

# Women in Aquaculture

**Case studies of aquaculture production in Cambodia, Thailand and Vietnam throw up several important questions and issues related to the empowerment of women in the sector**

By **Arlene Nietes Satapornvanit** (arlenens@gmail.com), formerly worked with Network of Aquaculture Centres in Asia-Pacific, with support from Amornrat Sermwatanakul and Kanit Naksung Department of Fisheries, Thailand; Kao Sochivi, Fisheries Administration, Cambodia; **Truong Hoang Minh** and **Nguyen Thi Kim Quyen**, Cantho University, Vietnam; **Yuan Derun**, Network of Aquaculture Centres in Asia-Pacific, Thailand; and **Nikita Gopal**, Indian Council of Agricultural Research, India

It has been reported in many documents that women are involved at various nodes of the aquaculture value chain. However, is it enough that they participate in activities? How much involvement is considered work? How much work is considered paid work? How does women's involvement in aquaculture impact their value and well being? One of the challenges facing women in aquaculture nowadays is the lack of recognition for their efforts, and the insufficient or inaccurate data to support how much contribution they are providing to ensure food security at the household, community and even global levels. In fact, the lack of sex disaggregated data hinders the design and planning of gender responsive policies, projects and interventions.

To explore some of these questions, case studies on selected aquaculture value chains, focusing on the grow-out production node, were conducted under the USAID Maximizing Agricultural Revenues through Knowledge, Enterprise Development and Trade (MARKET) project, with the following objectives: to map gender roles in the selected

aquaculture value chain; to identify the roles and activities of women and men in the grow-out stage of aquaculture; to analyse the gender dimensions with respect to division of labour, decision making process, benefit sharing and access to resources (including knowledge and information); and finally, to identify gender issues, needs and opportunities.

The case studies included inland small-scale aquaculture in Cambodia, small-scale marine shrimp and tilapia cage culture in Thailand, and the small-scale shrimp-rice rotation and tilapia culture in Vietnam. Primary data was collected through focus group discussions, key informant interviews, and in-depth surveys of men and women involved in the grow-out production of selected species.

Depending on the countries, species cultured and farming systems employed, women's involvement varied. The constraints women faced includes the heavy workload in the household which needs to be balanced with the obligation in the farms. These case studies could be used as reference and materials for outreach and training in building capacity of practitioners to include women and consider the gender aspects in their aquaculture work.

Primary data was collected through farmer and household surveys, in-depth interviews with women, focus group discussions, and key informant interviews. Secondary data was also collected from local language documents, published papers, reports and government records. The respondents were farmers (at least 30 farmers or households per system, but the ratios of male to females were unequal in some systems). In addition, in-depth interviews were also conducted with a few women to discuss their activities both at home and in the farm, roles, relationships with other stakeholders, ownership, capabilities, power and decisions making, needs, priorities and aspirations.

In Cambodia, we studied women's labour in small-scale freshwater aquaculture production. Here, aquaculture is still considered a family activity where all members engage in various aquaculture related work. Farmers also hire temporary external labour (men for construction, women for harvest). Both men and women are involved but women have more inputs than men in terms of labour and time. Men in this area often

WIRAWAN RAYAN



Women's involvement not only in fish farming but also in other livelihood activities provide a major income source for their households

migrate to big cities for alternative occupations outside their hometown, leaving the women to operate the farms. In most areas, rice farming is the main occupation while aquaculture is just secondary, along with livestock farming.

One of the issues related to roles included wages. Men would be paid USD 1 to 3 per day while women would be paid USD 0.5 to 2 per day. One of the reasons given for the differences in wages was that men are given a heavier workload. But this does not consider the fact that when women are left to operate the farms when men migrate elsewhere, there is pressure on women to balance both household and farm work, and sometimes other livelihoods. Technical decisions are mainly taken by the men as they are more trained. Training opportunities are limited for women as they cannot participate in training programmes even though they are invited. Financial decisions are taken mainly by the women due to their marketing and trading skills.

Women farmers face issues such as lack or inadequate technical knowledge and experience in aquaculture, financial assistance and technical support, markets to sell their fish with better prices, and support to mitigate or protect their culture operations from the impact of environmental and climate change, including drought, flood and diseases.

Small-scale aquaculture needs to be linked with food and nutrition security but there is a need to address the issues above to empower women. One example is that of Mrs CN, 54, who is both a housewife and a fish farmer. She is married to Mr KH, 56, a rice and fish farmer. They have four children and two young grandchildren. Mrs CN was trained in fish seed and grow-out production, after which she successfully expanded her farm and equipment. Now she is training others and has become an example of success, not only in her village but among aqua farmers in Cambodia. Her success has benefited herself, her family and their community.

In Thailand, we considered women's labour in small-scale freshwater tilapia cages and marine shrimp ponds. In one area of Sakon Nakhon province, northeast Thailand, tilapia farmers' wives also have other economic activities, such as selling fish, owning a grocery store, farming rice and rubber cultivation. These are considered more important sources of income. Thus women's involvement in tilapia cage farming is limited due to other chores, but they still want to participate.

Tilapia farming adds income to the family and keeps families together as the men do not have to migrate to other areas to find work. The women manage the financial aspects especially income disposal for household use.

A case study of small-scale marine shrimp ponds in a district in Chanthaburi province, eastern Thailand, revealed that female shrimp farmers have other work at home, or in trading, as hired labour and other income generating activities. Although their time is limited, women farmers can still work in the shrimp farms with their husbands, doing such tasks as feeding, record keeping and checking stock. Regarding farm ownership, it is common for husband and wife to jointly own farms. Female farmers perceive their role as important in shrimp farming due to the ownership status but the men take the main responsibility as they have more knowhow. This is a result of government extension programmes in the past wherein only the men were invited and could attend as the women had other work to do.

The women farmers do not feel constrained in doing tilapia cage culture or shrimp farming, especially when they work in partnership with their husbands. Household work does not prevent them from being involved in aquaculture but can limit the time they devote to farming. Women farmers also feel empowered while making decisions to improve their operations to generate more income. A case in point is Mrs M, who was the first one to establish tilapia cage farming in her area. She is also a rice farmer. She said, "I have more control of our rice and fish farming business than my husband. I can make my own decisions about farm operations. I can do everything that a man can do in the farm, even heavy work. People here perceive me as economically better-off." Another beneficiary is Mrs SK, a small-scale shrimp farmer and public school teacher, who said: "I hired a farm manager (male), and I also visit my farm and can interact with my manager and workers without any difficulty."

Tilapia cages are located on rivers, often at quite a distance from the homesteads. This is difficult for women who have household responsibilities and other livelihood activities. Access to finances is also important, as operating fish cages could entail high costs. The lack of technical knowledge hinders them, for tilapia cage operations and management are quite intensive.

**One of the challenges facing women in aquaculture nowadays is the lack of recognition for their efforts.**

For shrimp, the limited land available for expanding operations is a constraint even if the farmers have more knowledge and resources. The farm workload could be high but they can hire workers to help them.

For those who require finances, the high cost of operations leads to more debts. Many farmers also incurred heavy losses due to diseases, especially the Early Mortality Syndrome (EMS) in the last three years.

In Vietnam, women's labour in small-scale tilapia cages and rice-shrimp rotation in ponds was studied. Tilapia cages in the province of TienGiang, in the Mekong Delta region, are dominantly managed by male members of households. Women's involvement is limited mainly at the input stage, and during sales and marketing in local markets. Women have to balance their household and other activities with farm work. The major roles of men include operations and handling technical matters, obtaining credit or loans and managing the repayments, stocking seed and feeding during the culture period, and financial and selling decisions, including pricing. However, both men and women can take decisions on how to use the income from tilapia for spending, especially for family and household use.

For rice-shrimp rotation system in ponds, both men and women can operate small-scale farms. The women are active in the small-scale collection and harvest of produce, in assisting in feeding and cleaning, as well as financial decisions and making savings, along with housework. The men mainly engage in critical operations which have intensive technical and management requirements, as well as marketing communications, that is, negotiating with buyers.

In Vietnam, as in most places in Asia, heavy and physical work is stereotyped as a male activity. Women's involvement is therefore limited due to the perception that they cannot do heavy work, and also because of the lack of technical training in intensive operations. According to the men, they take responsibility for the heavy work and for high risk investments in order to protect their women from hurt and losses. In addition, the stereotype of men being regarded as head of the household might limit women's participation in farm work.

Several important issues and questions emerge from these case studies. In household or small-scale operations of aquaculture, women are already involved. The main issue is how can they be more empowered in the work that they are doing? Increasing women's participation can be an added burden, and yet there is often no adequate compensation. Thus, beyond just increasing their participation or involvement, we should examine how women are treated, compensated and protected as they go about their work in farms, homes and communities. Do they have a voice or opportunity to express how they feel in the workplace?

A recurring theme among the women in the three countries studied was the added burden of aquaculture to their demanding work in the home and in other livelihood activities. How can men share the burden of household and family responsibilities that women carry every day? As the seafood industry becomes more concerned about their contribution to social development, especially in the production nodes, one of the areas of focus will be how the public, private and civic sectors may support empowerment of women in aquaculture. ❏