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)

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<th>Activities</th>
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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
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<th>Item</th>
<th>Cost</th>
<th>BDT</th>
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<tbody>
<tr>
<td>1. a. Three days training on cage culture for 35 rural women</td>
<td>Tk100 food p.p×35×3</td>
<td>10,500</td>
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<td>b. Conveyance for 35 farmers</td>
<td>Tk100 x 35 x 3</td>
<td>10,500</td>
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<td>c. Local Trainer Honorarium</td>
<td>Tk1,000×2×3</td>
<td>6,000</td>
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<td>d. Training materials</td>
<td>3,000</td>
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<tr>
<td>e. Tilapia fry for 35 cages</td>
<td>Tk 500 x 35</td>
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<tr>
<td>f. One day follow up training: Food + Conveyance for 35 farmers</td>
<td>200 x 35 x 1</td>
<td>7,000</td>
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<tr>
<td>g. Pond preparation (Lime, fertilizers, etc.) for 15 ponds</td>
<td>15 x 500</td>
<td>8,500</td>
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<tr>
<td>2. Input materials (net and bamboo split and others) for 35 cages</td>
<td>Per cage TK. 600×35</td>
<td>21,000</td>
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<tr>
<td>3. Fish feed</td>
<td>Tk 1000 x 35</td>
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<tr>
<td>4. Development of cage culture training manuals and documentation (at least 500 pcs.)</td>
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<td>50,000</td>
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<td>5. Posters - 1000 pcs.</td>
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<tr>
<td>6. Overall emergency Disaster support for cage inputs (water pumping, etc.)</td>
<td></td>
<td>25,000</td>
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<tr>
<td>7. Travel cost, Food and Accommodation for field supervisor</td>
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<td>8. Local seminar &amp; workshop</td>
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<td>Total (Two lakhs three thousand and five hundreds)</td>
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<td>Total VOSD contribution</td>
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<td>Total AwF contribution</td>
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Grand Total of AwF support provided[1] US$ 2720

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,
Area of specialization of Principal investigator: 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 Republic of Bangladesh (GoB)

VOSD Registration number in concern departments of GoB:

a. Department of Social Services: DSS-Bari-253
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/ACTIVITIES 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.
Agriculture.
-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