and pests and diseases.

Tambuyog Development Center played a vital role in both mobilizing farmer organizations and acting as a value chain development facilitator. To ensure inclusivity, Tambuyog mobilized the involvement of women groups. These women are mostly mothers who have been in the business of fingerling breeding and product value addition (such as smoking milkfish) for years. Tambuyog will also implement a mangrove reforestation project around the project fishpond areas. As the Department of Environment and Natural Resources may buy out seedlings as part of its reforestation program, the cultivation of mangrove seedlings here will help provide supplementary income for the fisherfolk involved. Tambuyog's work with the private sector aims to promote a social reform agenda which stresses the rights of marginalized fishers, the wider coastal environment and society, and the responsibility of companies to respect those rights. Tambuyog and our partner fisherfolk associations are collaborating with Feedmix to work together towards better aquaculture practices, and to develop inclusive value chains that yield returns and benefits for partner community groups. Through assistance from Grow Asia and PPSA, we managed to gain more technical and practical inputs to better deliver the processes in the project."

Dinna L Umengan

Executive Director Tambuyog Development Center

Looking Ahead

Although some activities are already being implemented – such as capacity building programs and the involvement of women in value-adding activities like the production of smoked monkfish – the project is still in the process of development. Looking ahead, we expect that through this arrangement the producer groups involved will have a stable market for their products while Feedmix gets a continuous supply of fingerlings for its grow-out farm operations. It is expected that Feedmix, the fisherfolk, and all other enterprises involved will increase their revenues through this partnership.

The PPSA and Grow Asia will continue to support the Fisheries Working Group to make sure the value chain project is indeed inclusive and will lift fisherfolk livelihoods.