



સર્વોચ્ચ Swim Like Milkfish



COFBreP = Comprehensive Outreach and Fish Breeding Project

Vol.1 Premiere Issue in 2007



Prologue

The Project Aims at... Environment-Friendly Aquaculture

Fish pen and fish cage aquaculture has been increasing recently in the Philippines. This type of aquaculture achieves high-density fish culture by feeding them large amounts of compound feed. A semi-intensive method has been also on the rise in pond culture, which allows more fry to be grown using compound feed. Because of these circumstances, there are concerns that residual feed and fish discharge have contaminated the water. A large number of milkfish were killed in Pangasinan in 2002, and similar incidents have occurred in the last five years. A solution would be to promote environment-friendly aquaculture in the regions. The project has been implementing such aquaculture to promote effective use of natural food (lab-lab, lumut, plankton) in several pilot activity sites. The project has also started integrated water quality monitoring in all the river basins that belong to the three Local Government Units, namely Dagupan City, Binmaley, and Lingayen, in Pangasinan prefecture. We believe that environment-friendly aquaculture will become the mainstream of aquaculture in the Philippines in the near future. **Milkfish (→)**



(↑) This is one of the target natural foods to be promoted. It is locally called "lumot". Milkfish likes this...



...By Experiments



(↑) The project experiments different types of natural foods to 20-22 day-old milkfish fry in aquaria for comparison analysis. Mr. Sasaki, one of the Japanese experts, is checking conditions of each aquarium.

Dr. Terashima invented(→) new equipment to maximize the growth of natural food.

Counterparts are installing it in a trial pond. Let's see how the natural food grows!!

...By Trials



How to find a WAY toward Environment-Friendly and Efficient Aquaculture??



(←) Dr. Kitamado, the team leader, is collecting information on feeds and feeding methods on milkfish aquaculture in fields. The project may find good tips in the traditional ways.

...By information gathering

In fields

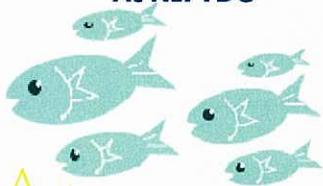
Strategies for Extension

3 Types of Training



1 for Hatchery Workers

TRAINING FOR HATCHERY WORKERS
May 21 – June 1
At NIFTDC



(↑) Demonstration on sexing of fish and gonadal determination.
(Training for hatchery workers)

2 for Extension Workers

TRAINING FOR EXTENSION WORKERS
August 27 – 31, 2007

The training was conducted at NIFTDC for 14 extension workers. It aims at capacity building of the extension workers in knowledge on aquaculture and in practical skills as an effective extension worker.

(↑) Group work on conflict resolution.
(Training for extension workers)



Voice of a lecturer

We updated the participants on the latest techniques on natural food production, particularly the culture of Nannochloropsis and rotifer. The participants are highly motivated since natural food production is very important in any hatchery operations. See you in the next training course and we hope you can also share with us your experience in your respective places.

Mrs. EDITH ROXAS
Aquaculturist 2



Voice of a Participant

Mrs. ERMELINDA TAN from Pampanga

Our training is very much applicable to our work as an extension worker. It strengthened knowledge of the principles, farming systems, management, handling of farm production, and marketing schemes. It also had a great impact on a set of important values such as resourcefulness, creativity, friendship, patience, cooperation and leadership. All the activities helped us review the value of extension service in our field.

We are very grateful to the JICA Experts and NIFTDC staff for this meaningful training, their efforts and full support for the project, and the success of this training.

3 for Fish farmers

FISH FARMERS' TRAINING
September 10 – 12, 2007 (Pampanga)

The training was carried out 4 times, namely for Pangasinan, Pampanga, Bongabong, and Roxas. The topics focus on basic knowledge and skills on the culture of milkfish. The topics also contain bookkeeping for good management. The second course will be conducted in February next year. We look forward to seeing you again

(↑) Discussion in training for fish farmers

Swim Like Milkfish

Voice of a Participant

Mr. SEBASTIAN V. GOROSTIZA
from Masantol



Our training for fish farmers is very informative. We learned the proper pond preparation techniques, which is the first thing to do for successful harvest. We also learned that we have to keep a record on daily activities in the form of a logbook for the purpose of management analysis. The record on all our activities, no matter how small, enables us to keep track of all things happening in our farm and to assess the profitability of our business.



3:00 a.m.: Collecting Fry

It's still at 3 am. Hatchery men show up in darkness to pack and deliver milkfish fry. They start collecting fry from the larval rearing tanks. Two men work together to scoop a bunch of fry with a fine-mesh net. (↓)



The scooped fry are transferred to basins with care. (↓)



3:20 a.m.: Counting Fry

Hatchery men are going to make 34 sacks of 2,500 milkfish fry. They keep their eyes on swimming fry to count up to 2,500... Watch out! Fry are swimming so fast!! (Counted 2,500 fry in a basin) (↓)



4:00 a.m.: Packing

Hatchery men carefully transfer the counted fry into a special plastic bag for fry delivery. They add oxygen to a bag to allow the fry to breath properly in the bag even during the travel. (↓)



(↑) Perfect! Look!! 2,500 fry are swimming in a bag!!

DELIVERY OF MILKFISH FRY TO OUR PILOT SITE

85,000 fry grown at NIFTDC under the project are delivered to the pilot site in Sasmuan. Project activities start in earnest!!



4:40 a.m.: Loading

Two bags are put in one Styrofoam box. This box helps keep the water temperature stable and prevents the bags from rolling around in the back. It also allows double-stack load in the back. Mr. Takano supervises the process. (→)



5:00 a.m.: Finish!! Let's Go!

An ISUZU D-Max, our lovely Project car, is now ready to deliver the fry!!

Thank you for all the hard work of the hatchery men!



Topics

Then... what happened to the fry?

The fry were successfully released into our pilot site with a very low mortality rate despite the long travel. The counterparts, the Japanese experts, a pond owner, and fishfarmers joined the release of the fry. The picture shows they passed the bags one after another by hand. The fry were released after the bags were kept in the pond for a certain time. That is to avoid a sudden change of the environment to the fry in the bags.

Then... how big the released fry become ??





Special Topic

'LOGO CONTEST'

Thank you very much for your contribution!!



The Project team held a logo contest for the project in June. The final decision was made in a meeting with counterparts in August. The project team had not expected many entries from NIFTDC, the counterpart institute. However, the team was pleasantly surprised to receive more than 20 entries in total. It was very hard to choose only one from them since each entry has a good story of its own.

The one who won the final vote now stands on the top of the podium. It's the work of Joey in the administration section. The mark is excellent!! It represents milkfish broodstock of hatchery, and a fish farmer standing at a pond. Both are symbols of the critical components of the COFBreP project. The color contrast is brilliant, too. Blue is the JICA and BFAR color and the red color of the official project name drawn in a circle appears to be Japanese color. This mark is used as the official LOGO!

Again!! The Project team sincerely appreciates all the fantastic entries!!

Thank you!!



3



1



2

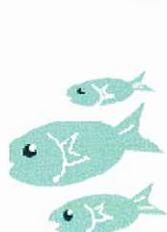
DO YOU KNOW ME?

Introducing
our Project Staff



PROJECT MANAGER
Engineer Enrique B. Marquez
(リケ)

I'm an Aquaculture Engineer and Senior Aquaculturist of the Bureau of Fisheries and Aquatic Resources (BFAR). I am the Project Manager of COFBreP, supervising the implementation of the Project in coordination with the JICA Experts. I like this project aiming at improving the socio-economic condition of fish farmers, which is necessary in our country. I also enjoy a lot of traveling in our project areas (Pangasinan, Pampanga and Oriental Mindoro) with Dr. Kitamado.



Center Representative
Mam Del Nipales
(マム デル)

I'm a senior aquaculturist of BFAR NIFTDC, in charge of milkfish development program and other marine finfish species.

I believe that I'm the sweetest and mentally youngest in our office. However, now that Masako-san (project coordinator) came to our office, I have to compete with her!! But a Filipina never loses!!

Anyway, I love working with all the Japanese counterparts, especially the super gentleman, Dr. Tokio Kitamado!!



We welcome your comments on this newsletter, "Swim Like Milkfish" !
You can reach COFBreP team at Ph_fish@icnet.co.jp



Comprehensive Outreach and Fish Breeding Project Team

Address: NIFTDC Bonuan Binloc, Dagupan City, Pangasinan
COFBreP Office Tel & Fax: (+63)-75- 522- 0558/0759
NIFTDC Tel: (+63)- 75-523-5412 Fax: (+63) - 523-0385



Notice

This newsletter is issued by the COFBreP Project team and does not represent the official viewpoints of JICA.