

Gendered Spaces in Abalone Fisheries in the Philippines

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Abstract

This paper analysed the social, economic and ecosystem conditions of abalone fishing in seven abalone-producing provinces in the Philippines. In the province of Iloilo, a closer examination of how these factors shaped patterns of resource access, control and benefits by women and men vis-à-vis their roles in production, reproduction and in the community was done. A survey of abalone collectors/divers was conducted in April-May 2013. Of the 153 abalone collectors/divers surveyed, 87% were males and only 13% were females; almost all of the women were from Iloilo. Gleaning in tidal flats was usually undertaken by women while skin diving in deeper parts of the sea was performed only by men. On average, abalone fishing contributed 56% to the total household income. Social norms reinforced by ecosystem conditions and geographic locations influenced gender roles and relations of men and women. Men had greater access and control over abalone fisheries. Women's access and control were constrained by the location of the resource and access to it, religion and household responsibilities. There is a need, however, to recognize the complementation of the roles of men and women in abalone fisheries, in the home and in the community as starting point towards more judicious management of abalone fisheries.

Introduction

Gender roles in fisheries vary depending on culturally rooted working practices, local ecological conditions, social structures and state policies (Siason et al. 2002; Lentisco and Alonso 2012). Changes in food production systems including fisheries can be attributed to the development and introduction of new technology, policy, social, cultural, political and environmental factors (Gopal et al. 2014). Siason et al. (2002) reported that in many Asian countries, women are actively engaged in the different phases of fisheries production. Their paper documented that the development of technology in brackish and fresh water aquaculture has led to more Thai and Cambodian women working in aquaculture and in Vietnam, more than half of the workers in capture fisheries, fish farming, transporting, processing and marketing of fishery products are women.

Siason et al. (2002) also mentioned that Malaysian men usually attend training on aquaculture since women stay at home to take care of domestic responsibilities, and Indonesian women work in seaweed farms, pearl oyster, shrimp, freshwater and paddy culture systems. Where they are active in fisheries and aquaculture, Asian fisher women predominantly work in small scale and traditional fisheries activities because they lack technical skills, basic knowledge and the capital for intensive commercial systems (Siason et al. 2002). Women's low level of participation in fisheries can be attributed to socio-cultural constraints that exacerbate their low literacy rate, lack of access to credit and training opportunities, limited mobility and undervalued contribution to the fisheries sector (Siason et al. 2002).

In the Philippines, fishing expeditions are usually carried out by men because women have been socially assigned the role to manage the household. Therefore, in fishing, women largely engage in near-shore activities such as in shell and fry gathering and spear fishing in rivers (Siason et al. 2002). Literature related to gender and fisheries in the Philippines (Siason 2001; Siason et al. 2002; Asong et al. 2002) are available but there is paucity of research on abalone and gender in abalone fisheries in particular.

Abalone is a single shelled marine mollusc that thrives in sublittoral zones. It is a high value fisheries commodity but unlike tuna, shrimps, milkfish and sardines which are already established industries, abalone is an infant industry. The Philippine abalone industry began in 1971 and its importance to the economy is often underestimated. An average of 427 tonnes annual collection equivalent to 122.2 PHP million (2.9 million USD) was recorded from 1990-2005 (Encena and Bayona 2010). Between the years 2002 and 2012, the country's highest volume of export was in 2004 with more than 600,000 kg valued at 3 million USD. Export volume, however, continuously dropped beginning in 2005 and, in 2012, less than 300,000 kg valued at 1.4 million USD was produced (NSO 2013).

The entire industry depended solely on the harvesting of wild stocks (Tahil and Junio-Menez 1999 as cited in Maliao et al. 2004). Stocks continued to decrease due to unregulated harvesting, destructive practices, absence of a policy framework for the management of the abalone fisheries, and occurrence of natural disasters that damaged the natural habitat (Maliao et al. 2004; Encena and Bayona 2010; Palomares and Pauly 2014) SEAFDEC Aquaculture Department, based in Tigbauan, Iloilo had developed technology for abalone aquaculture (*H. asinina*), but key informants claimed that its economic feasibility has yet to be validated.

This paper analyses the social, economic and ecosystem conditions of abalone fishing in seven abalone-producing provinces in the Philippines. Likewise, it examines how these factors shape the patterns of resource access, control and benefits by women and men vis-à-vis their roles in production, reproduction and in the community. It is important to take these factors into consideration since they either present opportunities or constraints for men and women in Philippine abalone fisheries.

Materials and Methods

Study sites

The study covered the provinces of Eastern Samar, Iloilo, Leyte, Northern Samar, Palawan, Tawi-tawi and Western Samar (Fig. 1), which are among the major abalone-producing areas in the Philippines.

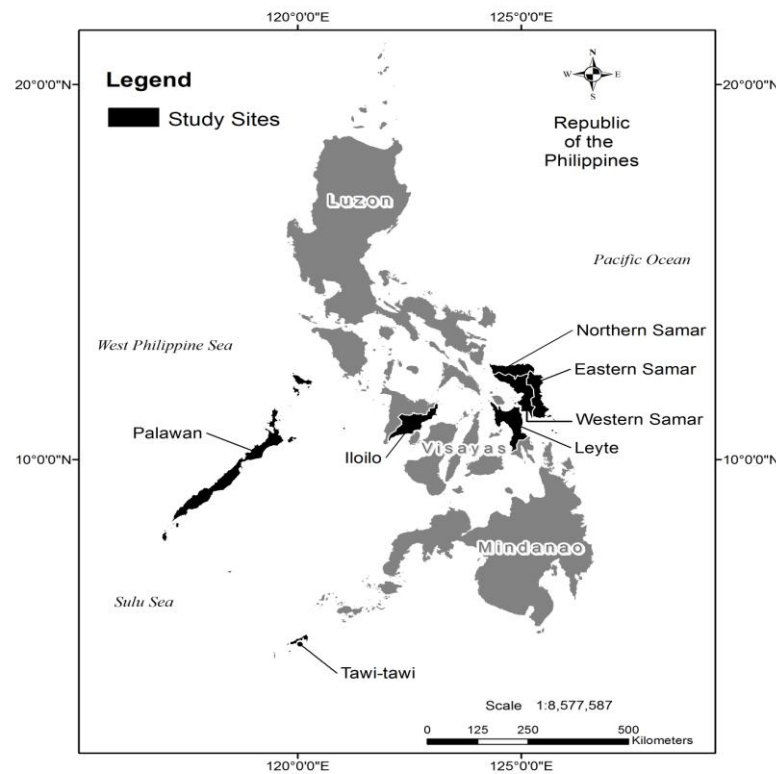


Fig 1. Location of the sites of the study on abalone fisheries in the Philippines.

Western Visayas region that includes the province of Iloilo has the highest average annual family income of 129,905 PHP (3,093 USD at exchange rate: 1 USD = 42 PHP) while the Autonomous Region for Muslim Mindanao (ARMM) which includes the province of Tawi-tawi has the lowest average annual family income of 88,632 PHP (2,110 USD). Iloilo has the biggest population of 2.2 million while Eastern Samar has the lowest population at 428,877. Palawan has the highest population growth rate at 3.7% and it also tops in terms of literacy rate at 83.9%. The dominant religion in Tawi-tawi is Islam while the other provinces are Catholic. Tawi-tawi is a third class province with the lowest literacy rate of 71.6 percent and where people's life expectancy is lower by at least nine years compared to the national average.

Data gathering methods and types of data gathered

Primary data used in this paper were collected through a survey conducted in April-May 2013 for the research project "Philippine Abalone Supply Chain Improvement." The survey covered 153 abalone fisher-respondents who were identified through referral of traders of abalone in the area. Fieldwork was facilitated by local research partners and enumerators who were familiar with the study areas and who spoke the local dialect.

A focus group discussion (FGD) was conducted in Iloilo to gain deeper insights into the gender roles of men and women, their access, control and benefits from abalone fisheries and their triple roles (productive, reproductive and community work). The initial findings were validated during stakeholders' consultations in all areas, in which abalone collectors, traders, officials from the local government units (LGUs), and representatives from the academe participated. Secondary data from the LGUs, statistics agencies, Department of Trade and Industry, Bureau of Fisheries and Aquatic Resources and the Southeast Asia Fisheries Development Center (SEAFDEC) were also utilised.

Table 1. Selected features of regions/ provinces covered by the study.

Region	Province	Population ^a (2010)	Population Growth Rate ^a (1990-2010)	Income Class ^a	Literacy Rate ^a (10-64 years old)	Average Annual Family Income ^b (USD)	Life Expectancy at Birth ^b	
							Female	Male
Western Visayas					82.6 %	3,903	74	67
	Iloilo	2,230,195	1.55	1				
MIMAROPA ^c					83.9 %	2,594	74	68
	Palawan	994,340	3.70	1				
Eastern Visayas					72.9 %	2,994	70	65
	Eastern Samar	428,877	1.33	2	NA	NA	NA	NA
	Leyte	1,789,158	1.83	1	NA	NA	NA	NA
	Northern Samar	589,013	2.17	2	NA	NA	NA	NA
	Western Samar	733,777	1.60	1	NA	NA	NA	NA
ARMM ^d					71.6 %	2,110	62	58
	Tawi-tawi	450,346	2.40	3	NA	NA	NA	NA

^a 2010 Census of Population, National Statistics Authority; ^b Romualdez, et al. 2011;

^c MIMAROPA – MIndoro, MArinduque, ROmlon, PALawan (Region 4.B); ^d Autonomous Region for Muslim Mindanao; NA- No Available Data

Analytical framework

To guide data collection, organisation, and analysis, the study adopted relevant tools and concepts from three gender analysis frameworks, namely: the Harvard analytical framework, the Moser framework, and the social relations approach. The Harvard and Moser frameworks have been extremely useful in explaining the gender differences in activities and in both access to and control over resources and benefits (March et.al. 1999). While both frameworks also look into the differences between productive and reproductive work, the Moser framework further categorizes community work into community managing activities and community politics (GIDP/UNDP 2001).

On the other hand, the social relations approach focuses on the relationships between people and their relationships to activities and resources (March et. al. 1999). The concept of gender roles is central to the Harvard framework but both Moser and Kabeer maintain that the roles need to be viewed in the context of the relations between men and women (March et al. 1999). For respondents in Iloilo, the present study identified the productive and reproductive tasks as well as community related services of men and women in abalone fisheries. Productive work included activities directly related to abalone fishing, processing and marketing, while reproductive work covered the maintenance of the household. Community related services included participation in socio-civic work and local political activities that aims to improve the community.

Results

Social-economic and ecological conditions of study sites

Based on the survey conducted, there were four abalone species found in the Philippines: *Haliotis asinina* Linnaeus 1758; *Haliotis glabra* Gmelin 1791; *Haliotis ovina* Gmelin 1791 and *Haliotis varia* Linnaeus 1758. *Haliotis asinina* is the most abundant species accounting to 91.3% of total volume of abalone collected from the wild. Abalone is locally known as *sobra-sobra* in Iloilo, Samar, and Leyte; *kapinan* in Palawan; and *lappas* in Tawi-tawi.

The areas of study were mostly island communities. Economic activities revolved around fishing with limited opportunities for diversification of income sources. Small scale capture fisheries were dominant and generally engaged in by men, while gleaning was considered a complementary activity usually done by women. Gleaning was usually done for domestic consumption but this was also a way to augment the income of fisher husbands.

In Eastern Visayas, Palawan and Tawi-tawi, men dived to gather abalone since the supply source was offshore in coralline areas. According to some fishers in Palawan, in the past decades, abalone disappeared from the nearby areas due to excessive collection on the tidal flats. As such, fishers had to go to deeper waters to collect abalone. In Eastern Visayas, fishers maintained that they had to travel for 4 hours by motorised boat to reach the area where abalone was abundant. On the other hand, the areas in Iloilo had wide tidal flats which were within walking distance from the residences, thus, providing women greater access to glean abalone. Gathering of abalone depended on the tides but women usually gleaned in the early morning or early evening while men dived regardless of the tide.

Tawi-tawi is a predominantly Muslim province and as with conservative Islamic countries “women do not have rights to make all decisions regarding personal choices and careers” (Siason 2002:6). In terms of literacy rate, Tawi-tawi had the lowest among the provinces which further limited opportunities for gainful employment of women (NSA 2010). Participants of the validation meeting that was conducted in Tawi-tawi said that women from predominantly Catholic provinces with higher literacy rates were less restrained from going out of their homes to engage in other income generating activities.

Abalone Fishers: She Gleaned, He Dived

Of the 153 abalone fishers (collectors/divers) surveyed, 87% were males and 13% were females. The average age of abalone women fishers was 42 years while their male counterparts' average age was 36 years. The majority of the fishers (76.2%) were married. In terms of education, the majority of the male (58%) and female (70%) abalone fishers finished elementary education, while twice as many males (31.7 %) finished secondary education as compared to females (15%). Average household size was 5.7. (Table 2)

There were generally more male abalone fishers in the seven abalone producing provinces. Except for Iloilo and Tawi-tawi, there were no female abalone fishers in the five other provinces. Out of the 28 total respondents in Iloilo, 19 were females, while in Tawi-tawi only 1 was female out of the 31 respondents. Across the provinces, average monthly income derived from abalone fishing was 2,343 PHP (55.8 USD) for females and 10,098 PHP (240.2 USD) for males. Male abalone fishers from Northern and Western Samar had the highest average monthly income of 19,477 PHP (463.7 USD) and 17,840 PHP (424.8 USD), respectively. Iloilo male abalone fishers came in third with 11,922 PHP (283.9 USD) while the female abalone fishers had an income of only 2,343 PHP (55.8 USD). The share of abalone fishing to total household income of the women was 31.6% and 59.8% for men but on average abalone fishing contributed 46% to the total household income. On average, women had been in abalone collection for an average of 17 years, while the average for men was 13 years (Table 3).

Table 2. Gender-disaggregated socio-demographic profile of abalone fishers per province.

Variable	Iloilo			Tawi-tawi			Palawan	Eastern Samar	Leyte	Northern Samar	Western Samar	All Provinces		
	F	M	T	F	M	T	M	M	M	M	M	F	M	T
N	19	9	28	1	30	31	27	24	15	18	10	20	133	153
Age (mean)	43.3	26.4	37.9	28.0	34.0	33.8	31.8	39.9	40.3	41.0	43.3	42.5	36.4	37.2
Sex (%)	67.9	32.1		3.2	96.7			100.0	100.0	100.0	100.0	13.1	86.9	
Civil Status (%)														
Married	89.4	33.3	71.4	100.0	90.3	90.3	76.9	87.5	93.3	100.0	100.0	90.0	85.6	76.2
Single	5.3	66.7	25.0		9.7	9.7	23.1	12.5	6.7			5.0	14.4	17.4
Separated	5.3		3.6									5.0		6.0
Educational Attainment (%)														
None	10.5	11.1	10.7			19.4	11.1		7.1			10.0	8.1	8.4
Elementary	68.4	44.4	60.7	100.0	56.7	58.1	48.2	76.2	50.0	66.7	66.7	70.0	57.7	59.4
Secondary	15.8	44.4	25.0		20.0	19.3	37.0	23.8	35.7	33.3	33.3	15.0	31.7	29.4
Vocational	5.3		3.6									5.0		0.7
College					33.3	3.2	3.7		7.1				2.4	2.1
Household Size	5.4	5.1	5.3	4.0	5.5	5.8	4.5	5.9	8.1	5.7	4.7	5.4	5.8	5.7

F = Female; M = Male; T = Total

Table 3. Gender-disaggregated data on number of years engaged in abalone fishing, average monthly income, and share of abalone to household income per province.

Variable	Iloilo			Tawi-tawi	Palawan	Eastern Samar	Leyte	Northern Samar	Western Samar	All Provinces		
	F	M	Ave	M	M	M	M	M	M	F	M	Ave
Number of years engaged in collecting abalone from the wild	17.2	9.1	13.1	6.9	8.5	15.9	18.9	22.7	19.3	17.2	13.4	15.3
Average monthly income (USD)	54.8	283.3	169.0	200.0	188.1	133.3	164.3	464.3	423.8	54.8	240.5	147.6
Share of abalone to total household income (%)	31.6	38.9	35.2	47.7	63.8	83.9	79.3	47.8	31.6	31.6	59.8	45.7

F = Female; M = Male

Abalone fishing was done either through gleaning, which involved collection of abalone in the intertidal zone during low tide, or skin diving at depths of 5-20 m. Gleaning was performed by both men and women while skin diving was undertaken only by men. There were fewer male gleaners in Iloilo compared to women due to the presence of alternative job opportunities.

Regardless of whether abalone fishers gleaned or dived, the method of extraction of abalone during daytime was destructive. Corals and stones which provided habitat for the abalone were upturned by the activities of gleaners and divers. The destruction of the natural habitat affected the sustainability of the supply of abalone in the wild. Abalone fishers were aware of this but still continued their practices.

Division of labour and access, control and benefits profile of Iloilo abalone fisheries

Adult male and female abalone fishers generally performed the same tasks in abalone collection and processing, except for diving and marketing which were done only by the males (Table 4). People perceived diving as risky and an activity which only males can do. It was also the male village trader who brought the abalone to the municipal trader based on the mainland, a trip which required 2 h of travel via pump boat. If a village trader happened to be a female, as in one case in Iloilo, she sold the abalone at a cheaper price due to limited networks and the urgent need to return home to pay her suppliers. As she had very limited capital, she usually got the abalone from the women collectors on credit with the promise that they would be paid after selling the abalone to municipal traders based in the mainland. Male traders were more persistent in collecting debts and more assertive in negotiating for a higher price. Children of abalone fishing households helped in gleaning abalone and in bringing fresh abalone gathered by members of the family to the trader based in the village.

Most of the household work was generally shared by all. Children helped in cooking, doing the laundry, cleaning the house and fetching water in the communal water source. The adults said that they needed to help each other in order to lighten each other's burden. It was very apparent, however, that women still had the greater share of the time spent doing reproductive work.

Table 4. Activity profile of abalone fishers in Iloilo.

	Female		Male		Where?
	Adult	Child	Adult	Child	
PRODUCTIVE WORK					
A. Abalone collection					
1. Diving			✓		Within the village
2. Search with use of flashlight	✓	✓	✓	✓	Within the village
3. Search with bare eyes	✓	✓	✓	✓	Within the village
4. Force abalone off the stone or corals	✓		✓		Within the village
5. Bring to trader in the same village	✓	✓	✓	✓	Within the village
B. Abalone Processing					
1. Boil water	✓		✓		At home
2. Half-cook abalone	✓		✓		At home
3. De shelling	✓		✓		At home
4. Cooling	✓		✓		At home
5. Cleaning	✓		✓		At home
6. Soak in water	✓		✓		At home
7. Salting	✓		✓		At home
8. Put in ice	✓		✓		At home
C. Marketing					
1. Bring to trader in Estancia			✓		Mainland
REPRODUCTIVE WORK					
1. Cook	✓	✓	✓	✓	At home
2. Wash clothes	✓	✓	✓	✓	At home
3. Carpentry	✓		✓		At home
4. Take care of small children	✓				At home
5. Clean the house	✓	✓	✓	✓	At home
6. Iron clothes	✓		✓		At home
7. Fetch water	✓	✓	✓	✓	Neighbourhood
8. Chop firewood	✓		✓	✓	At home
9. Charcoal making			✓		Neighbourhood
COMMUNITY-RELATED SERVICES					
1. CIVAC ^a	✓		✓		Village
2. DRRM ^b related activities (Rescue)	**		**		Village
3. BHW ^c	✓				Village
4. BNS ^d	✓				Village
5. Prepare for fiesta	**		**		Home
6. Church maintenance	**		**		Church
7. Tanod (peace and order officer)	✓		✓		Village
8. PTA ^e	✓		✓		School
9. Transfer of pump boat to safer grounds			✓		Village

** Village officials

^a Civic Action, ^b Disaster Risk Reduction and Management, ^c Barangay Health Worker, ^d Barangay Nutrition Scholar and ^e Parents-Teachers Association

When it came to community work, only the women volunteered as Barangay Health Workers (BHW) or Barangay Nutrition Scholars (BNS) while it was only the men who helped carry the pump boats to higher grounds before the arrival of typhoons. As part of their obligations, all village officials helped out in Civic Action or CIVAC, (e.g. tree planting and clean up drive, preparing for fiesta, and church maintenance). Some even lent out their personal money, offered their pump boats in times of emergency, or helped settle conflicts in order to promote progress in the village. Village officials who are mostly men, perceived helping others as ways by which they could strengthen their political influence while women did volunteer work that benefitted themselves and the larger community. Community-related activities did not involve the children since these entailed great responsibilities.

Men had more access to resources except for credit and capital (Table 5). Women had access to credit since they were responsible for household finances. The income of the husband was turned over to the wife. When the money was scarce, the women were usually the ones who borrowed money from local informal creditors. Women on the other hand did not have access to training, market and political representation since these activities and resources were usually located outside the home. Women's household work constrained their access to these resources except over processing facilities which remained home-based.

Table 5. Access and control profile of abalone fishers in Iloilo.

	Access		Control	
	Women	Men	Women	Men
A. Resources and Services				
1. Abalone	✓	✓		✓
2. Capital	✓		✓	✓
3. Labor	✓	✓		✓
4. Technology	✓	✓		✓
5. Credit	✓		✓	✓
6. Trainings or Extension programs		✓		✓
7. Processing facilities	✓	✓	✓	✓
8. Market		✓		✓
9. Political representation		✓		✓
10. Information	✓	✓		✓
B. Benefits				
1. Income of fisher	✓	✓	✓	
2. Basic needs (rejects are eaten)	✓	✓		
3. Income to motorcycle drivers	✓	✓		✓
4. Income of home-based convenience stores	✓	✓		
5. Money to buy children's needs	✓		✓	
6. Income to boat operator (transportation to Estancia)				✓
7. More knowledge about abalone (FGD)		✓		✓

In terms of benefits, the whole household benefitted from abalone that could not be sold due to its defects, as these were then consumed directly by the family. Marketing of abalone was viewed as directly beneficial to the motorcycle drivers and boat operators who transported the product from the house to the village wharf, and from the village wharf to the traders based in Estancia, a two-hour ride by pump boat from the island village.

Women abalone fishers on the other hand, had both access and control over income when these were allotted for household needs. The additional knowledge about abalone which they gained through their participation in the FGD was accessed more by the male abalone fishers since they were less tied to household work. In fact, there were cases when the women abalone fishers who were personally invited by the researchers to participate in the FGD asked their husbands to attend the activity on their behalf since there was no one else to look after the house. The women abalone fishers' traditional perceptions of female domesticity still dominated.

Discussion

In many Asian countries including the Philippines, women are predominantly engaged in small-scale marketing of fisheries products and in processing. But in Philippine abalone fisheries in some areas where gleaning is possible, women are engaged in collecting and processing while significantly absent in municipal level trading. This can be attributed to the domestic responsibilities that constrain their mobility and their lack of capital. Unlike other marine species collected through gleaning, abalone is not usually consumed by the household because of its high commercial value.

Social norms reinforced by ecosystem conditions and geographic locations in the different study sites shape the gender roles and relations of men and women in abalone fisheries. Women abalone fishers themselves put primacy on their household responsibilities therefore they would gather abalone in the tidal flats which are within walking distance from their residence. This decision to glean is also reinforced by their lack of diving skills which for them are skills more associated with the men. Among oyster farmers and mussel growers, ecological conditions have also influenced who will engage in specific fishing activities. According to Siar et al. (1995) women fishers in Western Visayas comprise 18% of oyster farmers and 2% of mussel growers; this is attributed to the traditional oyster farms being located in shallow portions of the river and mussel farms in deep bays.

In contrast, in Japan and South Korea, women dive for seafood in some areas. In Iki Island in Japan, the women *ama* or *amasan* which means "sea person" are diving experts who dive to a depth of 4-6 m to collect seashells including abalone, which is one of the preferred species due to its high price. In fact, women *ama* are regarded for their professional diving skill in male-dominated fishing communities but they are accorded lower status than men as diving has been perceived as a job only the poor and uneducated would choose" (Lim et al. 2012:31). Similarly in Korea, "Jeju women divers are considered to be the cultural identity and symbol of the island" (II 2012:46). Women in Jeju Island earn from high value fisheries such as sea mustard and abalone but like their Japanese sisters "they feel ashamed because diving is considered to be low status physical labor" (II 2012:47). In both countries, these divers are older women and the oldest in Iki Island is 74 years old. The contributions of both Japanese and Korean women divers to their "society and culture have remained hidden and unacknowledged" (Lim et al. 2012:31). As expected in poor fishing households including abalone fishing households, everyone helps in whatever way they can in the maintenance of the home. Fisher wives and daughters help in the various fishing related activities of the male household head.

Their work is unpaid and even if they contributed a lot to the overall income of the household, this is usually attributed to the male household head. Siason (2001) recognised the assistance and support of women to the work of their fisher husbands as having significant social value such as in reinforcing relationships within the community. In a study of gleaning in Panay Island (LeBlanc (1997), quoted in Palomares and Pauly (2014)) showed that parents taught their children the skills necessary in gleaning which was initially a past time activity with their peers. Men glean only in the absence of employment opportunities in land-based activities.

Men are assigned the role of providers for the family which gives them the privilege of greater mobility compared to women who are expected to take care of the house and the children. Men's greater mobility makes them responsible for the marketing of abalone because they have wider social networks and have more access to information about the market, unlike women whose time is spent more in domestic responsibilities. Siason (2001) also shared the observation that "men are involved in marketing activities mainly when dealing with intermediaries and the fish caught is of high commercial value (tuna, abalone)" (p.3). Male abalone traders presumably have more control over their time making them better traders compared to the women who are constrained by domestic responsibilities and by lack of capital to engage in the marketing of a high value fishery commodity.

Further, women's and men's roles and relations in abalone fisheries are intertwined with their other kinds of work in reproduction and community undertakings as seen in the experience of Iloilo province. Reproductive work and community work are generally shared by both men and women but they seemingly lean towards stereotyped gender roles. The challenge, however, is how women who substantially contribute to household income can have more voice in household decision making and greater negotiating power so that they may have opportunities for personal growth. These conditions can facilitate wider networks for business endeavours.

Across the provinces, both women and men have access to abalone fisheries, however, men have greater access and control over abalone fisheries. There are more males who undertake abalone fishing and such fishing contributes 60% to their total monthly income, while female collectors who spent more years than men in abalone fishing had incomes that accounted for only 32% of their total monthly income. Women's access and control were constrained by physical access to the resource (inshore vs offshore), religion as shown in Tawi-tawi province, and household responsibilities that take much of their time as in the case of Iloilo.

Male divers make up the majority of abalone fishers but they also make use of family labour (especially of their wives) in processing abalone. Further, women's work at home makes possible the work of men in abalone fisheries. With the continuous decline of abalone and other fisheries from the wild, the livelihoods of both men and women are threatened. If abalone disappear from the tidal flats, women will have less or no access to abalone found offshore. This may result in further economic marginalisation of women who, as it is, earn less than men from abalone fishing. The women are rendered more vulnerable since their reduced income will push them to find other types of work that are likely even more poorly paid. Whatever voice women have now in household decision making may also be stifled.

The need to recognise the complementation of the roles of men and women in fisheries, in the home and in the community should be taken as a starting point in working together for more judicious management of fisheries resources. Improving overall management of abalone fisheries would mean sustained income for women and men abalone fishers which would have positive effects on addressing persistent poverty among marginal fishers including the abalone fishers. Palomares and Pauly (2014) also underscored the importance of habitat protection that will ensure the sustained population of molluscs in the municipal waters to reduce poverty and promote health of coastal households.

Conclusion

Social norms reinforced by ecosystem conditions and geographic locations influence gender roles and relations of men and women in Philippine abalone fisheries as well as their access and control over resources and benefits. These findings support existing literature that posit that gender concerns and issues are best understood and appreciated by taking a more holistic and integrative approach. Understanding differences in gender roles and access and control over resources and benefits must be viewed in the context of the social, cultural, and geographic conditions.

The division of labour in abalone fisheries is not only about the separate work that men and women do but also about the complementation and interdependence of their works. Cognizant of the complementarities of roles of men and women in the different spheres of their lives, both should work together to equitably share in the responsibilities and benefits that would accrue from their efforts within and outside the home.

In the Philippines, in the light of the continuous decline in the supply of abalone from the wild that threatens the livelihoods of both men and women, the paper proposes the strengthening of efforts to improve the management of abalone fisheries. These initiatives will ensure that sustained income for male and female abalone fishers will help address the problem of poverty.

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