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Research Paper



Avoiding Pitfalls in Development Projects that Aspire to Empower Women: A Review of the Asian Fisheries Society Gender and Fisheries Symposium Papers

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Abstract

Many papers from the five Asian Fisheries Society (AFS) women/gender symposia reported on efforts to empower women but not on the underlying empowerment premises. To better understand women's empowerment, we chose to define the root word "power" based on feminist development literature. We then used the Longwe Women's Empowerment Framework to assess how each project from the 20 papers selected from the AFS women/gender symposia, has contributed to the process of women's empowerment. This framework proposes five levels of empowerment - welfare, access, conscientisation, mobilisation and control. Our results showed that most of the projects described in the selected papers achieved empowerment at the welfare or welfare to access levels, and in some cases the achievement at a fragile access level had reverted back to the welfare level. Our findings thus showed that women are still far from being able to define their own needs and priorities and to control resources which may help them to challenge their subordinate positions. In the fishery sector, feminist concepts of empowerment, which should have a place at the core of women's empowerment efforts, have been avoided. Unless women in the fisheries sector are able to construct a collective self to define and defend their gender needs, the control level of empowerment will remain far beyond their reach.

Introduction

After World War II, early initiatives in development were directed at addressing inequalities between developed and developing nations. These initiatives, however, focused on men and failed to narrow the economic gap between developed and developing nations. Boserup (1970) in her study highlighted the failure of including women in development projects even though, they played critical roles in sustaining local and national economies, especially in agricultural production. The report also observed that women professionals all over the world started to pressure their

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governments for change and that government and non-governmental agencies subsequently made visible efforts to integrate women into development projects.

Development projects which are predominantly based on the objective of economic growth may not truly benefit women. A review of the evidence of connections between economic growth and gender equality (Kabeer and Natali 2013) found that equality contributes to economic growth but, the reverse, that economic growth led to greater equality, was not necessarily the case. Providing services to women and increasing their income do not necessarily improve their wellbeing. This is especially the case if the new income generating activities increase their already heavy work burden and may adversely impact their physical and mental health. In addition to the economic criteria for measuring women's empowerment, several other criteria should also be used.

Starting in the late 1980s, researchers focused more on gender to develop better understanding of women's roles in the various economic sectors and to aid development efforts to address gender inequality. Although late in starting, the fishery sector (which includes aquaculture and fisheries activities) and its institutions, such as professional societies, also began to give attention to gender.

Through its Indian Branch, the Asian Fisheries Society (AFS) was first involved with the theme of women in fisheries in 1990 when it conducted the Workshop on Women in Indian Fisheries (Sudhindra 1992). Dr M.C. Nandeesha, who initiated the Indian event, subsequently helped the non-governmental organisation, Partnership for Development in Kampuchea (PADEK) to hold workshops (1994; 1996) on women in Cambodian fisheries (Nandeesha and Heng 1994) and women in Indo-China fisheries (Nandeesha and Hanglomong 1997). He also persuaded the then President of AFS, Prof. Dr. M. Shariff, to have AFS organise a women in fisheries in Asia Symposium in conjunction with the Fifth Asian Fisheries Forum organised by the AFS (Shariff 2002). Since then, a symposium on women/gender in the fisheries and Aquaculture Forum).

From the papers presented in the AFS women/gender in fisheries symposia series, research on women/gender studies made only slow progress. The lack of strong progress seemed to be partly because many of the researchers in the sector are not familiar with gender research methods and basic concepts (Williams et al. 2012). Many of the gender researchers also are newcomers to gender research, having been educated in disciplines such as biology and economics (the current authors included), and only a few have a grounding in feminist scholarship.

The AFS symposia have attracted papers that were predominantly concerned with women/gender in a development context. Power and empowerment are explicit or implicit among the development issues addressed. However, most studies did not indicate clearly whether the intended empowerment outcomes have been achieved in their projects.

The current paper reviews how selected papers published in the proceedings/papers of the first five AFS symposia (1998; 2001; 2004; 2007; 2011) addressed women's empowerment. We

first briefly examined the gender and development discourse on women's empowerment, and from this chose a frame for analysing the selected papers.

Materials and Methods

In order to find a conceptual frame for analysing the content of papers from the AFS gender and fisheries symposia, we undertook a literature study of feminist and development interpretations of the concepts of power and empowerment.

To provide the material for analysis using the conceptual frame, we then selected papers from the four AFS proceedings (Williams et al. 2001; Williams et al. 2002; Choo et al. 2006; Williams et al. 2012) and those from the gender and fisheries special issue of the journal *Development {51(2)}*. As the AFS symposia are special sessions within mainstream AFS Fisheries and Aquaculture Forums, the papers they attract are mainly independently contributed, i.e. not invited papers or multiple papers resulting from gender research programmes. Thus, they reflect the general stream of research and development projects funded by research institutes and development agencies, and are not the result of theme research planned and funded by the symposium organisers.

For the present study, papers were selected as relevant if they examined empowerment of women, paying due attention to the context within which women were situated. Thus, most of the chosen studies were of individual, or group experience at household or community level. In all, 20 papers were deemed relevant.

Results

A short review of the concepts of power and empowerment

Due to its now widespread use, the word "empowerment" carries different meanings when used by different people within different contexts. Very often, its use by applied researchers and development workers is never explicitly defined. The failure to define and explore the practical details of how empowerment can be achieved weakens its use as a tool for planning strategic change (Rowlands 1997). Diverse views exist on the meaning of empowerment and the ways to measure it (Okali 2013). It has also been accused of being "downsized" and constricted (Batliwala 2010).

The term "empowerment" can be understood better by going back to its root word "power" which is often described in association with another descriptive word (such as over, to, with and within). One definition of "power over" is the ability of the powerful to affect the actions and thoughts of the powerless (Gaventa 2006). Such power could be described as "zero sum"- the more power one person has, the less the other has. This kind of power can be seen at many levels from household to national or international policy making (Rowlands 1977). Further, Rowlands (1997) suggested that, in the development context, empowerment has often been constructed on a "power over" definition, and that women should somehow be empowered to participate within the economic and political structures of society. However, Gaventa (2006) noted that more and more

development workers are becoming aware of the need to analyse and understand the changing configurations of power, and to seek out other approaches that will result in a change of power relations. Power can also be conceptualised as a process when power is linked to "power to", "power with" and "power from within" (Rowlands 1997; Table 1).

Table 1. Implications of different dimensions of power (Luttrell et al. 2009, adopted from Rowlands 1997).

Type of power relation	Implications for an understanding of empowerment	
Power over: ability to influence and	Changes in underlying resources and power to challenge	
coerce	constraints	
Power to: organise and change existing	Increased individual capacity and opportunities for access	
hierarchies		
Power with: increased power from	Increased solidarity to challenge underlying assumptions	
collective action		
Power within: increased individual	Increased ownershapes and desire to shapes	
consciousness	Increased awareness and desire to change	

If power is used in the sense of "power over", a gender analysis shows that power is wielded predominantly by men over other men, and by men over women (Rowlands 1997). Rowlands added that this form of power can be witnessed in dominant social, political, economic or cultural groups over those who are marginalised. Power, in this sense, is in finite supply and, if one group gains power, the other group will have less. From a feminist perspective, interpreting "power over" entails understanding the dynamics of oppression and internalised oppression; empowerment thus is more than participation in decision-making, and must include the processes that lead people to perceive themselves as able and entitled to make decisions (Rowlands 1997).

Definitions of empowerment based on the interpretations "power to", "power with" and "power within" are associated with processes by which people become aware of their own interests and how these relate to the interests of others (Rowlands 1997). Further, the "power within" approach to empower women will help build women's confidence, self-esteem and undo the effects of internalised oppression. From the feminist's point of view, achieving empowerment must involve undoing negative social constructions so that people come to see themselves as having the capacity and the right to influence decisions. The feminist model includes not only the more tangible expressions of power but also an understanding of how internalised oppression creates barriers of inequality between men and women (Rowlands 1997). People who are systematically excluded from power and influence in society internalise the messages they receive about what they are supposed to be like, and believe the messages to be true, thus resulting in internalised oppression (Rowlands 1997).

One major constraint to achieve gender equality in the coastal and rural communities in Asia is that many women have accepted their subordinate position or perceived this as natural. Siason et al. (2001) in her overview on women in fisheries in the Philippines described them as "self-sacrificing, viewing themselves more as supporters than leaders". Many women from the fisheries community in Malaysia considered that it is their duty to help their husbands and perceived that work as based more on home needs, rather than as for pay (Choo 2005). In their work in addressing gender mainstreaming in the fisheries sector, Arenas and Lentisco (2011) noted that many women

have low self-esteem, possibly because of the social values that hold men superior. Women can only be empowered if they shed this internalised oppression.

To empower women to critically and creatively reshape their worlds, women's own concept of themselves has to be de-coded and re-inscribed (Wieringa 1994). Wieringa (1994) further added that decoding and reinscription are painful processes, since women are often fearful of change; the old may be painful and uncomfortable but it still provides the security of tradition and the consent of one's social surrounding.

Criteria other than economic criteria are needed when considering and measuring women's empowerment. In this respect, the United Nations Population Information Network (POPIN, undated) guidelines for women's empowerment comprises five components: women's sense of self-worth; their right to have and to determine choices; their right to have access to opportunities and resources; their right to have the power to control their own lives, both within and outside their home; and their ability to influence the direction of social change to create a more just social and economic order, nationally and internationally. Using these five components as indicators to women's empowerment can help focus on the well-being and status of the women and not only on the objects or money that they possess. The well-being approach therefore involves not only the external objective indicators (like income, nutrition and life expectancy) but also the subjective dimension of how individuals feel about their health or economic status (White 2009).

However, despite the global aspirations for a more holistic approach to empowerment, development efforts tend to focus mainly on women in isolation and on economic interventions for them. Okali (2011) warned that "*it cannot be assumed that by focusing on women, agricultural and rural development interventions will result in desired outcomes for them. Everything we know about the organisation of society, and including gender relations, should lead us to question this assumption*". She stressed that gender interventions must be well targeted in order to meet specific and practical needs, i.e. more than narrow economic interventions, to improve the lives of women and their families.

In Longwe's (2002) framework of women's empowerment, the women-only focused economic approach occupies the welfare level, where women are passive beneficiaries of a development project. Longwe (2002) suggested five levels of a women's empowerment framework (Table 2) which are not really a linear progression but can become a self re-inforcing loop. A final point, and one that will be borne out in several of the papers reviewed below, is that women's empowerment is not a fixed and immutable state. In terms of attempting to develop definitive measures of women's empowerment, Okali (2013:2) recommends that even individual and household income decisions have to be examined within the whole of economic and social lives.

"This would then shift the analysis towards the inter-dependency and linked lives of men and women, and towards a life course analysis that highlights shifts that have implications for the changing ways men and women engage in agriculture, rather than assuming that 'one size fits all at all times'. It would also force us to agree that empowerment does not look the same for everyone, nor is it a fixed state."

Welfare	"Welfare" is the lowest level of intervention where women are given benefits to improve their socio-economic status rather than producing or acquiring such benefits for themselves. This is the zero level of empowerment where women are the passive recipients of benefits.
Access	This is the first level of empowerment since women improve their own status by their own work arising from increased access to resources. This level is the beginning of the conscientisation process.
Conscientisation	This level involves the realisation that women's relative lack of access to resources actually arises from discriminatory practices and rules that give priority access and control to men. Conscientisation refers to a collective urge to action to remove one or more of the discriminatory practices that impede women's access to resources. "Where many women accept patriarchal norms, the leadership of more liberated and activist women is essential at this critical phase of fomenting dissatisfaction with the established patriarchal order."
Mobilisation	Mobilisation is the action level that complements conscientisation and involves women coming together for the recognition and analysis of problems, the identification of strategies to overcome discriminatory practices, and collective action to remove these practices.
Control	This level is reached when women have taken action so that there is gender equality in decision making, and women have taken direct control over access to resources.

Table 2. Five levels of women's empowerment framework (summary from Longwe 2002).

Analysis of selected AFS symposia papers on women's empowerment

Based on analysis of the content of each paper and using categories based on the empowerment levels proposed by Longwe (2002), the papers were grouped as follows: (1) general examination of women's empowerment, (2) welfare, (3) welfare to access (and in some cases may revert back to welfare from access), and (4) access to conscientisation. We had no papers that studied women's empowerment at the levels of mobilisation and control, although we know that small pockets do exist. Table 3 provides a summary of the papers examined, their scope of study and how they fitted into the various levels of empowerment in Longwe's framework.

(1) General examination of women's empowerment

Only one paper contained a broad examination of women's empowerment. In a comprehensive, probing viewpoint paper, Nozawa (2001) made the case for why women's empowerment was important. She explained the inner and outer nature of empowerment, and how deep personal, social and institutional changes are needed for its achievement. She suggested that women in Asian fisheries should be organised into three levels: the researcher/development worker level; the community level; and the institutional level.

She also emphasised the importance of establishing an organisation in Asian fisheries that can focus on: gender sensitive and fair institutions; information exchange; gender balanced fishery policies at various levels; and promotion of more women into decision-making positions. Her rhetorical questions covered all levels of the Framework.

Table 3. Symposium papers selected and the level of empowerment demonstrated, according to Longwe's (2002)

 Women's Empowerment Framework, with five levels: welfare, access, conscientisation, mobilisation, control.

Paper	Subject, Scope	Approximate level of Longwe Women's empowerment framework		
General examination of women's empowerment (1 paper)				
Nozawa 2001	General: general exploration of empowerment	All		
Welfare (3 papers)				
Kibria and Mowla 2006; Mowla and Kibria 2006; Halim and Ahmed 2006	Women in development projects in Bangladesh and Vietnam	Welfare, women burdened by the project activities		
Welfare to access (and possibly back) (14 papers)				
Debashish et al. 2001; Shelley and D'Costa 2002	How large development delivery institutes in Bangladesh (CARE, Caritas) approach empowerment in their strategies and activities	Welfare, access		
Sultana et al. 2002	Fisheries management by women in Bangladesh inland fisheries not yet fully legitimised	Access not achieved		
Kripa and Surendranathan 2008; Ramchandran 2012	S. India coastal aquaculture: Mussel culture, Kerala; mussel, seaweed and fish culture, southern India	Site rights: from welfare to fragile access and back		
Lim et al. 2012; Ii 2012; Frangoudes and O'Doherty 2006	Women's rights in developed country fisheries; Women divers rights in Japan, Korea; women's rights in EU countries	Fisheries rights access is maintained by informal rights; formal access has to be won by struggle		
Sullivan 2006; Lim and Laowapong 2012	Thailand rural women in aquaculture, fisheries	From welfare, struggling for access, held back by culture, despite modernisation		
Nowak 2008; Porter et al. 2008	Women in coastal fishing communities: a traditional society and Tanzanian women in Islamic communities	Fragile nature of access, conscientisation and some control that can be destroyed with resource, economic and cultural change; access being removed by		
Kusakabe 2006; Tindall and Holvoet 2008	Women and power in supply chains	modernisation Fragility of access		
Access to conscientisation (2 papers)				
Chao et al. 2002; Chao et al. 2006	Taiwan women: Taiwan women academics and scientists; women fishery sector entrepreneurs	Entrepreneurs can have control; academics have access but not conscientisation		

(2) Welfare

Three studies described donor-sponsored projects where economic empowerment is the main concern, and which unwittingly led to women being burdened with more work, Kibria and Mowla (2006) in Vietnam; Mowla and Kibria (2006) and Halim and Ahmed (2006) in Bangladesh.

The first project, "Aquaculture Development in Northern Uplands, Vietnam (VIE/98/009/01/NEX)," was implemented by UNDP from 1999 to 2002. The objective of the

project was to alleviate poverty and malnutrition in three provinces by diversifying rural development to include aquaculture. Although this project succeeded in creating suitable opportunities for ethnic women and enhanced their status, it also increased their work burden (Kibria and Mowla 2006). Apart from household work, women spent as much time as men in the various aquaculture and on-farm activities. The total work hours of women were greater than men's and women had fewer decision-making roles than men. Kibria and Mowla (2006) also noted that although women were usually responsible for managing money in the family, they, however, did not have the right to spend the money freely on whatever they liked. Women were allowed to make individual decisions on expenses for daily meals, clothes and part of the children's education; decisions on other family expenses were decided by the husband or by both husband and wife.

The second project, "Patuakhali Barguna Aquaculture Extension Project, Bangladesh," aimed to involve women in fish farming projects and was implemented from 1997 to 2004 with funding from DANIDA. The project was found to have increased the decision-making roles in certain family matters (such as production decision processes and schooling of children) of participating women, but did not increase women's part in making decisions concerning medical care for the family (DANIDA 2008). Although women participated more actively in decision-making processes in certain family matters, the final decisions were still made by men. As a result of economic development, domestic violence against women had decreased, and some participating women became role models in their communities (DANIDA 2008). This project, however, placed additional work burden on women who were already stretched to the limits (Mowla and Kibria 2006). Women had to work longer hours and had little time to attend training and were confused on how to organise their time between domestic chores and work on the aquaculture projects. Women interviewed revealed that they usually had to do everything related to fish farming within the households; they were also likely to be responsible for maintaining their vegetable plots and raising poultry along with fishing and fish farming.

The third activity reported in a paper in this category, "Women's involvement in Support of the University Fisheries Education and Research Project (SUFER) Bangladesh," was funded by the United Kingdom Department for International Development (DFID). A project entitled "Women in Fisheries in Bangladesh - Level of Involvement and Scope of Enhancement" funded under SUFER found that involving women in fisheries projects has led to a net increase in the work burden of women. About 10% of women reported spending more than 7 h a day in project activities; the increasing shortage of drinking water and fuel wood had also added to their workload (Halim and Ahmed 2006). Even today DFID has goals of job creation and higher income for women to achieve their empowerment. DFID considers that a paid job gives rise to greater empowerment and choice - particularly in matters of when to marry and to have children (DFID 2012).

(3) Welfare to access (and back)

This was the largest group in our selection (14 papers), revealing examples of progress in women's empowerment and also of regression from access to welfare, when supply chains changed.

Two Bangladesh papers revealed the evolving strategies of large national development assistance non-government organisations (NGOs) that aim, among other priorities, to empower women through aquaculture. Both organisations started their rural interventions from a welfare level and, through self-learning, moved towards access and into conscientisation efforts. The women empowerment approaches were explored for the Agriculture and Natural Resources (ANR) sector of CARE Bangladesh (Debashish et al. 2001) and for Caritas Bangladesh (Shelly and D'Costa 2002). Both papers described the long learning curve (decades) of the NGOs themselves in their efforts to upgrade the conditions of their beneficiaries. The learning began in other rural projects in the 1980s, and led to the realisation that men were tending to benefit from

and D Costa 2002). Both papers described the long learning curve (decades) of the NGOs themselves in their efforts to upgrade the conditions of their beneficiaries. The learning began in other rural projects in the 1980s, and led to the realisation that men were tending to benefit from the activities, despite having many women's groups involved. As aquaculture entered the portfolio of new technology interventions in the 1990s, major shifts were occurring in the NGOs' approaches, with efforts to make extension services, training, capacity building and financing much more accessible to women. The NGOs used family approaches and addressed women's status in efforts to overcome the cultural and structural obstacles to women empowerment. The NGOs also recognised the importance of transforming their own organisations to support women's empowerment work. ANR changed its own staff composition to include more women and to develop all staff to create a more appropriate workforce and workplace (Debashish et al. 2001). Caritas Bangladesh reoriented its micro-credit programmes and tackled changing the attitudes of men towards women. Caritas concluded that ownership of assets was the single most critical factor and began working towards equality of ownership of rights such as land – important access level issues in the Women's Empowerment Framework.

Also in Bangladesh, Sultana et al. (2002) studied the early stages of creation of a Goakhola-Hatiara women's *beel* (pond with static water) management committee with the support of the NGO Banchte Shekha and the WorldFish Center Community Based Fisheries Management project. The mainly Hindu women actively capture fish, snails and collect water plants. Although the project (by the late 1990s) had improved collective decision-making by the participants, the NGO had not yet succeeded in securing access to the land on which the project ran, and the women's role in the management committee was not well defined or fully legitimised. The assessment of empowerment, therefore, would be that only a fragile access level was achieved by the time of reporting.

In southern India, coastal aquaculture has become the platform for some women empowerment attempts. Kripa and Surendranathan (2008) reported the successes of women selfhelp groups (SHGs) in adopting mussel farming. The women found the group activity amenable. In these SHGs, a community of women (involving both illiterate and women with some education) were involved in the whole process of mussel farming-from planning to utilisation of profit. Using the framework of Longwe (2002), the level of empowerment in these SHGs will meet the "access level" where women improve their own status by their own efforts. However, Ramchandran (2012) reported that the fragile "access" situation attained by women had recently faced some challenges where men had also organised themselves to form SHGs with funding provided by banks, and women are beginning to fear losing to the male "muscle power" in mussel farming. Ramchandran (2012) suggested that the Indian government should reserve the shallow waters for women mariculture farmers. In our opinion, this could be resorting to the "welfare" approach and for women to move forward they also need to have more confidence in themselves, be more innovative and entrepreneurial to compete with men.

In Korea and Japan, although women who dive for abalone, sea cucumbers and other high value marine species are economically well compensated, they have a low social status (Ii 2012; Lim et al. 2012). The voice of women divers in Korea is very weak- they have no rights to their fishing grounds, and even when their fishing grounds are destroyed they will not be compensated (Ii 2012). To protect their interests, Korean women divers formed mutual aid societies (akin to SHGs) to pressure local and national administrations, but in areas with only a few women engaging in diving, divers were utterly helpless (Ii 2012). In Japan, women divers (ama) can become members of the Ama Cooperative General Assembly which looks after their interests (Lim et al. 2012). In a culture steeped in patriarchy, although ama are economically empowered, these women possess few of the characteristics attributed to empowered women. Their occupation has been perceived as a job for the poor and uneducated and their contributions remain unacknowledged and hidden. However, the treatment of ama in Japan is generally no different from that of other women in the Japanese fishing community, where women are highly marginalised and their quest for social justice elusive (Lim et al. 2012).

By contrast, in the European Union, fisherwomen can be considered as having progressed the most in the empowerment process. They are supported by several laws to recognise their contributions in the fishing community. Frangoudes and O'Doherty (2006) described how the rights of the fishers' collaborating spouses are protected by laws, especially in relation to social security, health care, old-age pension and maternity benefits.

Providing Thai women with skills and livelihood training can offer good leadership opportunities to women (Lim and Laowapong 2012). However, cultural roles of women in the reproductive sphere have often held them back from the highest level of empowerment. The Thai government had targeted women in aquaculture projects because of livelihood benefits (Sullivan 2006). Although women had benefited economically like their male counterparts in these projects, unlike the latter their mobility is still limited and is confined only to the community thus hampering them from experiencing the full gains from the government initiatives to empower women (Sullivan 2006).

Nowak (2008) reported that the egalitarian culture of the Btsisi, an indigenous community in Peninsular Malaysia was gradually being broken down as they mingled with other patriarchal cultures in the country and adopted their lifestyle when forced into other economic pursuits. The once hunting-gathering livelihood, in which women enjoyed a high level of empowerment along with men, is no longer feasible as forests had been largely replaced by oil palm plantations and fish were scarce due to overexploitation. In Tanzania, Porter et al. (2008) reported that the supposed benefits of modernisation and globalisation are not reaching poor coastal communities but have actually impoverished coastal communities, degraded resources and taken access to lucrative export resources such as octopus away from women. The subservient nature of small scale Cambodian women fish traders in the Thai-Cambodian border made them more successful than male traders (Kusakabe 2006). These women traders at the border had learned "to beg others for the trade" and men were probably unable to stoop that low and would more likely start a fight over trade (Kusakabe 2006).

In the fish supply chain from Lake Sélingué (Mali) to markets in the capital, Bamako, both women and men participate, in different proportions, in each part of the supply chain (Tindall and Holvoet 2008). In the fresh fish chain, however, the power relations between traders and wholesalers particularly are gendered. Traders are much weaker than wholesalers in the capital, Bamako, and forced to bear the handling losses. Over the previous decade, the number of traders has declined and women traders exited disproportionately, leaving only those with better access to credit. The traders' association was dominated by the men, even though half the remaining traders were women. This case demonstrates how the women traders' empowerment regressed, and also how the lack of access to decision-making power in the association contributed to post-harvest losses and loss of value in the supply chain. Women traders often have greater difficulty to access ice than their male counterparts and this often resulted in post-harvest losses and lower value for the fish they marketed.

(4) From access to conscientisation

The study by Chao et al. (2002) described how professional women in the fisheries industry in Chinese Taipei were able to respond positively to globalisation. They enjoyed easy access to information on global trends through the mass media, access to education and training courses and were highly responsive to the impact of globalisation. Women were willing to improve their language ability, to learn new knowledge, and to adapt to advanced technologies like e-science and e-commerce. Some had strong ambitions to expand into foreign markets. Chao et al. (2006) further described how these groups of professional women have created many pioneering ideas in the processing of aquatic products (such as microwavable milkfish, raw tuna belly fillets and processed shrimp) which were popular not only in the Taiwanese market but also in international markets.

Discussion

The 20 papers we examined for their approaches to empowerment covered a wide range. One paper (Nozawa 2001) provided a comprehensive treatment of women's empowerment. The others provided insights into empowerment of women in projects and into the institutions of development. Their main findings can be grouped into three main themes. First, development agencies need to consider their own organisation. Second, women's empowerment must always be considered within the context of development action. Third, women's empowerment is not fixed and can regress as well as progress.

On the first theme, two large development agencies in Bangladesh found from experience that, to help empower women, their own organisations (CARE Bangladesh and Caritas Bangladesh) had to acquire a deeper understanding and undergo profound institutional change, including in its human resources (Debashish et al. 2001; Shelly and D'Costa 2002). We believe that this is also a requirement for any organisation attempting to support work in women's empowerment.

On the second theme, the papers revealed the importance for development agencies working on women's empowerment to take into account the impact on women and families of their interventions and of sectoral change. Donor-sponsored projects that focused narrowly on women's economic empowerment may unwittingly lead to overloading the women with work (Kibria and Mowla 2006; Mowla and Kibria 2006; Halim and Ahmed 2006). The focus on involving women to improve the family's economic position, may only manage to increase the women's work burden. Moreover, increased family income may not give women an increased say over how to spend the money. Kibria and Mowla (2006) found that, apart from household expenses, money for other uses is still predominantly controlled by men.

Women need security of formal access to aquaculture space (Ramachandran 2012) and fisheries resources (Sultana et al. 2002) to move up the empowerment ladder. Further, women are often not formally recognised as fishery professionals. They are often barred from registering as professionals for fishery benefits. In fisheries for high value invertebrates in Japan and Korea, women practitioners are debarred from registering as professionals (Lim et al. 2012; Ii 2012). For the collaborative spouses in European fisheries, women's access to recognition and benefits had to be won through first fighting for enabling legislation (Frangoudes and O' Doherty 2006).

Social and cultural norms are other important contextual elements. For women in Thailand, Sullivan (2006) and Lim and Laowapong (2012) showed how the expectations of women's roles could circumscribe but not prevent empowerment. In Taiwan, Chao et al. (2002) and Chao et al. (2006) found many women entrepreneurs were empowered by good education and access to national and global infrastructure. These private sector actors could also be considered conscientised. In an earlier paper, however, Chao and Liao (2001) had found that women fishery academics saw themselves as competitive in academic and research fields but lacking the management skills and capacity to contribute to policy making.

In the two fish supply chain studies (Kusakabe 2006; Tindall and Holvoet 2008), women's empowerment was complex, and supply chain change strongly gendered.

Several papers illustrated the third theme, namely that women can slide backwards as well as progress in empowerment. Economic development was a common cause of loss of empowerment. For example, women's positions in the supply chain were weakened as a result of the globalisation of the octopus fishery in coastal Tanzania (Porter et al. 2008), modernisation impacts in traditional Btsisi' households of Malaysia (Nowak 2008), and the contraction of numbers of traders in Mali (Tindall and Holvoet 2008).

Only a few of the authors of the gender symposium papers had grounding in feminist scholarship. Most researchers who participated in the AFS women/gender in fisheries symposia have little contact with feminist research or movements, probably thinking that feminists represent too extreme a view in their demands and challenge for change. They are more influenced by

mainstream development views where empowerment is seen as an individual rather than collective process emphasising entrepreneurship, self-reliance and co-operation to challenge power structures. Similarly, among fisherwomen from Chile, Tavares de Azevedo and Pierri (2013) found outright rejection of feminism because the women saw it as negative and failed to recognise the importance of feminist ideas in their own fight for equality.

Wieringa (1994) pointed out that feminism is a discursive process- a process of producing meaning, of subverting representations of gender, of womenhood, of identity and collective self. She contended that feminist activities should be at the core of the empowerment process where the construction of a collective self will enable women to see themselves as vocal objects, able to define and defend their gender interests. We consider that this view has relevance to the aquaculture and fisheries sector where women are on the lower fringes of empowerment in the face of changes that are often disempowering.

Scientists, especially those in the physical and biological sciences, tend to simplify the gender inequity problem and focus on a narrow scope of an enormously complex issue. Donors also very often choose to emphasise the economic dimension of women's empowerment, concentrating on short-term goals of three to five years. A more holistic approach to empowerment should be targeted and relevant indicators developed to determine whether the output from development projects have indeed met the intended outcome of empowerment.

Conclusion

In the fishery sector, feminist concepts have been avoided, yet should have a place at the core of women's empowerment efforts. Longwe's (2002) Framework for Women's Empowerment, based on Rowlands (1997) power concepts, enabled us to examine the approximate levels of women's empowerment being reported in the AFS gender papers. Although based on only 20 studies, the results produced important lessons for development agencies wishing to aid women's empowerment. For a start, empowerment does not occur overnight. To position themselves, agencies must develop their own comprehension of women's empowerment and how they, as development institutions, may need to develop their own internal capacity in order to support the empowerment of beneficiary women. Programmes and projects should avoid focusing simply on welfare level economic activities for women as this, in isolation, may just overburden women with more work. That said, we stress the importance of opening up and supporting women's economic empowerment, but in a more complete way. Women need formal access to and ownership of space and resources. Ambient cultures, in the household and outside, must be taken into account because they can support and/or circumscribe women's empowerment and certainly hold women back from achieving conscientisation, mobilisation and control levels. For their work in fisheries, society must accord women professional recognition. Finally, fish supply chains do not stand still and changes are usually gendered and can work for or, more likely, against women's empowerment. Thus, empowerment is not guaranteed to be a linear progression through the levels from welfare to control and gender equality. We need to bear in mind that regression is possible.

References

- Arenas, M.C. and A. Lentisco. 2011. Mainstreaming gender into project cycle management in the fisheries sector. Food and Agriculture Organisation of the United Nations Regional Office for Asia and the Pacific, Bangkok. 92 pp.
- Batliwala, S. 2010. Taking the power out of empowerment an experiential account. In: Deconstructing development discourse buzzwords and fuzz words (eds. A. Cornwall and D. Eade), pp.111-121.Oxfam, Great Britain.

Boserup, E. 1970. Women's role in economic development, St. Martin's Press, New York, USA. 283 pp.

- Chao, N.H. and I.C. Liao. 2001. The role of women researchers and teachers in Taiwan fisheries in the last 30 years. In: International Symposium on Women in Asian Fisheries (eds. M.J. Williams, M.C. Nandeesha, V.P. Corral, E. Tach and P.S. Choo), pp. 111-120. ICLARM- WorldFish Center.
- Chao, N.H., C.F. Chang and E.Y. Chang. 2002. Responding to globalisation trends in fisheries: Assets of professional Taiwanese women. In: Global Symposium on Women in Fisheries: Sixth Asian Fisheries Forum, 29 November 2001, Kaoshiung, Taiwan (eds. M.J. Williams, N.H. Chao, P.S. Choo, K. Matics, M.C. Nandeesha, M. Shariff, I. Siason, E. Tech and J.M.C. Wong), pp.65-75. ICLARM- WorldFish Center.
- Chao, N.H., M.H. Chen and Y.H. Chen. 2006. Women's involvement in processing and the globalisation of processing in fisheries and aquaculture in Taiwan. In: Global Symposium on Gender and Fisheries: Seventh Asian Fisheries Forum, 1-2 December 2004. Penang, Malaysia. (eds. P.S. Choo, S.J. Hall and M.J. Williams), pp. 81-90. WorldFish Center, Penang, Malaysia.
- Choo, P.S. 2005. Women's unpaid labor in the small-scale fisheries in Malaysia. In: Women in fisheries and aquaculture: Lessons from the past, current actions and ambitions for the future (eds. K. Frangoudes and J. Pascual-Fernandez), pp. 55-64. Proceedings of the International Conference AKTEA, Santiago de Compostela, Spain, November 2004. Asociacion Canaria de Antropologia, Tenerife.
- Choo, P.S., S.J. Hall and M.J. Williams (eds.). 2006. Global symposium on gender and fisheries: Seventh Asian Fisheries Forum, 1-2 December 2004. Penang, Malaysia. WorldFish Center.173 pp.
- DANIDA. 2008. Impact evaluation of aquaculture interventions in Bangladesh. Ministry of Foreign Affairs of Denmark. 96 pp.
- Debashish, K.S., M. Shirin, F. Zaman, M. Ireland, G. Chapman and M.C. Nandeesha. 2001. Strategies for addressing gender issues through aquaculture programs: Approaches by CARE Bangladesh. In: International symposium on women in Asian fisheries. (eds. M.J. Williams, M.C. Nandeesha, V.P. Corral, E. Tech and P.S. Choo), pp. 147-156. ICLARM- The World Fish Center.
- DFID (Department for International Development). 2012. Operational Plan 2011-2015. DFID Bangladesh. www.dfid.gov.uk/Documents/publications1/op/Bangladesh-2011.pdf . Accessed 14 December 2012.
- Frangoudes, K. and J. O'Doherty. 2006. Legal recognition of women's contribution in fisheries and aquaculture in the European Union. In: Global Symposium on Gender and Fisheries: Seventh Asian Fisheries Forum, 1-2 December 2004. Penang, Malaysia. (eds. P.S. Choo, S.J. Hall and M.J. Williams), pp. 139-148. WorldFish Center, Penang, Malaysia.

Gaventa, J. 2006. Finding the spaces for change: A power analysis. IDS Bulletin 37(6):23-33.

- Halim, S. and M.K. Ahmed. 2006. Women in fisheries in Bangladesh: Level of involvement and scope for enhancement. In: Global Symposium on Gender and Fisheries: Seventh Asian Fisheries Forum, 1-2 December 2004. Penang, Malaysia. (eds. P.S. Choo, S.J. Hall and M.J. Williams), pp. 159-168. WorldFish Center, Penang, Malaysia
- Ii, S.A. 2012. Why do Korean women dive? A discussion from the viewpoint of gender. In: Gender in aquaculture and fisheries: Moving the agenda forward (eds. M.J. Williams, M. Porter, P.S. Choo, K. Kusakabe, V. Vuki, N. Gopal and M. Bondad-Reantaso), Asian Fisheries Science 25S:47-58.

- Kabeer, N. and L. Natali. 2013. Gender equality and economic growth: Is there a win-win? Institute of Development Studies, Working Paper 417. 58 pp.
- Kibria, M. G. and R. Mowla. 2006. Sustainable aquaculture development: Impacts on the social livelihood of ethnic minorities in northern Vietnam with emphasis on gender. In: Global Symposium on Gender and Fisheries: Seventh Asian Fisheries Forum, 1-2 December 2004. Penang, Malaysia (eds. P.S. Choo, S.J. Hall and M.J. Williams), pp. 7-14. WorldFishCenter, Penang, Malaysia.
- Kripa, V. and V.G. Surendranathan. 2008. Social impact and women empowerment through mussel farming in Kerala, India. Development 51:199-204.
- Kusakabe, K., P. Sereyvath, U. Suntornratana and N. Sriputinibondh. 2006. Women in fish border trade: The case of fish trade between Cambodia and Thailand. In: Global Symposium on Gender and Fisheries: Seventh Asian Fisheries Forum, 1-2 December 2004. Penang, Malaysia. (eds. P.S. Choo, S.J. Hall and M.J. Williams), pp. 91-102. WorldFish Center, Penang, Malaysia.
- Lim, C., Y. Ito and Y. Matsuda. 2012. Braving the sea: The amasan (women divers) of the Yahataura fishing community, Iki Island, Nagasaki Prefecture, Japan. In: Gender in aquaculture and fisheries: Moving the agenda forward (eds. M.J. Williams, M. Porter, P.S. Choo, K. Kusakabe, V. Vuki, N. Gopal and M. Bondad-Reantaso). Asian Fisheries Science 25S:29-45.
- Lim, C.P. and A. Laowapong. 2012. Edging up the ladder: The women in Ban Thung Maha, Thailand. In: Gender in aquaculture and fisheries: Moving the agenda forward (eds. M.J. Williams, M. Porter, P.S. Choo, K. Kusakabe, V. Vuki, N. Gopal and M. Bondad-Reantaso). Asian Fisheries Science 25S:93-101.
- Longwe, S.H. 2002. Spectacles for seeing gender in project evaluation. Paper presented in understanding Gender Evaluation Methodology (GEM) Africa Workshop, 16 November 2002. http://www.apcwomen.org/gemkit/en/understanding_gem/longwe.htm. Accessed 20 February 2013.
- Luttrell, C., S. Quiroz, C. Scrutton and K. Bird. 2009. Understanding and operationalising empowerment. Overseas Development Institute Working Paper 308. 33 pp.
- Mowla, R. and M.G. Kibria. 2006. An integrated approach on gender issues in coastal fisheries projects in Bangladesh: Problems and challenges.. In: Global Symposium on Gender and Fisheries: Seventh Asian Fisheries Forum, 1-2 December 2004. Penang, Malaysia. (eds. P.S. Choo, S.J. Hall and M.J. Williams), pp. 21-27WorldFish Center, Penang, Malaysia.
- Nandeesha, M.C. and N. Heng. (Compilers). 1994. Women in Cambodian fisheries. Proceedings of the national workshop on women in fisheries. Bati fisheries Station, 7-9 November 1994.PADEK, Cambodia.134 pp.
- Nandeesha, M.C. and H. Hanglomong (eds.). 1997. Women in Fisheries in Indo-China countries. Proceedings of the seminar on women in fisheries in Indo-China countries. Bati Fisheries Station-PADEK, Phnom Penh, Cambodia.167 pp.
- Nowak, B. 2008. Environmental degradation and its gendered impact on coastal livelihoods: options among Btsisi' households of Peninsular Malaysia. Development 51:186-192.
- Nozawa, C. 2001. Empowerment of women in Asian Fisheries. In: International Symposium on Women in Asian Fisheries (eds. M.J. Williams, M.C. Nandeesha, V.P. Corral, E. Tech and P.S. Choo), pp. 57-61. ICLARM-WorldFish Center.
- Okali, C. 2011. Achieving transformative change in rural women's empowerment. In: Expert group meeting on enabling rural women's empowerment: Institutions, opportunities and participation. UN Women, FAO, IFAD and WFP. EGM/RW/2011/EP, 8 September 2011. 12 pp. Accra, Ghana 20-23 September 2011.
- Okali, C. 2013. Measuring women's empowerment: A retrograde step? http://www.future-agricultures.org/blog/ entry/measuring-womens-empowerment-a-retrograde-step-#.UiGrOcAu9p2. Accessed 31 August 2013.

- POPIN. (undated).Guidelines on women's empowerment. United Nations Population Information Network (POPIN). UN Population Division, Department of Economic and Social Affairs, with support from the UN Population Fund (UNFPA). http://www.un.org/popin/unfpa/taskforce/guide/iatfwemp.gdl.html. Accessed 05 March 2013.
- Porter, M., R. Mwaipopo, R. Faustine and M. Mzuma. 2008. Globalisation and women in coastal communities in Tanzania. Development 51:193-198.
- Ramachandran, C. 2012. "A sea of one's own!". A perspective on gendered political ecology in Indian mariculture.
 In: Gender in aquaculture and fisheries: Moving the agenda forward (eds. M.J. Williams, M. Porter, P.S. Choo, K. Kusakabe, V. Vuki, N. Gopal and M. Bondad-Reantaso). Asian Fisheries Science 25S:17-28.
- Rowlands, J. 1997. Questioning empowerment: Working with women in Honduras. Oxfam (UK and Ireland), Oxford. 180 pp.
- Shariff, M. 2002. Asian Fisheries Society: An historical perspective of women in fisheries. In: Global Symposium on Women in Fisheries: Sixth Asian Fisheries Forum, 29 November 2001, Kaoshiung, Taiwan (eds. M.J. Williams, N.H. Chao, P.S. Choo, K. Matics, M.C. Nandeesha, M. Shariff, I. Siason, E. Tech and J.M.C. Wong), pp. 3. ICLARM- WorldFish Center.
- Shelly, A.B. and M. D'Costa. 2002. Women in aquaculture: Initiatives of Caritas Bangladesh. In: Global Symposium on Women in Fisheries: Sixth Asian Fisheries Forum, 29 November 2001, Kaoshiung, Taiwan (eds. M.J. Williams, N.H. Chao, P.S. Choo, K. Matics, M.C. Nandeesha, M. Shariff, I. Siason, E. Tech and J.M.C. Wong), pp.77-87. ICLARM- WorldFish Center.
- Siason, I.M. 2001. Women in fisheries in the Philippines. In: International symposium on women in Asian fisheries. (eds. M.J. Williams, M.C. Nandeesha, V.P. Corral, E. Tech and P.S. Choo), pp. 69-77. ICLARM- World Fish Center.
- Sudhindra R.G. (ed.). 1992. Women in Indian fisheries. Proceedings of the workshop on women in Indian fisheries, 27 May 1990. Special Publication 8. Asian Fisheries Society Indian Branch. 51 pp.
- Sullivan, L. 2006. The impacts of aquaculture development in relation to gender in northeastern Thailand. In: Global Symposium on Gender and Fisheries: Seventh Asian Fisheries Forum, 1-2 December 2004. Penang, Malaysia. (eds. P.S. Choo, S.J. Hall and M.J. Williams), pp. 29-42. WorldFish Center, Penang, Malaysia.
- Sultana, P., P.M. Thompson and M. Ahmed. 2002. Women-led fisheries management- a case study from Bangladesh. In: Global Symposium on Women in Fisheries: Sixth Asian Fisheries Forum, 29 November 2001, Kaoshiung, Taiwan (eds. M.J. Williams, N.H. Chao, P.S. Choo, K. Matics, M.C. Nandeesha, M. Shariff, I. Siason, E. Tech and J.M.C. Wong), pp.89-96. ICLARM- WorldFish Center.

Tavares de Azevedo, N. and N. Pierri. 2013. Gains and challenges. Yemaya 43:5-7.

- Tindall, C. and K. Holvoet. 2008. From the lake to the plate: Assessing gender vulnerabilities throughout the fisheries chain. Development 51:205-211.
- White, S.C. 2009. Analysing wellbeing: A framework for development practice. WeD Working Paper 09/44.University of Bath. 20 pp.
- Wieringa, S. 1994. Women's interests and empowerment: Gender planning reconsidered. Development and Change 25:829-848.
- Williams, M.J, N.H. Chao, P.S. Choo, K. Matics, M.C.N. Nandeesha, M. Shariff, E. Tech, and J.M.C. Wong (eds.). 2002. Global symposium on women in fisheries: Sixth Asian Fisheries Forum. 29 November 2001, Kaohsiung, Taiwan. WorldFish Centre and Asian Fisheries Society, Penang. 201 pp.
- Williams, M.J., M.C. Nandeesha, V.P. Corral, E. Tech, and P.S. Choo (eds.). 2001. International symposium on women in Asian fisheries: Fifth Asian Fisheries Forum. Asian Fisheries Society, 13 November 1998, Chiang Mai, Thailand. WorldFish Center and Asian Fisheries Society, Penang.181 pp.

- Williams, M.J., M. Porter, P.S. Choo, K. Kusakabe, V. Vuki, N. Gopal and M. Bondad-Reantaso. 2012. Guest editorial: Gender in aquaculture and fisheries- moving the agenda forward. In: Gender in Aquaculture and Fisheries: Moving the Agenda Forward (eds. M.J. Williams, M. Porter, P.S. Choo, K. Kusakabe, V. Vuki, N. Gopal and M. Bondad-Reantaso), Asian Fisheries Science 25S:1-13.
- Williams, M.J., M. Porter, P.S. Choo, K. Kusakabe, V. Vuki, N. Gopal and M. Bondad-Reantaso. 2012. Gender in aquaculture and fisheries: Moving the agenda forward. Asian Fisheries Science 25S:276 pp.