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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 October 2002 - 31 December 2002)**

Prepared by

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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 October 2002 through 31 December 2002. Financial reporting for the Project is handled separately from the WorldFish Center (previously called ICLARM-The World Fish Center) 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 operations. 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 additional production options, improving the technology transfer process and monitoring the impact of the adopted aquaculture practices.

This quarter was highlighted by (i) the evaluation of the achievements and performances of partner NGOs, (ii) the organization, preparation and implementation of the annual evaluation workshop with partner NGOs and (iii) the constitution of a technical committee for the selection of research awards.

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

DEMONSTRATIONS AND NGO ACTIVITIES

Currently the Project collaborates with 27 partner NGOs responsible for the implementation of 7,654 new demonstrations and for continuing technical assistance to 5,345 farmers supported by 14 partner NGOs last year (2001-2002). The total number of demonstration farmers receiving technical assistance and advice to improve their skills and subsequently their fish yields during the 2002-2003 aquaculture production season is 12,999. These farmers are organized in 1,341 demonstration farmer groups (DFG) of which 955 are new groups and 386 are carried forward from last year's extension effort (cf. attachments 1-3). During the annual evaluation meeting with TMSS we were informed that TMSS had never discontinued supporting the 500 demonstration farmers selected in 2001. For this reason we indicated in the previous progress report 4,845 demonstrations of 2001-2002 carried forward in 2002-2003 instead of 5,345 presently. The status of the aquaculture effort in 2002-2003 including details of partner NGOs and their field staff, new demonstrations and carried-forward ones are compiled in the 2002 NGO directory (cf. DSAP working paper 2002/8).

Continuous on-the-job training of NGO staff through frequent field visits, attending partner NGOs' extension meetings, rallies/farmer field days and annual evaluation of partner's performance were the main activities during the reporting period. Currently all partner NGOs have completed the second follow-up training of 2002 selected cooperating farmers, whereas the second refresher training of 2001 selected farmers is ongoing (cf. attachment 4). Monthly regional coordination meetings (RCM) with the cooperating NGOs, local GoB representatives, farmers and other stakeholders were organized as per schedule. The project organized one partner NGO coordination meeting in Dhaka and an annual evaluation workshop in Tangail that were attended by senior management staff of most of the cooperating NGOs. However, the participation of local government officials and other stakeholders is gradually declining.

Fish harvesting of the 2002-2003 aquaculture season started this quarter and is likely to continue for the next quarter or even more. The project field staff, through the partner NGO extension workers, provided valuable advice and support for the proper use of the pond record books as harvest proceeds. Unlike previous years, the pond record books will remain with the cooperating farmers and the use of this book as a management tool for future planning and decision-making is greatly encouraged. Some of these pond books will be checked and production data will be collected during impact surveys to be conducted by partner NGOs and the project.

As per approved 2002 work plans the 27 cooperating partner NGOs were committed to conduct 306 rallies/farmer field days (two per Field Assistant) throughout the 2002-2003 aquaculture season. During the reporting period 233 rallies were organized as per schedule allowing the promotion of aquaculture to some 15,000 neighbors (cf. attachment 5). The remaining rallies are scheduled for the first quarter 2003.

Annual partner NGO evaluation workshop, presided over by Dr. M.G. Hussain, Director Research, BFRI was held in Tangail on 18-19 December 2002. After the presentation of partner NGO's achievements 2002-2003 and the results of the 2000-2001 pond book analysis, the following key issues were reviewed and discussed: field staff drop out, strategy for implementation of demonstrations, work plans and budget 2003. The partners confirmed the importance of quality of provided extension services, participatory approach, integration of agriculture and aquaculture. The annual numbers of new demonstration farmers per extension worker (i.e. 50) as well as sharing of 40% of the program costs by the partner NGOs in 2003 were confirmed. All partners committed to increase the number of nursery and rice-fish demonstrations as well as the participation of women through either the selection of female demonstrators or the selection of couples (household approach). Furthermore increased emphasis will be given to monitor the spread-over effect and the possibility of secondary adopters to enter the demonstration farmer groups. The proceedings of the two-day partner NGO evaluation workshop provide detailed recommendations and guidelines approved by the participants.

Prior to the workshop, the Research Assistants (extension) conducted a survey to assess the partner NGO's performance in 2002 (cf. attachment 6). The overall performance of 16 partners was satisfactory, 9 need improvement and 2 were unsatisfactory and might be put on hold for next year if the management of these NGOs is not providing appropriate options for improvement. The results of these performance assessments will be discussed with the NGOs individually during the 2003 work plans/budget negotiations in January 2003.

Funds for the 4th quarter were released to all partner NGOs with exception of Caritas, who had not yet provided the financial report of the previous quarter. The release of funds to most of the partners was delayed once again due to late submission of the quarterly financial and technical progress reports. Full details of the funds release status are given in attachment 7.

RESEARCH

Impact assessment of adopted aquaculture practices

Year 2000-2001 data: The analysis of pond record book data of 2000-2001 has been completed and the report is waiting for finalization. Information of some important parameters of this study has been used by the USAID for the semi annual review and annual report of the fiscal year 2002. The report will be published as DSAP working paper 2002/9.

Year 2001-2002 data: The data of the **pond record book** for the aquaculture year 2001-2002 have been entered into the computer. Verification, scrutiny and analysis of the data are proceeding. The report is expected to be completed by April 2003 and will be published as a DSAP working paper.

Year 2001-2002 data: Economic Impact Assessment: Analysis of this data set is going on. Some of the facts of this data analyzed earlier were used by the USAID. Further analysis and reporting of the study will be completed soon and working paper will be published by the WorldFish Center in April 2003.

Long-term Impact Monitoring (RESTORE): This long-term participatory impact monitoring study has been commissioned in 2002. Four working areas namely, Bogra, Mymensingh, Comilla and Magura have been selected for this study. Selection of 320 farmers for this study has been already completed through a rigorous PRA and two-way wealth ranking procedure. Several visits were made to each of the selected farmers to make them understand the purpose of their participation and terms and conditions under which they would participate in the study.

Having the farmers selected, a meeting of the concerned Research Assistants (monitoring) was conducted at the Dhaka office to refresh the RESTORE concept and its formats for filling up the information. As part of long-term impact monitoring, benchmark information of the selected farmers for the period May 2002-April 2003 (dry and raining season) are now being collected using the RESTORE questionnaires.

The long-term impact monitoring study (to be analyzed using the RESTORE procedure) does not accommodate some of the important indicators of full impact. For this reason, it was decided to undertake some supplementary studies. As part of this, it has been planned to commission studies on consumption pattern, gender aspects and livelihood issues of the selected farmers. The questionnaire for the consumption survey has already been finalized. The other two questionnaires are in the process of preparation.

DSAP-NGO directory: A directory of the DSAP partner NGOs showing the details of technologies, farmers, location, field assistants, project coordinators and the contact addresses of the NGOs has been finalized and distributed among the concerned stakeholders (cf. DSAP working paper 2002/8).

Collaborative research with BFRI

Following approval of TAPP for collaborative research between BFRI and WorldFish Center, the proposed research studies are proceeding smoothly at the BFRI in Mymensingh with their scientists.

Research grants to universities

This quarter we received one full proposal entitled “Study of inbreeding problems of Thai pangas (*Pangasius sutchi*) in Bangladesh (Bogra region) using allozyme electrophoresis”, submitted by Dr. M.M. Rahman Khan, Assistant Professor, Department of Fish Biology and Genetics, BAU, Mymensingh. This proposal was approved, as it was not required to be presented to the selection committee since this is a continuation of a previous award. This trial is scheduled to start in January 2003.

Two studies: “Study of inbreeding problems of Thai pangas (*Pangasius sutchi*) in Bangladesh (Mymensingh region) using allozyme electrophoresis” and “Socio-economic aspects of freshwater prawn (*Macrobrachium rosenbergii*) culture development in Mymensingh” were completed and final reports are under preparation.

During the reporting period 9 full research proposals were received. These proposals will be presented during the first meeting of the Research Grant Technical Committee of WorldFish Center, Bangladesh scheduled for the first quarter 2003.

A total of 10 grants to the University teachers were so far awarded by the project, of which 8 studies are completed and two are on going (cf. attachment 8).

TRAINING

During the reporting period the fourth refresher-training course for partner NGO field staff recruited in 2001 and the second refresher-training course for staff recruited in 2002 were organized. Due to frequent requests of partner NGO field staff the subject of these two training courses were identical: “Aquaculture focused participatory approaches”. Hence the courses were jointly organized in 8 batches from 16 November 2002 to 2 January 2003. A total of 96 Field Assistants and 15 Program Coordinators participated in these courses. Four remaining batches are scheduled for January 2003 to complete these follow-up training courses on PRA.

In the previous progress reports we reported for the initiation of the associate-partner NGO program and the selection of 2001 and 2002 NGOs. Under the associate partner agreement, the WorldFish Center provides training and technical support to the associate-partner NGO. The technical support, through the Research Assistants (extension) based at the regional liaison offices, comprises on-the-job training and regular regional coordination meetings. The status of the reported demonstrations supported by associate-partners in 2002 (cf. attachment 9) indicates that they supported about 2,700 demonstrations covering a total surface of 530 ha. Carp Polyculture in ponds or rice paddies are the dominant technology groups (respectively 68 and 26 % of the ponds/plots or 58 and 38 % of the total surface area). Some associate-partners NGOs selected this year have not yet initiated their aquaculture extension program. This is scheduled for the next production season. We have not received any information this year on the status of some 5,000 demonstrations reported in 2001 by about 45 associate-partner NGOs of which staff received training in 2000¹. It might be interesting to include monitoring the impact of these demonstrations in the surveys scheduled for 2003.

ADMINISTRATION

As reported in the previous progress report (June-September 2002) Mr. Reazul Karim joined the Project on 1st November 2002. The list of Project personnel as of 31 December 2002 is attached (cf. Attachment 10).

Several informational meetings and discussions were held with Mr. Shaheduzzaman Choudhury, financial support adviser, USAID Dhaka on the Scope of Works (SOW) for the Recipient Contracted Audit 2001 and 2002. The SOW prepared by the Financial Unit, WorldFish Penang, Malaysia was submitted to USAID for approval during the last week of December 2002.

¹ These associate or non-partner NGOs are not participating in the multi-year Associate-Partner Program that was launched in 2002 (cf progress report April-June 2002)

Several meetings and discussions were held with the Enterprise Development team on the SO5 impact indicators for USAID 2002 annual report and a PowerPoint presentation of 2002 achievements and impact for the semi-annual review.

The usual assortment of meetings, visitors and field visits were attended during the reporting period. The most important were:

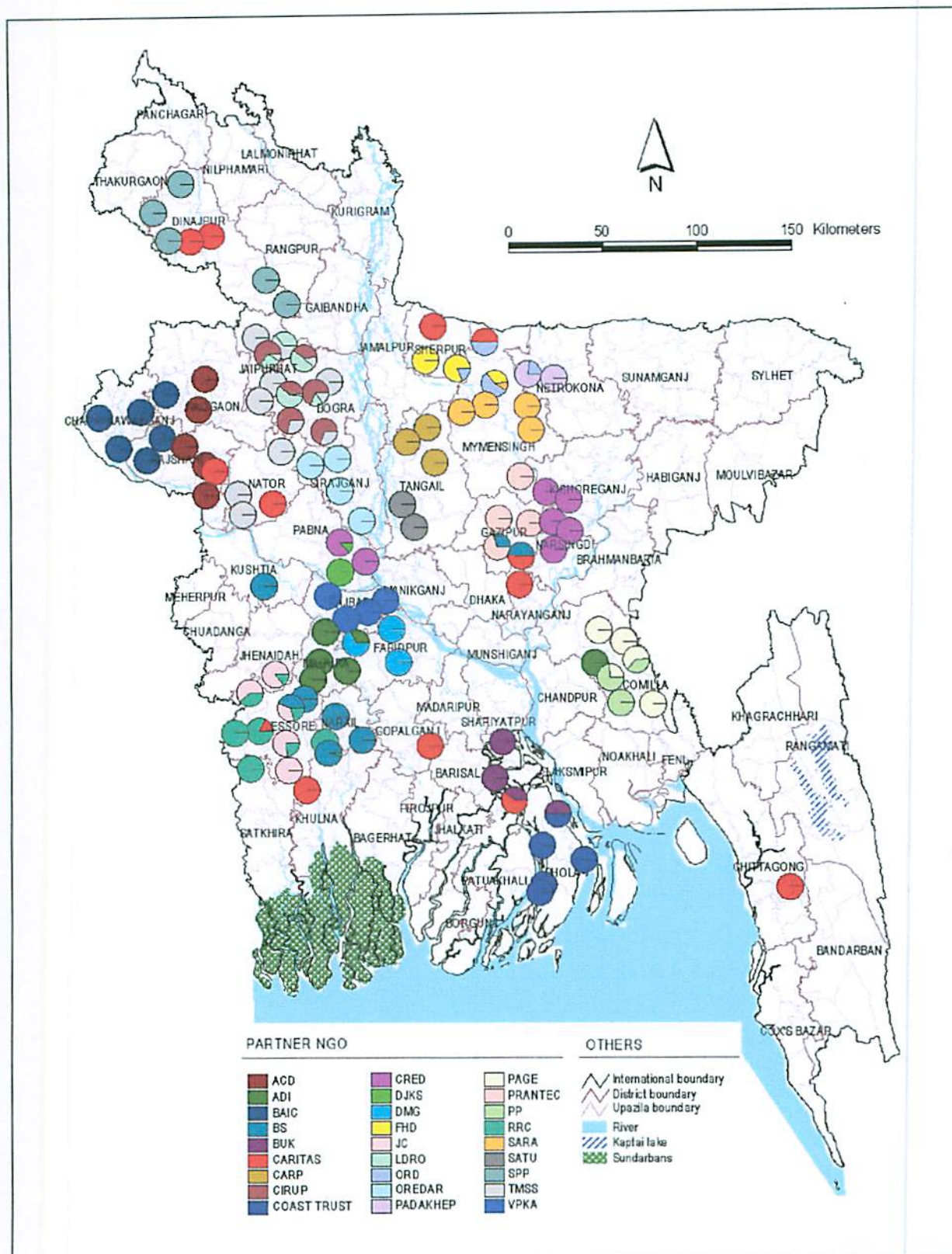
1. Mr. Naseem Aleem, Field Coordinator and Mr. Johannes Janssen, Project Leader participated in a review meeting on the “America Week” organized by USAID on 1 October 2002;
2. Organized visit of Dr. David Little to visit field activities in Dinajpur and Mymensingh of Post Doc fellow Dr Benoy Barman and PhD fellow Mr. Golam Faruque from 2-8 October 2002;
3. Dr. Md. Ferdous Alam, Research Coordinator and Mr. Johannes Janssen, Project Leader participated in a workshop on the review of the Annual Research Plan 2002-2003 of the Bangladesh Fisheries Research Institute held on 6-7 October 2002 in Mymensingh;
4. Mr. Johannes Janssen, Project Leader met with Prof. A.U. Khan and Prof. S. Huq-Hussain from Geographical Solutions Research Center Ltd (GSRC) for USAID commissioned GIS need assessment;
5. Dr. Md. Ferdous Alam, Research Coordinator and Mr. Johannes Janssen, Project Leader participated in Project Management Committee Meeting of DFID supported SUFER project on 27 October 2002;
6. Mr. Naseem Aleem, Field Coordinator participated in a half-day workshop presenting results of three SUFER supported research grants on genetics of Indian major carps;
7. Dr. Khonder Murshed-e-Jahan participated in the presentation and discussion on results of impact study of DOF/Danida Mymensingh Aquaculture Extension project;
8. Mr. Johannes Janssen, Project Leader participated in a one-day strategy workshop of the Fisheries Sector Review and Future Fisheries held at Sonargaon Hotel on 11 November 2002;
9. Dr. Md. Ferdous Alam, Research Coordinator and Mr. Johannes Janssen, Project Leader participated in a one-day workshop on Fisheries Research Forum at BRAC Center, Dhaka on 12 November 2002;
10. Mr. Johannes Janssen, Project Leader met with Farmer-to-Farmer volunteer Mr. Charles Bauer Duke and Dr. Barua to review aquaculture development in Bangladesh including the Development of Sustainable Aquaculture Project on 18 November 2002;
11. Dr. Md. Ferdous Alam, Research Coordinator presented a paper entitled “Nature and Extent of Agricultural Diversification in Bangladesh” at the International Workshop on Agricultural Diversification in S-E Asia held in Bhutan from 20-23 November 2002.

ATTACHMENTS

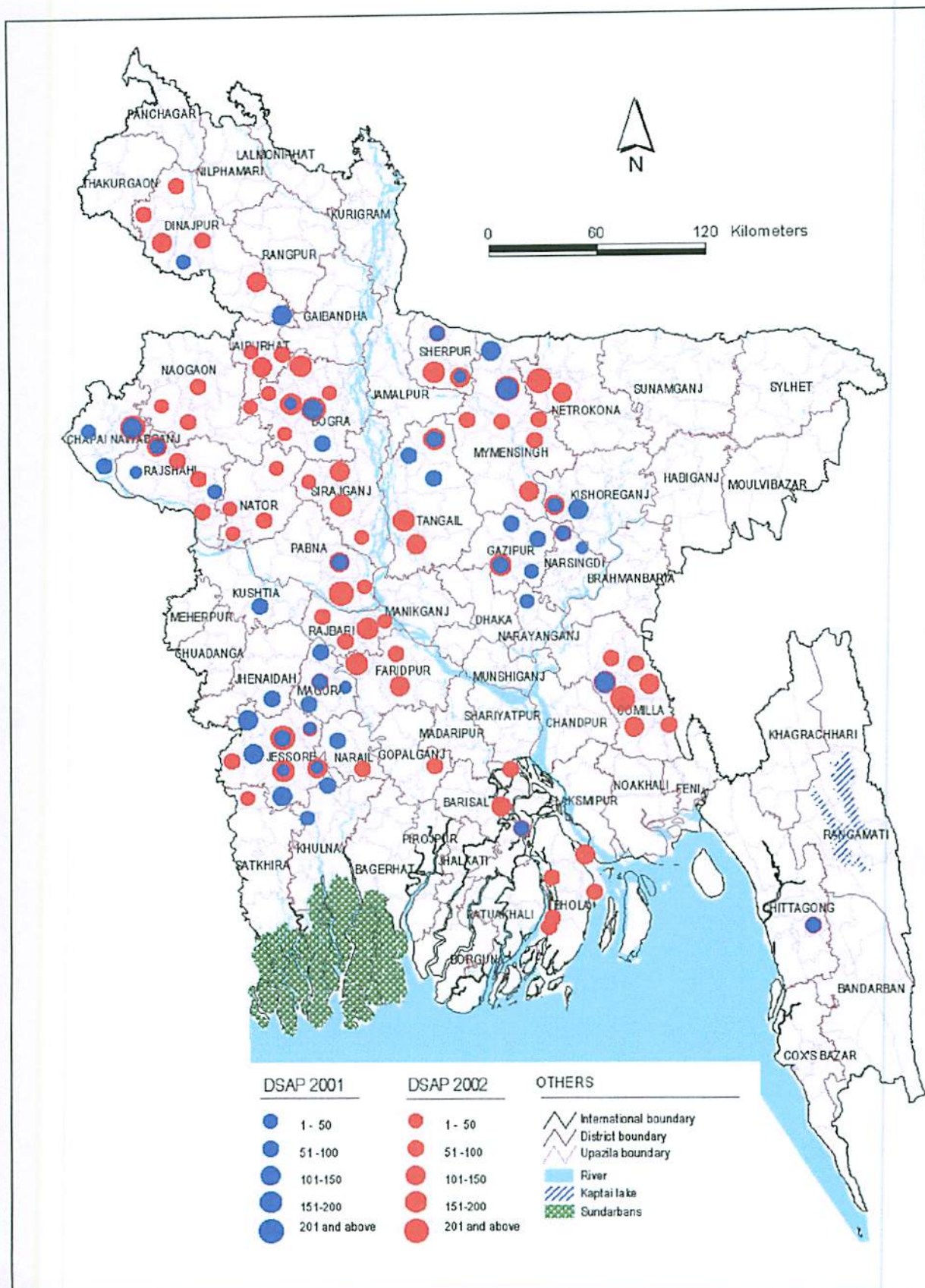
- Attachment 1** Status of on-farm demonstration farmers and Demonstration Farmer Groups (DFG) in 2002 (new and carried over)
- Attachment 2** Geographical distribution of aquaculture demonstrations supported by WorldFish-NGO aquaculture extension effort 2002 (NGO wise)
- Attachment 3** Geographical distribution of aquaculture demonstrations supported by WorldFish-NGO aquaculture extension effort 2002 (number wise)
- Attachment 4** Status of demonstration farmer training by partner NGOs in 2002
- Attachment 5** Status of rallies and farmer days realized October-December 2002
- Attachment 6** Criteria used for assessing the partner NGO's performance (2002)
- Attachment 7** Status of funds released to partner NGOs as of 31 December 2002
- Attachment 8** Completed and ongoing research projects as of 31 December 2002
- Attachment 9** Status of on-farm demonstrations supported by associate-partner NGOs in 2002
- Attachment 10** USAID-funded staff list as of 31 December 2002

Sl. #	NGO	New in 2002		Carried over of 2001		Total in 2002	
		DFG	Demos	DFG	Demos	DFG	Demos
01	ACD	35	250			35	250
02	ADI	50	350	32	496	82	846
03	BAIC	41	350	35	431	76	781
04	BS	40	350	34	498	74	848
05	BUK	29	250			29	250
06	CARITAS	17	401	43	600	60	1001
07	CARP	35	250	20	300	55	550
08	CIRUP	35	250	21	300	56	550
09	COAST TRUST	29	250			29	250
10	CRED	49	350	32	435	81	785
11	DJKS	35	253			35	253
12	DMG	32	250			32	250
13	FHD	35	250	15	203	50	453
14	JC	35	350	30	500	65	850
15	LDRO	29	250			29	250
16	ORD	35	250	23	282	58	532
17	OREDAR	29	250			29	250
18	PADAKHEP	35	250			35	250
19	PAGE	35	250			35	250
20	PRANTEC	33	250	20	304	53	554
21	PP	34	250			34	250
22	RRC	46	350	20	300	66	650
23	SARA	35	250			35	250
24	SATU	32	250			32	250
25	SPP	39	300	22	196	61	496
26	TMSS	51	350	38	500	89	850
27	VPKA	25	250			25	250
Total	27	955	7,654	386	5,345	1,341	12,999

Attachment 2 Geographical distribution of aquaculture demonstrations supported by WorldFish-NGO extension effort 2002 (NGO wise)



Attachment 3 Geographical distribution of aquaculture demonstrations supported by WorldFish-NGO aquaculture extension effort 2002 (number wise)



Attachment 4 Status of demonstration farmer training by partner NGOs in 2002

Training Course	2001 demo farmers	2002 demo farmers	Total
Foundation	-	7,654	7,654
Follow-up 1	-	7,404	7,404
Follow-up 2	-	7,054	7,054
Follow-up 3	6,108		6,108
Follow-up 4	2,338		2,338
Total	8,446	22,112	30,558

Attachment 5 Status of rallies and farmer field days, October-December 2002 (in No)

NGO	Rallies	Demo farmers	Local participants	Total participants
ACD	10	246	310	556
ADI	10	145	1098	1243
BAIC	14	350	821	1171
BS	8	200	650	850
BUK	10	248	318	566
CARITAS	8	322	353	675
CARP	10	240	612	852
CIRUP	6	58	760	818
COAST TRUST	15	247	578	825
CRED	7	170	346	516
DJKS	10	250	500	750
DMG	1	25	108	133
FHD	5	109	228	337
JC	10	230	882	1112
LDRO	10	250	653	903
ORD	4	45	160	205
OREDAR	10	250	451	701
PADKHEP	10	236	242	478
PAGE	10	250	785	1035
PP	10	238	547	785
PRANTEC	10	240	785	1025
RRC	2	50	200	250
SARA	5	122	65	187
SATU	10	250	654	904
SPP	0	0	0	0
TMSS	18	450	1777	2227
VPKA	10	245	950	1195
Total	233	5,466	14,833	20,299

Attachment 6 Criteria used for assessing the partner NGO's performance (2002)

- a. Comprehensive, correct quality of quarterly technical reports, annual work plans and timely submission
- b. Accurately and timely preparation of quarterly financial reports, annual projected budget
- c. Financial transparency including payment of staff salary and administrative fairness
- d. Cost-effective programming
- e. Transparency of NGO-WorldFish interface
- f. Successful implementation of aquaculture demonstration program
 - Proper selection of area, demonstration farmers and demonstration ponds/plots
 - Transparent agreement with demo farmers
 - Support/advice for formation and development of Demonstration Farmer Group
 - Quality of farmer trainings and field visits (quality, duration & time)
 - Quality of rallies (target, participation of villagers, time...)
 - Appropriately and timely release and use of farmer's grant money
 - Continued support to 2001 demo farmers
 - IGA (Service charge, credit, aquaculture activities...) undertaken
 - Staff and farmer drop out
 - Spread-over effect or farmer to farmer extension
- g. Hiring of qualified field staff and their performance
- h. Involvements of WorldFish supported staff in other programs
- i. Participation of ED/management staff in the program including national and regional coordination meetings
- j. Program monitoring including verification pond books and records
- k. Sources cost sharing for aquaculture support program
- l. Linkage and networking of partner NGO with different stakeholders
- m. Ownership, interest and commitment to the NGO's aquaculture support program
- n. Overall appreciation and comments by evaluator

Attachment 7 Status of funds release to partner NGOs as of 31 December 2002

Sl. No.	NGO	# pond/plot	Total budget		Balance 2001	Installment				Remaining budget
			Initial	Revised		Q-1	Q-2	Q-3	Q-4	
1	ACD	250	581,570				174,471	146,817	223,268	37,014
2	ADI	350	1,382,875			204,800	521,004	439,909	185,178	31,984
3	BAIC	350	1,448,890	1,769,196	346,480	192,320	569,899	579,156	107,515	-26,174
4	BS	350	1,389,400			207,200	481,436	391,533	284,616	24,615
5	BUK	250	459,940				183,976	80,480	189,778	5,706
6	CARITAS	400	2,390,681				1,195,341	956,272		239,068
7	CARP	250	1,010,687	1,024,187		135,000	387,353	352,187	116,132	33,515
8	CIRUP	250	1,031,000			194,700	370,923	165,047	300,330	0
9	COAST trust	250	681,446				204,434	165,654	260,416	50,942
10	CRED	350	1,381,843		24,135	204,550	515,054	430,072	211,782	-3,750
11	DJKS	250	605,160				181,548	179,900	205,499	38,213
12	DMG	250	639,225				191,768	191,754	186,422	69,282
13	FHD	250	1,098,275			192,940	367,522	251,116	257,812	28,885
14	JC	350	1,364,830		13,930	170,008	563,270	406,998	223,506	-12,882
15	LDRO	250	1,060,250			151,300	438,155	286,327	39,231	145,237
16	ORD	250	1,137,650		14,700	250,000	411,219	280,982	161,086	19,663
17	OREDAR	250	563,688				169,106	199,548	130,478	64,556
18	Padakhep	250	1,265,225			191,306	361,900	323,535	360,599	27,885
19	PAGE	250	591,570				177,471	102,748	268,330	43,021
20	PP	250	537,330	529,830			161,199	145,046	177,406	46,179
21	PRANTEC	250	1,098,635	1,105,835	15,011	171,128	444,008	318,654	150,199	6,835
22	RRC	350	1,361,986		14,870	213,900	516,585	496,212	23,789	96,630
23	SARA	250	591,210				177,363	116,293	268,105	29,449
24	SATO	250	1,169,848			167,462	377,743	295,848	328,795	0
25	SPP	300	1,235,796	1,242,547		190,740	393,797	342,922	258,273	56,815
26	TMSS	350	1,705,300	1,721,051	445,660			910,562	339,066	25,763
27	VPKA	250	586,260				175,878	133,176	252,819	24,387
	Total (No/Taka)	7,650	28,370,570		874,786	2,837,354	9,712,423	8,688,748	5,749,498	863,769
	Total (US\$)		486,380	0	14,997	48,643	166,508	148,958	98,568	14,808

Attachment 8 Completed and ongoing Research Projects as of 31 December 2002

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. 235,500
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

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 under preparation	Approved: Tk. 250,000 Disbursed: Tk. 190,000
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 under preparation	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)	On-going (continuing component)	Approved: Tk. 290,000 Disbursed: Tk. 116,000
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)	On-going (continuing component for Bogra)	Approved: Tk. 290,000 Disbursed: Tk. -

Attachment 9 Status of on-farm demonstrations supported by Associate Partner NGOs in 2002

No.	AP-NGO	pond				Carp polyculture in rice-field		Pond/rice fish nursery		Total	
		Carp polyculture		Carp-Golda polyculture		No	Area (dec)	No	Area (dec)	No	Area (dec)
		No	Area (dec)	No	Area (dec)						
1	AGSB	33	1469			7	231			40	1700
2	AID	250	5250	5	125	125	8125	30	570	410	14070
3	ALO	2	251			5	150	2	40	9	441
4	ARD	35	1134			9	440	5	285	49	1859
5	ARRDO	10	926	1	15	2	100	2	150	15	1191
6	ASROY									0	0
7	ASUS	18	1003			5	195	2	75	25	1273
8	BCVD									0	0
9	BRIDGE									0	0
10	BUS									0	0
11	CDS	20	660							20	660
12	CIRAD	40	1933			10	1800			50	3733
13	DDC	14	252			2	75	1	25	17	352
14	DNP	30	720			10	613	3	71	43	1404
15	GKK - Comilla	59	1180							59	1180
16	GKK -Magura	35	677					8	108	43	785
17	GKS	30	1200							30	1200
18	GMKS	45	945							45	945
19	GRASUK	50	10240			100	7500			150	17740
20	HEAP	10	300							10	300
21	Hunger Project									0	0
22	ISWA	25	550			1	50	2	160	28	760
23	JNDP	18	945			4	320			22	1265
24	KGUK	40	1004							40	1004
25	KORMI	35	1227			5	190			40	1417
26	LOCOS	11	304	9	216					20	520
27	MDS	20	4344							20	4344
28	MOUCHAK	15	360			5	250	4	113	24	723
29	NADO									0	0
30	NDC	28	900			12	300			40	1200
31	NDP	7	718			3	482			10	1200
32	OMI	30	750							30	750
33	ORNOB									0	0
34	PARTNER									0	0
35	PCD									0	0
36	PDBS	30	1150			10	350			40	1500
37	PEDA	40	1326							40	1326
38	POSD	40	3504			4	230	4	52	48	3786

Attachment 9 Status of on-farm demonstrations supported by Associate Partner NGOs in 2002 (continued)

No.	AP-NGO	Pond				Carp polyculture in rice-field		Pond/rice fish nursery		Total	
		Carp polyculture		Carp-Golda polyculture		No	Area (dec)	No	Area (dec)	No	Area (dec)
		No	Area (dec)	No	Area (dec)						
39	PSUS	75	1112			180	10800	9	225	264	12137
40	PUP	40	800							40	800
41	RUSTIC	4	60	2	200	17	850	2	16	25	1126
42	SAG	27	660					3	40	30	700
43	Swanivar B'desh	35	8120			5	6000			40	14120
44	SDC-Magura	25	750			20	978	4	112	49	1840
45	SDC-Comilla	30	660							30	660
46	SDS-Sariatpur					1	500			1	500
47	SDS-Spiritual	33	620					2	60	35	680
48	SECDO	23	610			3	150	1	40	27	800
49	SETU	52	913			25	875	8	128	85	1916
50	SETU BANDHAN	25	700					5	50	30	750
51	SEVA	31	930							31	930
52	SHUSHILAN	16	222	2	462					18	684
53	SKF	25	500							25	500
54	SMKK	10	200			1	80			11	280
55	SOPNIL	45	855			40	2400	5	85	90	3340
56	SPK	8	210			15	500	1	24	24	734
57	SRISTY-Tangail	27	5420			30	3400	20	370	77	9190
58	SRIZONY-BD	22	550			7	224	5	117	34	891
59	SSKS	20	700							20	700
60	SSPKS									0	0
61	STAR									0	0
62	SUS	20	630							20	630
63	TARA	25	834	1	30	1	30	1	32	28	926
64	TRINOMOL									0	0
65	TSP	40	1883							40	1883
66	Unnayan Dhara	30	510			12	686			42	1196
67	UDDYOG	28	561			10	1056	2	66	40	1683
68	VDC	27	540							27	540
69	VOSD	30	1325			4	290	8	200	42	1815
70	WE	57	1311	3	140	14	630	5	127	79	2208
Total		1850	77408	23	1188	704	50850	144	3341	2721	132787
%		68.0	58.3	0.8	0.9	25.9	38.3	5.3	2.5	100.0	100.0

Attachment 10 USAID-funded staff list as of 31 December 2002

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	Hasan Ahmmed Chowdhury	Research Associate	15 December 99
5	Dr. Khondker Murshed-e-Jahan ¹	Research Associate/Fellow	24 January 01
6	Reazul Karim	Research Associate	01 November 02
7	Kh. M Shameem Kamal	Research Assistant	01 July 99
8	Ms Manuara Azim	Research Assistant	01 July 99
9	Mohammad Abdul Latif Siddique	Research Assistant (extension)	11 March 01
10	Md. Jahirul Hoque	Research Assistant (monitoring)	11 March 01
11	Mohammed Mokhlesur Rahman	Research Assistant (monitoring)	11 March 01
12	Bijan Mazumder	Research Assistant (extension)	11 March 01
13	Md. Mamunor Rashid	Research Assistant (monitoring)	20 May 01
14	Md. Abul Kashem	Research Assistant (extension)	20 May 01
15	Md Nazim Uddin	Research Assistant (extension)	29 May 02
16	Md Abdur Razzaque	Research Assistant (extension)	29 May 02
17	Syed Arifuzzaman	Research Assistant (extension)	29 May 02
18	Mir Mostaque Ahamed	Research Assistant (extension)	29 May 02
19	Md. Asadul Hoque	Research Assistant (extension)	23 June 02
20	Md. Khabirul Hasan	Research Assistant (monitoring)	9 June 02
21	Ms Chamon Ara Begum	Research Assistant (monitoring)	9 June 02
22	Saiful Islam	Research Assistant (monitoring)	1 July 02
23	Abu Sayed	Research Assistant (monitoring)	1 July 02
24	Md. Shakil Ahmed Khan	Research Assistant (monitoring)	1 July 02
25	Reza Md Ali Kareem ²	Office manager	10 Feb. 02
26	Bijoy Bhushan Debnath	Administrative Officer	01 May 90
27	Khan Golam Rasul	Accounts Officer	01 June 96
28	Md. Billal Hossain	Data Entry Operator	01 August 99
29	Ms Maksuda Khanam	Data Entry Operator	01 May 02
30	Ms Hilda Sobita Rozaria ³	Receptionist	10 July 02
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	Messenger	01 July 93
35	Md. Idris Ali ³	Messenger	01 June 98
36	Md. Abdul Wahab ³	Messenger	01 September 98
37	Md. Mahade Hasan Babul ³	Messenger	01 July 01

¹ Costs shared DSAP (80%), FRIAP (fish 2020?) (20%)

² Costs shared by ICLARM HQ (50%); CBFM (25%) and DSAP (25%)

³ Costs shared by CBFM (50%) and DSAP (50%)