AWF-VOSD SMALL SCALE CAGE CULTURE PROJECT

FOR RURAL WOMEN IN BANGLADESH

INTRODUCTION

This is a project organized and supported by the Voluntary Organization for Social Development, Bangladesh (VOSD) and Aquaculture without Frontiers (AwF).

Further details about project management and VOSD can be found at the end of this document.

Further information on AwF can be found on www.aquaculturewithoutfrontiers.org

PROJECT TITLE

AwF-VOSD Small Scale Cage Culture for Rural Women in Bangladesh

BACKGROUND

Fish culture in cages is not a traditional technology in Bangladesh like pond culture. It is a relatively new technology in Bangladesh though it has successful history in many other countries in Asia. In Bangladesh the first documented attempts on cage culture were small-scale research projects conducted at research institute campuses in 1970s and 1980s. The first serious attempt to introduce cage culture in Bangladesh occurred during 1980s in the Kaptai Lake (Flexi, S.S. 1987.Terminal report of the fish cage expert-Loan No.329-BAN (SF). Bangladesh Aquaculture Development Project No. 86.). In 1991 and 1992, Department of Fisheries (DoF) and Overseas Development Agency (ODA now DFID), supported the Northwest Fisheries Extension Project in collaboration with CARE starting cage culture in northwest Bangladesh. The target groups were women, initially successful, the project failed due to high level of post-stocking mortalities.

CARE's CAGES project was the first aquaculture development project which was exclusively on cage culture started from 1998 in six regions (Barisal, Comilla, Dhaka, Jessore, Natore and Sylhet) of Bangladesh. The first three years of this project was concerned with introducing cage culture with very limited previous experience. Returns and profits had increased each year since the project inception. The target groups were the resource poor particularly women who had no owner or access to pond as cages could be set in many different water body.

Cage culture showed an opportunity to poor farmers particularly women. After the successful introduction of CARE-CAGES project in some areas of Bangladesh, many farmers left their cages from water bodies after the finishing of the project in 2002. First it seemed to be a disaster but in reality, there was no body to support or follow up the program from government or NGO level after finishing the project.

OBJECTIVES

The overall goal of this project is to introduce low-cost cage culture technology to poor women to improve their nutrition status and livelihoods.

- -To achieve this goal, the specific objectives are given below:
- -To introduce low input cage culture technology to poor women beneficiaries.
- -To alert beneficiaries that cage culture is a profitable option of aquaculture and requires minimal investment.

- -To encourage beneficiaries about cage culture and fish feeding techniques.
- -To ensure farmers that it is a source of income and provides protein at very low cost.
- -To establish social interaction, like serving guests or neighbours.

ACTIVITIES

- -To achieve the objectives, the following works will be done:
- -Site will be selected for the project through VOSD.
- -Farmer selection will be done through a survey carried in selected area and then training, meetings, discussion and brain storming will be provided.
- -Two days training on cage construction and fish culture in cages will be conducted for selected farmers.
- -A training module will be prepared for cage culture for farmers.
- -Water quality, fish mortality, feed and disease will be monitored at regular intervals.
- -Records will be kept of fish production for each cage.
- -Progress reports will be provided every four months, and a final report will be prepared.
- -Tentative Work Plan for one year (two cycles/yr)

	2006	<u>, </u>									2007	
Activities	М	Α	М	J	J	Α	S	0	N	D	J	F
Farmers selection	Χ											
Training to the farmers		Χ										
Pond Selection	Χ											
Pond Preparation	Χ											
Cage construction		Х										
Fry purchasing		Х	Х				Х					
Fry nursing in ponds		Х				Χ						
Fry stocking in cages			Х				Χ					
Feeding of fish		Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	
Harvesting							Χ				Χ	
Monitoring & data collection	Χ	Х	Х	Х	Х	Х	Х	Χ	Χ	Χ	Χ	
Progress reports				Х				Х				
Dissemination workshop											Χ	
Final report												Χ

DURATION

-One year (for two cage culture cycles)

PROJECT AREAS

- -Two areas have been selected:
- -Nalcity upazilla, Jalokathi district (for 15 women).
- -Faridganj upazilla, Chandpur district (for 20 women).

EXPECTED OUTPUTS

- -From the proposed project the following objectives will be obtained:
- -Low cost fish culture technology will be established in new areas.
- -Farmers can earn an additional income through cage culture in the same pond with pond culture.
- -Jobs will be created for 35 poor women.
- -Family fish consumption as well as protein intake will be improved.
- -Awareness on cage culture technology will be developed among the farmers.
- -Posters and booklets will be published for extension.

POVERTY FOCUS

The target group of this proposed project is the rural women. The beneficiaries will be provided cage culture training to raise up tilapia in cages. As a result their income will be increased, which will ultimately help to their financial, empowerment of women in the family and improve their livelihoods status. The technology is also suitable for extreme poor families, as total investment and risks are low.

INDICATORS OF SUCCESS

- -The following indicators will be utilized:
- -Cage materials are locally available.
- -Farmer can use one side of pond or water body. Many people can culture together in one water area.
- -Fry are available around the area.
- -Local available food and daily vegetable waste can be used as feed for fish.
- -Mortality rate is very low.
- -Proper monitoring by NGO.
- -The farmers are practicing recommended techniques.
- -Improved livelihoods status of the women fish farmers in the target areas.

INPUTS

-The following inputs are required:
-Cage materials.
-Technical assistance (provide training).
-Monosex tilapia (Oreochromis niloticus) fry (1-1½ inch).
-Fish feed (first one month).
-Posters and leaflets.
ASSUMPTIONS AND RISKS
-Assumptions
-Water bodies in the target areas and water are available throughout the year.
-Cage materials are locally available and very cheap.
-Tilapia fry are available.
-Favourable climate conditions
-Good co-operation among the farmers and NGO staffs.
-The fish farmers and local people are co-operative.
Risks
-Natural disasters.
-Sudden changes in water quality.
-Disease outbreaks.
-Cutting the netting of the cage net by crabs, etc.
-Stealing.
ENVIRONMENTAL IMPACT
Any environmental impact will be monitored. We shall specially monitor the nutrient load beneath the cages due to feed application.
DISSEMINATION/UPTAKE
Local seminar/workshop will be held with various stakeholders includes farmers, NGO workers, Governments official and academics, provided with poster and booklets.

BUDGET

Item	Cost	BDT
1. a. Three days training on	Tk100 food p.p×35×3	10,500
cage culture for 35 rural		
women		
b. Conveyance for 35 farmers	Tk100 x 35 x 3	10,500
c. Local Trainer Honorarium	Tk1,000×2×3	6,000
d. Training materials		3,000
e. Tilapia fry for 35 cages	Tk 500 x 35	17,000
f. One day follow up training:	200 x 35 x 1	7,000
Food + Conveyance for 35		
farmers		
g. Pond preparation (Lime,	15 x 500	8,500
fertilizers, etc.) for 15 ponds		
2. Input materials (net and	Per cage TK.	21,000
bamboo split and others) for 35	600×35	
cages		
3. Fish feed	Tk 1000 x 35	35,000
4. Development of cage culture		50,000
training manuals and		
documentation (at least 500		
pcs.)		
5. Posters - 1000 pcs.		20,000
6. Overall emergency Disaster		25,000
support for cage inputs (water		
pumping, etc.)		
7. Travel cost, Food and		10,000
Accommodation for field		
supervisor		
8. Local seminar & workshop		20,000
	Total (Two lakhs three thousand	243,500
	and five hundreds)	
	Total VOSD contribution	70,000
	Sub Total	173,500
	Bank & other commission cuts	3256
	during handing the bank draft	
	(2%)	
	Total AwF contribution	176,756
Grand Total of AwF support provided[1]		US\$ 2720
	TOTAL A	

Annex 1. BACKGROUND INFORMATION

PERSONAL DETAILS OF THE PRINCIPAL INVESTIGATOR

Principal investigator:	Tamanna Khatun
Designation:	Director, Fisheries Program, VOSD
Address of Organization:	VOSD,

8/8, Lalmatia, Block-A,

	Dhaka-1207
	Bangladesh.
	Phone: (02) 9126278, 8150773 (Office)
	Phone: (02) 8155727 (Res.)
	Fax: (880-2) 8127629 (office)
	Email: tkhatun@dhaka.net
Area of specialization of Principal investigator:	vosd@dhaka.agni.com Fisheries.
TECHNICAL SUPPORT (VOLUNTARY)	
Technology collaborator:	Dr. M. Niamul Naser
Designation:	Associate Professor
Organization:	University of Dhaka
Address:	Department of Zoology,
	University of Dhaka,
	Dhaka- 1000, Bangladesh
	Phone: (8802) 9661920-59/6073 (Lab)
	(8802) 7168321 (Office direct)
	Fax: (8802) 8615583
	Email: mnnaser@udhaka.net
	Alternate: mnnaser@yahoo.com
Area of specialization of Dr. Naser :	Fisheries, Aquaculture, Sustainability of Rural Livelihoods.
INFORMATION ON ORGANIZATION OF VOSD	
Organization:	NGO

Year of Establishment July 1,1987 Chief of the Organization: Mr. A K M Mostafizur Rahman, Executive Director. Contact address: VOSD, 8/8, Lalmatia, Block-A, Dhaka-1207 Bangladesh. Phone: (02) 9126278, 8150773 (Office) Cell Phone: 0171568361 Fax: (880-2) 8127629 Email: vosd@dhaka.agni.com Registration of VOSD by: Government of the Peoples Republics of Bangladesh (GoB) a. Department of Social Services: DSS-Bari-253 VOSD Registration number in concern departments of GoB b. NGO Affairs Bureau: FDO/R-627 c. Family Planning Department: FP-70 Bank Name: Bangladesh Krishi Bank Bank Details for transferring Mailing address: Tajmahal Road Branch, Tajmahal road, Mohammadpur, Dhaka - 1207.

Account name: VOSD

Account number: CA-AC-No. 993.

CORE PROGRAMS/ACTIVITES of VOSD:

Since 1987 VOSD is working with the underprivileged people through awareness and sustainable skill development in-

- -Health and Nutrition.
- -Non-formal primary, Adult Education.
- -Income Generating and Credit.

- $\hbox{-} A griculture.\\$
- -Fisheries.
- -Environment
- -Good Governance and Human Rights.
- -Training and Research.
- -Disaster Preparedness.
- -At present the overall activities of VOSD is covering 667,500 beneficiaries at 5,687 villages of 86 upazilla (sub-districts).

A BRIEF OVERVIEW OF THE VOSD FISHERIES PROGRAMME:

Pond leasing and fish culture for the fishermen groups supported by Upazilla Fisheries Department from 1989. Assisting pond leasing by the fishermen groups, organizing fishermen groups or pond owners, providing orientation, improved scientific fish culture training, providing credit support for fish culture. A total 730 ponds have been assisted for fish culture program. Till now 8420 women group members and fishermen are covered under such approach.

Pond re-excavation and fish cultivation for the women group members supported by WFP/DOF from 1993 to 2003. The main activities were: Identification of derelict ponds in the working areas, re-excavation, organizing women members or pond owners, provides training and credit support for fish culture. A total 365 ponds have been cultivated fishes in the working areas by 3750 women group members and fishermen.

Command Area Development through Small Scale Fisheries Development for the poor fisher women group members supported by ADB/DOF from 1999 to date.

Cage Fish Culture Program for the limited number of poor rural women group members supported by VOSD (2005).

1 US\$ @ BDT 65= US\$ 2720