

Due to its delectable meat and high market value, Rabbitfish (*Siganus guttatus*) is making waves in the aquaculture industry. In fact, the Bureau of Fisheries and Aquaculture Resources tagged it as one of the top seven species for aquaculture production in brackishwater ponds in 2020. Photo by DEVCOM



aqd matters

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Training empowers fisherfolks to boost abalone production



Donkey-ear abalone
Haliotis asinina

The trainees pose for a photo with SEAFDEC/AQD employees during the closing program last 28 June 2023. The picture depicts the training program's success and the close cooperation between SEAFDEC/AQD and the local community. Photo by JF Aldon

A PRIZED jewel lies hidden beneath the shimmering and pristine waters of Molocaboc Island, a part of the 32-hectare Sagay Marine Reserve in Negros Occidental: the donkey's-ear abalone (*Haliotis asinina*), a kind of marine snail known for its unique shell form that resembles the ear of a donkey.

Savoring its delightful

taste, one will find a luxurious blend of buttery richness, subtle oceanic sweetness, and *umami* complexity. its exquisite flavor, rarity, and labor-intensive harvesting process mean it is highly coveted in the international market, fetching a hefty price tag ranging from US\$ 25 to US\$ 50 per kilogram.

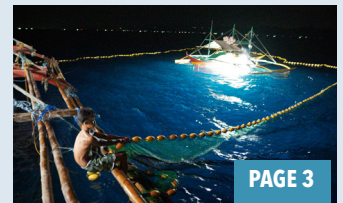
In Molocaboc, meanwhile, some locals are making a

living off the “kapinan” or “sobra-sobra” which are recently being purchased for about US\$ 8 per kilogram by buyer-aggregators who then ship the abalone to Cebu where processor-exporters are located.

Years ago, as orders began to pour in from Cebu, as well as hotels and restaurants from major cities, the locals were forced to double or triple their

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catch from the wild to keep up with the rise in market demand. Unfortunately, the pursuit of abundance bore the unwanted consequences – depletion of the abalone population on the Island.

SHIFTING THE TIDES

The increasing exploitation of the local abalone prompted an international aquaculture research center, the local government of Sagay City, and the local fisherfolks to work together to help the abalone population recover. One of the strategies they adopted is the stock enhancement of the abalone.

Stock enhancement is done by propagating abalone in hatcheries, seeding the young in coralline no-catch zones, and allowing locals to harvest grown individuals outside the protected area.

For years, abalone from Molocaboc were transported to Iloilo to be bred in the hatcheries of the Southeast Asian Fisheries Development Center Aquaculture Department (SEAFDEC/AQD). Beginning sometime in 2011, abalone seeds were brought back from Iloilo and stocked in the reefs of Molocaboc Island after about six-hour trips.

To make the sea ranching more sustainable, a small-scale solar-powered hatchery was constructed in Molocaboc in 2018, with support from the Government of Japan Trust Fund. The hatchery, with ten culture tanks of one ton each, made it possible to instead produce the abalone seeds locally with the technical support of SEAFDEC/AQD.

Recently, the local government of Sagay City sponsored an abalone hatchery operations training for fisherfolks of the



The Abalone Hatchery at Molocaboc Island in Sagay City, Negros Occidental. Photo by JF Aldon

island to learn how to breed the abalone themselves. Held from 17 to 28 June 2023 at the Molocaboc hatchery, the training was attended by four members of the Molocaboc Sea Ranchers Association (MOSRA) selected by the local government.

“This is for the participants to have knowledge in running the hatchery, considered to be the first community-managed abalone hatchery in the country so that in the future they will be able to operate it on their own and produce abalone,” said Sagay City Environment and Natural Resources Office head Jose Roberto Togle.

“The end goal of this is livelihood and food security in the community, and the training is beneficial for the abalone and eco-tourism project of the local government,” Togle added.

SEAFDEC/AQD abalone expert Dr. Shelah Mae Buen-Ursua and her team led the training which included practical

sessions on growing diatom as food for abalone, fabrication of settlement plates, egg collection, identification, selection and stocking of mature broodstock for spawning, stocking of larvae, and preparation of transport materials.

“We are thankful to SEAFDEC/AQD for the help in providing knowledge, especially in abalone production. The training was an eye-opener for us to conserve and practice sustainable farming of the species since it has a high commercial value,” said Princess Sasil, grateful that after the training, she will be employed by the LGU to work on the hatchery.

In a press statement, Mayor Narciso Javelosa Jr. stated that Sagay City is grateful to the research institution for their continued collaboration in providing the necessary training to empower the fisherfolks. [a](#)

— NG ARMADA & RD DIANALA

Chief Baliao's opinion sought on proposed gov't hatcheries



Chief Dan Baliao (2nd from right) was invited by the House Committee on Aquaculture and Fisheries to share his expert opinion on 17 House Bills concerning the establishment of multi-species fish hatcheries and fish ports in the country. Photo courtesy of DD Baliao

THE House Committee on Aquaculture and Fisheries Resources recently invited SEAFDEC/AQD Chief Dan Baliao to initial deliberations on bills establishing multi-species fish hatcheries and fish ports in several sites across the country.

Chief Baliao shared his expert opinion on 17 House bills that were the subject of the hearing held at the House of Representatives in Quezon City last 31 May 2023.

The invitation was extended by Committee Chairman Rep. Alfredo Maramaon III of the 2nd District of Negros Occidental.

For years, SEAFDEC/AQD has been assisting the Bureau of Fisheries and Aquatic Resources in conducting feasibility studies for hatcheries, training for hatchery operations, and research and development. [a](#)

— NG ARMADA

Backyard fish farmers upgrade skills through training on freshwater aquaculture

AROUND 66 fish farmers with existing backyard facilities gained additional knowledge on fish farming during a three-day on-site training course on freshwater aquaculture held by AQD on 9–11 May 2023 in Mina, Iloilo, Philippines.

AQD partnered with the Bureau of Fisheries and Aquatic Resources (BFAR)-Region 6 and the local government of Mina to deliver lectures and practical sessions on tilapia, catfish, and giant freshwater prawn culture, starting with biology and ecology, broodstock and hatchery management, and nursery and grow-out operations.

The training covered topics like ornamental fish breeding, fish diseases, and basic financial analysis to provide participants with livelihood options and guide them in farm management.

Mayor Lydia Grabato, Vice Mayor John Michael Defensor, and Sanggunian Bayan members of the

municipality graced the event.

Mina is a landlocked municipality in Iloilo's third district. Some of its residents are engaged in extensive farming of freshwater species such as tilapia and catfish.

Through its Joint Mission for Accelerated Nationwide Technology Transfer Program (JMANTTP), SEAFDEC/AQD conducts technocaravans, field demonstrations, and hands-on training to introduce economically viable, environmentally friendly, and socially equitable aquaculture technologies.

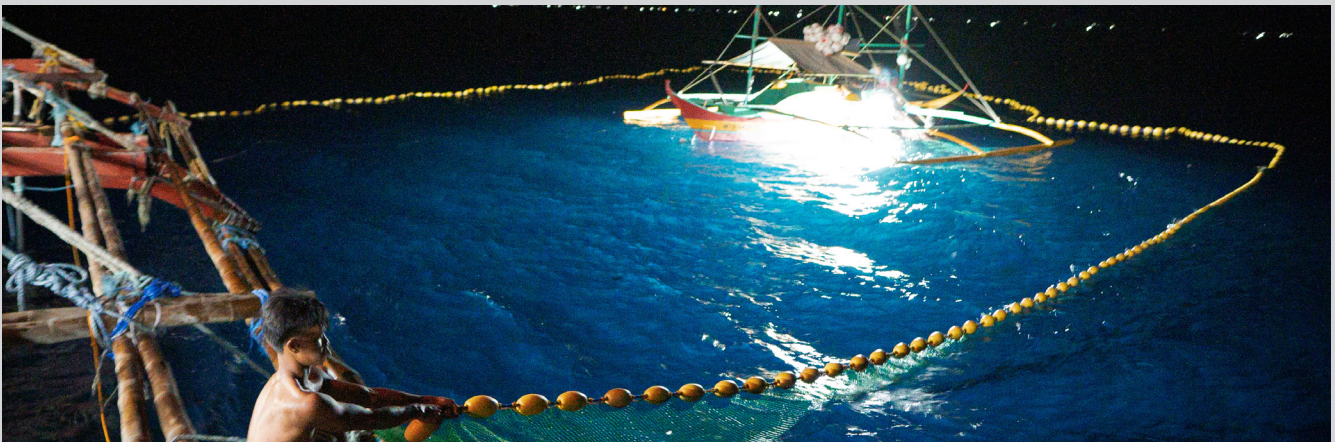
It is being carried out with the assistance of the BFAR, local government units, and other government agencies to facilitate the transfer of technologies, which will provide fish farmers, entrepreneurs, and other end users with an additional and alternative source of income. [a](#)

— NG ARMADA



A participant performs a practical activity on the induced spawning of catfish. Photo by NG Armada

SEAFDEC/AQD intensifies round scad research; stocks up on more breeders



SEAFDEC/AQD collected round scad (locally known as “galunggong” or “tamudyos”) at Hamtic, Antique, from 10 to 12 May 2023 to stock up on breeders and refine transport strategies.

After receiving approval to operate a purse seine from the town mayor Hon. Julius Pacificador, AQD partnered with a local fishing company to locate and capture live round scad, *Decapterus spp.*, which is an important food fish in the Philippines.

Broodstock collected on 10 May were immediately transported by sea and land to experimental facilities at AQD's Tigbauan Main Station. In the second night of collection, broodstock were acclimated in temporary net cages mounted on an outrigger boat before making the two-hour trip to Tigbauan, Iloilo, the following day.

AQD successfully spawned the round scad in 2021 and grew limited numbers to early-fingerling size in 2022. Ongoing broodstock collection aims to scale up experiments and achieve commercially-viable numbers of fingerlings for grow-out. [a](#)

— RD DIANALA

PALARO '23

SEAFDEC/AQD strengthens teamwork and camaraderie through sports

TWO exhilarating days of sports activities and engaging team-building games were organized for SEAFDEC/AQD's "Palaro 2023" event, held from 4 to 5 May 2023. The participants, comprising the center's employees, were divided into two teams named "Bangus" and "Sugpo," symbolizing the research center's flagship commodities.

Team "Sugpo," led by Chief Dan Baliao and Research Division Head Dr. Leobert de la Peña, was hailed as overall champion after winning three of four major ball games and some indoor games.

"Palaro" is an in-house activity that aims to create and develop camaraderie and teamwork among SEAFDEC/AQD's employees by inspiring them to work cohesively as a team to reach a common goal. **a**

— JMD ARANAS







Team-building activity for Rizal, Manila-based employees

THE Binangonan Freshwater Station (BFS) and Manila Office of SEAFDEC/AQD recently organized a team-building activity on May 25, 2023, at the Boso-Boso Highlands Resort and Hotel in Antipolo City. The event aimed to enhance camaraderie and strengthen social bonds among employees.

The activity included a variety of games, such as basketball, darts, badminton, and other indoor games. These games encouraged teamwork, communication, and problem-solving skills among the participants. Team Bangus emerged as the overall winner. [a](#)

— NG ARMADA





Students and volunteers haul a sack full of trash they collected from Barangay Nanga, Tigbauan, Iloilo's shorelines. Photo by JF Aldon

Coastal cleanup comes to Tigbauan's 2 barangays

SEAFDEC/AQD staff, students, and barangay officials held a one-day mass cleanup drive along the coasts of the barangays of Nanga and Parara Norte in Tigbauan, Iloilo last 30 June 2023.

Volunteers and employees collected plastic sachets, bottles, and other non-biodegradable waste that had washed ashore and been found on the shoreline. The activity not only beautified the coasts but also raised awareness about the significance of proper waste management.

The activity was part of the golden anniversary celebration of the research institution and also a way for SEAFDEC/AQD to give back to the community. **a**

— **NG ARMADA**



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Practical activity in Igang Marine Station in Nueva Valencia, Guimaras. Photo by EV Antolino

Sandfish culture training for the Pacific Community

TRAINEES from Papua New Guinea, Fiji, Kiribati, and French Polynesia completed a training on sandfish aquaculture that was organized by SEAFDEC/AQD for the Pacific Community (SPC) on 15 May–1 June 2023 in the Philippines.

SPC, an international development organization with 27 members, mostly Pacific island countries and territories, requested SEAFDEC/AQD to conduct the training after recognizing the potential of sandfish as an ideal species for aquaculture in their areas.

Formally called the Training Course on Sandfish (*Holothuria scabra*) Seed Production, Nursery, and Management, it was held at SEAFDEC/AQD's Tigbauan Main Station. Trainees attended lectures and practical demonstrations by experts to gain the skills and knowledge needed to culture sandfish, a species of sea cucumber which is prized as seafood, especially in Asia.

Site visits were also done at the Igang Marine Station (IMS) in Guimaras and the brackishwater station in Dumangas, Iloilo. Practical training sessions on sea ranching, nursery pen harvest, and sea ranch monitoring took place at IMS and Molocaboc Island in Sagay City, Negros Occidental.

Topics and activities were on sandfish biology, broodstock collection and management, natural food organisms, spawning induction, egg collection, larval rearing, and nursery systems management. Grow-out culture and sandfish processing were also taken up.

CRUCIAL, IMPORTANT TRAINING

After completing the training course, Dr. Alok Kalla, Principal Fisheries Officer of the Ministry of Fisheries in Fiji,

stated that the training is crucial to generating income and local employment from the pristine waters of Fiji.

"It is very important to our economy, indeed, we are grateful. Please continue to support us through our services to make our dear Fiji a success by producing eco-friendly, economical, and socially acceptable aquatic bioresources for our growing population to combat malnutrition and create low-cost high-protein diets," Dr. Kalla added.

"I hope that sandfish will have a role in the development of the economy of the different countries in the South Pacific," said Dr. Edgar Amar, SEAFDEC/AQD Training and Information Division Head, during the closing program conducted on 1 June. "Aquaculture of the sandfish can supplement the harvest from the wild. It can also be a tool for stock enhancement or stock management."

Neiribati Tabe, Senior Fisheries Assistant of the Ministry of Fisheries and Marine Resource Development Coastal Fisheries Division in Kiribati said that they "are very fortunate to be part of this training" which increased their capacity and skills as aquaculture staff.

"As a country that only has four aquaculture species cultured in our hatchery, we are thankful that we get to learn and understand other species and techniques introduced from the special topics," Tabe added.

The sandfish culture training course is currently SEAFDEC/AQD's most popular training program, with six batches held since the beginning of 2023. [a](#)

— NG ARMADA