Women in a Fish Market in Barbados

Mujeres en un Mercado de Pescado en Barbados

Les Femmes dans un Marché aux Poissons de la Barbade

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ABSTRACT

Fishing is usually male work. Yet "fisheries" are much more than just "fishing". Recent investigation on a global scale has shown that if supporting activities (e.g. credit supply) and postharvest (e.g. fish processing and trade) are taken into account, then females may be in the majority. This does not count the growing number of women in policy, management, science, education, civil society, and other activities related to fisheries. CARICOM countries typically have few gender disaggregated fisheries data useful for comparing and assessing the roles and contributions of women and men. The authors conducted research at the Oistins fish market in Barbados, focusing on its successful female fish vendors and other women. Through livelihoods analysis we sought deeper understanding of how society, culture, formal and informal education, household arrangements, and entrepreneurship combined with other factors to shape the involvement of women in fisheries. Results are presented on some of their vulnerabilities, seasonal calendar of activities, multiple household occupations, time use patterns, and strategies for achieving livelihood outcomes. There are marked differences in seasonal patterns of activity, and access to credit was identified as a constraint to entrepreneurship.

KEY WORDS: Fisheries, gender, livelihoods

INTRODUCTION

As in most places, fishermen dominate the harvest sector in the fisheries of the Caribbean but also women play a critical role in most fisheries if postharvest (e.g. fish processing and trade) and ancillary activities (e.g. fishing inputs and financing) are taken into account (Bennett 2005, FAO et al. 2008). Gender disaggregated data suitable for detailed comparative analysis of the socio-economic roles and contributions of women and men are scarce for fisheries in the Caribbean Community (CARICOM 2002). However, even from the most casual field observation, it is clear that women often rule the landing site fish markets around the Caribbean (Grant 2004).

This is the case in Oistins, an important fish landing site on the south coast of Barbados. Due to the lack of gender analysis it is difficult to develop evidence-based policy on gender in fisheries in the English-speaking Caribbean. An examination of livelihoods is one of the most useful ways in which to conduct gender analysis in fisheries anywhere (Weeratunge and Snyder 2009). The poster that accompanied this paper illustrated the results of a very limited examination of the livelihoods of some women in the Oistins fish market.

METHODS

A livelihood is "the assets (natural, physical, human, financial and social capital), the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or house-hold" (Allison and Ellis (2001:379). Livelihoods are situated within broader social and economic systems of culture and society. Within these interlocking systems, people have vulnerabilities assets and strategies to achieve their desired livelihood outcomes. Along the way they must navigate through governance structures and processes. Livelihoods are deemed sustainable when they can maintain or enhance assets, and cope with internal and external perturbations, without irreversibly compromising the natural resource base on which they rely. A sustainable livelihood approach or framework (Figure 1) applies this broad understanding of livelihoods and is frequently used in fisheries analyses (Allison and Horemans 2006, Weeratunge and Snyder 2009).

Bridgetown, the national capital, is the island's largest fish landing site. Oistins, in the south of the island, is next and has a socio-cultural heritage of fisheries livelihoods for men and women. It is the home of the Oistins Fish Festival each year at Easter, and its 'fish fry bay garden' that comes alive every night of the week has become a popular attraction for both tourists and locals. The Oistins fish market building was recently renamed after a woman (Berinda Cox) who was an icon in the fishing community. Oistins is a place with many female fish vendors, female entrepreneurs in the fish fry area and where women have been boat owners for as long as men have fished. Hence, it was considered a site for investigating, as a pilot study, the livelihood stories of women in the fish market. An aim of the study was to test field methods that allowed some insight into how receptive the women in the fish market were to participating in gender analysis.

Two government authorities overlap considerably in jurisdiction at Oistins, but the Fisheries Division's emphasis is on the harvest sector whereas the Markets Division focuses mainly on postharvest. We sought and received assistance from both, and also collaborated with the Barbados National Union of Fisherfolk Organisations (BARNUFO) of which one of the co-authors was the President.



Figure 1. Sustainable livelihoods framework.

Indeed Nicholls instigated the research to assist BARNUFO in obtaining information on the contribution of women to fisheries. McConney and Simmons selected Oistins as the pilot site for field-testing methods. McConney led research design and analysis. Simmons did most of the fieldwork, including adaptive re-design of methods. They collaborated with Nicholls at all stages. The pilot was implemented between October 2010 and February 2011, culminating with a presentation at the Institute for Gender and Development Studies Biennial Symposium: Contemporary Issues in Caribbean Research on Gender and Feminism held 24-25 February 2011 at the Cave Hill Campus of The University of the West Indies in Barbados.

The Fisheries Division's vessel registration database allowed extraction of the Oistins fishing boats based on fields for primary landing site and mooring site. It revealed that 7% of the Oistins fleet is registered to women. Further analysis showed that most of these were iceboats (larger vessels making multi-day trips) rather than the more numerous dayboats (that make only day trips) and moses (small boats that usually fish close inshore). These data require further probing to look for gendered patterns in ownership and vessel characteristics.

The field study started with a flyer explaining the research being distributed at the fish market, to the Markets Division and to the Fisheries Division. Meetings were held with the authorities to explain the research, confirm their cooperation and request data. Officials were given the opportunity to participate in the research. At the fish market the research was explained face-to-face during several visits to female fish vendors. The introduction was a largely photographic slide show displayed on a laptop computer accompanied by discussion of the research topic. We showed images of women's work in fisheries around the world during the introduction, and during the research we provided the participants with photos of themselves at work.

A sample of two vendors per stall, or ten female respondents in all, was selected based upon willingness and availability to participate in the research. They were selected only after all vendors were told about the research and additional visits made by the field researcher to get to know the work of the vendors and the women themselves informally before formal interviewing commenced.

Semi-structured interviews were adapted to the livelihood analysis framework described previously, and administered using the methods of Bunce et al. (2000). These methods (timeline, livelihood assets, seasonal calendar, and daily time use pattern) facilitate visualisation and allow the respondents' results to be quickly fed back to them for gap filling and further investigation. Social network analysis was also to be tested, but this had to be cancelled.

RESULTS AND DISCUSSION

The convenience sample of ten female fish vendors ranged from 30 to 64 years in age. The mean was 50 years. Eight out of the ten reported completing primary but not secondary school, having left formal education in their early teens. About half of the vendors were attracted to and inducted into the industry by kin. Friends brought in the remainder. The vendors most often started in the position of fish cleaner. Few pursued further formal education or fisheries training after entering the industry, but fish handling was the most prevalent occupational training. All of the vendors mainly sold flyingfish and the large pelagic fishes such as dolphin, wahoo (locally called kingfish), tunas and billfish.

The majority of vendors were in female-headed households with one to eight members comprising up to three generations. The average age of household members was 25 years. Most households contained a male/female mix of members, with at least one other person involved in fisheries work. Other members of the vendors' households had jobs in health services, food services, tourism, and a variety of sectors. Usually, some of these were selfemployed.

Using the livelihoods framework, perceived vulnerabilities were investigated. The majority of vendors did not identify any specific vulnerability. The three main categories of reported vulnerabilities were:

- i) Lack of fish: such as due to weather, absence of a fishing agreement with Trinidad and Tobago, etc.,
- ii) Fish market equipment failures: such as the refrigerated storage units or fork-lift, and
- iii) Not enough space for selling fish: a result of crowding in the stalls due to the numbers of both vendors and their assistants.

The latter two vulnerabilities are directly related to the management of the fish market. They may indicate that the vendors lack access to management or lack the power to influence management systems and the design of the physical infrastructure. There was a small users committee at the market, set up by the Markets Division, but its level of functioning was unclear. The status of vendors in the market, and the institutions of market management, need to be further investigated.

Vendors reported their livelihood assets (Figure 2). Physical capital was quite variable. Human capital was limited in terms of formal education, but perhaps underreported in terms of the skills acquisitions that many of them took for granted. Natural capital often included access to small plots of land for kitchen gardening. Social capital is a major livelihood asset, spilling over into others such as the 'meeting turn' (rotating credit association) that provided financial assets. More research into asset portfolios, the malleability of these forms of capital, and their relationship to successful livelihood strategies is needed.



Figure 2. Fish vendors' livelihood assets.

Harvest sector livelihood research and development often seeks to investigate alternative livelihoods for male fishers as a way to reduce over-exploitation and promote stock recovery while making it more profitable for those who remain in the fisheries. A concern of these women in postharvest was about diversifying livelihoods to ensure year round sustainable household income, but this was not a major issue. Over 30% of the vendors had no supplementary livelihood while the remainder reported a diverse set of options.

Vendors confirmed the main or high season as being December to June and the off or low season as being August to October. July and November were shoulder months but most often counted within the low season that was essentially the hurricane season. Supplementary livelihoods were linked to seasonality in the industry, and were prevalent in the off or low season, although there is some multioccupationality throughout the year. Within the suite of occupations of all household members (Figure 3), the women reported that fish vending made only a 'medium' contribution to average household income. Further investigation of supplementary livelihoods and gender differences among them at the household level would be enlightening. The daily time use analysis used the reference/recall periods of March 2010 (main season) and August 2010 (off season) for comparing time use between fishing seasons in the same year (Table 1). We thought that accurate recall between years would be unlikely in the brief interviews unless at least one of the years was exceptional. Vendors work nearly 12-hour days in March when flyingfish and large pelagics were available. Their main household task was said to be early morning food preparation. Comparing



Figure 3. Livelihoods in the households of fish vendors.

Table 1. Vendors'	daily time	use patterns	in March and
August 2010.			

Time	Typical activity in March 2010 high season	Typical activity in August 2010 low season	
6:00 AM	Cooking for mem-		
7:00 AM	bers of the house-	Cooking for members	
8:00 AM	hold	of the household	
9:00 AM			
10:00 AM			
11:00 AM			
12:00 PM		Set up, work in fish market and clean up	
1:00 PM	Set up, work in fish		
2:00 PM	market and clean		
3:00 PIVI	up		
4.00 PM			
6:00 PM			
7:00 PM		Relax with household	
8:00 PM		after dinner or go out	
9:00 PM	Relax with house-	for recreation with	
10:00 PM	hold after dinner	other tishertoik	
11:00 PM			
12:00 AM			
1:00 AM			
2:00 AM	Sleep	Sleep	
3:00 AM			
4:00 AM			
5:00 AM			

this to August, the latter month is characterised by shorter work days and more time spent on both recreation and household duties. From informal interviews it appeared that recreation (e.g. playing dominoes) strengthened social networks, building social capital. The off season was also when vendors had time for self-improvement and planned for the next fishing season.

Vendors were asked to comment on successful livelihood strategies. Their suggestions focused upon technical solutions for improving fish products and sales such as:

- i) Customer service: to attract and retain customers,
- ii) Purchasing practices: to ensure the best fish at lowest price,
- iii) Good fish storage: to address market infrastructure deficiencies,
- iv) Division of labour: to be efficient in the use of their assistants, and
- v) Product quality: to enhance customer experience and storage life.

Vendors seldom mentioned organisational strengthening and empowerment despite the presence of three struggling fisherfolk organisations in the Oistins area. They did not mention any serious barriers to success.

CONCLUSION

Women outnumber men in fish processing and trading across the world but, since their informal sector activities are often not recorded, they are invisible in national labour and economic statistics and ignored by researchers (Davis and Nadel-Klein 1992). Thus, the socio-economic contribution of women is typically underestimated. Only a few countries in the developing world collect and actively use gender-disaggregated data on fisheries (Weeratunge and Snyder 2009).

Fisheries are regionally, nationally, and locally important uses of Caribbean marine resources. There is an urgent need, however, to seek deeper understanding of how society, culture, formal and informal education, household arrangements, entrepreneurship and other factors combine to shape the different involvement of women and men in fisheries. Gender research is essential for informing fisheries policy and finding ways in which to improve livelihoods (Davis and Nadel-Klein 1992, FAO 2006).

The Markets Division and Fisheries Division do not mainstream or pay much attention to gender in their policies, plans and operational management, but both are conscious of the gendered divisions of labour in the industry and the different roles of men and women. Several administrative forms contain a field for recording the sex of industry participants, and that provides some gender context to official statistics where databases can be queried, such as for fishing boat registration. The need for gender mainstreaming is very evident. In this pilot study useful insight was provided from a small dataset. It was a study more of women than of gender, but some lessons were learned. The field methods were relatively successful although the vendors did not all cooperate fully or immediately or as much as we would have wished. A longer period of immersion will be necessary in order to build trust and a higher degree of willing participation. Incentives may need to be crafted to support this.

Further gender analysis is required to determine the nature of vessel ownership, capital investment decisionmaking, and operational agency arrangements. This includes the managerial power conferred to women through ownership or agency for absentee owners given that most vessel captains and crew are male.

Social network analysis is a tool that should be tested for examining gender within fisheries governance, adaptive capacity, resilience, and the ecosystem approach to fisheries (De Young et al. 2008). We strongly recommend conducting gender analyses coupled with quantitative social network analyses in order to provide useful insight into the dynamics of gender in Caribbean fisheries (McConney and Parsram 2008, Parsram and McConney 2011).

ACKNOWLEDGEMENTS

The authors thank the Oistins fish vendors who participated in this pilot study. We also acknowledge the assistance of Adriel Jackman of the Fisheries Division and Elvis Bryan of the Markets Division who provided assistance.

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