

# **Training and Information Dissemination at SEAFDEC AQD**

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## **Abstract**

The SEAFDEC Aquaculture Department (AQD) is mandated to develop human resources and to disseminate and exchange information for aquaculture development in the region. In 1991-1994, a total of 294 participants attended 23 sessions of nine training courses. Many others participated in AQD's student practicum, internships, and summer work programs. AQD conducted seminar-workshops on aquaculture development in southeast Asia, fish breeding, feeds and feeding, and training needs. Information materials (newsletters, a monograph, two extension manuals, leaflets, and videos) were produced based on research at AQD. To assist fishfarmers and other sectors of the local aquaculture industry, AQD conducted on-site or outreach seminars, and provided resource persons during fairs and exhibits, seminars, and consultative meetings. The AQD Library is open to all users; in addition to the collection of printed materials, a CD-ROM reader is now available for fast retrieval of bibliographic information from computerized databases like ASFA.

## **Introduction**

The SEAFDEC Aquaculture Department (AQD) exists to develop and promote aquaculture in southeast Asia. One mandate of AQD is to develop human resources and disseminate and exchange information in aquaculture. Since its establishment in 1973, the Department has received trainees from SEAFDEC Member Countries (Thailand, Malaysia, Singapore, Philippines) and other countries for short-term training courses. AQD has conducted scientific conferences and seminar-workshops to disseminate aquaculture science and technology. AQD researchers and information specialists have also packaged the relevant information into monographs, extension manuals, newsletters, and video programs.

### Training Program

Six short-term training courses were offered at AQD in 1991-1994 (Table 1) in accordance with the recommendation of the 1991 Seminar-Workshop on Aquaculture Development in Southeast Asia (ADSEA '91). Three additional training courses were conducted by AQD in collaboration with the Network of Aquaculture Centres in the Asia-Pacific and the UP-V Brackishwater Aquaculture Center. Sixteen Iranians and one Pakistani attended the training course in Aquaculture Engineering. Nine Bangladesh nationals sponsored by the Government of Bangladesh attended the Shrimp Culture course, and two Pakistanis took the course in Brackishwater Aquaculture Management and Operation. A total of 327 government workers and aquaculture technicians completed the 25 sessions of training courses in 1991 to 1994 (Table 1).

Table 1. Participation in the SEAFDEC AQD training courses.

Training Course	Number of sessions	Number of participants			
		1991	1992	1993	1994
Fish Nutrition	3	12	13	12	
Marine Fish Hatchery	5	16	30	13	13
Fish Health Management	4	14	14	14	15
Aquaculture Management	4	14	18	18	18
Shrimp Hatchery	3	17	12		14
Culture of Natural Food	2	13		8	
Aquaculture Engineering	2			17	1
Shrimp Culture	1				9
Brackishwater Aquaculture Management & Operation	1				2
Total	25	86	87	82	72

These 'hands-on' courses were 10-20% lectures and 80-90% laboratory and practical work. The resource persons included the Department's professional staff of 63 Ph.D. and M.Sc. degree holders, faculty from the University of the Philippines in the Visayas (UP-V) and the UP Marine Science Institute, and experts from other research institutions and the private sector. The training facilities include fish and shrimp hatcheries, various laboratories, a feed mill, and audio-visual lecture rooms.

ADSEA '94 recommended that two courses be offered again: Freshwater Aquaculture (phased out in the 1980s) and Coastal Aquaculture (formerly Brackishwater Pond Culture).

AQD also offered practicum training for graduating students in fisheries and related fields to satisfy the 400 hours requirement. The training provides students practical experience in aquaculture to supplement their theoretical orientation in school. Students assist in ongoing

research and verification studies at AQD. In 1991-94, 124 graduating students from various schools did their practicum at AQD.

Table 2 shows the number of trainees by country of origin and sponsoring agency. SEAFDEC AQD provided fellowships to 165 trainees from member countries.

Table 2. Participation in SEAFDEC AQD training courses by home country and sponsoring agency, 1991-1994.

Country	Number of participants by sponsor			Total
	SEAFDEC AQD	World Bank	Govt or Private	
Philippines	68		99	167
Thailand	49			49
Malaysia	38		6	44
Singapore	3			3
Vietnam	7			7
Iran			18	18
Bangladesh			10	10
Nigeria		5	1	6
Sri Lanka			4	4
China		3		3
Hongkong			3	3
Pakistan			3	3
Kenya			1	1
Egypt			1	1
Indonesia			3	3
Saudi Arabia			2	2
India			2	2
Papua New Guinea			1	1

The SEAFDEC AQD fellowships are funded by the Government of Japan.

Internships in fish and shrimp hatchery, feed development, chemical analyses, disease diagnosis, plankton culture, and other laboratory work were also arranged for various individuals and groups. Sixty-four trainees from the government and the private sector in the Philippines, one from Australia, and one from Sri Lanka undertook internship at AQD. Ten students also undertook the Summer Science High School Internship.

Pursuant to the directive of the Philippine President, a Summer Work Appreciation Program was implemented by AQD in collaboration with the Department of Labor and Employment. This program engaged 227 out-of-school teenagers in productive endeavors at AQD.

To improve the training program of AQD, a survey of aquaculture training needs in the Philippines was initiated. The survey will be extended to other countries in the region.

### Seminar-Workshops

Five seminar-workshops were held by AQD in 1991-1994 to disseminate and share research findings. These well attended conferences were:

- Aquaculture Development in Southeast Asia (ADSEA '91)
- Aquaculture Workshop for SEAFDEC/AQD Training Alumni (1992)
- Breeding and Seed Production of Cultured Fishes in the Philippines (1993)
- Nutrition and Feeds (1994)
- Aquaculture Development in Southeast Asia (ADSEA '94)

AQD also conducted outreach or on-site seminars, participated in national fairs and exhibits, and provided resource persons in non-AQD seminars and consultative meetings.

### Library and Documentation

Researchers, teachers, students, and aquaculture practitioners avail of the excellent resources of the AQD Library. Acquisition of information materials in aquaculture and related subjects is constantly being intensified through purchases, subscriptions, gifts and exchanges, and requests from donor agencies. Library holdings as of 30 June 1994 include 11,733 monographic volumes, 6,188 pamphlets, 2,633 SEAFDEC publications, and 4,050 bound journal volumes. A CD-ROM reader is now available for fast retrieval of bibliographic information from commercial databases like the Aquatic Sciences and Fisheries Abstracts.

### In-House Publications

Two monographs, three extension manuals, two conference proceedings, two compilations, and other reports were published by AQD in 1991-1994.

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| • Biology of Milkfish ( <i>Chanos chanos</i> Forsskal)   | 1991 |
| • Seaweeds of Panay  | 1992 |
| • AEM No. 19 Prawn Hatchery Operations   | 1991 |
| • AEM No. 20 Management of Milkfish Broodstock   | 1992 |
| • AEM No. 21 Feeds and Feeding of Milkfish, Nile Tilapia,<br>Asian Sea Bass, and Tiger Shrimp        | 1994 |
| • Proceedings of the Aquaculture Workshop<br>for SEAFDEC AQD Training Alumni                         | 1993 |
| • Aquaculture Development in Southeast Asia and Japan<br>and Prospects for Seafarming and Seafarming | 1994 |

- Collected Abstracts of Research Publications (1987-90) 1991
- Collected Abstracts of Research Publications (1991-93) 1994
- Annual Report 1991 1992
- 20 Years of Research & Development: An Anniversary Souvenir Volume 1993
- 1992-93 SEAFDEC/AQD Report:R&D for Sustainable Aquaculture 1994
  
- Caring of Milkfish Larvae (Video) 1992
- Oyster and Mussel Farming in Western Visayas (Video) 1993
- Rapid Rural Appraisal (Video) 1994

Volumes 13-15 of the quarterly newsletter *SEAFDEC Asian Aquaculture* came out in 1991-93. This newsletter features news in aquaculture, as well as short versions of papers published by AQD researchers originally in primary journals, as well as news in aquaculture.

Volumes 9-12 of the bimonthly newsletter *Aqua Farm News* came out in 1991-1994. AFN is a technology-oriented package focusing on specific topics, including the following recent ones:

- Vol. 9      Sea bass: the profitable alternative  
Grow-out culture management for freshwater finfishes  
Integrated fish farming  
Why artificial reefs?  
Coastal aquaculture: environmental issues  
What you should know about seaweeds
  
- Vol. 10     Marine ornamental fish  
Filipino crabs  
Farming lapulapu  
Mollusc culture  
Aquaculture and its human elements  
Snappers: worthy of aquaculture?
  
- Vol.11     Small is beautiful  
Milkfish breeding  
Tilapia culture  
Policing fisheries  
Catfish culture
  
- Vol. 12     Farming the sea  
Alternative development  
Conserve biodiversity  
Hatchery systems  
Siganid culture  
GATT issues in agriculture