

[AFCD sets up modern mariculture demonstration farm \(with photos/video\)](#)

To guide the local mariculture industry to adopt modern and sustainable operation, the Agriculture, Fisheries and Conservation Department (AFCD) has established a modern mariculture demonstration farm at the Tung Lung Chau fish culture zone this year.

An AFCD spokesman today (June 28) said, "The demonstration farm has adopted a semi-submersible steel truss cage farm design that can withstand strong wind, waves and ocean currents and is durable. Equipped with modernised technology and management, such as a real-time surveillance system, a real-time water quality monitoring system, an automated feeding system and a solar and wind power generation system, the demonstration farm can operate in the open sea with better water exchange at a larger scale and increase production capacity."

The spokesman said the dimensions of the demonstration farm are about 91 metres in length, 28m in width and 7.5m in depth, with a design draft of about 6.5m, and the effective aquaculture water volume is about 11 000 cubic metres. Taking into consideration the selected site in Hong Kong and similar environmental conditions in the coastal regions of the South China Sea, the demonstration farm is designed to withstand extreme weather and rough sea conditions.

The demonstration farm is composed of a main structure, culture nets, a mooring system and mariculture supporting facilities. The main structure is an all-welded steel structure with a steel truss connecting the floating steel ballast tanks. It has a five-point mooring system to secure the farm in the designated location. In addition, the demonstration farm has three main cages and the culture nets are fixed on the main steel structure to form a fish culture area to prevent the escape of fish and the invasion of predators.

The spokesman said the location of the demonstration farm at Tung Lung Chau is the site with the strongest ocean currents among the existing fish culture zones and hence a suitable demonstration site for large-scale open sea cages. The AFCD is conducting mariculture studies at the demonstration farm to collect empirical data for future reference.

With support from the Sustainable Fisheries Development Fund (SFDF), the Hong Kong Polytechnic University is running a project on promoting modernised and sustainable mariculture at the demonstration farm. It provides hands-on training at the demonstration farm and lectures to conventional mariculturists and people who intend to join the mariculture industry with a view to helping the local trade to develop modernised and sustainable mariculture practices. To enhance the effectiveness of mariculture production and promote food safety of fisheries products, the Standard Operating

Procedure (SOP) and the Hazard Analysis and Critical Control Point (HACCP) of the target fish species would also be developed with data acquired through culture trials and training.

The SFDF aims to help the local fishing community move towards sustainable or high-value-added operations so that the trade can enhance its overall competitiveness. Applications for the SFDF to carry out projects and research that would contribute to fostering the sustainable development and enhancing the overall competitiveness of the fisheries industry, and bring benefits to the operations of the local fisheries community as a whole, would be considered on their individual merits by the AFCD.

