

Breaking Gender Borders in Philippine Aquaculture: a Case Study in Negros Occidental, Philippines

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A gender case study of housewives engaged in tilapia farming was conducted in January 2018 in Isabela, Province of Negros in central Philippines. A socio-economic survey was administered to female fish farmers using the face to face interview method with the aid of a structured questionnaire. Fish farming as a livelihood requires strenuous and laborious activities. For these reasons, fish farmers are usually male. The expectation that husbands should provide for the family and wives are left at home to take care of the household has ceased to be the norm. Women have found their niche and have become actively involved in the management, production, and general administration in aquaculture. While poverty cannot be totally eradicated, Filipinos' resiliency opened doors for women to explore their indispensable roles in aquaculture and economic progress.

Big Catch in a Small Town

According to information gathered from the Philippine Statistics Authority, during the first quarter of 2017, tilapia production in the Philippines rose by 2.08% during the same period from the previous year. Situated in central Philippines, the Province of Negros Occidental, one of the twin provinces forming the Island of Negros (Fig. 1), is ranked number 24 in the country's tilapia production with a contribution of 735.69

metric tons (BFAR, 2017). Dubbed as "Sugarbowl of the Philippines," Negros Occidental is known for vast lands of sugarcane plantations. Nonetheless, aquaculture activities in the Province are still evident. In fact, a review by Cruz *et al.* (2008) showed that the practice of tilapia-shrimp polyculture in Negros Island was effective in reviving the aquaculture industry in the Province of Negros Occidental. This practice also contributed to the popularity of tilapia even in small towns in the whole Island of Negros.

Isabela (Fig. 1) is a third class municipality in the Province of Negros Occidental (PSGC, 2008), with an average annual income of PHP 35 million (about US\$ 0.7 million) or more but less than PHP 45 million (US\$ 0.9 million), and is about a two-hour drive from the Province' capital Bacolod City with a distance of 78.2 km (Provincial Government of Negros Occidental, 2018). With a land area of 17,740 ha, this town is famous for their "Tigkalalag Festival" celebrated every 2nd of November since 2004. This is their way of showing respects for their departed love-ones in a form of merrymaking. This is a distinct festival in the Philippines wherein instead of a festive ambiance, the "Tigkalalag Festival" is associated with Halloween, zombies, and other supernatural creatures.

Aside from its "Tigkalalag Festival," Isabela is also known for its upland tilapia farming, a method of culturing tilapia in ponds in the mountains or in hilly areas. While women empowerment in the whole Municipality of Isabel has been recognized in the recent years, most of the farm-related roles are dominated by men due to the heavy nature and demands of the job. This is however different for the town's upland tilapia farming which is generally managed by women.

Isabela Housewives in Action

A face-to-face interview with housewives from Barangay Mansablay, Isabela, Negros Occidental revealed the roles of women in the aquaculture ventures of this Municipality. The respondents are married and have big families with an average of six members. Their respective husbands are engaged with other sources of income hence, the housewives are left to take care of their backyard tilapia farms. Basically, all activities in the tilapia farms are being managed by women, *i.e.* from pond preparation to harvesting up to marketing. The women source their fingerlings from private hatcheries in nearby areas while commercial feeds are bought from the market. Even without receiving any formal training about



Fig 1. Site of Isabela, Negros Occidental, central Philippines (Note: the other province forming the Island of Negros is Negros Oriental)

(Source: Wikipedia.org)

tilapia farming, these housewives learned the trade from their neighbors who are also into the business. According to these women, most of the problems encountered in their farm activities are related to financial limitations, predation of farms by birds, and poor water quality.

Though most of the fish farmers are men, these women do not feel insecure. They are rather motivated to learn the business so that they could help their husbands in providing for their family needs. *Mrs. Herminia Guzman*, 54 years old, owns one earthen pond which she stocks with tilapia. The produce is mainly for their family consumption. Her husband is employed hence away from home most of the time. She lives with her husband, sons, and grandchildren. Her four sons constructed the pond in their backyard with an area of approximately 34 m².

On the other hand, *Mrs. Natividad Cabrellos*, 50 years old, owns two earthen ponds which produce 150 kg of tilapia which she harvests every six months. At average weight of about 500 g per fish, the fish could be sold for PHP 100 (US\$ 2) per kg. She markets the produce directly in the community as buyers go to her farm to purchase the fish. Her husband works in the sugarcane and banana plantations of Negros Occidental. When they established the tilapia farm, *Mr. and Mrs. Cabrellos* hired a laborer to help them in the initial digging of the pond for a week. After which, she and her husband continued the pond preparation for almost a month until it was ready for stocking. *Mrs. Guzman* and *Mrs. Cabrellos* are among the few housewives engaged in aquaculture in the Negros Occidental. According to these women, they practice fish farming to augment their family incomes for their everyday expenses in their households and to sustain the studies of their children.



Fig. 2. Face-to-face interview with *Mrs. Cabrellos* (left) and *Mrs. Guzman* (right) at the Municipal Agricultural Office of Isabela, Negros Occidental

Worldwide Phenomenon on Gender Equity

These Filipino women (known as Filipinas) show that the norm of confining women in household chores, incapable of doing hard labor and providing for their families no longer holds true today. The accomplishments of these Filipinas are reflective also of the women's role in aquaculture in small communities similar to those experienced in Sakhon Nakhon, Thailand as reported by Sermwatanakul *et al.* (2024), and in Driti, Fiji as reported by Nandlal (2005).

The same attitude towards the desire to be involved in aquaculture was observed among the members of the Driti Village Women's Club (Nandlal, 2005). When men in their village abandoned the tilapia project due to inadequate fingerling supply, the women revived the ponds with the help from their Government and the Canada-South Pacific and Ocean Development Program. Given the right set of tools, training and opportunity, these women were able to provide enough fresh supply of tilapia in their village ending the dependence on canned fish and other meat products from stores (Nandlal, 2005). It can be inferred therefore that the workforce and role of women in food security and employment especially in small villages could not be underestimated.

There is no established women's club in Isabela concerning aquaculture. However, an organization called Sitio Calasag Farmer's Association is recognized where women are encouraged to be members. As training and education are being accessed across all age and gender, the niche of women in Philippine aquaculture was identified by Mandas (2016) in her paper presented during the Asian Pacific Aquaculture 2016. These include farm owners, managers, technicians, laboratory analysts, technical sales representatives, researchers, extension workers, educators, and consultants. Moreover, Satapornvanit *et al.* (2015) indicated in their study that women in Cambodia, Thailand, and Viet Nam are already involved in aquaculture and their contributions are essential.

Respondents from the case study in Isabela, Negros Occidental had modest educational attainment. Although education is important as the basic tool in decision making in farms, it is not the only source of knowledge of the fundamentals in fish farming. Training sessions, seminars, and actual observations of other farms are other sources of fish farming knowledge that can guide new entrants and existing farmers. Even if production efficiency could vary from farm to farm, anyone who has interest, knowledge, and

capital can go into the business of tilapia farming. Results of the survey also indicated that regardless of educational attainment and gender, anyone can engage in tilapia farming. In line with the increasing competency of women in this business and technology, it is but fair to re-evaluate how women are treated, valued, protected, and compensated in their workplace.

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