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DEVELOPMENT OF SUSTAINABLE AQUACULTURE PROJECT

**A project implemented by the
WorldFish Center**

**Funded by the
U.S. Agency for International Development (USAID)
(Cooperative Agreement 388-A-00-00-00068-00)**

**PROGRESS REPORT
(1 January 2004 - 31 March 2004)**

Prepared by

**WorldFish Center, Bangladesh Office
House No 22B, Road 7, Block F
Banani, Dhaka - 1213, Bangladesh
Tel: +(880-2) 8813250
Fax: +(880-2) 8811151**

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INTRODUCTION

The Development of Sustainable Aquaculture Project (DSAP) was authorized by USAID under the Cooperative Agreement # 388-A-00-00-00068-00 on 28 June 2000. This technical progress report covers activities for the three months of the project, 1 January 2004 through 31 March 2004. Financial reporting for the Project is handled separately from the WorldFish Center (previously ICLARM-International Center for Living Aquatic Resource Management) headquarters in Penang, Malaysia.

The main thrust of the Development of Sustainable Aquaculture Project is to sponsor on-farm aquaculture production demonstrations implemented through co-operating NGO partners. These demonstrations are expected to show farmers and their neighbors the profitability of managed aquaculture systems as small business enterprises. Both small ponds and integrated rice and fish systems, based on research-proven production results, are the target of these demonstrations. The Project also has a research component directed to understanding and exploring alternative production options, improving the technology transfer process and monitoring the impact of the adopted aquaculture practices.

This quarterly technical progress report covers (i) the evaluation of partner NGOs 2003 achievements, (ii) the negotiations and finalizations of the 2004 work plans and budgets, (iii) (iv) the advertisement for small research projects (v) the second meeting of the Steering Committee of the collaborative research project with BFRI and (vi) the preparations for the mid-term DSAP review scheduled for May-June 2004.

Details about the support of on-farm demonstrations, research, training and administrative actions are presented in the respective sections of this report.

DEMONSTRATIONS AND NGO ACTIVITIES

Following the NGO performance assessment 2003 (cf. technical progress report Oct-Dec 2003) 34 out of 35 partner NGOs were invited to prepare work plans and budgets for the 2004 extension program. The collaboration with one partner NGO (DMG) was put on hold due to insufficient performance/transparency for the second consecutive year despite frequent promises of major improvement. Subsequently meetings were organized with all of the 34 partners during the month of January to review the 2003 activities and achievements as well as to negotiate the programs for this year's technology dissemination program. The work plans and budgets of 31 partner NGOs were approved with minor amendments. Those of 3 partner NGOs were approved for the first quarter 2004 only and further collaboration with the project after this period is subject to significant improvements particularly in financial and human resource management. Following the meetings held with these three partners NGOs at the end of March 2004 and having reviewed the performance of these partners for the period Jan-March 2004, the partnership with two (CIRUP and OREDAR) was decided to be continued and one (LDRO) was put on hold. Henceforth the total number of partner NGOs put on hold in 2004 is two (DMG and LDRO) and the aquaculture extension program is currently implemented in collaboration with 33 partner NGOs. As outlined in the DSAP Strategic Plans (cf. technical progress report Jan-March 2002) no new NGOs will be recruited this year, just one and a half (1½) year ahead of the current project termination date. Attachment 1 illustrates the evolution of collaborating partner NGOs since inception of the program.

The selection of new demonstration farmers for the 2004 extension effort was undertaken during the reporting period and is expected to be completed by April 2004. As unanimously recommended by the partners in the NGO evaluation workshop 2003 in Cox's Bazar (cf. previous progress report), the Whole Family Approach and participatory methodologies/tools

were used for aforementioned selection process. The contracted partner NGOs have committed to identify and select at least 11,250 new demonstration sites. The status of field staff (33 Program Coordinators and 225 Extension workers) of the collaborating partner NGOs of the 2004 extension effort and the number of new demonstrations per partner NGO is presented in attachment 2. Besides the new demonstration farmers/families, the partner NGOs will continue to provide extension services to the demo farmers as well as the new members (or secondary demo farmers) of the Farmer Demonstration Groups identified in 2002 and 2003 (i.e. aquaculture season 2002/03 and 2003/04). NGOs were strongly encouraged to continue the promotion of new members entering these 'old' farmer organizations in 2004. As in previous years the partner NGOs will carry out a beneficiaries' survey once the farmer selection for 'new' and 'old' groups terminated. A refresher training course was organized (cf. Training section below) to review last year's survey and to adapt the questionnaires to the "Whole Family Approach". The results of this survey will be available by the end of June and presented in the next technical progress report (April-June 2004).

As per DSAP technology dissemination policy the extension services to the members of the farmer demonstration groups (DFGs) will be withdrawn after three consecutive years of participation in the program. Therefore the 4,701 demonstration farmers recruited in 2001/02 and having received extension services for a period of three years will be graduated in the second quarter 2004 after finalization of the 2003/04 harvest together with the 1,034 new members or secondary demo farmers, most of which entered the DFGs in 2002/03.

Whilst the partner NGOs were busy to select new demonstration farmers, to organize farmer foundation training and to promote the entrance of interested villagers into the existing farmer organizations (i.e. DFG), they also provided valuable technical assistance and support to farmers in respect to the harvest and marketing of the 2003/04 aquaculture production and the proper utilization of pond books. Attachments 3-5 illustrate the geographical distribution of the supported aquaculture demonstrations of the 2003/04 extension program partner NGO-wise, the same number-wise and the distribution of partner NGO staff according to WorldFish-DSAP field liaison office respectively.

Support to partner NGOs was continued as usual during the reporting period, i.e. through on-the-job training of NGO staff, frequent field visits including new area selection, new farmer/family selection, fish harvest/marketing, the use of pond books as well as attending partner NGOs' extension meetings and national/regional coordination meetings.

Prior to the release of funds for the new program (2004/05) the expenditures of the previous year (2003/04) were finalized and approved. Funds for the first quarter 2004 were released to all partner-NGOs of the 2004/05 extension program. Full details of the final situation of the 2003 budgets and the status of funds release of the first quarter 2004 are provided in attachments 6 and 7 respectively.

As mentioned in the previous technical progress report, the project continued its collaboration with 55 associate-partner NGOs for the 2003/04 aquaculture season. The project provided limited technical assistance through on-the-job training to these partners and organized bimonthly regional coordination meetings. The annual evaluation workshop with the associate-partners that aims at reviewing the 2003/04 program/achievements and to discuss the 2004/05 program is scheduled for April 2004.

In order to assess and evaluate the progress towards achieving the project's main objectives, *i.e. sustained fish production* by cooperative farmers and a sustained NGO aquaculture technology dissemination program, and to adjust if needed the strategic plans developed to

achieve these objectives, the project has designed and initiated several social studies. These studies are, for the time being, limited to cooperating partner NGOs and demonstration farmers supported by those NGOs. The present status of these studies is:

1. **NGO financial capacity strengthening through aquaculture related income generating activities (IGA): Constraints and potentialities.** This study monitors and evaluates the NGOs achievements in respect to IGA especially to aquaculture related activities including paid extension and the advantages/disadvantages of farmer grant versus non-grant NGOs. Paid extension is also studied from the farmer's perspective. Quantitative data were collected from all partner NGOs covering 2001/02 to 2003/04 aquaculture seasons and qualitative data were obtained from 8 randomly chosen partner NGOs and 40 demonstration farmers. Data collection is completed; analysis and report writing are ongoing.
2. **NGO institutional capacity strengthening: Constraints and potentialities.** This study monitors and evaluates the NGO's achievements in respect of issues such as staff development, human resource management, skills development, program ownership and staff turn-over. Quantitative and qualitative data were collected from 8 randomly chosen partner NGOs. Data analysis and report writing are ongoing.
3. **Institutional development of aquaculture related farmer organizations supported by DSAP.** This study monitor and evaluates the experiences of the Demonstration Farmer Groups (DFGs) supported by the partner NGOs of the DSAP aquaculture extension program. Issues such as group formation, group dynamics, social acceptance, promotion of aquaculture practices, integration of new members, farmer-to-farmer dissemination, group sustainability etc. will be studied. Structured questionnaire was prepared and data collection is scheduled during the second semester 2004.
4. **Farmer's subsidy and micro-credit: Experiences of demonstration farmers supported by DSAP under different extension methodologies.** This study monitor and evaluates the successes and failures of grant and non-grant farmers of the DSAP program and evaluates the farmer's need for micro credit in relation to the farmer's financial management capacities. This study also assesses and evaluates the availability and access to micro-credit in rural Bangladesh. Structured questionnaire prepared. Data collection scheduled during second semester 2004.

RESEARCH

Impact assessment of adopted aquaculture practices

Year 2001-2002 pond book data: The draft report was made ready and it is under the process of publishing as a working paper 2003/26.

Year 2001-2002 data (Economic Impact Assessment): Three research reports were made ready. These are:

1. **Carp Polyculture:** A comparative study between DSAP supported demonstration farmers and control farmers.
2. **Technical efficiency of the DSAP supported carp-golda farmers of Jessore district, Bangladesh.**
3. **Towards efficiency and resource allocation:** A data envelopment analysis on DSAP supported carp-golda farmers of Bangladesh.

The above reports were drafted and the results are in the process of validation. Having validated, these will be published as DSAP working papers 2004/27, 2004/28 and 2004/29

respectively and articles will be derived out of them for publication in the journals home and abroad.

Year 2002-2003 data: These were generated by the partner NGOs and associate-partner NGOs as part of their aquaculture extension monitoring program. A draft report showing performances of the grant and non-grant supported partner NGOs as well as associate-partner NGOs has been made ready. The contents of the draft reports are in the process of validation. Having validated, this will be published as a DSAP working paper 2004/30.

Ex-post impact assessment 2000-2001: Background of this program has already been mentioned in the previous progress reports. Further analysis of these data is going on. As mentioned in the earlier report, one intern (from France) has already submitted a preliminary report on completion of her internship. The other intern (from Germany) has made use of the full data set collected for the impact assessment. He has also submitted preliminary findings in the form of tables and charts. Currently the DSAP research staff is making further analysis of the data. The draft report on this assessment is expected to be made ready by May 2004 and the final report will be produced by the end of June 2004.

Year 2003-2004 data: In order to improve the partner NGO's involvement with the performance monitoring of their aquaculture extension program, the project took a second initiative at the beginning of the year to refresh the monitoring and evaluation techniques for the project coordinators and the monitoring staff (cf Training section in this report). Following the foundation training in 2003, the NGOs were advised to sample 5% of their beneficiaries in order to monitor performance of their demonstration farmers. Using a structured questionnaire, the NGO field staff conducted the performance survey of the 2002-03 farmers. The research staff have made use of the data collected by them and produced a draft report to be shared with the partner NGOs to show how the demonstration farmers performed during the 2002-03 aquaculture season. Similar efforts are ongoing for the 2003-04 beneficiaries. However, the random sample size for this year's performance survey has been increased to 10%. As mentioned above, the project has organized till date three training courses (Foundation I and II, one refresher course) to develop the partner NGO capacity of monitoring and evaluating their aquaculture program. The programs and outcomes including methodologies, basic statistics, random sampling, questionnaires etc. have been compiled in a comprehensive reference document (Working paper 2004/31).

Long-term Impact Monitoring (RESTORE): The benchmark survey report on the RESTORE farmers are in progress. The draft report is expected to be made ready by the end of the next quarter. Monitoring and data generation are running smoothly.

DSAP-RESTORE directory: Since the long term impact assessment program mentioned above is a three-year endeavor, publishing a directory of the participatory farmers was felt necessary to better monitor the participating farmers. DSAP has already published and distributed this directory as a working paper (Working Paper 2004/17).

Supplementary studies: Supplementary studies of interest are (i) a consumption survey and (ii) a livelihood survey of the RESTORE farmers. The consumption survey was commissioned in August 2003 for a period of one year. Data up to February 2004 for 392 farmers are at hand and in the process of computer entry. Monthly data generation and compilation are running smoothly. The terminal month of data collection for this survey is July 2004. Upon receiving full data for the period from August 2003 to July 2004, these will be processed and results will be published. Similarly the livelihood survey was initiated in October 2003 for a period of one year. The data generation is going on smoothly.

Data management and database systems: Mr. Gertjan de Graaf, international consultant, was recruited locally from 23 February to 7 March 2004 to initiate the development of a functional multi disciplinary data management and analysis tool for aquaculture data generated by WorldFish Bangladesh. A national consultant was identified to set up the data management and database systems and his recruitment is in process. A second consultancy mission is foreseen at the end of 2004 to test the data management system before delivery. A mission report is available and was distributed to the concerned partners.

Collaborative Research with BFRI

The Second Steering Committee meeting of the Technical Assistance project "Research for Sustained Aquaculture Development Project (RSADP)" was held on 7 January under the chairmanship of Mr. Mohd. Abdul Huq, Secretary Ministry of Fisheries and Livestock (MoFL). The major decisions of the Steering Committee meeting were as follows: (i) the annual work plans and budget of RSADP for the year 2003-2004 were approved, (ii) to include the Director General, Department of Fisheries as one of the committee members and (iii) to involve the Implementation Monitoring and Evaluation Division (IMED) and the Planning Commission, Bangladesh in the DSAP mid-term evaluation.

As mentioned earlier, the progress of the projects under the Research for Sustainable Aquaculture Development (as per TAPP) of the BFRI the year 2002-2003 has been running very well. BFRI has submitted the annual research progress reports on (i) Culture potentials of small indigenous fish, Bata (*Labeo bata*) in semi intensive culture system, (ii) Low cost agro-based fish feed trials on carp and catfish in the field condition, (iii) Factors affecting adoption of polyculture technology in some selected areas of Bangladesh, (iv) Refinement of aquaculture technologies through NGO, (v) Indigenous catfish culture in ponds, and (vi) Carp brood-stock development and minimization of inbreeding depression problem in hatcheries. Of these six projects, number (i) and (iii) has been successfully completed. The others are carried over in 2003-2004. And five new research projects have been undertaken for the year 2003-2004:

- Carp broodstock development and minimization of inbreeding depression problems in hatcheries;
- Development of mass seed production techniques of climbing perch/koi (*Anabas testudineus*);
- On-farm adoptions of golda (*Macrobrachium rosenbergii*) nursery management;
- On-farm adoption of freshwater pearl culture;
- Seed production of Genetically Improved Farmed Tilapia (GIFT) in brackish water environment.

Research Grants to Universities

During the reporting quarter, no new grant was awarded. The final report of the research grant awarded to Dr. Saleha Khan (Management of Euglenophytes in Aquaculture Ponds for Improving Fish production in Bangladesh) of the Bangladesh Agricultural University, Mymensingh was submitted. Realizing the usefulness of the outcomes of this research, DSAP has started putting efforts to produce an extension booklet expected to be of excellent use for fish farmers in Bangladesh.

The status of research grants awarded and the funds released so far is presented in attachment 8. Altogether 19 small research grants were awarded, 10 were completed and 9 are ongoing.

As far as awarding of new research grants are concerned, an invitation for specific research proposals related to eight topics was advertised in the Daily Star, published on 28 December

2003 to make the circulation wider. A total of 108 (after excluding the duplications) research proposals were received from the applicants. These proposals were preliminarily reviewed by the staff of BFRI and DSAP. Having preliminarily reviewed, 20 short-listed proposals covering eight topics were identified. These short-listed proposals were sent to the members of the Research Grants Technical Committee (RGTC) for their review and final comment. The meeting of the RGTC has been scheduled to be held on 13 April 2004.

TRAINING

The training program 2004 for both partner and associate-partner NGOs was finalized (cf. Attachment 9). The partner NGO training program includes two refresher courses for staff recruited in 2003 and two refresher courses for staff recruited in 2000 to 2002. And two refresher courses are scheduled for associate partner NGOs in 2004. The evolution of field staff of the partner NGOs (Program Officers and Field Assistants) that participated in the ToT program since inception of the project is highlighted in attachment 10. Compared to last year (cf. technical progress report Jan-March 2003) the overall field staff dropout has been increased from 25.6 to 41.9 percent. The dropout is due to putting on hold of cooperating NGOs: 16.2% (15.5% last year) and to resignation/dismissal of field staff: 25.7% (10.1% last year). The number of Program Officers and Field Assistances that has resigned in 2003, i.e. 28.6 and 28.2 % respectively, is alarming. Human resource management should obviously be taken much more into consideration by the partner NGOs to ensure sustainability of the NGO extension programs.

During the period from 1 January to 31 March 2004 the following training courses were organized according to the annual training plans (cf. work plans FY2004):

- A 1-day orientation workshop on “**Whole Family Approach (WFA)**” and a 1-day refresher workshop on “**Monitoring and evaluation techniques**” were organized simultaneously for two batches of partner NGO Program Coordinators on 26 and 27 January 2004 in Dhaka; In total 34 partner NGOs staff members participated in the training program facilitated by staff from the maize and wheat extension program of CIMMYT and DSAP staff (“**Whole Family Approach**”) and DSAP staff (monitoring and evaluation techniques).
- A 2-day refresher workshop on “**Decentralized GIFT seed production in rice-field based systems**” was organized in Dhaka on 28 and 29 January for partner NGOs participating in the tilapia (GIFT strain) trial initiated in the 2003/04 aquaculture season. 11 Program Coordinators of the partner NGOs participating in last year’s trial as well as 6 new partner NGO, selected on motivation and performance participated in the workshop. The workshop, facilitated by Dr. Benoy Barman, Post Doc fellow Stirling University, United Kingdom reviewed the 2003/04 program and prepared operational plans for 2004/05. At least 102 farmers/families will participate in the 2004/05 GIFT program of which 66 will be supported by “old” partner NGOs and
- A 3-day orientation training course on “**Whole Family Approach (WFA)**” and “**Participatory Action Learning (PAL)**” was organized for nine batches of partner NGO staff from 23 February to 31 March 2004 in Bogra, Jessore, and Mymensingh (2 simultaneously batches each) and Barisal, Comilla and Rajshahi (one batch each). This represented the third and fifth refresher training course for staff recruited in 2003 and 2002 respectively. A total of 216 Field Assistants from 34 partner NGOs attended these refresher courses facilitated by project staff;

- A 5-day foundation training including a 1-day field visit on “**Aquaculture for small-scale enterprises**” was organized from 4 to 8 January 2004 for field staff of a national NGO: Christian Commission for Development in Bangladesh (CCDB). A total of 20 field staff members from 10 different field offices of CCDB attended the foundation training facilitated by two local consultants. The trained CCDB staff members are expected to provide training, technical assistance and support to small-scale aquaculture entrepreneurs in their respective working areas.

In order to promote participatory methodologies to disseminate aquaculture technologies and to prepare a manual on participatory action learning (PAL) for freshwater aquaculture sessions, the project has organized an international PAL competition in collaboration with the Support to Freshwater Aquaculture (SUFA) program in Vietnam funded by Danida and the Government of Vietnam. Despite widely advertisement and the distribution of a PAL competition flier in Vietnam, Bangladesh and Thailand only 9 submissions were received. A selection committee comprising six judges from the two projects has scored the submitted PAL sessions, of which five PAL sessions were awarded with cash prizes. The PAL competition flier, the results of the selection committee and the awarded cash prizes are summarized in attachments 11, 12 and 13 respectively. Both projects are in the process of compiling existing and the submitted PAL sessions for editing and adaptation to local situations in Bangladesh and Vietnam respectively and will be published locally as a PAL manual related to freshwater aquaculture.

One of the project’s commitments to its NGO partners is to produce a comprehensive report of all foundation and refresher courses organized allowing trainees (NGO staff) as well as their managers to possess a reference document. Most reports are published as DSAP working papers and distributed to partners. Attachment 14 resents the status of DSAP publications till date.

ADMINISTRATION

The list of project personnel as of 31 March 2004 is attached (cf. Attachment 15) Mr. Anisur Rahman was recruited to fill the vacant position of Accountant and joined the Center on the 1st of January 2004. Mr. M.A. Mannan took up the position of Office Manager on February 10th, 2004. However, Mr. Mannan visibly did not appreciate the work load of this important position and tendered his resignation on 9 March 2004. Presently the Center is in the process of recruiting a replacement.

In the previous progress report (Oct-Dec 2003) we reported on the progress of the recipient contracted audit (RCA) carried out by KPMG, Penang, Malaysia and their local affiliate Rahman, Rahman and Huq during the last quarter of 2003. The draft report including the management letters and the comments from WorldFish management was submitted to all concerned partners. The exit meeting, scheduled for 30 March 2004, has been postponed to 1 April 2004. The final report of the RCA is expected by May 2004.

The project along with four partner NGOs namely Barendra Advancement Integrated Committee (BAIC), Dulai Jana Kallyan Sangstha (DJKS), People’s Organization For Sustainable Development (POSD) and LUSTRE participated in the American Week 2004 organized by the Embassy of the United States of America and USAID from 29 February to 2 March 2004 in Rajshahi. The project set up a booth displaying several photographs of the project’s key activities, the Integrated Agriculture-Aquaculture model, an aquarium showing major cultured fish species in Bangladesh, documents, books, leaflets, posters etc. A good number of books, leaflets and posters were distributed to interested visitors. The project also organized a field visit for Ms. Judith A. Chammas, Deputy Chief of Mission, US Embassy,

Dhaka, Mr. Gene George, Mission Director, USAID/Bangladesh and the local press to show some project activities in the region. Two demonstration farmers and one new member or secondary demo farmer of one of the fish farmer groups supported by POSD, showed their aquaculture activities highlighting major achievements, difficulties encountered as well as future development plans. A press release highlighting DSAP objectives, strategies and policies and major achievements and a scene-setter underlining what the visitors of the field visit would see, key individuals to meet with, background and major project achievements was prepared for this field event (cf. Attachment 16 and 17).

A fundamental project activity that was originally planned by USAID for last year but postponed due to unforeseen constraints is the mid-term evaluation. The project evaluation including a partial impact assessment was rescheduled for this year and will be organized by WorldFish from 10 May to 10 June 2004. The scope of work for this evaluation was prepared and approved by all concerned parties. As discussed and approved by the second Steering Committee meeting, the review team should comprise two independent consultants and two representatives from the Government of Bangladesh. The project has initiated the identification of appropriate candidates to be recruited by WorldFish as independent consultants and submitted a request to the GOB to nominate two GOB representatives for this important task: one from the Planning Commission and one from the Implementation Monitoring and Evaluation Division (IMED). An international consultant identified by USAID (Mr. Harry Rea), who will provide assistance and support to the national review team and recommend on future directions of the aquaculture program, is scheduled to be in Bangladesh from 18 May to 1 June 2004.

The usual assortment of meetings, visitors and field visits were attended during this quarter. The most important were:

1. Mr. Johannes Janssen and Mr. Naseem Aleem met with colleagues from Hellen Keller International (HKI) to discuss the mid-term review of HKI's homestead gardening program supported by USAID on 8 January in Dhaka;
2. Dr. Benoy Kumar Barman, Mr. Naseem Aleem, Mr. Reazul Karim and Ms. Israt Zahura participated a two-day workshop on decentralized seed production strategies in the Northwest of Bangladesh held on 21 and 22 January in Dinajpur;
3. Mr. Naseem Aleem, Mr. Joseph T. McGee and other USAID officials participated in a dry run and finalized the program for the field visit of the Deputy Chief of Mission, US Embassy and the Mission Director, USAID on 29 January 2004 in Rajshahi;
4. Ms. Jennifer Hauck, University of Bonn, arrived on 14 February for a six-week internship as a follow up of her previous internship at WorldFish HQ from June to September 2003; The intern will focus on different dissemination strategies practiced by the projects;
5. Mr. Johannes Janssen and Dr. Ferdous Alam participated in a one-day USAID retreat on 11 February in Dhaka to discuss different housekeeping issues such as custom duties, value added taxes (VAT), passbooks, income taxes as well as to strengthen synergies among USAID projects through working group discussions on good governance/corruption; outreach, sustainable institutions and alliances;
6. Dr. Benoy Kumar Barman Post Doc, Stirling University on decentralized seed production traveled to Stirling on 15 February for two-month report and article writing;

7. Mr. Johannes Janssen participated in a preparatory meeting on the America Week 2004 in Rajshahi in particular issues related to project displays and field trips held on 16 February in Dhaka;
8. Mr. Johannes Janssen met with Mr. David Brown, acting Project leader of the DFID funded SUFER project on 17 February in Dhaka to review the collaboration on small research grants and the decentralized seed project;
9. Mr. Johannes Janssen met with Ms. Ana Klenicki, consultant USAID, on 23 February in Dhaka to discuss USAID regional program on Muslim outreach influence (Afghanistan, Pakistan, India and Bangladesh). WorldFish confirmed interest to take a leading role in the implementation of the training program in collaboration with Islamic Foundation in Bangladesh and subject to additional funding;
10. Mr. Johannes Janssen attended the first day of the inception workshop of the Challenge Program Water and Food, Project 10 (Interface saline and fresh water) on 4 March in Dhaka, Mr. Naseem Aleem attended the second day of the workshop and the field trip to Khulna from 5 to 7 March 2004;
11. Mr. Johannes Janssen and Mr. Naseem Aleem visited CIRUP and LDRO in Bogra on 2 March 2004 to review with the Executive Directors and Program Coordinators the actual progress in respect to the financial and human resource management as well as the quality of extension programs of these two regional NGOs;
12. Dr. Paul Teng, Deputy Director General, Dr. M.V. Gupta, Assistant Director General and Mr. Douglas Dunstan, Associate Director General of WorldFish Center visited Bangladesh Office from 8 to 12 March 2004 following the leadership transition of the Community Based Management Project-2. Executive Management team met with officials from DFID, USAID, MoFL, BFRI, DoF, NGO and WorldFish staff.

ATTACHMENTS

- Attachment 1** Cooperating partner-NGOs aquaculture season 2000/01 to 2004/05
- Attachment 2** Status of partner NGO staff and new demonstrations in 2004/05
- Attachment 3** Geographical distribution of aquaculture demonstrations supported by the WorldFish-NGO aquaculture extension effort 2003/04 (NGO-wise)
- Attachment 4** Geographical distribution of aquaculture demonstrations supported by WorldFish-NGO aquaculture extension effort 2003/04 (number-wise)
- Attachment 5** Status of partner NGO staff (2004/05) according to WorldFish - DSAP filed liaison offices
- Attachment 6** Final status of 2003 budgets and funds release to partner NGOs
- Attachment 7** Status of 2004 budgets and funds release to partner NGOs as of 31 March 2004
- Attachment 8** Status of research projects with the Universities as of 31 March 2004
- Attachment 9** Training plan January-December 2004
- Attachment 10** Status of partner NGO field staff from 2000/01 to -2004/05
- Attachment 11** PAL competition flier
- Attachment 12** Results of selection committee PAL competition
- Attachment 13** Awarded cash prizes PAL competition
- Attachment 14** DSAP publication list
- Attachment 15** USAID-funded staff list as of 31 March 2004\
- Attachment 16** DSAP Press release, America Week 2004 in Rajshahi
- Attachment 17** Scene-setter for the DSAP field visit, America Week 2004 in Rajshahi

Attachment 1 Cooperating partner-NGOs aquaculture season 2000/01 to 2004/05

	2000/01	2001/02	2002/03	2003/04	2004/05	Total
	ADI ARSHI BAIC BS Caritas CARP CIRUP CRED DSS GRAMAUS JC PPSS ¹ PRANTEC RASDO RRC SEVA ¹ SOP ¹ SPP STAR ¹ TMSS UTTARAN ¹	ADI ARSHI ¹ BAIC BRAC ¹ BS Caritas CARP CIRUP CRED DSS ¹ FHD GRAMAUS ¹ JC ORD PRANTEC RASDO ¹ RRC SPP TMSS	ACD ¹ ADI BAIC BS BUK Caritas ¹ CARP CIRUP COAST CRED DJKS DMG FHD JC LDRO ORD OREDAR PADAKHEP ¹ PAGE PP PRANTEC RRC SARA SATU SPP TMSS VPKA	ADI BAIC BS BUK CARP CDS (Chandradip) CIRUP COAST CRED DJKS DMG ¹ FHD GRAMAUS GRASUK ISWA JC LDRO ¹ LIPP LUSTRE LUSTRE ORD OREDAR PAGE POSD PP PRANTEC Proshika RRC SARA SATU Shristy Shushilan SPP TMSS VPKA WE	ADI BAIC BS BUK CARP CDS (Chandradip) CIRUP COAST CRED DJKS FHD GRAMAUS GRASUK ISWA JC LIPP LUSTRE ORD OREDAR PAGE POSD PP PRANTEC Proshika RRC SARA SATU Shristy Shushilan SPP TMSS VPKA WE	
Total	21	19	27	35	33	
Carried over	-	16	14	24	33	
New	21	03	13	11	0	48
Dropout	-	05	05	03	2	15

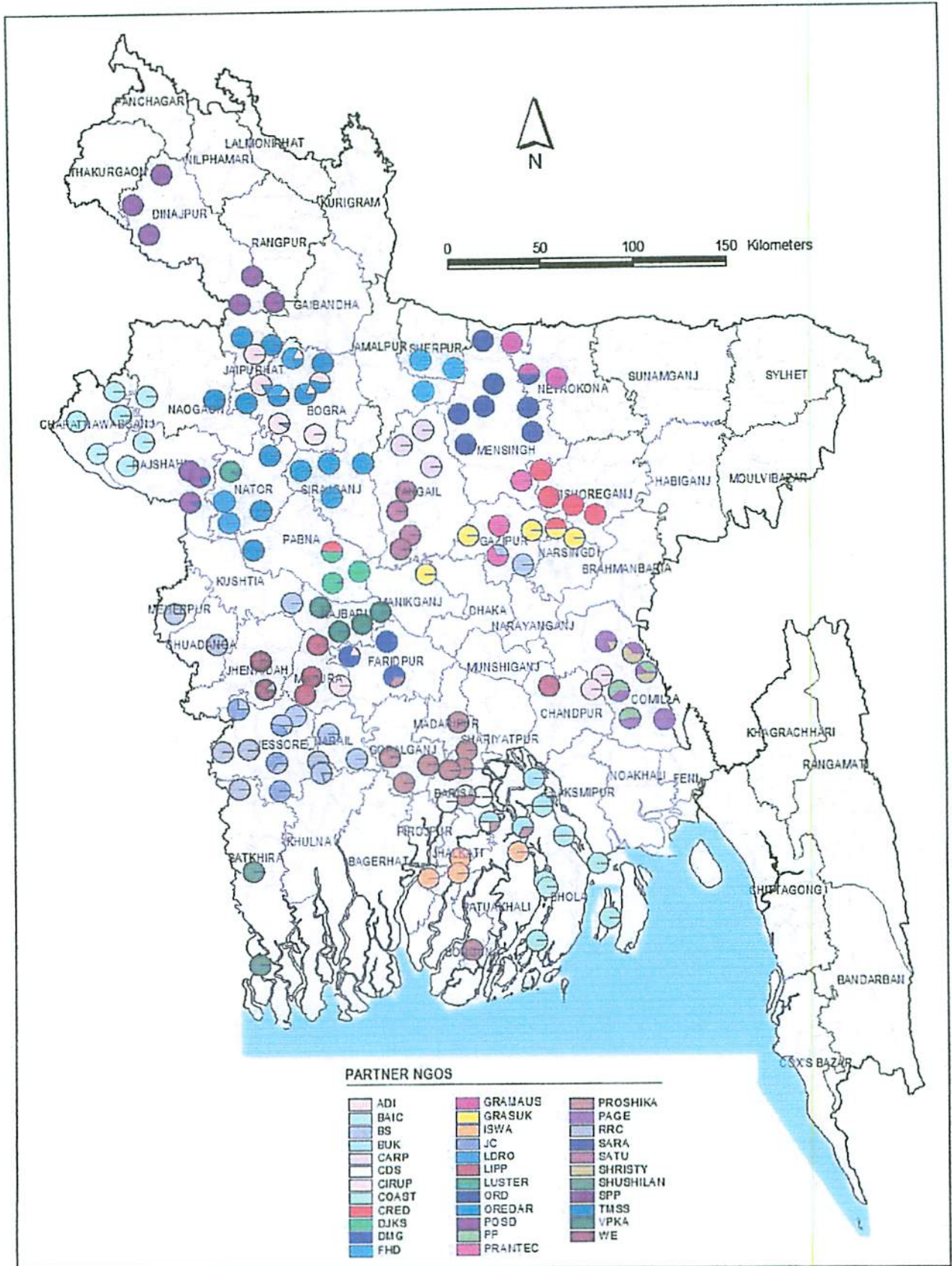
¹ withdrew/put on hold next season

Attachment 2 Status of partner NGO staff and new demonstrations in 2004/05

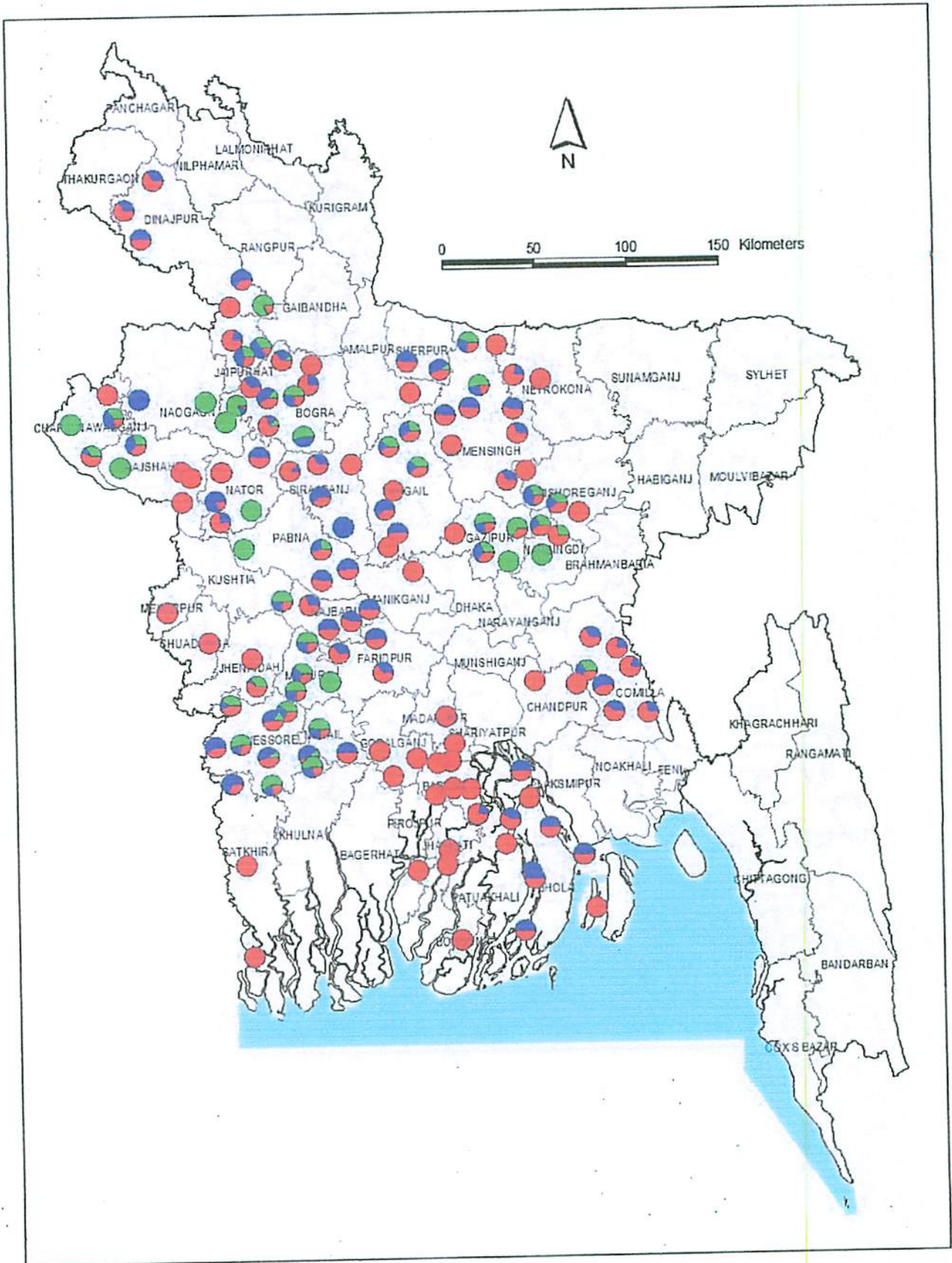
Sl. No	NGO	old FA	new FA	Total FA	FC	Demos	Remarks
1	ADI	9	-	9	1	450	
2	BAIC	9	-	9	1	450	
3	BS	9	-	9	1	450	
4	CARP	7	-	7	1	350	
5	CIRUP	6	-	6	1	300	
6	CRED	9	-	9	1	450	
7	FHD	6	-	6	1	300	
8	Gramaus	5	-	5	1	250	
9	JC	9	-	9	1	450	
10	ORD	6	-	6	1	300	
11	PRANTEC	7	-	7	1	350	
12	Proshika	6	-	6	1	300	
13	RRC	9	-	9	1	450	
14	SATU	6	-	6	1	300	
15	SPP	8	-	8	1	400	
16	TMSS	9	-	9	1	450	
Sub total-I (with grant)		120	-	120	16	6000	
17	BUK	7	-	7	1	350	
18	CDS	5	-	5	1	250	
19	COAST	7	-	7	1	350	
20	DJKS	7	-	7	1	350	
21	GRASUK	5	-	5	1	250	
22	ISWA	5	-	5	1	250	
23	LIPP	5	-	5	1	250	
24	LUSTER	5	-	5	1	250	
25	OREDAR	7	-	7	1	350	
26	PAGE	7	-	7	1	350	
27	POSD	5	-	5	1	250	
12	Proshika	6	-	6	-	300	
28	PP	5	-	5	1	250	
29	SARA	7	-	7	1	350	
30	Shristy	5	-	5	1	250	
31	SHUSHILAN	5	-	5	1	250	
32	VPKA	7	-	7	1	350	
33	WE	5	-	5	1	250	
Sub total-II (without grant)		105	-	105	17	5,250	
Grand total 33 NGOs		225	-	225	33	11,250	

1	DMG		7	1		put on hold
2	LDRO		6	1		put on hold

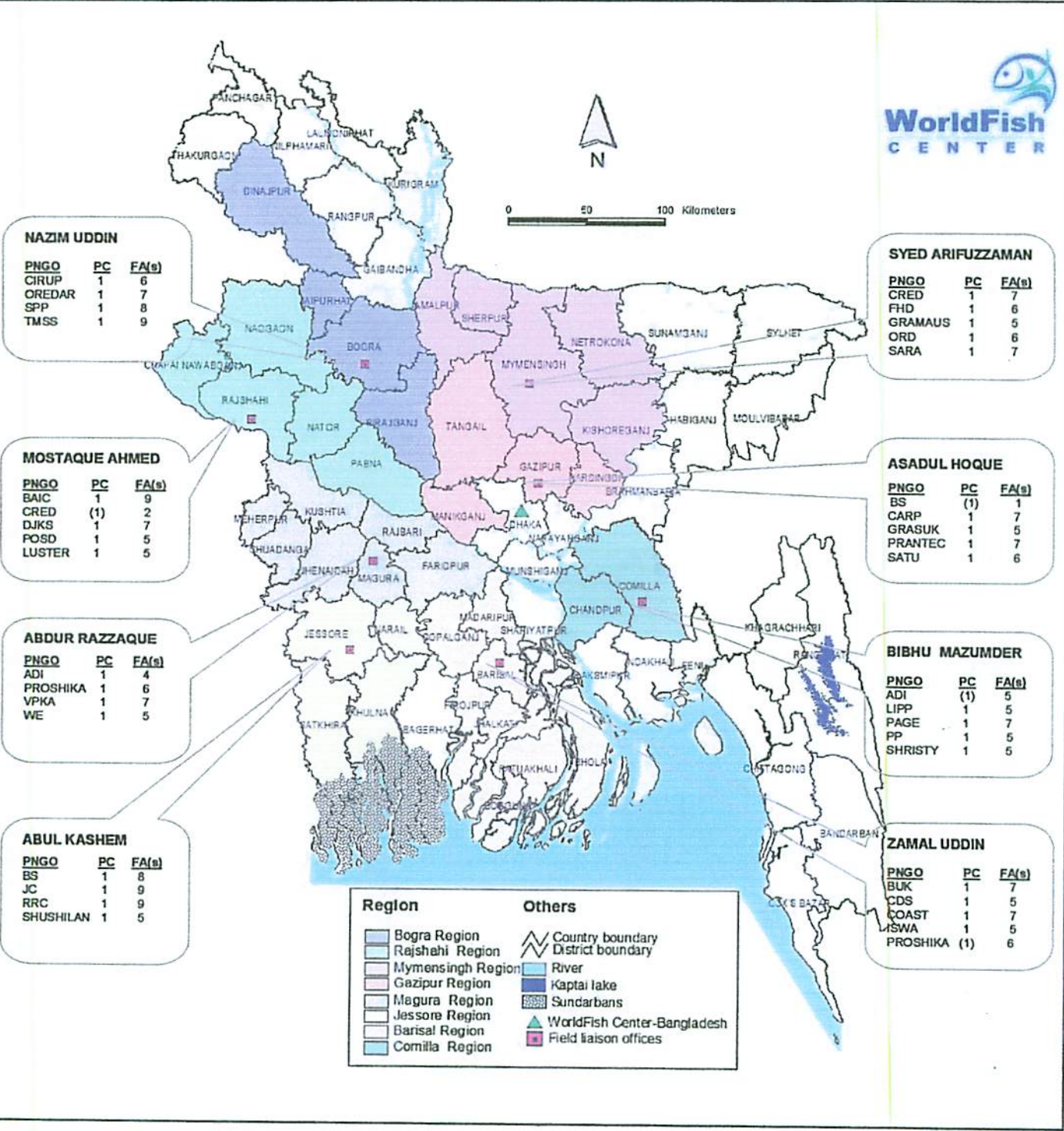
Attachment 3 Geographical distribution of aquaculture demonstrations supported by WorldFish-NGO extension effort 2003/04 (NGO-wise)



Attachment 4 Geographical distribution of aquaculture demonstrations supported by WorldFish -NGO aquaculture extension effort 2003/04 (number-wise)



Attachment 5 Status of partner NGO staff (2004/05) according to WorldFish – DSAP field liaison office



Attachment 6 Final status of 2003 budgets and funds release to partner NGOs

Sl. No.	NGO	No of planned pond/plot	Budget		Balance 2,002	Received 2003	Expenditures 2003			Balance 2003
			Total	WorldFish			Total	WorldFish	NGO	
1	ADI	450	2,133,008	1,684,641	-8,392	1,580,801	2,015,077	1,609,594	405,483	-37,185
2	BAIC	450	2,316,206	1,801,222	53,742	1,714,618	2,296,571	1,788,728	507,843	-20,368
3	BS	450	2,167,232	1,706,420	53,752	1,536,069	2,012,104	1,601,459	410,645	-11,638
4	BUK	350	1,056,000	672,000	1,174	612,831	1,050,852	668,724	382,128	-54,719
5	CARP	350	1,793,730	1,396,010	-32,988	1,356,458	1,783,143	1,389,273	393,870	-65,803
6	CDS (Chandradip)	250	654,527	505,771		454,351	615,707	475,773	139,934	-21,422
7	CIRUP	300	1,611,692	1,243,804	12,174	1,171,744	1,604,047	1,238,939	365,108	-55,021
8	COAST trust	350	1,307,763	832,213	24,651	687,072	1,161,150	738,800	422,350	-27,077
9	CRED	450	2,230,065	1,746,405	31,797	1,616,519	2,204,073	1,729,865	474,208	-81,549
10	DJKS	350	1,120,196	712,852	54,712	581,749	1,120,196	712,852	407,344	-76,391
11	DMG ¹	300	1,161,188	738,938	79,854	531,758	723,907	460,668	263,239	150,944
12	FHD	350	1,611,670	1,243,790	105,891	1,056,920	1,581,778	1,224,768	357,010	-61,957
13	Gramaus	250	1,209,610	1,048,335		1,000,277	1,158,760	1,009,042	149,718	-8,765
14	GRASUK	250	761,503	588,434		526,311	699,144	540,248	158,896	-13,937
15	ISWA	250	600,215	463,803		425,229	574,487	443,922	130,565	-18,693
16	JC	450	2,093,328	1,659,390	28,142	1,553,998	1,959,352	1,574,133	385,219	8,007
17	LDRO	300	1,487,676	1,164,885	-118,474	1,209,727	1,466,696	1,151,534	315,162	-60,281
18	LIPP	250	635,859	491,346		440,893	575,572	444,761	130,811	-3,868
19	LUSTRE	250	637,258	492,426		439,460	633,655	489,644	144,011	-50,184
20	ORD	300	1,618,820	1,248,340	-2,777	1,223,744	1,614,362	1,245,502	368,860	-24,535
21	OREDAR	350	1,156,771	736,127	12,639	639,201	1,142,180	726,842	415,338	-75,002
22	PAGE	350	1,026,630	653,310	119,284	402,959	1,018,916	648,401	370,515	-126,158
23	POSD	250	637,588	492,681		439,556	636,821	492,089	144,732	-52,533
24	PP	250	828,300	527,100	66,185	417,167	828,134	526,994	301,140	-43,642
25	PRANTEC	350	1,865,644	1,441,773	-10,639	1,351,473	1,834,902	1,422,211	412,691	-81,377
26	Proshika	600	2,337,362	1,942,507		1,770,511	1,943,605	1,638,240	305,365	132,271
27	RRC	450	2,107,239	1,668,243	-36,027	1,617,466	2,003,254	1,602,070	401,184	-20,631
28	SARA	350	1,085,920	691,040	96,678	498,444	1,000,023	636,378	363,645	-41,256
29	SATU	300	1,579,110	1,223,070	101,069	1,055,913	1,493,913	1,168,854	325,059	-11,872
30	Shristy	250	569,737	440,252		397,216	508,639	393,040	115,599	4,176
31	SHUSHILAN	250	613,250	473,875		455,588	612,491	473,289	139,202	-17,701
32	SPP	400	2,054,443	1,598,276	37,213	1,452,221	2,000,201	1,563,764	436,437	-74,330
33	TMSS	450	2,464,310	1,895,470	-25,763	1,804,386	2,437,496	1,878,407	559,089	-99,784
34	VPKA	350	1,037,828	660,436	86,504	524,241	1,037,620	660,304	377,316	-49,559
35	Welfare	250	692,918	535,436		476,205	691,064	534,004	157,060	-57,799
Total (No/Tk)		11,900	48,264,596	36,420,621	730,401	33,023,076	46,039,892	34,903,116	11,136,776	-1,149,639
Total (US\$)			833,657	629,081	12,616	570,396	795,231	602,869	192,362	-19,857

¹ = expenditures of last quarter not received (NGO put on hold in 2004)

US\$= 57.895

(January 2004)

Attachment 7 Status of 2004 budgets and funds release to partner NGOs as of 31 March 2004

SI No	NGO	No planned pond/plot	Budget		Balance 2,003	Installment				Remaining budget
			Total	WorldFish		Q-1	Q-2	Q-3	Q-4	
1	ADI	450	2,091,612	1,441,642	-37,182	226,759	1,062,493	162,493	27,080	1,252,065
2	BAIC	450	2,279,962	1,527,256	-20,368	239,908	1,088,177	188,177	31,362	1,307,716
3	BS	450	2,190,559	1,486,618	-11,639	210,955	1,075,985	175,985	35,331	1,287,302
4	BUK	350	1,101,265	500,575	-54,719	229,920	150,173	150,173	25,029	325,374
5	CARP	350	1,904,038	1,247,290	-65,804	257,356	864,187	164,187	27,364	1,055,738
6	CDS (Chandradip)	250	774,169	422,274	-21,423	169,219	126,682	126,682	21,114	274,478
7	CIRUP	300	1,667,761	1,085,346	-55,021	224,892	745,604	145,604	24,267	915,475
8	COAST trust	350	1,198,236	544,653	-27,078	217,707	163,396	163,396	27,232	354,024
9	CRED	450	2,310,239	1,541,018	-81,550	305,906	1,092,305	192,305	32,051	1,316,662
10	DJKS	350	1,133,435	515,198	-76,393	256,712	154,559	154,559	25,760	334,879
11	FHD	300	1,690,601	1,095,728	-61,958	235,463	328,718	328,718	264,786	922,223
12	Gramaus	250	1,478,340	1,033,640	-8,765	195,539	660,092	160,092	26,682	846,866
13	GRASUK	250	872,740	476,040	-13,937	180,551	142,812	142,812	23,802	309,426
14	ISWA	250	778,679	424,734	-18,693	167,350	127,420	127,420	21,237	276,077
15	JC	450	2,133,938	1,460,881	8,007	188,302	1,065,862	138,219	60,491	1,264,572
16	LDRO	300	1,598,603	1,053,910	-60,280	219,149				Put on hold
17	LIPP	250	784,783	428,063	-3,867	153,689	128,419	128,419	21,403	278,241
18	LUSTRE	250	864,765	471,690	-50,184	215,276	141,507	141,507	23,584	306,598
19	ORD	300	1,719,547	1,108,885	-24,535	202,645	752,666	152,666	25,444	930,775
20	OREDAR	350	1,154,822	524,919	-75,001	258,723	157,476	157,476	26,246	341,197
21	PAGE	350	1,171,297	532,408	-126,158	312,501	159,722	159,722	26,620	346,065
22	POSD	250	873,950	476,700	-52,534	219,379	143,010	143,010	23,835	309,855
23	PP	250	911,966	414,530	-43,642	188,728	124,359	124,359	20,726	269,444
24	PRANTEC	350	1,962,243	1,273,747	-81,377	282,188	872,124	172,124	28,688	1,072,936
25	Proshika	600	2,610,758	1,696,777	132,270	251,602	889,352	241,127	182,426	1,312,905
26	RRC	450	2,249,578	1,513,445	-20,631	235,337	1,084,034	184,034	30,672	1,298,739
27	SARA	350	1,202,214	547,370	-41,257	232,837	164,211	164,211	27,368	355,790
28	SATO	300	1,645,820	1,075,373	-11,874	178,255	742,612	142,612	23,768	908,992
29	Shristy	250	766,486	418,083	4,176	142,153	125,425	125,425	20,904	271,754
30	SHUSHILAN	250	787,710	429,660	-17,701	168,082	128,898	128,898	21,483	279,279
31	SPP	400	2,169,211	1,422,369	-74,330	292,154	986,711	186,711	31,124	1,204,545
32	TMSS	450	2,484,979	1,620,445	-99,784	351,940	1,116,134	216,134	36,022	1,368,289
33	VPKA	350	1,318,163	599,165	-49,558	259,266	179,750	179,750	29,958	389,457
34	Welfare	250	819,863	447,198	-57,801	214,320	134,159	134,159	22,360	290,679
Total (No/Tk)		11,550	50,702,332	30,857,630	-1,300,591	7,684,763	17,615,206	5,539,337	1,318,915	24,473,458
Total (US\$)			867,968	528,248	-22,265	131,555	301,553	94,827	22,578	418,958

approved expenditure/disbursed

projected expenditure

1 \$ = 58.415

(March 2004)

Attachment 8 Status of research projects with the Universities as of 31 March 2004

Grant No.	Name of the Project	Principal Investigator Name and Address	Project tenure	Existing status	Funds status
01	Feasibility of early shrimp farming with over wintered Golda (<i>Macrobrachium rosenbergii</i>) juveniles	Dr. Mahmudul Karim, Shrimp Culture Specialist, House No.16, Road No. 20, Sector No. 4, Uttara Model Town, Dhaka Bangladesh E.mail: dmkarim@bdcom.com	One year (October 2000 - May 2001)	Completed and final report available	Approved: Tk. 235,000 Disbursed: Tk. 162,527
02	Improved handling and preservation of golda <i>Macrobrachium rosenbergii</i> for producing safe and wholesome product	Drs. Md. Kamal and Md. Nazrul Islam, Professors, Department of Fisheries Technology, Bangladesh Agricultural University, Mymensingh., Bangladesh Tel: (091) 55695-97/2359 E-mail: kamal@royalten.net	One year (April 2001 - March 2002)	Completed and final report available	Approved: Tk. 250,000 Disbursed: Tk. 250,000
03	Cost-profit analysis and market testing of value-added product from silver carp and involvement of rural low income people in the production and marketing of value added product	Dr. Nowsad Alam, Professor, Department of Fisheries Technology, Bangladesh Agricultural University, Mymensingh, Bangladesh Email: nowsad@royalten.net	One year (November 2001 - October 2002)	Completed and final report available	Approved: Tk. 250,000 Disbursed: Tk. 200,000
04	Development of an appropriate technology on <i>Azolla</i> based rice-fish farming	Dr. M.H. Mian. Professor, Department of Soil Science, Bangladesh Agricultural University, Mymensingh, Bangladesh Email: soilbau@mymensingh.net	One year (April 2001 - March 2002)	Completed and final report under preparation	Approved: Tk. 254,800 Disbursed: Tk. 229,324
05	Ecology of euglenophytes in aquaculture ponds and their role in fish production	Dr. Saleha Khan, Assistant Professor, Department of Fisheries Management, Bangladesh Agricultural University, Mymensingh, Bangladesh Email: salehamk@bdcom.com	One year, (June 2001 - May 2002)	Completed and final report available	Approved: Tk. 237,315 Disbursed: Tk. 237,315
06	Economic analysis of the sustainability of supplementary feed-based aquaculture	Md. Rais Uddin Mia. Assistant Professor, Department of Agricultural Finance, Bangladesh Agricultural University, Mymensingh, Bangladesh Tel: (091) 55695-97/2260 Email:	One year, (August 2001 - July 2002)	Completed and final report under preparation	Approved: Tk. 225,000 Disbursed: Tk. 170,759

Attachment 8 Completed and ongoing Research Projects as of 31 March 2004 (continued)

Grant No.	Name of the Project	Principal Investigator Name and Address	Project tenure	Existing status	Funds status
07	Study of inbreeding problems of Thai Pangas (<i>Pangasius sutchi</i>) in Bangladesh using allozyme electrophoresis (Mymensingh region)	Dr. Md. Mukhlesur Rahman Khan Assistant Professor Department of Fish Biology and Genetics Bangladesh Agricultural University, Mymensingh 2202 E-mail: mukhles@royalten.net	One year (December 2001 - November 2002)	Completed and final report submitted	Approved: Tk. 250,000 Disbursed: Tk. 250,000
08	Socio-economic aspects of freshwater prawn (<i>Macrobrachium rosenbergii</i>) culture development in Mymensingh	Dr. Nesar Ahmed, Assistant Professor, Department of Fisheries Management, Bangladesh Agricultural University, Mymensingh, Bangladesh Tel: (091) 55695-97/2281 Email: nesar@royalten.net	One year (January 2002 - December 2002)	Completed and final report available	Approved: Tk. 126,000 Disbursed: Tk. 126,000
09	Management of Euglenophytes in Aquaculture Ponds for Improving Fish production in Bangladesh	Dr. Saleha Khan, Assistant Professor, Department of Fisheries Management, Bangladesh Agricultural University, Mymensingh, Bangladesh Email: salehamk@bdcom.com	One year (January 2003 - December 2003)	Completed and final report available	Approved: Tk. 290,000 Disbursed: Tk. 261,000
10	Study of inbreeding problems of Thai Pangas (<i>Pangasius sutchi</i>) in Bangladesh using allozyme electrophoresis (Bogra region)	Dr. Md. Mukhlesur Rahman Khan Assistant professor Department of Fish Biology and Genetics Bangladesh Agricultural University, Mymensingh 2202 E-mail: mukhles@royalten.net	One year (January 2003 - December 2003)	Completed and final report available	Approved: Tk. 290,000 Disbursed: Tk. 290,000
11	Development of HACCP Based Quality Management Systems for freshwater Prawn (<i>Macrobrachium rosenbergii</i>) at Field Level for Improved Production, Handling, Preservation and Transportation.	Dr. Md. Kamal and Dr. Md. Nazrul Islam Professors, Department of Fisheries Technology, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh, Bangladesh.	One year (1 April 2003-31 March 2004)	On-going	Approved Tk. 250,000 Disbursed: Tk. 175,000
12	Development of a Low Cost Feed Using Local Feed Ingredients for Culture of Freshwater Prawn (<i>Macrobrachium rosenbergii</i>) in Ponds by Rural Farmers.	Dr. Md. Arshad Hossain Professor, Department of Aquaculture, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh, Bangladesh	One year (1 April 2003-31 March 2004)	On-going	Approved Tk. 250,000 Disbursed: Tk. 225,000

Attachment 8 Completed and ongoing Research Projects as of 31 March 2004 (continued)

Grant No.	Name of the Project	Principal Investigator Name and Address	Project tenure	Existing status	Funds status
13	Culture and Artificial propagation of freshwater eels (<i>Monopterus albus</i> and <i>Mastacembalus armatus</i>)	Dr. S.M. Rahamatullah Professor, Department of Aquaculture, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh, Bangladesh	One year (1 April 2003-31 March 2004)	On-going	Approved Tk. 250,000 Disbursed: Tk. 225,000
14	Investigation of Diseases and Development of Strategies for Improved Health Management of Thai pangus (<i>Pangasius sutchi</i>) Cultured in Rural Ponds in Mymensingh District.	Dr. Md. Ali Reza Faruk Associate Professor, Department of Aquaculture, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh, Bangladesh	One year (1 April 2003-31 March 2004)	On-going	Approved Tk. 250,000 Disbursed: Tk. 225,000
15	Marketing of Small Indigenous Fish Species (SIS) and Socio-economic Aspects of SIS Producers, Intermediaries and Retailers with Sustainable Livelihood Approach in Three Fish Markets of Mymensingh.	Dr. Mostofa A.R. Hossain Associate Professor, Deptt. of Fisheries Biology and Genetics, Faculty of Fisheries, Bangladesh Agricultural University, Mymensingh	One year (1 April 2003-31 March 2004)	On-going	Approved Tk. 250,000 Disbursed: Tk. 225,000
16	The Sustainable Livelihood Approach of Prawn Distribution and Marketing System in Mymensingh	Dr. Nesar Ahmed Assistant Professor Department of Fisheries Management Bangladesh Agricultural University, Mymensingh	One Year (1 May 2003-30 April 2004)	On-going	Approved: 218,000 Disbursed: Tk. 152,600
17	GIS study in Mymensingh region for sustainable aquaculture development and inland fisheries management	Dr. M.A. Salam Assistant Professor Department of Fisheries Management Bangladesh Agricultural University, Mymensingh	One year (1 September – 31 August 2003-2004)	On-going	Approved: 267,000 Disbursed: Tk. 184,000
18	Livelihood assessment of fish seed traders: PRA and household survey	Mr. Mahmud Hasan Lecturer Department of Aquaculture and Fisheries University of Dhaka, Dhaka	Seven months (1 August – 28 February 2004)	On-going	Approved: 244,400 Disbursed: Tk. 171,080
19	Study of Inbreeding Problems of Thai Pangas in Bangladesh (for Jessore region)	Dr. Md. Mukhlesur Rahman Khan Assistant Professor Department of Fisheries Biology and Genetics Bangladesh Agricultural University, Mymensingh	One Year (01 Jan 2004-31 December 2004)	On-going	Approved: 250,000 Disbursed: Tk. 100,000

Traning activities	January	February	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
I. Partner NGOs												
2003 Recruited Staff												
Third follow-up (Whole Family Approach - WFA + Participatory Action Learning - PAL) training in 6 batches (151 staff) - 3 days												
Fourth follow-up (Integrated Agriculture Aquaculture -IAA + Household Finance Management) training in 6 batches (151 staff) - 4 days												
2001 and 2002 Recruited Staff												
Fifth follow-up (Whole Family Approach - WFA + Participatory Action Learning - PAL) training in 4 batches (82+38 = 120 staff) -3 days												
Sixth follow-up (Integrated Agriculture Aquaculture -IAA) training in 4 batches (82 + 38=120 staff) - 2 days												
II. Associate-partner NGOs												
2001-2003 staffs												
Second follow-up (Integrated Agriculture Aquaculture) training in 4 batches (110 staff) - 2 days												
Third follow-up (Household Finance Management) training in 4 batches (110 staff) - 2 days												
III. Others												
GIFT seed production in Rice Field based system 1 batch for PC (16 Staff) -1 day												
Whole Family Approach - WFA in 2 batches for PC (35) -1 day												
M&E refresher course in 2 batches for PC (35)-1 day												

Dhaka HQ
 Bogra
 Jessore
 Mymensingh
 Comilla
 Barisal
 Rajshahi

Attachment 10 Status of partner NGO field staff from 2000/01 to -2004/05

I. Program Coordinators

Designation	2000	2001	2002	2003	2004	total	%
Total	8	15	28	35	33	-	
Carried forward	-	7	7	17	23	-	
New	8	8	21	18	10	65	
Drop-out:							
-put on hold	1	3	4	2		10	15.4
-resigned/dismissed	0	5	7	10		22	33.8
Total dropped out	1	8	11	12		32	49.2

II. Field Assistants

Designation	2000	2001	2002	2003	2004	total	%
Total	63	50	153	238	225	-	
Carried forward	-	43	28	121	158	-	
New	63	7	125	117	67	379	
Drop-out:							
-put on hold	20	13	16	13		62	16.3
-resigned/dismissed	0	9	16	67		92	24.3
Total dropped out	20	22	32	80		154	40.6

III. Program Coordinators and Field Assistants (I + II)

Designation	2000	2001	2002	2003	2004	total	%
Total	71	65	181	273	258	-	
Carried forward	-	50	35	138	181	-	
New	71	15	146	135	77	444	
Drop-out:							
-put on hold	21	16	20	15		72	16.2
-resigned/dismissed	0	14	23	77		114	25.7
Total dropped out	21	30	43	92		186	41.9

Attachment 11 PAL competition flier

Participatory Action Learning for Freshwater Aquaculture – Competition with US\$ 1,500 in Cash Prizes!

FAO and CARE (an international non-government organisation) have successfully used participatory action learning (PAL) sessions delivered to farmers in field schools to break rice field ecosystems down into small chunks for the extension of integrated pest management in Asia.

The Support to Freshwater Aquaculture (SUFA) program in Vietnam (funded by Danida and the Government of Vietnam) and the Development of Sustainable Aquaculture Project (DSAP) in Bangladesh (funded by USAID and implemented by WorldFish) are now seeking the assistance of people worldwide conducting extension and training of farmers to compile participatory action learning (PAL) session plans on the following four themes related to freshwater aquaculture:

- 1) Small-scale pond aquaculture.
- 2) Integrated agriculture-aquaculture.
- 3) Group formation and development.
- 4) Monitoring and extension.

To this end, SUFA and DSAP are funding a competition with a total of US\$ 1,500 in cash prizes to encourage submission of PAL session plans. A compilation of these session plans will then be published by SUFA and DSAP.

STREAM (Support to Regional Aquatic Resources Management), WorldFish and the Institute of Aquaculture, Stirling University, UK have kindly agreed to advertise the competition.

What is a PAL session?

A PAL session is designed to provide farmers/trainees with opportunities for self discovery of a phenomenon, an effect, a relationship or a concept, rather than the promotion of outside practices and the remembering of facts.

A trainer decides what concept is to be demonstrated and then designs a PAL session for that purpose. A PAL might involve an experiment, a trial, a demonstration, role play, a game, modelling, reviewing videos or films, simulations, case studies, etc. A sample PAL session on 'Dangers of Herbicides' is shown below².

Building on the experiential learning cycle

Formal education has traditionally been 'dustbin' learning, i.e., a passive learning process where the learner sits and is 'filled' with information, usually from books or lectures, much of which is irrelevant to their daily lives.

PAL sessions encompass the experiential learning cycle (ELC) which has the following four steps:

- **Experiencing** - concrete experience
- **Processing** - observations and reflections
- **Generalizing** - formation of abstract concepts and generalizations
- **Applying** - testing implications and concepts in new situations

PAL sessions also integrate learning and living together in a single process.

Key elements of the ELC and PAL

In each PAL, the facilitator/trainer guides participants through the four ELC steps, with the participants learning from a PAL experience and not from the trainer's knowledge.

² This session was developed for Vietnam from a CARE Bangladesh PAL by SUFA staff.

The experience and knowledge the farmers/trainees bring to the session is respected and built upon during each PAL session. Equally important is that farmers and the PAL session facilitator are equals who learn from each other.

Each PAL session builds upon earlier sessions and provides opportunities for self-discovery and opening of new 'windows' for the farmers/trainees. This, in turn, raises further questions and provides self-direction for further training and new PAL sessions. Both the ELC and PAL are iterative (repeated) processes that encourage farmers/trainees to continue learning through experimentation and careful observation.

The role of a PAL session facilitator

An effective PAL trainer facilitates opportunities for the trainees to gain new experiences by appropriate PAL design, by choosing an appropriate location (perhaps a shaded area near a pond), creating a conducive layout (e.g., sitting in a small circle on a mat for the PAL session), and through effective questioning.

Effective questioning should avoid closed questions that will result in "yes" or "no" answers and leading questions that contain the desired answers. Effective PAL session facilitators demonstrate active listening, use paraphrasing to check that answers have been correctly understood, and reiterate correct answers given by farmers.

The PAL trainer should limit 'telling' to giving the topic of the session and simple, clear instructions for the PAL activity. Thereafter the facilitator should encourage self-analysis, careful observation, and critical thinking through questioning, leading the farmers/trainees to discovery. An effective PAL facilitator should be a catalyst and a helper, **not** a giver of information and facts.

To make the PAL participatory, the facilitator uses questioning skills to ensure that all the participants are involved and engaged in the learning process.

The 5 PAL steps

In PAL step 1 the topic is introduced without telling the farmers/trainees what conclusions they will draw from the session. In PAL step 2 the facilitator/trainer checks what the participants already know about the topic, including what they may have learned in previous sessions and from their own experiences.

PAL step 3 describes what the PAL session involves. In PAL step 4 the facilitator encourages the farmers to discuss what they are doing, seeing and their implications, while they are conducting the PAL.

Through questioning in step 5 the facilitator encourages farmers to summarize what concepts they have learned and relate them to their own fish pond, rice field or relevant farming practices.

Judging and competition guidelines

PAL sessions should be submitted in English, in Word format, by e-mail to Don Griffiths (competition coordinator) at the following e-mail address:

palcompetition@fastmail.fm

The session plans should also be copied (cc) to both the SUFA programme at pal.sufa@fsps.com.vn and to the DSAP Project at palcompetition@agni.com.

Sessions should be produced in the same format as the sample PAL on 'Dangers of Herbicides' given below to make judging easier.

Entrants should submit their full name and postal address with their PAL session and should state which of the four themes their PAL should be entered against.

The closing date and time for receipt of e-mail submissions will be 17.00 hours (GMT + 7 hours) on Friday 27 February 2004.

Any questions or queries should be sent to Don Griffiths at the above e-mail address and **not** to SUFA, DSAP, STREAM or the Institute of Aquaculture.

SUFA and DSAP will reserve the right to edit and publish all or part of any of the contributions submitted for the competition, though the author(s) of any PAL sessions published by SUFA or DSAP will be acknowledged in all cases.

A selection committee, comprising senior SUFA and DSAP staff, and the competition coordinator will judge the PAL sessions.

The selection committee will award 1 cash prize of US\$ 125 (one hundred and twenty five dollars American only) and 5 cash prizes of US\$ 50 (fifty dollars American only) for the best and most innovative PAL session plans for each of the four themes i.e., a total of four US\$ 125 prizes and twenty US\$ 50 cash prizes.

SUFA has already developed PAL sessions on the topics listed below and will therefore give **preferential** judging treatment to topics not yet covered:

Pond PALs

- The effects of sunlight on plankton growth.
- Effects of nutrients on plankton growth.
- Natural feeds in ponds.
- Grow-out pond preparation.
- Fish conditioning before transportation.
- Open transportation and stocking.
- Fish seed selection.
- Oxygen and temperature.
- pH and mud clearing.
- Grass carp feed rope.
- Selecting harvest time.

Rice field fish culture PALs

- The dangers of using herbicides and pesticides.
- Rice field design for growing fish as a third crop in rice fields.
- Choosing fingerling stocking size for rice fields.

The ruling of the selection committee will be final and not subject to appeal or negotiation.

Prizes winners will be announced on the STREAM website and cheques will be mailed to the winners by 17.00 hours (GMT + 7 hours) on Wednesday 31 March 2004.

Attachment 12 Results of selection committee PAL competition

Judging criteria/considerations	Range	1	2	3	4	5	Mean
Calcium hydroxide as an alternative piscicide							
Opportunities for farmers to discover for themselves?	1-4	2	3	1	1	3	
The 4 experiential learning cycle (ELC) steps?	1-4	3	3	2	1	3	
The 5 PAL steps?	1-4	3	2	2	2	3.5	
Effective questioning?	1-4	2	1	1	1	3	
Is 'telling' limited to the topic and simple instructions?	1-4	2	2	1	1	3	
Is the session plan appropriate for its theme?	1-4	1	2	1	2	2	
Technical appropriateness for Vietnam or Bangladesh?	1-4	1	1	2	1	3.5	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
Social appropriateness for Vietnam or Bangladesh?	1-4	2	2	3	3	3	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
After editing should it be included in the manual?	1-4	2	1	1	2	2	
Does this session merit a cash prize?	1-4	1	2	1	1	3	
Are the equipment, facilities needed available?	1-4	2	2	1	2	1	
Total	13-44	21	21	16	17	30	21.0
The importance of correct stocking density							
Opportunities for farmers to discover for themselves?	1-4	3	3	4	4	3	
The 4 experiential learning cycle (ELC) steps?	1-4	3	3	4	3	3.5	
The 5 PAL steps?	1-4	3	3	4	4	3	
Effective questioning?	1-4	2	3	3	3	3	
Is 'telling' limited to the topic and simple instructions?	1-4	2	3	3	3	3	
Is the session plan appropriate for its theme?	1-4	3	3	3	4	3	
Technical appropriateness for Vietnam or Bangladesh?	1-4	3	3	4	3	3	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
Social appropriateness for Vietnam or Bangladesh?	1-4	2	3	4	3	3	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
After editing should it be included in the manual?	1-4	3	3	4	4	3	
Does this session merit a cash prize?	1-4	3	3	4	3	3	
Are the equipment, facilities needed available?	1-4	3	3	4	4	3.5	
Total	13-44	30	33	41	38	34	35.2
Nursing small fish fry							
Opportunities for farmers to discover for themselves?	1-4	3	3	1	3	2.5	
The 4 experiential learning cycle (ELC) steps?	1-4	3	3	2	4	3	
The 5 PAL steps?	1-4	3	3	2	4	3	
Effective questioning?	1-4	3	3	1	3	3	
Is 'telling' limited to the topic and simple instructions?	1-4	3	3	2	4	3	
Is the session plan appropriate for its theme?	1-4	3	3	1	4	2	
Technical appropriateness for Vietnam or Bangladesh?	1-4	3	3	2	3	3	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
Social appropriateness for Vietnam or Bangladesh?	1-4	2	3	2	4	3	

Attachment 12 Results of selection committee PAL competition (continued)

If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
After editing should it be included in the manual?	1-4	3	3	1	4	3	
Does this session merit a cash prize?	1-4	3	3	1	2	3	
Are the equipment, facilities needed available?	1-4	3	3	1	3	2	
Total	13-44	32	33	16	38	30.5	29.9
The advantages of small-scale pond aquaculture							
Opportunities for farmers to discover for themselves?	1-4	3	2	1	2	2	
The 4 experiential learning cycle (ELC) steps?	1-4	3	2	2	2	2	
The 5 PAL steps?	1-4	3	2	2	2	2	
Effective questioning?	1-4	2	2	2	2	1.5	
Is 'telling' limited to the topic and simple instructions?	1-4	1	2	2	2	1	
Is the session plan appropriate for its theme?	1-4	1	2	1	2	1	
Technical appropriateness for Vietnam or Bangladesh?	1-4	2	2	2	2	2	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
Social appropriateness for Vietnam or Bangladesh?	1-4	1	2	2	3	1	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
After editing should it be included in the manual?	1-4	3	2	1	1	1	
Does this session merit a cash prize?	1-4	2	2	1	2	1	
Are the equipment, facilities needed available?	1-4	3	2	2	3	3	
Total	13-44	24	22	18	23	17.5	20.9
Making fast tanks for catfish							
Opportunities for farmers to discover for themselves?	1-4	2	2	1	1	2.5	
The 4 experiential learning cycle (ELC) steps?	1-4	2	2	2	1	2	
The 5 PAL steps?	1-4	2	2	2	1	2.5	
Effective questioning?	1-4	2	2	1	1	1.5	
Is 'telling' limited to the topic and simple instructions?	1-4	1	2	1	1	1.5	
Is the session plan appropriate for its theme?	1-4	1	2	1	2	2.5	
Technical appropriateness for Vietnam or Bangladesh?	1-4	1	2	1	2	1	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
Social appropriateness for Vietnam or Bangladesh?	1-4	1	2	1	2	2.5	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
After editing should it be included in the manual?	1-4	2	2	1	1	3	
Does this session merit a cash prize?	1-4	1	2	1	2	1.5	
Are the equipment, facilities needed available?	1-4	1	2	1	2	1	
Total	13-44	16	22	13	16	21.5	17.7

Attachment 12 Results of selection committee PAL competition (continued)

Recognising good quality fry

Opportunities for farmers to discover for themselves?	1-4	3	4	3	3	3	
The 4 experiential learning cycle (ELC) steps?	1-4	3	4	3	3	2.5	
The 5 PAL steps?	1-4	3	4	3	3	3	
Effective questioning?	1-4	3	3	2	2	3	
Is 'telling' limited to the topic and simple instructions?	1-4	3	3	3	2	2.5	
Is the session plan appropriate for its theme?	1-4	3	3	3	3	3	
Technical appropriateness for Vietnam or Bangladesh?	1-4	3	3	3	3	3.5	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
Social appropriateness for Vietnam or Bangladesh?	1-4	2	4	2	3	3.5	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
After editing should it be included in the manual?	1-4	4	4	3	1	3	
Does this session merit a cash prize?	1-4	3	4	3	1	3	
Are the equipment, facilities needed available?	1-4	4	4	3	4	3	
Total	13-44	34	40	31	28	33	33.2

The advantages of integrated agri/aqua-culture

Opportunities for farmers to discover for themselves?	1-4	2	2	1	2	3	
The 4 experiential learning cycle (ELC) steps?	1-4	2	2	2	1	2.5	
The 5 PAL steps?	1-4	3	3	2	1	3	
Effective questioning?	1-4	2	3	2	1	3	
Is 'telling' limited to the topic and simple instructions?	1-4	1	2	2	1	2	
Is the session plan appropriate for its theme?	1-4	1	2	1	2	2	
Technical appropriateness for Vietnam or Bangladesh?	1-4	2	2	2	2	3	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
Social appropriateness for Vietnam or Bangladesh?	1-4	2	2	1	2	3	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
After editing should it be included in the manual?	1-4	3	2	1	1	3	
Does this session merit a cash prize?	1-4	2	2	1	1	3	
Are the equipment, facilities needed available?	1-4	2	2	1	2	2.5	
Total	13-44	22	24	16	16	30	21.6

Planning and budgeting for rice-fish cultivation

Opportunities for farmers to discover for themselves?	1-4	2	4	1	2	2.5	
The 4 experiential learning cycle (ELC) steps?	1-4	2	3	1	2	2.5	
The 5 PAL steps?	1-4	3	3	1	2	2.5	
Effective questioning?	1-4	3	3	1	2	1.5	
Is 'telling' limited to the topic and simple instructions?	1-4	2	3	1	2	2	
Is the session plan appropriate for its theme?	1-4	2	3	1	3	2	
Technical appropriateness for Vietnam or Bangladesh?	1-4	2	3	1	2	2	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
Social appropriateness for Vietnam or Bangladesh?	1-4	2	3	1	2	2	

If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
After editing should it be included in the manual?	1-4	3	3	1	1	2.5	
Does this session merit a cash prize?	1-4	2	3	1	2	2	
Are the equipment, facilities needed available?	1-4	3	3	3	3	2.5	
Total	13-44	26	34	13	23	24	24.0

Why keep records?

Opportunities for farmers to discover for themselves?	1-4	2	2	2	2	2.5	
The 4 experiential learning cycle (ELC) steps?	1-4	2	2	2	2	1.5	
The 5 PAL steps?	1-4	3	2	2	2	2.5	
Effective questioning?	1-4	3	1	2	3	3	
Is 'telling' limited to the topic and simple instructions?	1-4	2	2	2	3	1.5	
Is the session plan appropriate for its theme?	1-4	2	2	2	3	1.5	
Technical appropriateness for Vietnam or Bangladesh?	1-4	3	2	1	3	2	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
Social appropriateness for Vietnam or Bangladesh?	1-4	2	2	1	3	1.5	
If not, could it be made appropriate by modification?	Y/N	N/A	N/A	N/A	N/A	N/A	
What modifications would be needed?							
After editing should it be included in the manual?	1-4	3	2	1	2	2.5	
Does this session merit a cash prize?	1-4	3	2	1	2	2	
Are the equipment, facilities needed available?	1-4	4	2	4	3	3	
Total	13-44	29	21	20	28	23.5	24.3

Attachment 13 Awarded cash prizes PAL competition

Theme - Small-scale pond aquaculture

Submitted by	Title, postal address and e-mail	PAL title	Code	Mean score	Prize ¹
Arlene Nietes-Satapornvanit (Jigsz)	Senior Project Researcher Aquaculture Outreach Project AARM/SERD, AIT PO Bix 4, Klong Luang, Pathumthani 12120 Thailand arlene@ait.ac.th	The importance of correct stocking density	1.2	35.2	US\$ 125
Mr. Phan Tien Chuong	Technical Department Nghe An Extension Centre Trang Thi Ward, Vinh City Nghe An Province, Vietnam Tel: +84 038 561 542	How to recognise good quality fish larvae	1.6	33.2	US\$ 50
Arlene Nietes-Satapornvanit (Jigsz)	Senior Project Researcher Aquaculture Outreach Project AARM/SERD, AIT PO Bix 4, Klong Luang, Pathumthani 12120 Thailand arlene@ait.ac.th	Nursing small fish fry	1.3	29.9	US\$ 50

¹ minimum scoring of 60 and 50% are required for first prize (USD\$ 125) and second prizes (US\$ 50) per theme

Theme – Integrated agriculture-aquaculture

Submitted by	Title, postal address and e-mail	PAL title	Code	Mean score	Prize ¹
Tran Thi Tuyet, Vu Thi Bich Ha and Nguyen Hien Thi	Business Promotion and Service Center (BPSC) Alley 149, Giang Vo Hanoi, Vietnam Tel: 84 4 7342 481, 7342 482 Fax: 84 4 7342 488 bpsc@netnam.vn	Planning and budgeting for rice-fish cultivation	2.2	24.0	US\$ 50

¹ minimum scoring of 60 and 50% are required for first prize (USD\$ 125) and second prizes (US\$ 50) per theme

Theme – Monitoring and extension

Submitted by	Title, postal address and e-mail	PAL title	Code	Mean score	Prize ¹
Arlene Nietes-Satapornvanit (Jigsz)	Senior Project Researcher Aquaculture Outreach Project AARM/SERD, Asian Institute of Technology PO Bix 4, Klong Luang, Pathumthani 12120 Thailand arlene@ait.ac.th	Why keep records?	4.1	24.3	US\$ 50

¹ minimum scoring of 60 and 50% are required for first prize (USD\$ 125) and second prizes (US\$ 50) per theme

Attachment 14 DSAP publication list

Working papers

1. Shah W.A., K.M.S. Kamal, S. Safa, I. Jahan, M. Azim and J. Sarker. 2001. Fisheries resources and livelihood of villagers of Chitrapara. Working paper 2001/1. 48p.
2. Shah W.A., K.M.S. Kamal, I. Jahan, M. Azim and J. Sarker. 2001. Profitability of farming systems and contribution to small-scale aquaculture in Bangladesh. Working paper 2001/2. 37p.
3. Islam, N., A.K.M.F. Khan, A. Hossain, H. Ahmed, K.H. Mahmud. P. Thompson, P. Sultana. 2001. Pilot study on impacts of sustainable aquaculture project extension through demonstrations. Working paper 2001/3. 39p.
4. Shah W.A., K.M.S. Kamal, S. Safa, I. Jahan, M. Azim and J. Sarker. 2001. Retail prices of fisheries in five regions of Bangladesh. Working paper 2001/4. 13p.
5. Azim, M., B. Majumder, K.M.S. Kamal, J. Janssen and M. F. Alam. 2001. DSAP/NGO directory 2001. Working paper 2001/5. 46p.
6. Chowdhury, H., and R. Karim. 2002. Report on partner NGO refresher course (3) for staff recruited in 2001. Working paper 2002/6. 15 p.
7. Chowdhury, H., and R. Karim. 2002. Report on partner NGO foundation training course for staff recruited in 2002. Working paper 2002/7. 26p.
8. DSAP. 2002. DSAP/NGO directory 2002. Working paper 2002/8. 101p.
9. Alam, M.F., J. Janssen, K.M.S. Kamal and K.M. Jahan. 2002. Profiles of aquaculture demonstrations practiced under Research for Development of Sustainable Aquaculture Project 2000/01. Working paper 2002/9. . 54p.
10. Chowdhury, H., and R. Karim. 2002. Report on partner NGO refresher course (1) for staff recruited in 2002. Working paper 2002/10. 17p.
11. Chowdhury, H., and R. Karim. 2002. Report on associate-partner NGO foundation training course for staff recruited in 2002. Working paper 2002/11. 34p.
12. PromPT. 2002. Report on Aquaculture extension focused PRA training course. Working paper 2002/12. 44p.
13. Karim, R., Aleem, N.A., M.F. Alam and J. Janssen. 2002. Proceedings of the WorldFish-partner NGO annual evaluation workshop 2002. Working paper 2002/13. 28p.
14. R. Karim and N. Uddin. 2003. Report on foundation training course for partner NGO staff recruited in 2003. Working paper 2002/14. 16p.
15. DSAP. 2003. DSAP-NGO Directory 2003. Working paper 2003/15. 153p.
16. DSAP. 2003. Proceedings of WorldFish-partner NGO annual evaluation workshop 2003. Working paper 2003/16. 73p.
17. DSAP. 2003. DSAP-Restore farmers directory. Working paper 2003/17. 47p.
18. Zahura, I., R. Karim, N.A. Aleem and J. Janssen. 2003. DSAP Training Directory 2000-2003. Working paper 2003/18. 95p.
19. PromPT. 2003. Report on PRA orientation course for partner NGO field staff recruited in 2003. Working paper 2003/19. 13p.
20. N.A. Aleem and J. Janssen. 2003. Financial management training for managers of partner NGO recruited in 2003. Working paper 2003/20. 21p.
21. I. Zahura and R. Uddin. 2003. Report on foundation training course and refresher course on PRA orientation for associate-partner NGO staff recruited in 2003. Working paper 2003/21. 24p.
22. LIFD. 2003. Report on group dynamics and fish nursery management (refresher course (5), (3) and (1) for Partner NGO staff recruited in 2001, 2002 and 2003. Working paper 2003/22. 53p.
23. LIFD. 2003. Report on group dynamics and fish nursery management (refresher course for associate-partner NGO staff). Working paper 2003/23. 25p.
24. PromPT. 2003. Report on household finance and participatory approaches (Refresher course (6) and (4) for partner NGO recruited in 2001 and 2002). Working paper 2003/24. 25p.

25. I. Zahura. 2003. Report on Participatory Action Learning and Whole Family Approach. Working paper 2003/25. in preparation
26. Alam, M.F., J. Janssen, K.M.S. Kamal and K.M. Jahan. 2003. Profiles of aquaculture demonstrations practiced under Research for Development of Sustainable Aquaculture Project 2001/02. Working paper 2004/26. in preparation
27. Alam, M.F., K.M. Jahan, , K.M.S. Kamal, M.M. Rahman and J. Janssen. 2004. Carp polyculture: A comparative study between DSAP supported demonstrations and control farmers. Working paper 2004/27. 38p.
28. Alam, M.F., K.M.S. Kamal, K.M. Jahan, M.A. Kashem and J. Janssen. 2004. Towards Efficiency and Resources Allocation: A Data Envelopment Analysis on DSAP Supported Carp-golda Farmers of Bangladesh. Working paper 2004/28. 53p.
29. Alam, M.F., K.M.S. Kamal, K.M. Jahan, and J. Janssen. 2004. Technical Efficiency of the DSAP Supported Carp-Golda Producers of Jessore District, Bangladesh. Working paper 2004/29. 34p.
30. Jahan K.M., K.M.S. Kamal, M. Azim, M.F. Alam and J. Janssen. 2004. Profiles of aquaculture demonstrations practiced under Research for Development of Sustainable Aquaculture Project 2002/03. Working paper 2004/30. 34p.
31. Alam, M.F., K.M. Jahan, K.M.S. Kamal, M. Azim and J. Janssen. 2004. Monitoring and Evaluation Training Program. Working paper 2004/31. 61p.
32. PromPT. 2004. Report on PRA orientation training course for partner NGO executives. Working paper 2004/32. 13p.
33. An *ex-post* impact assessment of aquaculture demonstrations practiced under the Development of Sustainable Aquaculture Project in 2000/01. Working paper 2004/33. in preparation.

Final reports of research grants

- Ahmed, N. 2002. Socio-economic aspects of freshwater prawn (*Macrobrachium rosenbergi*) culture development in Mymensingh. Final report USAID/WorldFish research grant. Department of Fisheries Management, Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh. 25 p.
- Alam, N. 2002. Cost-profit analysis and market testing of value-added product from silver carp and involvement of rural low income people in the production and marketing of value added products. Final report USAID/WorldFish research grant. Department of Fisheries Technology, Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh. 31 p.
- Karim M. 2001. Feasibility of early farming with over-wintered golda *Macrobrachium rosenbergii* juveniles. Final report USAID/WorldFish research grant. Dhaka, Bangladesh. 13p.
- Kamal, M. and M. N.I Islam, 2002. Improved handling and preservation of golda *Macrobrachium rosenbergii* for producing safe and wholesome product. Final report USAID/WorldFish research grant. Department of Fisheries Technology, Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh. 76 p.
- Khan, M.M.R, 2002. Study of inbreeding problems of Thai pangas (*Pangasius sutchi*) in Bangladesh using allozyme electrophoresis (Mymensingh region). Final report USAID/WorldFish research grant. Department of Fisheries Biology and Genetics, Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh. 50 p.
- Khan, M.M.R, 2003. Study of inbreeding problems of Thai pangas (*Pangasius sutchi*) in Bangladesh using allozyme electrophoresis (Bogra region). Final report USAID/WorldFish research grant. Department of Fisheries Biology and Genetics, Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh. 45 p.
- Khan, S. 2002. Ecology of euglenophytes in aquaculture ponds and their role in fish production. Final report USAID/WorldFish research grant. Department of Fisheries Management, Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh. 71p.
- Khan, S. 2003. Management of euglenophytes in aquaculture ponds for improving fish production in Bangladesh. Final report USAID/WorldFish research grant. Department of Fisheries Management, Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh. 53p.

- Hussain, L. 2000. Studies on Biology and Culture Potential of Dhela (*Osteobrama cotio cotio* Ham.) Final report USAID/WorldFish research grant. Department of Fisheries Biology and Genetics, Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh. 21p.
- Mia, M.H. 2000. Development of an Appropriate Technology on Azolla Based Rice-Fish Farming. Final report USAID/WorldFish research grant. Department of Sol Science, Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh. 21p.
- Bashar, M.A. 2000. Basic Biology and Culture Potential of *Esomus danricus* (Small Indigenous Fish) in Miniponds, Aquaria and in Some Ecological Sites in Chittagong (Hill Areas). Final report USAID/WorldFish research grant Department of Zoology, University of Dhaka, Bangladesh. 91p.

Conference papers

- Alam, M.F. and Johannes Janssen. 2002. Aquaculture technologies for Alleviating Poverty and Improving Food Security in Bangladesh. A paper presented at the World Aquaculture Society Conference held at Beijing, China. 20-24 April 2002. 18p.
- Alam, M.F. 2002 . Socioeconomic aspects of carp production and consumption in Bangladesh. Paper presented at the workshop on "Genetic status and improvement strategies for exotic carps for low-input aquaculture in Asia" p. 83-94. *In* Penman, D.J., M.G. Hussain, B.J. Andrews and M.A. Mazid (eds) Proceedings of a workshop on Genetic Management and Improvement Strategies of exotic carp species in Bangladesh, 12-14 February 2002, Dhaka, Bangladesh. Bangladesh Fisheries Research Institute, Mymensingh, Bangladesh. 123 p.
- Alam, M.F. 2002. Role of fisheries in alleviating poverty in Bangladesh. Keynote paper presented at the national seminar on "Role of fisheries sector in poverty alleviation" held at Bangladesh Agricultural research Council, Farmgate, Dhaka on 20 August 2002. 14p
- Alam, M.F. 2002. Towards Poverty Alleviation: The Potential of Fisheries in Bangladesh. Keynote paper presented at the national seminar on "Role of fisheries sector in poverty alleviation" held at Bangladesh Institute of Administration and Management, Dhaka on 13 August 2003. 13p
- Alam, M.A. 2002. Nature and extent of agricultural diversification in Bangladesh. Paper presented at the international seminar on "Agricultural Diversification in South-East Asia" held in Bhutan, 20-23 November 2002. 29p
- Alam, M.F. 2003. Agricultural Diversification in Bangladesh. A paper presented at the workshop on Agricultural Diversification. A paper presented at the workshop on Agricultural Diversification and Vertical Integration I South Asian Countries: Can Small Holders Harness the Opportunities, held at New Delhi, India. November 5-6, 2003.38p.
- Alam, M.F., M.M. Dey and F.J. Paraguas 2003. Estimation of Demand for Freshwater Fish in Bangladesh. A paper presented at the workshop on Sustaining Fisheries and Aquaculture Production to benefit the Poor Households in Bangladesh, organized by the Department of Fisheries, Dhaka, Bangladesh. 5 June 2003. 30p.
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Others

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Attachment 15 USAID-funded staff list as of 31 March 2004

No	Name of Staff	Position	Date Employed
1	Drs. Johannes Janssen	Senior Aq. Scientist/Project Leader	01 September 01
2	Prof. Md. Ferdous Alam	Research Coordinator	01 July 01
3	Naseem Aleem	Field Coordinator IAA	01 June 02
4	Dr. Khondker Murshed-e-Jahan ³	Research Associate/Fellow	24 January 01
5	Reazul Karim	Research Associate	01 November 02
6	Ms Israt Zahura	Research Associate	15 June 03
7	Kh. M Shameem Kamal	Research Assistant	01 July 99
8	Ms Manuara Azim	Research Assistant	01 July 99
9	Md. Jahirul Hoque	Research Assistant (M&E)	11 March 01
10	Mohammed Mokhlesur Rahman	Research Assistant (M&E)	11 March 01
11	Md. Abul Kashem	Research Assistant (Extension)	20 May 01
12	Md Nazim Uddin	Research Assistant (Extension)	29 May 02
13	Md Abdur Razzaque	Research Assistant (Extension)	29 May 02
14	Syed Arifuzzaman	Research Assistant (Extension)	29 May 02
15	Mir Mostaque Ahamed	Research Assistant (Extension)	29 May 02
16	Md. Asadul Hoque	Research Assistant (Extension)	23 June 02
17	Md. Khabirul Hasan	Research Assistant (M&E)	9 June 02
18	Ms Chamon Ara Begum	Research Assistant (M&E)	9 June 02
19	Saiful Islam	Research Assistant (M&E)	1 July 02
20	Ferdous Ali	Research Assistant (M&E)	11 May 03
21	Shamin Parvez	Research Assistant (M&E)	11 May 03
22	Zamal Uddin	Research Assistant (Extension)	14 May 03
23	Bibhu Bhushan Mazumder	Research Assistant (Extension)	15 June 03
24	Md. Shakil Ahmed Khan	Research Assistant (M&E)	1 July 02
25	vacant ⁴	Office manager	
26	Bijoy Bhushan Debnath	Administrative Officer	01 May 90
27	Anisur Rahman	Accounts Officer	01 January 04
28	Md. Billal Hossain	Administrative Assistant	01 August 99
29	Ms Maksuda Khanam	Administrative Assistant	01 May 02
30	Ms Fahmida Ahmed ³	Receptionist	03 June 03
31	Md. Abdur Razzak	Driver	01 May 89
32	Md. Dulal	Driver	01 May 99
33	Md. Nazrul Islam	Driver	01 October 01
34	Tapan Chandra Sarker ³	Messenger	01 July 93
35	Md. Abdul Wahab ³	Messenger	01 September 98
36	Md. Mahade Hasan Babul ⁵	Messenger	01 July 01

³ Costs shared DSAP (80%), FRIAP (20%)

⁴ Costs shared by WorldFish HQ (50%); CBFM-2 (25%) and DSAP (25%)

⁵ Costs shared by CBFM-2 (50%) and DSAP (50%)

⁴ up to 16 September 2003

Attachment 16 DSAP Press release America Week Rajshahi

Development of Sustainable Aquaculture Project

WorldFish Center

House No. 22B, Road No. 7, Block-F

Banani, Dhaka 1213, Bangladesh

www.worldfishcenter.org

Press:

Public Information: Phone (02)881-3250, (02) 881-4624

FOR IMMEDIATE RELEASE

February 24, 2004

Contact: USAID Press Office

Dhaka- USAID has been a donor funding for the development of aquaculture in Bangladesh for decades. Its most recent contribution is the **Development of Sustainable Aquaculture Project (DSAP)**. DSAP was launched on 28 June 2000 and is implemented by the WorldFish Center, an international research organization of the Consultative Group of International Agricultural Research (CGIAR). The broad objective of the project is to promote aquaculture in Bangladesh and to help NGOs and fish farmers attaining sustainability of their aquaculture extension program and their fish culture practices respectively.

DSAP works closely in collaboration with non-government organizations (NGO) that implement aquaculture demonstrations through active participation of fish farmers. Till date DSAP has 34 partner NGOs and over 40,000 fish culture demonstrations. A total of 5000 ha of water area was brought under fish culture in 2003. Production per ha was around 3 tons last year which is more than three-fold as compared to the farmer's practices prior to the initiation of the DSAP. The project is expecting more demonstrations this year. Other notable benefits include enhanced income, creation of job opportunity, skill development through training, increased nutrition intakes and gender participation in fish culture for the farmers and capacity development of the NGOs associated with the program.

In Rajshahi region, DSAP is collaborating with 4 NGOs namely, BAIC (Barendra Advancement Integrated Committee, in Chapainawabganj district); POSD (People's Organization for Sustainable Development, in Rajshahi district); LUSTRE (Lustre, in Natore district); and DJKS (Dulai Jana Kallyan Sangstha, in Pabna district).

DSAP is challenging and different from many other ongoing extension projects in Bangladesh as it also aims at sustainability of the NGO aquaculture extension programs. The notable features are the NGO's income generating activities including the introduction of paid extension, where farmers are to pay for the services they received and gradually taking over of the operational costs of the extension programs (i.e. cost sharing) by the partners. It is believed that if farmers and NGOs are capable of doing so, sustainability is assured: the farmer can carry out fish farming indefinitely and the NGO can continue running their aquaculture program in the absence of external support. Partner NGOs believe that DSAP approach is conceptually very clear and appropriate in terms of paid extension and cost sharing. While they believe in the concept, it is their feeling that period for attaining sustainability should be higher than 5 years

USAID FIELD VISIT



**Office of Economic Growth, Food, and Environment
Development of Sustainable Aquaculture Project**

**WorldFish Center
House 22B, Road 7, Block F
Banani Model Town
Dhaka 1213, Bangladesh**

**Monday, March 1, 2004
09:00 a.m. – 11:30 a.m.**

WHAT YOU WILL SEE:

- Aquaculture activities of a fish farmer group comprising 16 households/members
- fish culture activities: a pond producing fish seed; another one producing table fish, and one rice cum fish paddy producing rice and fish;
- The fish farmer and some of his fellow members of the Demonstration Farmer Group practicing fish culture;
- This pond and those of the group members are to serve as demonstration ponds for promoting improved fish culture technologies in the village;
- Gradual expansion of aquaculture activities of group members and neighboring villagers following assistance from DSAP trained and supported partner NGO (POSD);
- Some other activities of the group members: preparation of molasses; rice seedlings planting

The fish culture demonstration pond is located at Boro Dhadash, Belpukur, Puthi, Rajshahi adjacent to the Rajshahi-Dhaka high way and approximately 30 minutes travel time (20 kilometers) from Rajshahi Parjatan hotel

KEY INDIVIDUALS YOU WILL MEET:

- Mr. Ismail Hossain, demonstration farmer
- Mr. A.F.M. Razib Uddin, Director, POSD (partner NGO)
- Mr. Johannes Janssen, Project Leader, DSAP
- Mr. Naseem Aleem, Field Coordinator, DSAP

BACKGROUND:

The Development of Sustainable Aquaculture Project (DSAP) is a 5-year US\$ 5.5 million project of the WorldFish Center aiming at increasing the smallholder farm household income and life circumstances of resource limited people. To achieve this the DSAP is implementing at least 7,000 new demonstrations each year through the NGO community bringing unused and/or underused seasonal and perennial ponds and rice fields into improved production using technologies that are feasible, affordable and acceptable for the small-scale farmers. The quality assistance to cooperating demonstration farmers is provided for a period of three years to sustain the aquaculture activity.

Currently the DSAP is collaborating with 34 partner-NGOs. Assistance provided by DSAP includes such areas as aquaculture technologies, integration of agriculture and aquaculture, participatory extension methods, group dynamics, household finance, administration and financial management, monitoring & evaluation as well as income generating activities. Financial assistance is gradually phasing out ensuring sustainability of the NGO's aquaculture program.

People's Organization for Sustainable Development (POSD) is a partner of DSAP since 2003. Presently one Program Officer and five Field Assistants are employed to implement the aquaculture extension program of POSD. Sustainability of this program is targeted by 2006.

PROGRAM IMPACT:

- Over 40,000 aquaculture demonstration are implemented up to date promoting fish seed and table fish production in ponds and paddy fields;
- Approximately 16,000 neighboring villagers have entered into the demonstration farmer groups as new members;
- Fish production in ponds is increased on average by 300% and financial returns by 400%;
- Value of annual sales of supported and graduated demonstration farmers in 2002 is estimated at US\$ 5.2 million;
- Income generation activities for partner-NGOs are identified including payment of an annual modest amount for provided extension activities.

POSSIBLE DISCUSSION QUESTIONS:

- Where are you marketing the produced fingerlings and table fish?;
- Do you have any difficulties for marketing your fish production?;
- What plans do you have for future expansion?;
- What is the potential of aquaculture expansion in your village?;
- What kind of income generating activities (IGA) have you developed? (partner-NGO);

Would you be able to continue your aquaculture extension program without assistance from WorldFish by 2006? (partner-NGO).