



## WOMEN'S HEALTH AND SECURITY IN SHRIMP CULTIVATION AND PROCESSING PLANTS IN COASTAL BANGLADESH

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**Abstract:** The lives of people in the coastal areas have been adversely affected both economically and socially by the shrimp culture which is also creating serious ecological threat to the environment. The discontent and sufferings are now increasing and needs to be critically addressed. The women associated with the shrimp culture process are of socially, economically and physically disadvantaged group. The issues of social and human rights violation in the shrimp industry is really a matter of great disquiet that concerns the women involved in shrimp cultivation. The health and insecurity of women has increased through the occurrences of kidnapping, rape, wage discrimination and other forms of female harassments. Various types of health risks are prevalent among women involved with the shrimp sector who do not have other viable employment alternatives. Women working in the shrimp industry and fry collection from the coast are target group of this study. It is necessary to develop a holistic and integrated approach addressing the socio-economic affairs, health and security issues of women for sustainable management of shrimp farming in the country. This paper endeavors to accommodate the existing scenario of women's health and security concern in shrimp cultivation in southwestern Bangladesh.

**Key words:** Shrimp farms, shrimp processing plants, coastal areas of Bangladesh, women' health and security

### Introduction

Women's involvement in the shrimp sector in Bangladesh is part of the global economy. Labor force participation rate (LFPR) for women in the labor market is still lower than the men, but female LFPR has been growing at a faster pace than male LFPR in rural areas. Between 1984/85 and 1990/91, about 33 per cent of the total employment increased due to increase in women's employment. In rural areas 59 per cent of the increase in employment came from female labor force. During this period the share of rural women in total rural employed population also rose from 9 per cent to 13 per cent (Mahmud, 2001).

Women's involvement in shrimp cultivation is not a recent phenomenon in Bangladesh. Poor women living in coastal regions of Bangladesh have been traditionally engaged both in fisheries and agriculture for a long time. Women have been working in this sector for the last 20 years. Most women and children of the study area maintain their livelihood by collecting shrimp fry, preparing shrimp farms as day laborers, clearing weeds and other aquatic plants for the shrimp farms, liming the ponds, fish sorting and beheading.

Most of the women involved in the shrimp culture collect shrimp fries from rivers and canals in and around the coastal belt. They travel along the canals of the *Sundarbans* for fry collection. During peak fry collection periods (April to May), women spend the entire night collecting fries.

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Fry collection continues up to the month of September when the numbers of fry collected start falling. Women and children spend early dawn hours or the late evening catching the shrimp fry from the rivers, canals, etc. During the full moon the fry availability increases and collectors work any hours that they are available (Halim *et al.*, 2001). The shrimp farm owners prefer to hire female workers to male workers because they could be paid less money and they have limited bargaining power in this particular. Generally, women and children are engaged in the shrimp farms for five hours beginning at 7 am in the morning and extending till 1 pm. During the lean period, some of the women and children continue providing services to the shrimp farms, while others seek employment in homesteads, repairing homes, processing crops, or engaged in domestic services. Some also seek work in the crop fields, road repair and development, canal excavation, etc.

In shrimp processing plants workers especially women are subject to discriminate by their superior supervisors in multi-faceted ways. Less payment to the female workers is very much common in these plants and thus trigger economic instability persists among these families. Majority of the women employer do not have any legal contract with the shrimp processing plant authority. So the authority can take any decision, which can goes against the workers legal labour rights (No regular leave, lack of proper maternity leave, risk of loosing job after maternity leave, risk of loosing job with any kind of activity against shrimp processing plant authority etc). This study has explored the health and security concerns of women involved in the shrimp cultivation and working in the shrimp processing plants.

### **Materials and Methods**

Forty five households where women are working in shrimp industry from three villages e.g., *Burigoalini*, *Soldana* and *Botbungia* located in *polders* 5, 23 and 31 in the Satkhira, Khulna and Bagerhat Districts were taken for a questionnaire survey. Focus Group Discussions (FGD) has also been conducted over the entire data collection period. The targeted women, observation of the shrimp culture activities and related secondary data were considered for this study. A number of case studies and interview of experts regarding the health risks particularly for the women those are involved in the shrimp cultivation were also consulted to realize the problem as well.

### **Results and Discussion**

**Demographic features:** It is found that the average age of the women involved in shrimp cultivation is 34 years. It is observed that, 70 per cent of women engaged in shrimp cultivation remained within the age group of 26 to 40 years while 65 per cent of women working in the processing industries belong to the age group of 22 to 32 years. Almost 62 per cent of the women involved in the shrimp cultivation or working in the processing plants are illiterate. More than 80 per cent of women working in both shrimp cultivation and shrimp processing plants are married. However, abandoned and divorced women were more in the shrimp processing plants than in the shrimp farming, while unmarried women were more engaged in shrimp farming rather than working in the plants. Study findings show that around 75 per cent married women of those involved in shrimp cultivation have children while this percentage stands at 60 for those working in the shrimp processing industries. Women usually left their child at home mostly with their elder son or daughter and those who do not have an elder son or daughter left their child with relatives and neighbors.

**Socio-economic conditions:** Almost 99 per cent of women are involved in shrimp farming due to poverty and lack of any alternative productive work. It is often the children aged more than 8 years either male or female get involved in shrimp farming with their mothers or elder sisters.

Duration of works varies with the level of engagement in shrimp culture. In shrimp fry collection, most women (more than 66 per cent) often accompanied with children and work for 6 to 7 hours a day. Children and boys and girls of adolescent age often continue to catching fry and swimming in the river until they are forbidden by their parents. More than 55 per cent of women work for 5 to 7 hours for shrimp pond preparation. In shrimp depots, most women (82 per cent) works for 7 to 8 hours while in the shrimp processing plants more than 86 per cent women works for 8 to 10 hours a day.

The average wage rate for women per day is between BDT 45 to BDT 50 and for the children it is BDT 15 to BDT 20 (Halim *et al.*, 2001). There are different levels of pay for different jobs. In shrimp farm preparation, a woman gets BDT 40 to BDT 45 per day; in cleaning of weeds they get Tk. 35-45 per day. Income level varies substantially in fry collection from BDT 40 to BDT 150 per day depending on the quantity of the fries collected. It is reported that 72 per cent of the women sell their fries to the *farias* (Middle men) while the others sell directly to the depot holders. Almost 46 percent surveyed women are obligated to sell their fries to *farias* or others, from whom they have taken advanced credit (locally known as *dadon*). The women cannot market shrimp fries the current prices of the shrimp fries. Findings show that the women lose more than 40 percent value of their products. The *farias* often pressurize the women to catch more fries, women also often works hard to catch more fries to repay the loan taken earlier. Study finding shows that more than 68 percent of women involved in shrimp farming have no control over earned money while almost 95 percent of their income is spent on food items.

**Health risks:** Involvement of women in shrimp cultivation has caused to increase their health risks with many diseases and as a result the entire family particularly children are becoming more vulnerable. Women usually spend long duration in the saline water for shrimp fry collection that increases prevalence of various kinds of skin diseases. It is found that about 60 percent of the women involved in shrimp fry collection have been affected by skin diseases, e.g. alopecia, dermatitis, fungal infection and scabies. Common cold is common to most women and children in the study area. About 90 percent people in the study area suffer from different types of diseases while 32 percent are caught by skin diseases. Murtaza (2003) also found that Cold and fever are common to 60 per cent of women involved in shrimp farming. Expert says that continued skin diseases like scabies, fungal infection may lead to kidney related diseases. It has been also reported that the diseases mentioned above are resulting deterioration of physical attraction and creating problems in marriage for unmarried shrimp fry collectors.

Shrimp culture has caused serious malnutrition problem to the children and other family members. Children are also being vulnerable to pneumonia, acute respiratory infection and diarrhoea due to lack of safe drinking water and unhygienic working environment in the locality. The shortfall of safe drinking water in this area is caused by the intrusion of saline water in the water reservoirs. Women have to walk a long distance, even more than 3 kilometers, for collecting drinking water from tube wells. Shortage of safe drinking water is increasing the incidence of diarrhoea, dysentery, typhoid, jaundice and other GIT (Gastro-intestinal Tract) disturbance such as acidity. The reproductive health condition of the women engaged in the shrimp farming depicts a serious situation. It is found that only 21 per cent of the mothers working in shrimp culture got ante-natal care and 27 per cent got post-natal care while around 70 per cent of them did not hear about it. Only 13 per cent of them are vaccinated with tetanus toxoide (TT), although there are many health activists in the southwest region of Bangladesh with these issues. Unhygienic working environment, long hours of stay in the saline water, absence of personal hygiene, sexual abuse by the male workers in the shrimp processing industries, guards and other co-workers has increased the prevalence of reproductive tract infections (RTI) among

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the women and experts opines that these may lead to vulnerability to STD (Sexually Transmitted Disease) and HIV/AIDS.

**Women's insecurity:** The livelihood pattern of the poor women in the coastal belt has been seriously affected by the shrimp farming. Women in the study area are found to have security problems. Table 1 shows the number of violence occurred in the study area due to conflicting interest of different groups involved in the shrimp farming. Number of court cases and *shalishees* (village judgments) are also increasing in the area. It is found that around 129 cases directly related to shrimp farming were filed in the courts during the period of July 2003 to June 2004, of which kidnapping cases were 2, rape cases 2 and murder case 1. The village *shalishees* considered around 179 shrimp farms related cases during the period in the three districts (CDP, 2004a).

Table 1. Human rights violation at the shrimp farms in the south-west coastal belt of Bangladesh during the period of July 2003 to June 2004 (CDP, 2004a)

Types of violation	Name of Districts			Total
	Satkhira	Bagerhat	Khulna	
Robbery	29	29	29	87
Violence	25	39	38	102
Unnatural death/ murder	8	27	19	54
Toll extracting	7	14	21	42
Kidnapping	4	7	12	23
Rape	3	1	3	7
Others	20	13	29	62

Rape and sexual assault has been the most crucial security issue for women. Shrimp farming has brought many outsiders in the village and at the same time took women out of home. Local musclemen, strangers, guards, co-workers, robbers and others are reported to be held responsible for physical assaults, jeering verbally, miss behavior, looking down, and teasing of women. More than 70 per cent of women answered positively that they have faced sexual assault at least once while in the shrimp related activities. From the deep forest Sundarbans, sometimes water robbers hijack fry collecting women and rape them.

Although men and women do the same work for same time but it is found that women get 40 percent less than their male counterparts (Table 2). In the shrimp cultivation, women usually sells their fries to the *farias* or shrimp farms owner and they could not walk a distance like males to sell at a higher price. However, female workers claimed that they are less paid because of the availability of more female workers than needed.

In order to meet the *dadondar's* demand and for more income, women often goes deep in the *Sundarbans* for collecting fries. These often cause threats to their life. It has been reported that a number of women and children were not found, while some were found bitten by snakes or killed by tigers.

Table 2. Gender biased wage discrimination at shrimp farms in the selected Upazilas of south-west region of Bangladesh (CDP, 2004b)

Name of upazila (sub-districts)	Workers' type			% wage discrimination among male and female
	Male	Female	Children	
Dumuria	50	35	15	30
Rupsha	70	40	25	43
Koyra	50	40	15	20
Mongla	60	40	20	33
Morrelgonj	120	80	50	33
Paikgacha	50	30	15	40
Shyamnagor	50	45	25	10

Women in the shrimp culture works in a very unpleasant environment. It is observed that often female workers are fired from work if they are late in work. In the shrimp processing industry women are worked in a humid environment where many anti-bacterial chemicals are used. No precautionary measures are found to protect the workers from side effects of these chemicals. It is reported that the women are forced physical and mental assaults, in most cases keep secret the occurrences in the fear for losing their existing jobs or in fear that they will be looked down by the community people.

### Conclusion

Food and shelter are the two constitutional rights of the people and it is the state that is to take care of the citizens' fundamental rights. However, in reality, due to the poor economic condition of the country, corruption, lack of willingness of the responsible parties and many other reasons worsened the situation. In order to live, the poor women are going for shrimp fry collection even in the deep Sundarbans with so many insecurities and are working in the shrimp industries and shrimp processing plants being economically and socially discriminated. They are still working in the culture with so many health and life risks because they have no options. This is best reflected in the word of a woman in the study area "give me an alternative income source and I will never go to the Sundarbans for fry collection..." The existing institutional support and services are very minimal to cater the needs and aspirations of the poor women of the southwest costal belt of Bangladesh. It is worth to mention here that some NGOs have undertaken special plans and programs for addressing the problems of the women involved with shrimp culture. The government, NGOs, civil societies and local bodies are addressing the problems of women in the shrimp farming with less priority both in the local and national level. Improving law and order, providing adequate health services, building community ownership and awareness, creating alternative income generating activities and last but not the least, ensuring participation of the victims in any intervention is urgently necessary for solving insecurity of the women in the country.

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