

Shrimp Culture and Feminist Environmentalism: A Case Study from Bangladesh

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Abstract: The purpose of this article is to focus a feminist environmentalist lens to observe women's grassroots movements in protest of environmental degradations. To achieve the goal this study identifies the critical gender and social class relations in the unequal distribution of property rights that upsets sound management of natural resources. Secondly using feminist environmentalist viewpoint it investigates women's grass root campaigns as a consequence of the commodification and privatization of resources from the traditional informal economic system to industrial economic system which restrict women's access to natural resources. In more informal economy of South Asia, traditional agriculture was male dominated where women also performed a very significant role in production such as harvesting and crop processing activities. While contributing to agriculture they were also receiving some informal right on crops which enabled women's purchasing power in informal economy. But after the introduction of cash economy in some areas, women lost their economic ability along with a loss of their livelihood. The case study of this essay focuses on women's protest against shrimp cultivation in the southern part of Bangladesh as a specific context for this analysis. Since 1980s, as invested by World Bank and also later by other donor agencies the government of Bangladesh has been offering incentives to businessmen to participate in the shrimp cultivation in coastal areas, which was a fastest growing profitable industry of that time. Consequently a number of protests in this region (including in India) have been noticed against environmental degradations. Further, it is argued that critical gender-class interaction and women's experiences with nature shapes women's protest against such environmental vulnerabilities in this region.

1.0 Introduction

Property rights for access to natural resources have a very crucial role in environmental resources management and subsequently in the welfare of women, men, their family and the community who directly rely on these resources (Meinzen-Dick, R. S., Brown, L. R., Feldstein, H. S. and Quisumbing, A. R. 1997). The actual meaning of property

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rights includes a diverse set of rights from decision making to access to land and other natural resources such as water, forests and trees (Robbins, P., 2005 and Agarwal, B., 1994a). However, social class and its critical interaction with gender often cause an inequitable distribution of resources which produces negative impacts on women and also nature's survival (Wangari, E., Thomas-slayter, B., Rocheleau, D., 1996). Consequently, women's negative experience from resource exclusion and environmental degradation often involve them in grassroots protests "to supplement their [missing] income" and survival (Agarwal, B., 1994a, pp.456). Indeed, a number of women's protests are observed in South Asia to save livelihood and nature (Agarwal, B., 1994a). Therefore, it is relevant to search causes of such protests as a consequence of ongoing social and economic system of production. The purpose of this article is to focus a feminist environmentalist lens to observe women's grass root movements in protest of environmental crisis. To achieve this, the study first identifies the critical gender and social-class relations in the unequal distribution of property rights which upsets the sound management of natural resources. Secondly, using the feminist environmentalist viewpoint it investigates women's grass root campaigns as a consequence of the commodification and privatization of resources from the traditional management system to capitalist arrangements which restrict women's access to natural resources.

The case study of this essay focuses on women's protest against shrimp cultivation in the southern part of Bangladesh as a specific context for this analysis. A number of protests in this region have been noticed not only by journalists and non governmental organizations but also by many academic scholars. Many researches have focused on environmental degradation and damage to the mangrove forest and coastal ecology as an effect of shrimp cultivation (such as Alauddin, M. and Tisdell, C., 1998; Deb, A.K. 1998; Toufique, K.A., 2002; Alam, S.M.N., Lin, C.K., Yakupiteyage, A, Demaine, H. and Phillips, M.J., 2005; Naylor, R. L., Rebecca J. Goldberg, Jurgenne H. Primavera, Nils Kautskysk, Malcolm C. M. Beveridge, Jason Clay, Folkesk, C., Lubchencon, J., Mooney, H., Troell, M., 2000; Islam, S. and Haque, M., 2005, Hossain, S., Otts, S.K., Chakraborti, A., Kumar, S., Karunasagar, I., Karunasagar, Iddya, 2004, and Gopal, B. and Chauhan, M., 2006) whereas few studies have highlighted women's protest against aquaculture which is partly responsible for environmental degradation of this region. This study focuses on

women's grassroots protest as a response to shrimp cultivation in Bangladesh.

2.0 Feminist Environmentalism

In her scholarly article, Bina Agarwal (1992) highlighted that women's relationship with nature need to be understood in the context of some specific forms of interactions they have with environment in the 'classical' economic system of production. Since capitalist system of production is patriarchal by nature, such industrial system of production oppresses both women and nature by altering livelihoods in the community. Moreover, as highly gendered and class based division of labour and distribution of resources are observed in almost every society, the gender and class interface critically shape people's access to natural resources which affect livelihoods of both women and men. Agarwal (1992) argues that this critical gender-class interaction shapes women's protest against environmental degradations which is originated from their direct experience and knowledge of nature in daily life activities. Such a critical argument has also been supported by other feminist political ecologists (such as Rocheleau, D., Thomas-Slayter, B. and Wangari, E. 1996). The following part provides an elaboration of this statement.

Firstly, the shift of control on property rights and natural resources management such as land and water from the traditional tenure system to the private property system has had a long impact in marginalizing the local (class) community especially women and their livelihood (Meinzen-Dick, R. S., Brown, L. R., Feldstein, H. S. and Quisumbing, A. R. 1997). When a natural resource becomes a commodity, it brings a business-market which restricts the communal access and socially favourable natural resource management (Ciriacy- Wantrup, S.V. and Bishop, R.C., 1975). In fact privatization and industrialization results in a shift of rights and access to natural resources from community management to individuals of the powerful class. Furthermore, in capitalist society, some structural (policy) adjustments initiated by the state minimize supports to social welfare and environmental sustainability to enhance industrial profit maximization and higher returns. Hence, privatization can shift resources from state to politically powerful groups or shift property rights from traditional management (agriculture) to individual (industrial) ownership (Meinzen-Dick, R. S., Brown, L. R., Feldstein, H. S. and Quisumbing, A. R. 1997). Nevertheless, as women have less political access in the

capitalist transformation of rights, many women and marginal users are forced to surrender their rights to powerful individuals (Sielbeck-Bowen, K., A., Brisolaro, S., Seigart, D., Tischler, C. and Whitmore, E., 2002). Consequently, poor women around the world severely suffer in managing their livelihood where vulnerability includes food and income deficiency, diseases and hazardous environmental conditions (Rocheleau, D, Thomas-Slayter, b. and Wangari, E. 1996).

Secondly, Bina Aganval (1992) also argues that in traditional communities, women have to rely on natural resources to a greater degree than men. Women have higher experiences and interactions with nature (Saulnier, C. F., 1996). Thus their knowledge about ecology is also based on the experiences and the interactions they have with the natural environment (Miller, V., Hallstein, M., and Quass, S., 1996). However, the division of labour, property and exclusion of 'common' also shapes women's knowledge and experience they share with nature. This is because women are most adversely affected by a specific environmental crisis. Therefore, women can be seen as "both victims of the destruction of nature and as repositories of knowledge about nature, in ways distinct from the men of their class" (Agarwal, B., 1992, pp.126). This victimization of women from natural resource exploitation generates an impulse for their protest and collective movement resisting environmental damages. Alternatively, the latter attribute "as repositories of knowledge about nature", influences women's perception and rationalization favouring ecological protest (Agarwal, B., 1992 pp.126). In terms of action and movement, the overall phenomenon - women's shared knowledge and experience with environmental degradation call for collective protest against the dominant groups who control power, politics and resources (Agarwal, B., 1992 pp.126 and Wangari, E., Thomas-Slayter, B. and Rocheleau, D., 1996). Thus feminist environmentalism outlines the struggle of nature and women on the same platform of exploitation along with the outer expression of women's protest against the dominators. To concentrate on the discussion, this article considers Bangladesh's experience in the section below. The focus of the context is the rural environment of the southern part of Bangladesh.

3.0 Women's Resistance Against the "Fake Blue Revolution": The Death of Zahida Bibi

(The term Fake Blue Revolution is coined by Deb, A.K. 1998).

Since the 1980s, as invested by the World Bank and also later advised

by other donor agencies (such as United Nations Development Program and other Non Governmental Organizations) the government of Bangladesh has been offering incentives to businessmen who live in cities to join in the shrimp cultivation in coastal areas, which was a fast growing profitable industry of the decade (Rahman, M. and Wiest, R., 2002 and Ahmed, N., Demaine, H. and Muir, J. F., 2008). Shrimp cultivators were patronized not only by legal-administrative supports but also financially by sanctioned bank loans and other monetary incentives (Shanahan, M., 2003 and Guhathakurta, M. and Begum, S. 2005). More businessmen and local elites were involved to run this profitable business which encourage them to convert more agricultural land into shrimp ponds. Despite some regulations on land rights conservation and distributions such as the necessary voluntary consent of 85% land owners (who are basically farmers) before taking over the control of agricultural land for shrimp cultivation, local elites were able to bypass these rules with their political and military backing at different times since 80s (Gain, P., 1995). One reason is that the recruitment of city businessmen in shrimp cultivation was guaranteed by local administrative authorities including government officials and politicians (Shanahan, M., 2003 and Guhathakurta, M. and Begum, S. 2005). Interestingly, such land robbery ultimately causes many **grass-root** protests in Bangladesh. Indeed, numerous case studies (such as Stonich, S. C., 2000; Toufique, K. A. 2002, South Asian Free Media Association, 2005) illustrate that the 'capture' of local lands is the main reason for the violent conflict and the protests of women and men against shrimp cultivation and environmental degradation in the south-western part of Bangladesh (Guhathakurta, M., 2003).

3.1 Context

Baburabad is one of nine villages located in Satkhira district, in southern-western Bangladesh. These villages are inhabited by almost 1,200 families who are living on khas (government owned) lands. Such Government owned lands were given to many landless families on a yearly basis mainly for agricultural and dwelling purposes (Coastal Development Partnetship, n.d). Since this area has prospects for shrimp cultivation, a local politically influential group attempted to acquire government khas land which was being used by **the** agricultural community who were previously landless. Doing these local influential people collaborated with local administrative authority and police to forcefully evict those residing farmer families to grab hundreds of acres of land for shrimp cultivation (South Asian

Free Media Association, 2005 and Guhathakurta, M., 2003). Although some local journalists and NGOs showed protest against such land aggression, it could not stop local elites and businessmen from advancing to grasp agricultural lands of hundreds. The endangered farmer families gathered themselves to protest against this land aggression. On July 27, 1998 in the early morning, such businessmen with the district magistrate, police and hired mercenaries arrived at Baburabad village to demarcate the agricultural land for shrimp cultivation. The villagers, mainly women, showed their protest in the form of a procession and shouting slogans. Most of the men of the village were hiding because numerous false police cases were filed against them (Guhathakurta, M., 2003 and Coastal Development Partnership, n.d). When the landless were confronting police, Zahida Bibi, a mother of five, carrying a child in one arm and broom in another to show her symbolic protest went through the police barricade and marched towards the district magistrate and other officials. This surprised police officials and they shot her on that spot. Zahida Bibi and her child fell to the ground. Many other people were injured (Guhathakurta, M., 2003 and Coastal Development Partnership, n.d). This further increased the angry protest of local poor people to take action against powerful businessmen and some government officials.

The death of Zahida Bibi demonstrates women's collective movement to protect their livelihood. Such grass root activities were further strengthened by local NGOs in mobilizing women's collective activities. Therefore, women - who's resources were suppressed by the powerful class received a temporary response from the government in solving their problems (Guhathakurta, M., 2003 and Begum, S. 2005). However, in a patron-client based society, is a matter of question how far such movements ensure sustainability. Because a number of similar crime incidents and killings are observed in Bagerhat, Satkhira and Khulna districts of southern Bangladesh (Gain, P., 1995).

4.0 Analysis

Like some other developing countries in the south Asia, shrimp cultivation in Bangladesh was recommended by ADB and World Bank in 70s after the independence. Such an initiative can be seen as the perception of 'globalization' with the expansion of worldwide capitalism which was initially taken for granted as an inevitable prerequisite for development (Guhathakurta, M., 2003 and Rahman,

M. and Wiest, R., 2002). The commercial shrimp culture in Bangladesh was also boosted by the increasing demand of this product in the world market. This has replaced many cultivable lands (15% to 32% of the total land area of southern Bangladesh) for the shrimp industry (Guhathakurta, M., 2003). Thus, shrimp cultivation has linked Bangladesh with the global economy. But the conflict between capitalist elites and the local community has brought environmental stress, and also creates stress in women's and men's socio-economical equilibrium of life.

The south-western part of Bangladesh is mainly low land that consists the Satkhira, Khulna, Barisal, Patuakhali districts and Sundarban (a mangrove forest). In this coastal area rivers carry fresh water and intersect the Bay of Bengal with saline water where tides from the sea also bring salt over the coastal areas (Guhathakura, M., 2003). Moreover, this region covers Shundarban, an extensive mangrove forest which produces life supportive elements for many species including humans (Islam, S. and Haque, M., 2005). Furthermore, the tidal routine and mangroves have a very complex productive role in balancing the coastal ecosystem (Islam, S. and Haque, M., 2005). However, the industrial shrimp cultivation converted huge Mangrove forest into fisheries in that region. Industrial shrimp cultivation has multiple adverse impacts in livelihood and nature because "the influence of mono-culture of shrimp cultivation began to disarticulate this organic link between people and environment" (Guhathakurta, 2003 ch10, pp.1).

Furthermore, as a chain reaction to industrial intervention in a traditional society such as shrimp industry, rural economy experiences more distress. Because the structure of traditional economy depends on that particular environmental context. When the environment is stressed, it impacts the livelihood of local people. However, this complex relationship between nature and environment can be understood as the root of the women's movements of this region. Such movements can be described as responses to the negative impacts of the agricultural shift on women's livelihood and gender relations and also from their direct experience and interconnection with nature.

4.1 Impacts on gender-class relation

Women and children are more critically effected by environmental degradation (Agarwal, B., 2000). Since the social class and gender dimensions are responsible for natural resources allocation, these

critical gender- class interactions also create divisions of labour for different occupations like agriculture, fishing and food gathering (Agarwal, B., 1992). Traditionally women play a productive role in agriculture which does not offer them directly cash but empowers them economically in a non-monetary way. But the shift from agriculture to an industrial system diminishes women's economic power (Agarwal, B., 1992).

Firstly, the conversion of agricultural land into shrimp industry has made many farmers landless, which causes them to become day labours (Dev, A.K., 1998). Traditional agriculture was male dominated where women also performed a very significant role in production. Women participate in harvesting and crop processing activities besides their household works. Moreover, the traditional agricultural system, contributed to both men and women also offers other subsistence activities most particularly for women such as cattle rearing and poultry farming (Guhathakura, 2003). Indeed women's involvements in economic activities were more dependent on natural resources. When the industrial shrimp cultivation started replacing traditional agricultural system by the aqua industry, it also made a clear shift from the traditional economic system to a more cash oriented economy. Labour wages were being paid by cash which initially seems attractive to the lower class of the society who were previously paid by a combination of crop, food and cash. Eventually agriculture loses its control on the local economic system. Furthermore, land was forcefully taken by political, influential authorities for shrimp cultivation. Many farmers became unemployed, day labourers or they travelled to other places for occupations (Dev, A.K., 1998). In contrast, while women were participating and contributing to agriculture, they were also receiving some purchasing power out of crops. This was until the introduction of the industrial cash economy. Since harvesting and crops processing was undertaken by women, they had an informal right to the crops. Women frequently used rice as a non-monetary exchange to purchase other products (Agarwal, B., 1994b and Agarwal, B., 2000). For example, women exchanged harvested rice (ek mutho chal) with other classes or people like fishermen, tailors and carpenters to buy products (Guhathakura, 2003). Also, women used this as wages to other women and labourers to receive particular help or service from them. But in the changed cash economy, particularly with the initiation of shrimp industry, the waging system have become more cash oriented. Though men could

manage to join some other labour force by migration, women could not as they usually take care of children. Eventually this process has reduced women's economic ability and purchasing power in society (Guhathakurta, 2003).

Moreover, shrimp businessmen do not employ local men in their industry especially who were previously involved in agriculture. Since the businessmen have captured land from these farmer initially, they lost trust in these distressed people. Labourers are exported from some other regions on a seasonal basis (Alauddin, M. and Tisdell, C., 1998). Thus, local males fail to cope with managing family expenses and often divorce women and shift to other places in search of new jobs. Some of the men became involved in risky jobs in Shundarban (forest), and are often killed by tigers, sharks and other adverse situations. As a result, running the family and livelihood often becomes women's burden only. Nevertheless, these women are further exploited by the migrant seasonal labourers as "many of these men enter into relationship and marry them only to desert them again when the season is over" (Guhathakurta, M. 2003 ch10, pp7).

4.2 Women's direct experience with nature

Shrimp cultivation not only occupies agricultural lands but also government **khas** lands which were earlier distributed to local inhabitants in a more comparable manner to the common **property** theory (Dev, A. K., 1998). Previously government lands were used for subsistence economic activities like cattle and poultry raising and drying paddies. However, shrimp farming replaced many of these lands that restricts women's access to lands, trees and vegetations which also underpins their 'negative' experiences with environmental degradation (Guhathakurta, M. 2003). Furthermore, the expansion of the aquaculture industry replaces and destroys the most eco-friendly mangrove forest of this region (Islam, S. and Haque, M., 2005). Indeed, the cutting of mangrove forest in the southern part of Bangladesh has brought one of the most hazardous impacts on ecological balance and public (women's) health. Research has found that a mangrove supported ecology absorbs, transforms and 'exports' waste materials originated from both industrial and natural contaminations (Deb, A.K. 1998, pp.78). Moreover, "mangroves form an important part of the 'aquatic continuum' from river catchments to the sea, acting as filters for land-derived materials before they enter the ocean" (Deb, A.K. 1998, pp.78). Nevertheless, such a natural

purifier also filters nitrogen, phosphorus and other biological contaminations produced from shrimp ponds (Dev, A. K., 1998 and Gopal, B. and Chauhan, M., 2006). The expedition for high industrial 'profit margin' destroys mangrove forest of the huge areas which have been later converted as shrimp ponds - producing devastating effects on the environment.

Eventually, many poor women facing a double burden - without the support from their male counterparts they join the only existing economic activity of that region, that is collecting shrimp fry from the rivers (Guhathakurta, M. 2003). They do this in knee-deep water. Water on this coastal region receives tides from the sea which also brings sharks and crocodiles to the upstream area which also causes death (Guhathakurta, 2003). In Bangladesh, women work on water 10 hours a day to collect shrimp fry. Many of them collect these close to the farms where water pollution is higher. They are not provided hand gloves and they suffer from frequent infections and skin diseases (Shanahan, M. 2003). However, the shrimp industry employs women in processing fishes to ensure the export quality. This causes illness among many women working in an atmosphere where the inhalation of chemical gas like ammonia is unavoidable. Working with and handling ice and cold fishes often causes diseases like arthritis (Shanahan, M. 2003). Again, like some other South Asian countries, shrimp cultivation raises the salinity in water and makes existing agricultural lands unproductive and it also pollutes other water sources like rivers. Many children of farmer families refrain from going school to collect food and water for their family. Moreover, child labour in the shrimp industry also causes many diseases among children. Child labour in the shrimp industry is noticed in Bangladesh, Sri-Lanka, India, Thailand, Cambodia, Indonesia, Peru, Ecuador and Burma (Shanahan, M. 2003).

4.3 Women's Resistance: From Social Network to Collective Protest

Bina Agarwal (in 2000) also argues that women's power to protest against environmental degradation is deeply rooted with the gendered division of labour and also their 'experience with nature'. Firstly, women's social bond (social capital) is distinct from men's social network (Shields, M. D., Flora, C. B., Thomas-Slayter, B. and Buenavista, G, 1996 and Agarwal, B., 2000). Women participate collectively in harvesting and other agricultural activities through mutual exchange of labour. This makes a strong mutual bond and

cooperation. Secondly, since women's physical mobility is typically more restricted than men, they have greater need to strengthen their network as a coping strategy especially in critical natural situations. Women share **non-monetary** surplus (like crops) as mutual aid within the network (Robbins, P., 2005). Indeed during seasonal food crisis or drought, women can share or bring food from kinship, neighbours or wealthy families (Aganval 1990 in Agarwal 2000 and Robbins, P., 2005). Hence feminist environmentalism perceives women's grassroots movements (network) as obtained from their typical endurance to coexist with nature.

5.0 Conclusion

With the expansion of globalization, modes of production and gender class interactions in resource allocation create instability in both the ecological and socio-economic equilibrium. With this disequilibrium women experience an erosion in their family and survival. Generally, women's grassroots protests are organized through their social networks where women traditionally exchange mutual supports during natural crisis or to manage agricultural and informal economic activities (Wangari, E., Thomas-Slayter, B. and Rocheleau, D., 1996). Although a number of such women's grassroots movements are documented in South Asia, most of the 'women protests' and their voices are scattered and more localized (Aganval, B. 2000). However, **"their message is a vital one" - to save their family in the broader context of natural environment** (Aganval, B. 2000 pp.150-151). Indeed, similar women's and men's protests are also documented in other third world countries such as Latin American and African countries (Stonich, S.C., 1995). This indicates that the accelerated conflicts between shrimp cultivators and local communities are exceeding many national and translational boundaries. Therefore environmental and gender concerns must be taken together in long term planning, resource allocation and distribution as an alternative transformation of the development method.

References:

- Agarwal, B., 1992, "The Gender and Environment Debate: Lessons from India", *Feminist Studies*, vol.18, issue.1.
- Aganval, B., 1994a, "Gender and Command Over Property: A Critical Gap in Economic Analysis and Policy in South Asia", *World Development*, Vol. 22, Issue. 10.
- Aganval, B., 1994b, *A field of one's own: Gender and land rights in South Asia*, Cambridge University Press, USA.
- Agarwal, B., 2000, "Conceptualising environmental collective action: why gender matters", *Cambridge Journal of Economics*, vol.24, Issue.3.
- Ahmed, N., Demaine, H. and Muir, J. F., 2008, "Freshwater Prawn Framing in Bangladesh: History, Present Status and Future Prospects", *Aquaculture Research*, vol.39, issue.8.
- Alam, S.M.N., Lin, C.K., Yakupiteyage, A, Demaine, H. and Phillips, M.J., 2005; "Compliance of Bangladesh shrimp culture with FAO code of conduct for responsible fisheries: a development challenge", *Ocean & Coastal Management*, Vol.48, Issue.2.
- Alauddin, M. and Tisdell, C., 1998; "Bangladesh's Shrimp Industry and Sustainable Development: Resource-Use Conflict and The Environment", *Asian Fisheries Society*, vol.11, Issue.2.
- Coastal Development Partnership, n.d, *Khulna*, Bangladesh. Retrieved May 16 from <http://www.cdcbd.org>
- Ciriacy-Wantrup, S. V. and Bishop, R. C., 1975, "'Common Property' as a Concept in Natural Resources Policy", *Natural Resources Journal*, vol.15, issue.4.
- Deb, A.K. 1998; "Fake Blue Revolution: Environmental and socioeconomic impacts of shrimp culture in the coastal areas of Bangladesh", *Ocean and Coastal Management*, vol.41, Issue.1.
- Gain, P., 1995, "Farming Shrimp, Harvesting Hunger: The Costs and Benefits of the Blue Revolution", *Institute for Food and Development Policy*, Retrieved May 8, 2008 from <http://www.foodfirst.org/>.
- Gopal, B. and Chauhan, M., 2006, "Biodiversity and its conservation in the Sundarban Mangrove Ecosystem", *Aquatic Sciences-Research Across Boundaries*, vol.68, issue.3.

- Guhathakurta, M., 2003, "Globalization, Gender and Class Relations" in Rahman, M. (ed.), *Globalization, Environmental Crisis and Social Change in Bangladesh*, The University Press Limited, Dhaka.
- Guhathakurta, M. and Begum, S. 2005, "Bangladesh: Displaced and Disposed" in Banerjee, P., Basu, S., Chawdhury, R. and Das, S. M. (eds.), *Internal Displacement in South Asia*, John Hopkins SAIS Project on Internal Development, retrieved on May 2, 2008 from <http://google.booksearch>
- Hossain, S., Otts, S.K., Chakraborti, A., Kumar, S., Karunasagar, I., Karunasagar, Iddya, 2004, "Detection of WSSV in cultured shrimps, captured brooders, shrimp postlarvae and water samples in Bangladesh by PCR using different primers", *Aquaculture*, Vol.28, Issue.4.
- Islam, S. and Haque, M., 2005, "The mangrove-based coastal and nearshore fisheries of Bangladesh: ecology, exploitation and management", *Reviews in Fish Biology and Fisheries*, Vol.14, Issue.3.
- Meinzen-Dick, R. S., Brown, L. R., Feldstein, H. S. and Quisumbing, A. R. 1997, "Gender, Property Rights, and Natural Resources", *World Development*, vol.25, issue.8.
- Miller, V., Hallstein, M., and Quass, S., 1996, "Feminist Politics and Environmental Justice: Women's community activism in West Harlem, New York" in Rocheleau, D., Thomas-Slayter, B. and Wangari, E. (eds.), *Feminist Political Ecology: Global issues and local experiences*, Routledge, London.
- Naylor, R. L., Rebecca J. Goldberg, Jurgenne H. Primavera, Nils Kautskysk, Malcolm C. M. Beveridge, Jason Clay, Folkesk, C., Lubchencon, J., Mooney, H., Troell, M., 2000; "Effect of Aquaculture on World Fish Supplies", *Nature*, Vol.405.issue.6.
- Rahman, M. and Wiest, R., 2002, "Context and Trades of Bangladesh", in Rahman, M. (ed.), *Globalization, Environmental Crisis and Social Change in Bangladesh*, Retrieved May 2, 2008 from <http://www.members.shaw.ca/motirahmanl>
- Robbins, P., 2005, *Political Ecology*, Blackwell Publishing, Australia.

- Rocheleau, D., Thomas-Slayter, B. and Wangari, E. 1996, "Gender and Environment: A feminist political ecology perspective", in Rocheleau, D., Thomas-Slayter, B. and Wangari, E. (eds.), *Feminist Political Ecology: Global issues and local experiences*, Routledge, London.
- Saulnier, C. F., 1996, *Feminist Theories and Social Work: Approaches and Applications*, The Haworth Press, London.
- Shanahan, M., 2003, "Appetite for Distraction: Shrimp Farming", *The Ecologist Magazine*, retrieved may 2 , 2008 from www.ejfoundation.org.
- Shields, M. D., Flora, C. B., Thomas-Slayter, B. and Buenavista, G., 1996, "Developing and Dismantling Social Capital: Gender and Resource Management in the Philippines", in Rocheleau, D., Thomas-Slayter, B. and Wangari, E. (eds.), *Feminist Political Ecology: Global issues and local experiences*, Routledge, London.
- Sielbeck-Bowen, K., A., Brisolara, S., Seigart, D., Tischler, C. and Whitmore, E. 2002, "Exploring Feminist Evaluation: The Ground from Which We Rise" in Seigart, D. and Brisolara, S. (eds.), *Feminist Evaluation: Explorations and Experiences*, no.96.
- South Asian Free Media Association, 2005, "Media Monitor", Retrieved May 1, 2008 from <http://www.southasianmedia.net>
- Stonich, S.C., 1995, "The Environmental Quality and Social Justice": Implications of Shrimp Mariculture Development in Honduras", *Human Ecology*, Vol.32, Issue.2.
- Toufique, K.A., 2002; Bangladesh Institute of Development Studies, Paper for presentation in the 9th Biennial Conference of the International Association for the Study of Common Property on The Commons in an Age of Globalisation to be held in Victoria Falls, Zimbabwe, 17-21 June, 2002.
- Wangari, E., Thomas-Slayter, B. and Rocheleau, D., 1996, "Gendered Visions for Survival: Semi-arid regions in Kenya", in Rocheleau, D., Thomas-Slayter, B. and Wangari, E. (eds.), *Feminist Political Ecology: Global issues and local experiences*, Routledge, London.