

BACKGROUND

The WorldFish Center, previously known as the International Center for Living Aquatic Resources Management (ICLARM), has been working in Bangladesh since 1989. WorldFish's efforts have been diverse but focused mainly on small-scale aqua culture and participatory management. During the last 14 years the WorldFish Center in collaboration with the Bangladesh Fisheries Research Institute (BFRI) has evolved many transferable aquaculture technologies. During 1999-2000, WorldFish tested these technologies under the "Research for Development of Sustainable Aquaculture Project (RDSAP)". Following successful implementation of RDSAP, another project "Development of Sustainable Aquaculture Project (DSAP)" was undertaken on 28 June 2000. The project will continue for 5 years until July 2005. The DSAP is financed by the United States Agency for International Development (USAID) and implemented by the WorldFish Center.

PROJECT GOAL

The goal of the project is to increase the smallholder farm household incomes and life circumstances of resource limited people who take advantage of improved ways to farm the extensive inland water resources of Bangladesh and to bring to market increased aquaculture products.

PROJECT OBJECTIVES

- Disseminate improved technologies to a large number of smallholders through local NGOs and training of their extension staff;
- Continue research on applied aqua culture technology innovation and refinement; monitor effectiveness of different dissemination methodologies and assess impact of the demonstrations;
- Provide training support to aqua culture-related small businesses (hatchery owners, managers, seed sellers...).

STRATEGIES FOR TECHNOLOGY TRANSFER

The project aims at implementing at least 7,000 aquaculture demonstrations each year through NGO communities. At present DSAP is working with 35 partner NGOs and over 70 associate partner NGOs. DSAP is implementing demonstrations using different modes of dissemination of aqua culture practices.



DSAP has opened 8 regional field offices at Jessore, Magura, Rajshahi, Bogra, Mymensingh, Gazipur, Comilla and Barisal to improve the technical support and advice to the cooperating NGOs. Research Assistants (monitoring) and Research Assistants (extension) are fielded in the regional offices. The RAs (extension) deal mainly with the dissemination of technologies

by working closely together with the NGOs and other local stockholders while the RAs (monitoring) conduct the monitoring and evaluation of action oriented research and assessment of impact of the aquaculture demonstrations. Program implementation is bottom up, which ensures active participation and empowerment of the farmers. Flexibility of the program, participation of NGOs/farmers and NGO ownership are the key elements of the projects strategy. The DSAP expects sustainability both at NGO level and at farmer level. The following technology packages are disseminated in both pond and paddy field based systems:

- Polyculture of indigenous and exotic carps;
- Polyculture of carps and golda (freshwater prawn);
- Nursery practices.

TRAINING FACILITIES

DSAP provides extensive training to NGOs, farmers and other concerned persons, agencies/institutions. The following trainings are usually imparted:

- Training of Trainers (ToT) for staff of partner and associate partner NGOs (residential foundation and follow-up training courses as well as on-the-job training);
- Training of demonstration farmers (foundation, follow-up training sessions and on farm training);
- Training for support services enterprises development to assist aquaculture business;
- Training of associated staff of linked programs and institutions;

RESEARCH ACTIVITIES

DSAP is involved in research at three different levels:

- Project staff conducted research;
- Collaborative research with Bangladesh Fisheries Research Institute (BFRI);
- Small research studies conducted through Universities.

PROJECT CONDUCTED RESEARCH

DSAP staff (regular staff, consultants, interns) are involved with research directly in connection with the impacts of technology



dissemination as well as research of related interest. At present, project staff are involved with the following research activities:

- Technology profiling and simple economics from pond record book data;
- Long-term participatory monitoring and impact assessment of Integrated Aquaculture-Agriculture (IAA) using the RESTORE (Research Tool for Natural Resource Management, Monitoring and Evaluation: a tool developed by the WorldFish Center) approach and effectiveness of extension methods;
- Economic, consumption, gender and other livelihood research;
- Other topics of emerging interest.

COLLABORATIVE RESEARCH WITH BFRI

The WorldFish Center has a Technical Assistance Project (TAP) entitled Research for Sustainable Aquaculture Development with the Ministry of Fisheries and Livestock to conduct collaborative research with BFRI. As per TAP, BFRI and DSAP are involved with research concerning generation of new technologies and refinement of promoted technologies. These need-based technologies generated through action cum research are tested on farm with cooperating farmers and NGOs of the project.



UNIVERSITY RESEARCH GRANTS



Research grants are awarded to university researchers for conducting special studies of current interest. The project has funds to support a total of 30 small research grants.

ACHIEVEMENTS

DSAP has implemented more than 20,000 aquaculture demonstrations from 2000 to 2002 aquaculture seasons and is implementing about 11,500 new demonstrations this season (2003/2004). At present, the project's working area is spread over 123 Upazillas covering 34 districts of Bangladesh. The project has provided training to 232 extension workers of 37 NGOs from 2000 to 2002. In addition, training support has also been provided to 477 staff members from over 170 associate-partner NGOs during the same period.

Results from year 2000 pond record books show that the aquaculture demonstration farmers produced on average 2730 and 2270 kg per hectare per crop in ponds and rice fields respectively. As compared to their previous practices, the production had increased by 103% in ponds and 121% in rice fields. Economic analysis shows that each Taka invested in fish culture resulted in a gross benefit of Taka 1.74 in ponds and Taka 2.70 in paddy fields.

To date project has awarded 16 small research grants to researchers of Bangladesh Agricultural University and Dhaka University. At present 10 studies are completed and 6 are in progress. Reports of the completed studies are circulated to the relevant persons/institutions for spread of information and workshops are also conducted to have a wider dissemination of the same among different stockholders including planners and policy makers.

The project has published several working papers, manuals and workshop reports. In addition, project staff and collaborative researchers have published several articles in national and international scientific journals.



CONTACT:

Project Leader: House 22B, Road 7, Block F, Banani, Dhaka - 1213, Bangladesh. Email: janssen@agni.com

PARTNER NGOS:

ADI	Alternative Development Initiative
BAIC	Barendra Advancement Integrated Committee
BS	Banchite Shekha
BUK	Bikalpa Unnayan Karmasuchi
CARP	Center for Alleviating Rural Poverty
CDS	Chandradip Development Society
CIRUP	Center for Integrated Rural Progress
COAST	Coastal Association for Social Transformation Trust
CRED	Center for Rural and Environment Development
DJKS	Dulai Jana Kallyan Sangstha
DMG	Dustha Mohila Gonoshiksha & Hasta Shilpo Proshikhan Kendro
FHD	Foundation For Human Development
GRAMAUS	Grameen Manobik Unnayan Sangstha
GRASUK	Gram Sampad Unnayan Kendra
ISWA	Integrated Social Welfare Association
JC	Jagorani Chakra
LDRO	Landless Distressed Rehabilitation Organization
LIPP	Local Initiative for Peoples Progress
LUSTRE	LUSTRE
ORD	Organization for Rural Development
OREDAR	Organization of Rural Economic Development & Rehabilitation
PAGE	PAGE Development Center
POSD	People's Organization For Sustainable Development
PRANTEC	Program on Agriculture, Nutrition & Environment Conservation
PROSHIKA	Proshika Manobik Unnayan Kendra
PP	Projukti Peeth
RRC	Rural Reconstruction Centre
SARA	Social Association For Rural Advancement
SATU	Social Advancement Through Unity
SHRISTY	Shristy Samaz Kallayan Mahila Sangstha
SPP	Samaj Pragoti Parishad
SUSHILAN	Shushilan
TMSS	Thengamara Mohila Sabuj Sangha
VPKA	Voluntary Paribar Kalyan Association
WE	Welfare Efforts

OTHER PARTNER ORGANIZATIONS

The **Bangladesh Agricultural University**, Mymensingh is the national university responsible for agricultural research and education.

The **Bangladesh Fisheries Research Institute** (BFRI) is the government agency under the Ministry of Fisheries and Livestock responsible for fisheries research.

The **United States Agency for International Development** (USAID) is an U.S. Government statutory agency created to manage international assistance programs. International assistance includes both development and humanitarian programs implemented outside the U.S.

The **WorldFish Center** is an international non-profit research organization working to improve the production and management of fisheries and other living aquatic resources to benefit the poor.

Library



1000015384

DEVELOPMENT OF SUSTAINABLE AQUACULTURE PROJECT (DSAP)

Executed by :



Supported by :



**United States Agency for International
Development (USAID)**

IAN R SMITH MEMORIAL LIBRARY &
DOCUMENTATION CENTER, WORLDFISH CENTER