Tigbauan
Main
Station

Tour of AQD stations / Conference / Training facilities

Tour of AQD stations is available by arrangement. Activities hosted at AQD’s Tigbauan Main Station may use its conference and training facilities.

For further information

The Southeast Asian Fisheries Development Center (SEAFDEC) is an autonomous intergovernmental body established as a regional treaty organization in December 1967 to promote fisheries development in the region through research, training and information services. Its member countries include Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.

The Aquaculture Department (AQD), one of SEAFDEC’s four departments, is mandated to implement programs in research, technology verification and demonstration, and training and information dissemination in order to promote responsible aquaculture in Southeast Asia.

The Chief
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Hatchery fry / Seedstocks
AQD has hatchery facilities for milkfish, high value marine fishes, abalone, mudcrab, shrimp, sea cucumber, and ilapia.

In 2011, AQD’s hatcheries produced 75.55 million eggs and newly hatched larvae, 6.17 million fry and fingerlings, and 472,868 abalone juveniles.

AQD has a total production capacity of 300 tons for larval rearing of marine fishes and 4.2 tons for abalone juveniles. With AQD’s production it showed that its technologies are viable and there is still a need of continuous efforts to improve these.

Feed formulation / Feed milling
AQD’s pilot feed mill can produce 300 kg of feeds per hour for its verification and demonstration studies.

In 2011, more than 116 tons of feeds were produced for broodstock, nursery and grow-out phase of milkfish, ilapia, seabass, pompano, snapper, grouper siganid, shrimp and prawn, mudcrab and abalone. All the diets are based on AQD’s R&D on fish nutrition and feed development.

Training courses
AQD also offers regular training courses which comprise 20% lecture and 80% practicals. Medium of instruction is English. Specialized training may likewise be arranged for requesting parties.

AQD also accepts internships and student practicum which are readily arranged for individuals or small groups.

Bookstore
AQD publishes aquaculture materials which are descriptive of its science-based technologies. Manuals, monographs, flyers, textbooks, among others, are available for sale at the AQD Bookstore.

Library
AQD Library has one of the best collections of books, journals, and other materials on aquaculture in Southeast Asia. The library is open Mondays to Fridays, from 8 am to 5 pm. Internet access is provided for free to students and AQD trainees.

FishWorld
FishWorld is a museum-aquarium-visitor center that promotes informal education for responsible aquaculture in particular, biodiversity, environment protection and sustainable development in general. FishWorld also conducts R&D internship for high school students.

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**Research & development**

The economically important commodities being studied at AQD include:

- Milkfish
- Abalone
- Groupers
- Seaweeds
- Seabass
- Snapper
- Tiger shrimps
- Prawn
- Pompano
- Seahorses
- Freshwater prawn
- Mud crab
- Indigenous species

Research on all life stages (broodstock, hatchery nursery, and grow-out) of the above species are conducted. Likewise, AQD produced juveniles for aquatic resources enhancement. Studies on nutrition and feed development, fish health management, ecology and farming systems, economic viability of cultured commodities and the promotion of sustainable aquaculture technologies are also being done to ensure comprehensive and holistic development of aquaculture and enhance its role in securing food and livelihoods in fishing communities.

AQD has strong linkages with foreign institutions and international agencies, and works closely with various universities, fishery schools, and government agencies in the Philippines and the Southeast Asia region. Like for instance, AQD collaborated with Australian Centre for International Agricultural Research (ACIAR) to carry-out research on improved seaweed culture and post-harvest utilization in Southeast Asia.

**Facilities**

- Multi-species marine fish hatchery
- Integrated fish broodstock and hatchery complex
- Crustaceaan hatchery
- Seahorse hatchery
- Sandfish hatchery
- Abalone hatchery
- Small-scale backyard hatchery
- Feedmill
- Natural food laboratory
- Fish health laboratory
- Laboratory for advanced technologies (BIOTECH)
- Experimental infection building

**Meeting socio-economic challenges of aquaculture**

The program aims to enhance the role of aquaculture in improving livelihood and food security; support the sustainability of the environment and resources; and identify relevant policies, infrastructure and linkages.

**Quality seed for sustainable aquaculture**

The program covers studies and activities that will generate, verify and promote technologies to ensure the sustainable production of quality seedstock for aquaculture as well as for stock enhancement.

**Healthy and wholesome aquaculture**

The strategies invoked in this program concentrate on nutrition to promote healthy farmed aquatic animals; disease diagnosis, control, monitoring and surveillance of aquatic animals; and environmental integrity, certification and food safety.

**Maintaining environmental integrity through responsible aquaculture**

The program focuses on the impacts of aquaculture on the environment and how to minimize them. It also aims to promote the use of various culture technologies that integrate aquaculture with the environment such as aquaculture, integrated multitrophic aquaculture systems, among others.

**Thematic programs**

- Multi-species marine fish hatchery
- Integrated fish broodstock and hatchery complex
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- Abalone hatchery
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- Feedmill
- Natural food laboratory
- Fish health laboratory
- Laboratory for advanced technologies (BIOTECH)
- Experimental infection building

**Adapting to climate change**

The program aims to identify aquaculture species, strains, farming systems, techniques that will adapt better to climate change, and increase resilience and overall capacity of various stakeholder groups through training and knowledge transfer.

**Products and services**

**Technical assistance / consultancy**

AQD provides technical assistance and consultancy in hatchery, natalage or fish farm operation for entrepreneurs and communities through its extension programs the Agro-outil-operate-transfer (AORT) and the Institutional capacity development for sustainable aquaculture (ICDSA), respectively.

**Disease diagnostics / Analytical services**

- Molecular Microbiology Laboratory
  - detection of shrimp and fish viruses by PCR-base techniques
  - electron microscopy of biological samples (scanning and transmission)
  - microbiological analyses of food, products, water, etc.
    (coli count, Salmonella, Shigella, S. aureus, Escherichia col, yeast/mold count, water potability)

- Algal Production Laboratory
  - sale of culture media and starter stocks

- Centralized Analytical Laboratory
  - analysis of chemicals in fisheries and aquaculture products
  - analyses of water and soil
  - proximate analyses
  - fatty acid / amino acid profile

- Fish Feed Technology Laboratory
  - development of environment-friendly feeds
  - improvement of feed conversion and growth of farmed species

**Plankton starters available for sale**

- Green algae (Tetraselmis tetrachae, Chlorella sp., Nannochloropsis sp.)
- Brown algae (Chaeoscoeces cadorafotrans, Skeletonema tropicam, Thalassiosira sp., Navicula sp., Amphora sp.)
- Golden brown algae (Isochrysis galbana)
- Zooplankton (Brachionus plicatilis)