

30,000KG A MONTH

Singapore engineer pivots from oil rigs to 'fish farm of future'

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SINGAPORE: A high-tech fish farm floats just off the coast of Singapore, part of a plan by a retired engineer who once built oil rigs to bring diners cleaner, healthier seafood.

The tiny city-state imports 90 per cent of its food but hopes to locally source about a third of it by 2030 to guard against supply disruptions, such as climate change, disease and conflict.

So officials are backing projects such as Eco Ark, a giant aquafarm that produces seabass, grouper and threadfin for restaurant tables across the city of nearly six million.

The facility harvests 30,000kg a month, which ex-engineer Leow Ban Tat, founder of Eco Ark

and the Aquaculture Centre of Excellence, says is 20 times more per hectare than traditional open-net cage farms.

"There is a great difference in what we do because we believe in technology," Leow, who once built oil rigs, said.

The structure, which sits on a purpose-built submersible platform, filters seawater through an ozone machine to kill disease-causing pathogens before then transferring it into fish tanks six metres deep.

The tanks simulate ocean conditions to keep the fish swimming against the current, making them leaner and more nutritious, and shield them from threats such as disease, plankton blooms



Aquaculture Centre of Excellence Farm Eco Ark fish farm CEO and founder Leow Ban Tat outside the facility in Singapore on Dec 6. AFP PIC

and oil spills.

Leow, 65, said the water is so clean that, unlike other farms, Eco Ark has no need to add antibiotics, which help protect fish from disease but can cause resistance in humans over time and affect the environment.

Adult fish are given frozen squid as well as pelleted feed, with younger ones also given pro-

biotics "which helps with both digestion and physiological function" and improves the performance of the animal", he said.

Leow is also looking to cut emissions from his "fish farms of the future" by adding solar panels and has built a hatchery after finding that juvenile fish imported from Malaysia and Australia carried diseases.

Eco Ark's fish are delivered to more than 80 restaurants, supermarkets and specialty shops that put a premium on them being freshly harvested and healthy.

Leow hopes eventually to export not only the fish but the technology for the Eco Ark, which he says can be built near coastal areas to shorten delivery time and cut costs. **AFP**