Lessons from the Ground

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Bangladesh

March, 2010



Introduction

The Shrimp Aquaculture Dialogue (ShAD) is part of the Aquaculture Dialogue initiative that is being convened by the World Wildlife Fund. The goal of the ShAD is to develop performance based standards that promote ecological and social sustainability for the production of farmed shrimp. The ShAD has held meetings all over the world (Madagascar, Belize, Ecuador, and Thailand) to solicit input from the key shrimp producing regions and elected a Global Steering Committee (GSC) from participants at these global meetings to guide the development of the standards. The GSC is composed of members from the shrimp aquaculture industry and from Environmental Non-Governmental Organizations (ENGO) community who represent the major producing regions of the world. The GSC is now working on a draft standards document and hopes to post the standards for public comment before the end of the year. Once complete the standards will be held by the Aquaculture Stewardship Council (ASC) which is currently being developed and is scheduled to begin operations in 2011. It is the ShAD's hope that the standards developed will be a useful tool to ensure that farmers receive a fair and equitable price for the products they produce.

The two social issues that have been raised most often in the ShAD are labor issues and issues related to farm interactions with local communities. To gather the insights and relevant ideas of those who are not able to actively participate in the shrimp dialogue, the ShAD GSC decided to initiate outreach by GSC members. GSC believes that outreach, particularly in Asia will be fundamental to long-term uptake of the standards. As a part of ShAD outreach process for Bangladesh, Coastal Development Partnership (CDP) on behalf of the ShAD GSC conducted an outreach study to provide local context on the ShAD process. Bring social and environmental issues to forefront and supply chain issues dialogues with the local communities and indigenous peoples.

Background of the Outreach Facilitator Organization

Coastal Development Partnership (CDP) is one of the right-based organizations in the southwest coastal region that has been working to ensure people's rights since its inception in 1997. Recently, CDP has accomplished a project "Safeguarding Sundarban Ecosystem from Irresponsible Commercial Shrimp farming (SECO)" with the support of EGP of the Netherlands Committee of the IUCN. In 2006, with the support of World Fish Center, CDP had implemented a project "Awareness Creation among the shrimp Farmers on socially responsive and environment friendly shrimp culture in the southwest coastal region of Bangladesh". During 2003-2006, CDP had monitored Human Rights, Land Rights, Labor Rights and environmental degradation by the shrimp farms in South West Coastal Region under 'CDP- Shrimp Seal of Quality (SSOQ) Partnership Program' (SSOQ was a project of Government's ATDP-II). In 2002, as a member in the DFID supported Steering Group for the development of Wild Shrimp Fry Collectors, CDP tried to improve the lives and livelihoods of the shrimp fry collectors. The primary Beneficiaries of the CDP development intervention include a wide range of vulnerable livelihood group who are poor, marginalized and dependent on natural resources but have very limited or no access to the renewable natural resources for sustaining livelihood. It is important to note that CDP-DANIDA action research documented child labour in Shrimp Sector (CLSF) as the worst form of child labour (CDP, 2006¹).

¹ CDP, 2006: Situation Analysis on Child Rights Violation in Shrimp Sector in the Southwest Coastal Region of Bangladesh study funded by DANIDA (Human Rights and Good Governance-Program Support Unit).



CDP led many advocacy campaigns for conservation of the coastal wetlands and the Sundarbans biodiversity and to establish rights of the landless to khas lands. In addition to that, the organization is working to establish people's rights to information and to ensure participation of the local people to designing and implementation of projects by the local government organizations (Union Parishads).

In Bangladesh the profiteers of the commercial shrimp farms are mainly people from outside the community who could afford the high initial investment needed. But after the productive life, the local community bears the economic loss for not having the scope to utilize the site. Except large farmers, the small farmers and wage labourers does not benefit from shrimp cultivation, because of their uncertain incomes due to unstable international shrimp market. About 90% of total employment in the shrimp sector is confined to the poorer sections of the coastal communities in Bangladesh. CDP believes that without providing any alternative but sustainable livelihood it is very difficult to stop irresponsible shrimp farming.

Objective & Methodology of the ShAD outreach

To solicit feedbacks from key stakeholders on what they would like to see addressed by the Shrimp Aquaculture Dialogue.

To full fill the Objective, CDP organized many meeting with shrimp farmer, shrimp businessman, people affected by shrimp farming, people who support shrimp farming in Khulna and Bagherhat Districts.

The outreach study was conducted in between November 30, 2009 to March, 2010. The field work was done in February 2010.

The study followed Participatory Rapid Appraisal (PRA), mainly Focus Group Discussions (FGD) and In-Depth Interview. At the beginning of each discussion, moderator clarify the purpose of standards development and outreach efforts, role of facilitators, the results of engagement as well as the opportunity to offer input into the ShAD process.

Many local and national context of shrimp farming were discussed including shrimp policy, salinity, biodiversity, shrimp farms surrounding communities, child labour, human rights, labour law, environment, health and security of labours, wages and bargaining scopes of labours, appointment letter in favour of labours, conflict reduction, labours association, fry collectors, shrimp farm, transportation and communication, electrifications etc in the meeting.

Interviews were held with a) individuals for representative information, b) key informants for specialized information and c) groups for general community-level information. Focus groups are frequently used to discuss a specific topic in detail. The focus group discussions (FGDs) were conducted with the following peer groups to identify and develop shared recognition of the risks and opportunities of shrimp certification and document the FGD findings:

- People who are living around the shrimp farms
- Small-scale producers
- Women workers of the Shrimp farm
- Affected Communities
- NGO's & CBOs



In-Depth discussions with the knowledgeable persons who are familiar with the details in shrimp sector were done to identify critical issues to be addressed in shrimp certification. In-depth interview with Academicians & Journalists were also done for critical insights. Participatory Workshop with Small-scale producers were done to review draft ShAD standards. Discussion and consultations with the affected community were done to identify indicators /measures to minimize negative impact of the shrimp farming on community

Identification	Groups Engaged	Methods to Engage	Venue	Number	Male	Female	Total Participants
Involved with the Shrimp	Large Producer, Shrimp Farmer, Gher Owner, Shrimp	In-depth Interview		3	3	0	3
Farming	Businessman, Effected people, Community people who works in	Inception Meeting	Khulna, Bagerhat	2	69	12	81
	the shrimp farming, People who supports shrimp farming	Focus Group Discussion	Bagerhat, Khulna	5	69	1	70
		Workshop	Khulna	1	18	2	20
Not involved with the Shrimp	Affected communities not involve with the shrimp farming, NGOs &	In-depth Interview		2	1	1	
Farming	CBOs, Local Government, Academicians & Journalists	Focus Group Discussion	Bagerhat	1	13	0	13
		Workshop	Bagerhat	1	14	6	20

The outreach explored the following key aspects:

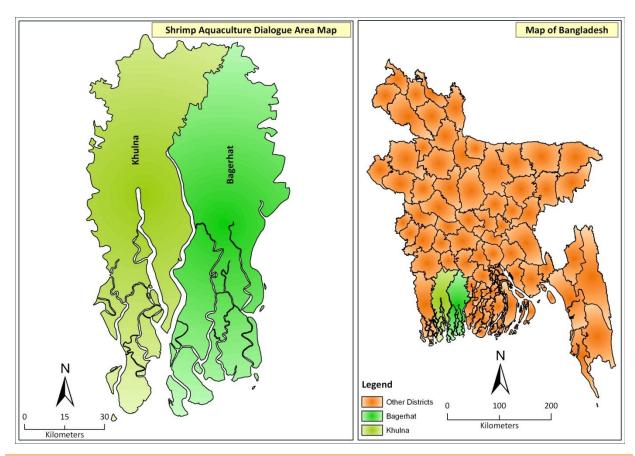
- a. perception & interests of the stakeholders about shrimp certification & standards
- b. Needs of the farmers to adapt with the new standards, specially badly sited existing farms
- c. standards to deal with the variety of farming systems and the variety of farming contexts
- d. social sustainability of the shrimp aquaculture
- e. Possibilities to link small-scale traditional shrimp farming to certification incorporating Gender issues
- f. major challenges in complying with the standards
- g. problems or risks that community is facing from shrimp farming
- h. Are you against the shrimp production or the way shrimp production is done?

Location

Most of the shrimp farms (ghers), deports and processing factories are situated in the three districts (khulna, Bagerhat and Shatkhira) of southwest coastal region of Bangladesh. This region is identified as the 'Shrimp Region' of Bangladesh. In this region there are 26,155 Bagda (*Penaeus monmodon*) and 67,644 Golda (*Macrobachium rosenbergii*) farms consisting of 156945 hector of land (Commercial shrimp farming in Bangladesh, Ashraf-ul-Alam Tutu, 2004). This region represents 80% of total area under shrimp farming in Bangladesh and the rest is in Cox's Bazar and other areas of the country. Besides, CDP has vast experiences to work in various uapzilas and villages in this region.

The proportion of the small and big scale holders is 75%:25%. The numbers of small holders in Khulna, Sathkhira, Bagerhat, Narail and Jessore are 47,084, 25,730, 43,061, 4,885, and 15,008 respectively.





Findings of the Outreach

The outreach discussed with shrimp farmers, community who were victim of shrimp farming and business community who are in favor of Shrimp Cultivation. The summary of the outreach findings are as follows:

Opinions of the Shrimp Farming Traders		Opinions of the Shrimp		Opinions of the Victims due to Shrimp		
			Farmers		Farming	
1.	Creating of employment opportunities;	1.	Registration of shrimp	1.	Impacts on environment;	
2.	Increasing of transport and		farms by the government;	2.	Increasing of salinity;	
	communication facilities;	2.	Fixing of tax on shrimp	3.	Health and insecurity of life;	
3.	Increasing of land price;		farms;	4.	Using of Child labour;	
4.	Reduction of pesticides;	3.	Requirement system and	5.	Communication problem;	
5.	Reduction of abandon land;		fixing of wages;	6.	Unemployment;	
6.	Increasing of earnings foreign	4.	Protection of shrimp from	7.	Unplanned shrimp cultivation;	
	remittance;		different diseases;	8.	Town hoodlums are creating social	
7.	Increasing employment opportunities	5.	Government Support;		problem;	
	of women labors;	6.	Unregistered depot;	9.	Decreasing of cultivable and rice	
8.	Created a new scope of Planting of	7.	Lack of government		productive land;	
	Palm Trees on the banks of shrimp		policy;	10.	HARY (rental fee of shrimp farm) is not	
	farms;	8.	Lack direct		paid off timely;	
9.	Created a new scope of earning more		communication link with	11.	Shortage of food for livestock resources;	
	money by investing a small amount of		the foreign buyers;	12.	Rising of violence against women &	
	capital;	9.	Lack of capital;		children;	
10.	Increasing of HARY (rental fee of	10.	Lack of marketing system;	13.	Declining of others species during the	
	shrimp farm);	11.	Lack of professionalism;		collecting shrimp fry;	
11.	Increasing of average rate of income	12.	Lack of education;	14.	Threats of illegal money collector groups;	
	of shrimp farm labors;			15.	Conflict of ownership;	



The employment & Wage Situation in the Shrimp Farming sector

Creating or reducing employment opportunities for the local people: Shrimp traders claimed that shrimp cultivation is increasing in the village level and creating of employment opportunities for both women & men in the villages. However, shrimp farmers revealed that majority of the men are employed in the shrimp farms and women are employed in the shrimp processing factories. According to the victims of the shrimp farming, Shrimp farming has created more unemployment among the local people. Earlier, local people could work in the field round the year, but now their working period has notably reduced.

Health risks and livelihood insecurity of the shrimp workers: According to the anti-shrimp groups, there is no health and livelihood security for the shrimp farm workers. Many times the workers continue their job with the different kinds of diseases. The illness cases of workers are treated negatively by the majority farm owners.

Exploitation of Child labour in many shrimp farms: According to the victims of the shrimp farming, sometimes child labours are being employed in the shrimp farms. They are being used as a full-time labour, but their wages is much less. Even they do not get the scope of treatment facilities if they became sick. Many times they are working in the farms with the different kinds of diseases. In this way the human rights violation is happening in the farms.

Increasing employment opportunities of women labours: The Shrimp farmers expressed that, the women employment opportunities are increased due to shrimp farming. In the meantime the women have got the scope to work in the different shrimp farm at local level. Thus, the unemployment situation is decreasing and the house level income is increasing accordingly. Victims of the shrimp farming groups reported many incidents that women workers are working in a risk situation, and frequently harassed in different ways-physically, verbally and sexually.

Increasing of average rate of income of shrimp farm labors: According to the shrimp farming supporting groups shrimp farming has increased the demands of labors in the locality. The rates of wages are increased as well as the bargaining scopes of labors. By comparing with the other export oriented industries like garments which is receiving an adequate support from the government and it is highly contributing to grow our national economics, but the shrimp industry is also contributing our economics without having any big support from the government, because the shrimp industry does not require any foreign raw materials said by the participants.

Employment system and fixing of wages: According to the Shrimp Farmers, the wages is fixed up through a bargaining process and also as per the local labor market demands. No recruitment advertisement is published. Even no appointment letter is issued in the most cases. There is no job security of labors and their stability in the jobs is depending on the farm owners, since all the recruitments are doing on the basis of verbal agreement.



The social acceptance of the Shrimp Farming

Hampering the local production of normal and seasonal crops: The anti-shrimp farming community strongly pointed out that the unplanned shrimp farming is creating new water- logging disaster by hampering on the drainage system of rain water flows in the region, which consequently hampering the local production of normal and seasonal crops.

Shortage of food for livestock resources: Normally, saline water is being used in the shrimp farming. The saline water is influence to destroy the grasses of the adjacent lands of shrimp farming area, thus it is creating a huge shortage of food for live stock resources in these areas.

Conflict of ownership: Every year many people are injured or killed due to fight and many cases are filed against each other due to conflict of shrimp farm's ownership among the cultivators groups in the society.

Increasing or decreasing local mobility through passageway facilities: Shrimp traders & farmers perceive that due to shrimp cultivation extensive embankment is made in the surrounding areas, that local people can easily use those embankments as the passageway. The embankments made a healthy rural life for the local people. In response to the harassment of the local community, Shrimp Farming Traders said that, only at night passers-by are being asked about their destination or stopped them sometime who used those embankments. No positive response has been found from the affected community on the above statement of shrimp farmers about the usefulness of embankments. Rather community revealed that due to shrimp farming many embankments are made in the surrounding areas, but the local people cannot move easily by using those embankments as their local passageway. Most of the times they are facing different obstructions to move where and there, particularly women are the main victim of this circumstance. Women even face mental and physical harassment when they use those embankments as a walking road. Sometimes school going girls are facing different types of harassment/violence when they use the embankments of shrimp farm as their walking path.

Rising of violence against women & children: The affected community reported many incidents that the rate of violence against women & children are being increased due to shrimp farming, especially by the Town hoodlums. The expanding of shrimp farms hires town hoodlums who are also creating social problems is increasing. In the remote areas, the women and girls are used to face many problems by this hoodlums and it is increasing. The women workers are often sexual victim of these hoodlums. Nobody including the farm owners, women and the local people are out of threats of them.

The rental fee of shrimp farm may increase but community does not receive it in-time: The shrimp farmers opinioned that the HARY (rental fee of shrimp farm) is increased due to increasing of shrimp farming. However, community revealed that the HARY (rental fee of shrimp farm) is not paid in time. The anti shrimp groups also claimed that that the HARY is not paid off timely, thus the poor and local land owners are economically suffering a lot. The local people are paying extra amount of money against the purchasing of rice and other daily goods due to local market price hike. The local businessman use HARY as the so-called additional income and increase local price which puts more burden on the community.



The Changing Landscape due to Shrimp Farming

Shrimp farming increases the local land price: According to the shrimp farming supporting groups, the prices of land are increased due to shrimp cultivation. Not only this, the rate of HARY (rental fee of shrimp farm) is also tremendously Increased, as a result the local people are highly inspired to shrimp farming as an alternative cultivation rather than cultivating of rice and other crops.

Reduction of abandon land through converting fallow land into productive shrimp farm: Shrimp farming supporting groups claimed that due to shrimp cultivation the abandon lands are reducing accordingly. In early days, people were depended on rice cultivation. If the nature do not respond positively then the rice cultivation used to hamper, even the maximum lands were fallen into abandon land in a year, but now the people can cultivate shrimp without keeping any abandon land.

Increasing salinity due to shrimp farming generates more abandoned land: The Anti-Shrimp farming groups pointed out the scarcity of drinking water is increasing due to shrimp cultivation. When saline water stay for a long period in a particular land then it affect on the other adjacent lands and it is considered as a caused of expanding of more saline porn area which is ultimately influencing to reduce the average rate of agro based production. Besides, it also hampered on the growth of coco-nut trees, betel-nut trees and other trees, even it is also influencing to reduce the feeds for cows, buffalos, goats, sheep and other livestock resources. Due to expanding shrimp farms the cultivable land of the local areas are decreasing day by day. Moreover, after the productive life, the site of the commercial shrimp farm is not suitable for any further productive use.

The Economic context of the Shrimp Farming

Shrimp aquaculture enjoys many government financial incentives for continual export earnings: According to the experts, Shrimp farming in Bangladesh enjoys financial incentives from the government in the form of subsidies, nominal lease fees and tax deduction. Bangladesh is one among the world's top ten shrimp producers and had share of about 3 percent of world sales in 2006. In national economic context, Shrimp covers more than 70% of the total export earning from all the agro-based products, including tea, raw jute, vegetables, fruit, etc. This sector also supports large varieties of local level cottage industries (made out of the home) such as bamboo baskets, mats, traps, nets, rickshaw vans, tempos (tri-wheelers), boats, etc.

Small amount of capital is not small for all: Shrimp farming supporting groups claimed that shrimp farming created a new scope of earning more money by investing of a small amount of capital. It is much more profitable business than other cultivation if no others natural calamity comes. However, anti-shrimp groups claimed that whatever the capital required for shrimp farming is beyond the most of the local community. The Shrimp Farmers from the local community also expressed similar concerns that due to the lack of capital, external traders who have more capital are controlling the business in locality. According to the Shrimp Farmers, to get the bank loan for the capital investment is very difficult them. Even banks take long time to process. On the other hand to get the NGO loan is very easy, but it is not profitable for the shrimp cultivators due to the weekly pay off scheme of NGOs.



Lack of direct link with the marketing system: According to the Shrimp Farmers, they are deprived from the fair price of shrimp due to the lack of timely marketing. Shrimp Farmers cannot communicate with the foreign buyers directly. Thus they depriving from the fair price of shrimp market. They expressed their interest towards directly communicate with the foreign buyers.

The Environmental Context of the Shrimp Farming

No pesticides in Shrimp farms in Mangrove forest region: Shrimp farmers claimed that no pesticides are using in the shrimp farming. All shrimp farming supporting groups made a general consensus that, any kinds of pesticide should not be used whether it is shrimp, rice and any other cultivation because it will create problem on Sundarban environment and biodiversity. Nobody supported the use of pesticides.

Severe Impacts on ecosystem & biodiversity: The anti-shrimp farming community identified that the current shrimp farming practice is severely impacting on environment. The saline water is affecting the forests and biodiversity. As a result, the local verities of fishes are on the way of declining, as well as the local species of snakes, frogs and the earth-worms.

Tree Plantation on the banks of shrimp farms to prevent disaster: Shrimp farmers have expressed that the south-west coastal region is very much friendly for producing of Palm Trees. There is a great possibility for protecting the entire coastal region from the natural calamity by planting of Palm Trees. Even the farmers could be gained economical benefits by planting of Palm Trees in both sides of the shrimp farms.

Declining of others species during the collecting shrimp fry: The small- scale shrimp farmers cannot collect healthy and diseases free shrimp fry in all time. Shrimp farmers have expressed that Fry collected from the natural sources (i.e. Sea, river) has a great demands to the farmers although these are costly than hatcheries fries. Farmers perceive that Hatcheries fry has no guaranty but the natural fry has more legibility and the rate of missing is very low. It is important to note that, only causes of unavailability of the farmers are using the hatcheries fry only when natural fry is unavailable to them. The fries or PL have to fly from Cox's Bazar to Jessore and then distributed through a chain of middlemen to hundreds of farms.

The legislative Context of the Shrimp Farming

Shrimp Farmers have strongly urged to consider the each sector of shrimp under the registration process.

Registration of shrimp farms by the government: According to the Shrimp Farmers, registration activities of shrimp farms are very slow due to the lack of government initiatives. Only a few shrimp farms are registered. If all the shrimp farms came under registration then the government and owner both sides will be benefited.

Taxing on shrimp farms: Majority of the shrimp farm owners do not pay off any tax to the government. Shrimp Farmers perceive that if the government fixed an amount of tax on each farm then it may help to increase the government revenue. On the other hand it would also help to reduce the unplanned shrimp farming.



Unregistered depot: The owners of unregistered depot are hindering the quality of shrimps. Due to unregistered category of depot sometimes they are staying out of law.

Lack of government policy: Violation of labour rights is happening in the different sectors of shrimp industry due to lack of government policy to protection of labour rights in this sector. Shrimp Farmers urged separate policy for shrimp industry. Although government is providing cash incentive on shrimp exports, the small-scale shrimp farmers are out of that scheme.

The shrimp certification and the scale of shrimp farming

Small-Scale Shrimp Farmers (SSF) must be included in the ShAD: The Small-Scale Shrimp Farmers (SSF) argued that they usually take good care of their shrimp pond because they cannot afford to change shrimp ponds frequently and also want to keep their limited land for future generations. Moreover, as small scale farmers usually live in close relationship with their neighbours, share community resources, they have to follow social norms. They recommended that the Small-Scale Shrimp Farmers (SSF) must be included in the ShAD; otherwise it will be a very poor standard. They want ShAD standards should integrate the factors of sustainable aquaculture with social acceptance. They (SSF) criticised large companies for using large quantities of public recourses & all type of government benefits but generate profit only for a few persons.

The experts highlighted few important technical challenges. For example, the unit for the use of public resources (land, water, energy, wild fish) cannot be measured as <u>kg shrimp/ ha pond</u> (this will promote intensification) as well as <u>kg shrimp/m3 water used</u> (this will not consider the difference in the water quality between inlet and outlet).

According to the experts, shrimp farming should consider the following issues:

- how much land is really used; including the part of the ocean that has been used to catch the fish for fish feed production [total LCA area / kg shrimp]
- how much fossil fuel has been used to produce one kg of shrimp and how much CO² is released for this production [GWP/kg product]
- how much nutrients have been released into the environment (which is public property) [mg N, P released/kg product].
- the amount of people living on each kg shrimp produced [livelihoods/kg shrimp],

In answer to the question, which type of indicators favors industry but create burden on small holders; experts commented that usually it is not the indicator that is a burden, but it is the unit of the indicator. For example, Efficiency of the production system [kg/ha], Water use [m3/kg shrimp] indicators may be burden for small holders. On the other hand, Efficiency of the production system [kg shrimp/kg Feed], Water use [kg N+P released/kg shrimp] indicators could be burden for shrimp industry

In general all indicators where public recourses (land, water, energy, and wild fish) are not evaluated along the whole life cycle favours industry and creates burden for small holders.



Voices of the victims' of the shrimp farming towards the shrimp certification

The victims' of the shrimp farming raised their voice against shrimp certification because it might increase the shrimp farming area. This anti-shrimp group strongly advocating for limiting or reducing shrimp farming area based on the following context:

- 1. In local context, shrimp farming is causing of more loss to the community and the so-called profit goes to the pocket of few riches.
- 2. The poor people are becoming poorer due to shrimp farming.
- 3. Fertilities of lands are rapidly decreasing due to misusing of lands by the shrimp farming.
- 4. It is more important to open the sources of water flows by re-excavating of recorded canals rather than shrimp farming.
- 5. Aman Paddy (a popular local species of rice) and livestock are declining due to continuous expansions of shrimp farming.
- 6. Violence against women Including the Social conflicts, Killings and Murders cases are highly increased.
- 7. Affecting the ecological system including the environment by the shrimp farming is ongoing.

The Impacts of shrimp farming on the coastal Livelihoods: A CDP analysis

The long chain of interdependence observed in the shrimp cultivation and processing in Bangladesh is likely to create a chain reaction when any shock affects the sector. The every fragmented part of the supply chain is narrowly focused on their particular interest. Besides, there are very few organizations like CDP that tries to visualize the problem in a holistic, pro-poor, community-based and non-judgmental way. For almost two decades fry collection and work in shrimp farm and industries have become the chief sources of livelihood for women and children in southwest coastal areas. The local community does not have any control of the public resources because the industrialized shrimp farming has more money & influence to get government support for using these resources for their profit.

- 1. Agriculture has been reduced, resulting in reduction of employment options for the poor and landless.
- 2. Destructive methods of shrimp fry collection have damaged aquatic bio-diversity and resulted in reduction of the fish population, adversely affecting the livelihoods of fishers.
- 3. Salinity enhanced by shrimp culture has killed off all vegetation and this has resulted in lack of sufficient firewood.
- Salinity has also adversely affected homestead vegetable gardening, poultry farming and cattlerearing, thus denying the poor people their sources of home-grown nutrition and subsidiary incomes.
- 5. The lack of vegetables, fruits, eggs and milk has resulted in massive malnourishment, especially of women and children, in the region.
- 6. Reduction in agriculture has resulted in lack of food security, especially for poor people of the region.



Ways to ensure the Sustainability of the Responsible Shrimp Farming

Government support is critical for sustaining Responsible Shrimp Farming: According to the Shrimp Farmers, adequate government supports and effective policy can establish the shrimp culture as a sustainable, profitable and peoples' oriented industry in Bangladesh that is strongly believed by participants. For example, the prices of shrimps are not determined by the market but dictated by the processors. The real the benefit of the higher price of shrimps in the market mainly goes to the middlemen's pocket rather than by the farmers. Government should intervene to ensure fair price for the farmers.

Institutional support must be available to protect shrimp farms from different diseases: According to the Shrimp Farmers, when different kinds of diseases attack in the farm then the farmers is taking care of their farms as per their own methods. Besides the unapproved medicines of markets they also used their own manufactured medicines. Sometimes they go to Upazilla Fisheries Officer for suggestions and treatments of shrimp, but no treatment is being applied in the cases of dangerous diseases like 'virus'.

Professional skills Development is a necessity: Due to lack of professional skills, the shrimp farm owners do not know how to choose fry, how to follow rules & regulations, standards for responsible farming, how to recruit labours etc. Without their skills development, they will always be staying in a backward position.

Need-based professional education through the Shrimp Farmers Field School: One of the significant aspect that all the small-scale shrimp farmers agreed as one of the key drawback for responsible shrimp farming is their lack of education. They revealed that lack of education is making all others barriers in human life. They strongly urged need based and profession oriented education for the shrimp farmers. Due to lack of education, most of the times the small-scale shrimp farmers can not their investment properly to earn the profit.

Type of the Shrimp	De	emands of the Shrimp Stakeholders for sustainable and socially acceptable shrimp
Stakeholders		farming
Shrimp Traders	1.	Separate policy in favor of Shrimp Industry;
	2.	Specific and effective shrimp policy
	3.	Separate Associations in favor of Owner and Labours;
	4.	Continuing Shrimp farm registration activities
	5.	Establishing a shrimp research center
	6.	Ensure support for shrimp certification process, like SSOQ project
Small-Scale Shrimp	1.	Arranging of interest free loan for the farmers;
Farmers	2.	Implementing pilot project in each shrimp production zone by the government;
	3.	Ensure transparency in each level from the production to selling of shrimp.
	4.	Arranging of the local communication and electricity supply facilities;
	5.	Ensuring government support for implementing of shrimp certification system;
	6.	Providing of need based training to the farmers;
	7.	Ensure direct linkage with processing plants & reduce middleman groups;
	8.	Local NGOs can help in forming cooperatives among Small-Scale shrimp farmers



Intensive technical training for the Shrimp Farmers: Lack of technical knowledge is one of the major problems identified by the shrimp farmers among the many other problems facing by them. It has been observed that, due to lack of technical knowledge the farmers are not well concerned about the farming system which may bring more profit for them or which system may be applied to cultivate producing of more shrimp without hampering ecosystem and following community concerns. According to the shrimp farmers, the technical knowledge is any kind of knowledge which has importance to ensure professional relationship buildup with all shrimp stakeholders for maintaining quality management in all activities doing by the farmers. If they have the necessary and accurate knowledge about the shrimp farming system then the micro level shrimp farmer and the owners will be benefited.

Provision of flexible investment for small-scale farmers: Investment is an important part of a business, because if the investment is not done properly then the result will never come. Without having an adequate investment in any kinds of business no one can hope for the result. The lack of investment is a great problem for the small- scale shrimp farmers, even if they want to move for responsible farming. If the farmer can invest capital in time with flexible process, they can reduce many sustainable practices that currently happening. It has to be noted that none of the financial incentives from the government directly reaches to the real farmers.

Setting information center to provide professional information to the stakeholders: Virtually all of the small-scale shrimp farmers do not know how to export shrimp after the processing activities or to who may be contacted to get the information about the current market and price as well. But the large-scale shrimp farmer are gaining huge amount of profit through their direct linkage with the foreign buyers. Setting information center to provide professional information to the farmers, buyers, and other related stakeholders in the shrimp farming could be very useful for the small- scale shrimp farmers.



Conclusion

Bangladesh gets an export income of 350 million US Dollars and nearly 1.2 million people are directly employed in various components of this industry and nearly 5 million people are benefited. As such, the importance of shrimp in the economy of Bangladesh is very high and increasing day by day. But questions are being raised internationally in respect of shrimp produced in Bangladesh and there is likelihood that Bangladesh may lose its markets for shrimp which will ultimately create livelihood insecurity for 5 million people.

Despite substantial government support, shrimp industry has not yet developed as a responsible business entity. On the other hand, even if shrimp farming is closed down, it would leave a vast area unutilized. In this context, it is better to improve the current situation by improving existing farms or gradual close down. But the big challenge is that small-scale shrimp farmers are the weakest stakeholders in Bangladesh shrimp value chain and they are virtually unfamiliar with international markets, standards and certifications. Certification to ShAD standards requires continuous up-grading of technical skills with particular attention to the Small-Scale Shrimp Farmers.

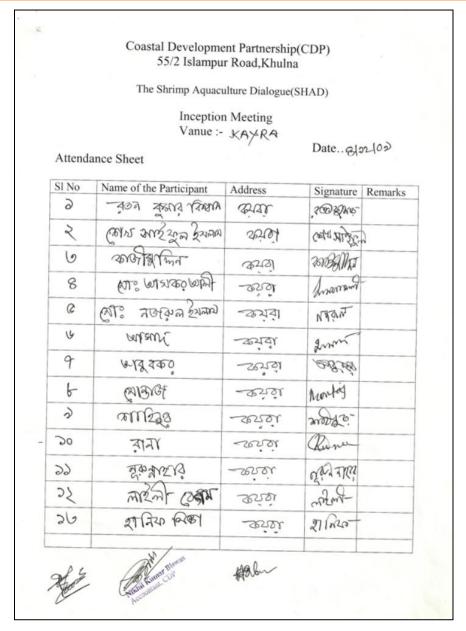
It has to be noted that almost all of the shrimp processing plants are located in Khulna Division where the 80% of the shrimp farms are located. However, only 30 to 40 plants are reported to be equipped with modern shrimp processing facilities as demanded by the major buyers like USA, Japan and EU. Since on average only 30% of processing plant capacity is utilized, there is no need to develop more processing plant, rather more emphasis should be given to farm level. That's one of the focus of ShAD. It is expected that findings of the outreach might be important for the making the ShAD standard more appropriate for farm level.



Annexure 1: Participant List

Inception Meeting

Group Shrimp Farmer, Businessmen and affected people			
Koyra			
4-December-2009	15:00 Hrs		
38 (33 Male, 5 Female)			
Md. Sirajul Islam			
Swapon Kumar Bashu			
	Koyra 4-December-2009 38 (33 Male, 5 Female) Md. Sirajul Islam		



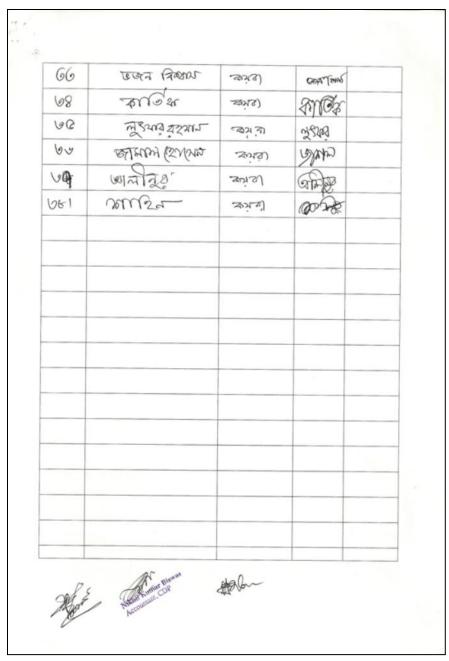
Page 1 of Attendance Sheet of Inception Meeting at Koyra, Khulna



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Page 2 of Attendance Sheet of Inception Meeting at Koyra, Khulna

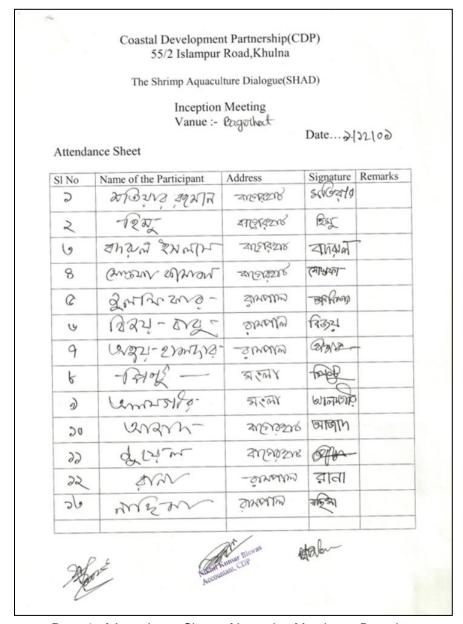




Page 3 of Attendance Sheet of Inception Meeting at Koyra, Khulna

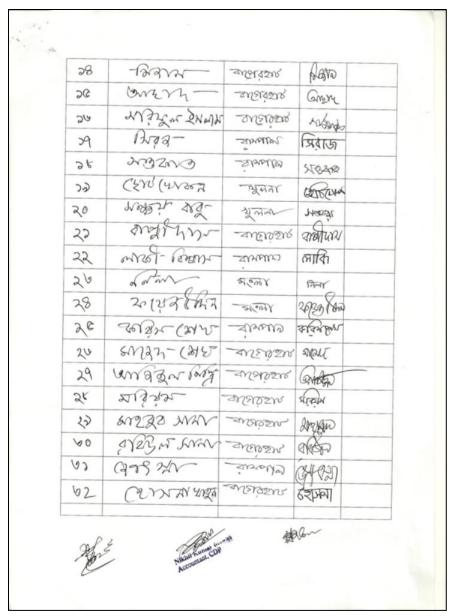


Inception Meeting						
Group Shrimp Farmer, Businessmen and affected people						
Location	Bagerhat					
Date and time	9-December-2009	15:00 Hrs				
Number of participants	43 (36 Male, 7 Female)					
Moderator Shaikh Abdul Jalil						
Reporter	Shaikh Abdul Jalil					



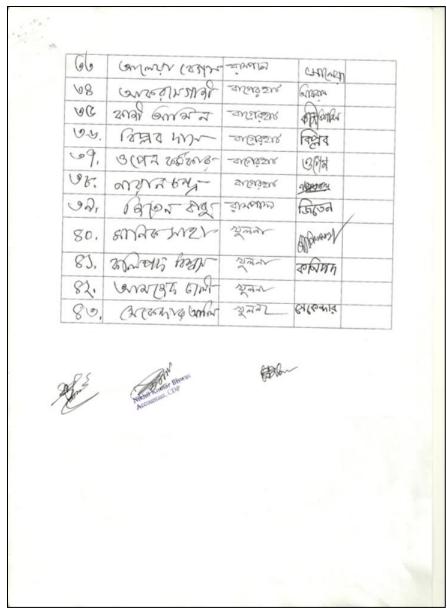
Page 1 of Attendance Sheet of Inception Meeting at Bagerhat





Page 2 of Attendance Sheet of Inception Meeting at Bagerhat





Page 3 of Attendance Sheet of Inception Meeting at Bagerhat



Focus Group Discussion						
Group	Shrimp farmers					
Location	Muktijoddha Shangshad, Rampal, Bagherhat					
Date and time	04-February-2010	11:00 Hrs				
Number of participants	15 (14 Male, 1 Female)					
Moderator	Shaikh Abdul Jalil					
Reporter	Swapon Kumar Bashu					

The Shrimp Aquaculture Dialogue (ShAD) Focus Group Discussion (FGD) Venue: MUKTE JODDHA SONGSADTime: 11 AM Dated: 04.02.10 RAMPAL. Signature Sheet Occupation Address Mobile S.I No. Name Signature 16:102-6027-- manney on los to feel to 01736254432 500 20 ensino 2. कारकर द्रायान कि रेंड हार्यी CON32127 01196252328 रशय - कावड्गा 又到111大部計 又21人对社 STSTONAS (347) (343K 3. SIA-Sour अवस्था अतिकृत र्राज्याम िरांड कार्य व्योधन्य वा 01719-891269 4. 5. FE . 13 172] COMB EVES प्रमाच काष्ट्रकारिक 3 WW Way (m: 27/304) देशावधान Y6175 678) 120 25 (July 6. 92886 7. James of the Late Catho fere sont IMO WON YOU dISI AIM 8. . नाडुल प्रिल 61918821098 Por 12 8 121 9. हित्र उपनी उर्देशकास समित साहितेषहुत्रभास हिंदि कुंडी annamo 01712555909 রামশান 10. 01735-748161 प्रमाम देखेन एका मानि Tel 5 618 11. COUNTENE tours age somit क्रिक हरकी 9108/5/23/hin arrowing 12. CORRYO SYMAN

Attendance Sheet of Focus Group Discussion at Muktijoddha Sangsad, Rampal, Bagerhat

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Focus Group Discussion					
Group	Shrimp Farmer				
Location	Dattakathi, Bagerhat				
Date and time	06-February-2010	11:00 Hrs			
Number of participants	15 (All Male)				
Moderator	Swapon Kumar Bashu				
Reporter	Md. Sirajul Islam				

Venue:	The SI	Focus Group D	Discussion (FGD)	(ShAD)	010
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Attendance Sheet of Focus Group Discussion at Dattakathi, Bagerhat



Focus Group Discussion					
Group	Shrimp Gher owner				
Location	CDP office, Koyra, Khulna				
Date and time	10-February-2010	15:00 Hrs			
Number of participants	15 (All male)				
Moderator	Md. Sirajul Islam				
Reporter	Swapon Kumar Bashu				

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enue:	कांक, का कार्या	- Time: outr	Da	yed: 20/07/20	
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Attendance Sheet of Focus Group Discussion at CDP Office, Koyra, Khulna



Focus Group Discussion					
Group	Shrimp Businessman				
Location	Koyra College Ground, Khulna				
Date and time	11-February-2010	11:00 Hrs			
Number of participants	14 (All Male)				
Moderator	Md. Sirajul Islam				
Reporter	Swapon Kumar Bashu				

enue:	wise, over my	Time: 33 100	Discussion (FGD)	Dated: >> 01170	
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Attendance Sheet of Focus Group Discussion at Koyra College Ground, Koyra, Khulna



Focus Group Discussion					
Group	People who support Shrimp farming				
Location	Khan Jahan Alir Hachari, Paschim Bhagh, Kandapa Bagerhat	ar,			
Date and time	23-February-2010 10:00 Hrs				
Number of participants	11 (All Male)				
Moderator	Md. Sirajul Islam				
Reporter	Swapon Kumar Bashu				

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Attendance Sheet of Focus Group Discussion at Khan Jahan Ali Hatchery, Paschimvag, Bagerhat



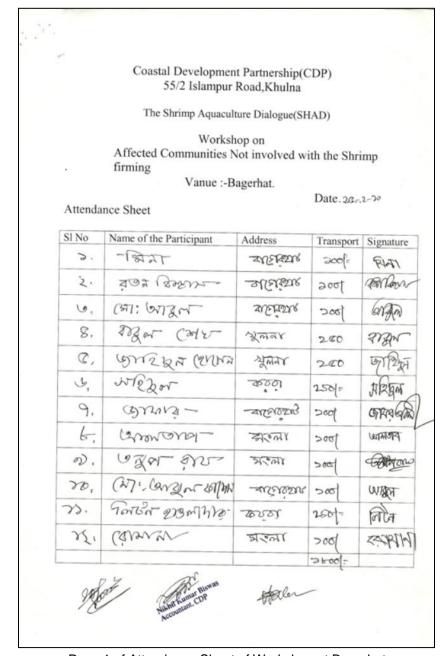
Focus Group Discussion				
Group	Affected people			
Location	Chandpai, Mongla, Bagerhat			
Date and time	23-February-2010	17:00 Hrs		
Number of participants	13 (All Male)			
Moderator	Shaikh Abdul Jalil			
Reporter	Md. Sirajul Islam			

	Focus Group I	Culture Dia Discussion, (F	FGD.)	ate; 23.02.
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Attendance Sheet of Focus Group Discussion at Chandpai, Mongla, Bagerhat

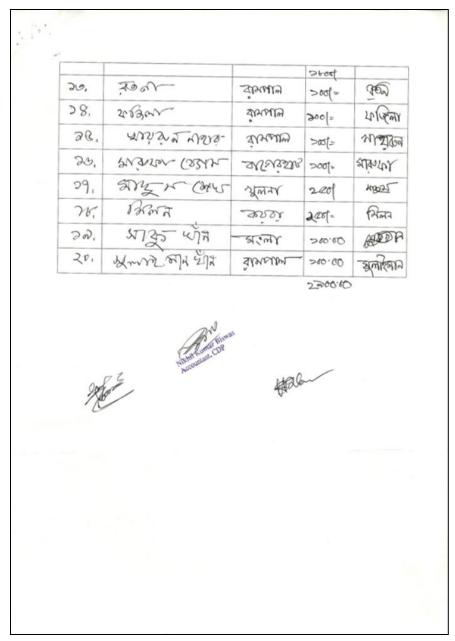


Workshop				
Group	Affected communities not involved	with the shrimp farming		
Location	Bagerhat	-		
Date and time	25-February-2010	10:00 Hrs		
Number of participants	20 (14 Male, 6 Female)			
Moderator	Shaikh Abdul Jalil			
Reporter	Swapon Kumar Bashu			



Page 1 of Attendance Sheet of Workshop at Bagerhat

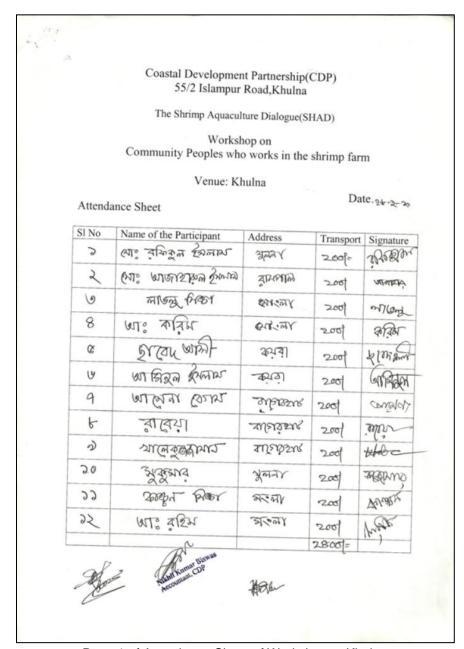




Page 2 of Attendance Sheet of Workshop at Bagerhat

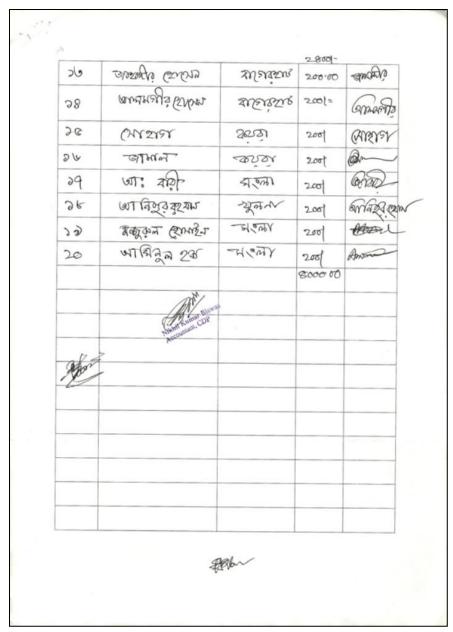


Workshop				
Group	Community people who works in the shrimp farm			
Location	Khulna			
Date and time	28-February-2010	10:00 Hrs		
Number of participants	20 (18 Male, 2 Female)			
Moderator	Swapon Kumar Bashu			
Reporter	Shaikh Abdul Jalil			
Documentation	Sirajul Islam			



Page 1 of Attendance Sheet of Workshop at Khulna





Page 2 of Attendance Sheet of Workshop at Bagerhat



Annexure 1: Photograph



FGD at Muktijoddha Sangsad, Rampal



FGD at Dattakathi, Bagerhat



Photograph of FGD at Khan Jahan Ali Hatchery, Bagerhat





Photograph of FGD at CDP Office, Koyra, Khulna



Photograph of FGD at Koyra College Ground, Khulna



Photograph of FGD at Chandpai, Mongla, Bagerhat

