

SEA URCHINS' PEST TO PLATE JOURNEY

Exports Many regard the black, spiny sea dwellers as trouble but one Japanese fisherman sees a gourmet goldmine, writes Michael Smith in Hirono.

It is early morning in the northern Japanese fishing town of Hirono, and Yukinori Shitautsubo is searching for treasure. A diver emerges from the choppy North Pacific waters with a net full of black spiny objects and Shitautsubo, who is steering the boat, and the crew cheer in excitement.

The 42-year-old is not looking for pearls or gold or Japanese tuna. Instead, the day's prize are sea urchins – globular echinoderms which are a marine pest in parts of Australia but now sought-after globally for their rich creamy flesh.

Known as *uni* in Japan, sea urchin roe is considered a gourmet treat in Asia, although many Australians would balk at tucking into the interior of these alien-like sea-dwellers. They are also an environmental problem due to global warming, gobbling up the kelp forests that reduce carbon emissions and provide vital spawning and eating grounds for other marine life.

Shitautsubo, the fourth in a generation of fishermen and seafood processors from the tiny fishing community of Hirono, which was devastated by the 2011 tsunami, hopes to change all that.

For the past decade, he has been using science to revolutionise the way the town where he grew up harvests sea urchins. His company Kita-Sanriku Factory (KSF) now hopes to export the process, as well as seafood, to the rest of the world.

Top of his list is Australia, where he has a \$20 million-plus vision to build sea urchin "ranches" in New South Wales, Victoria and Tasmania and create a new export trade for Australia.

"I know how to make sea urchins tastier. We have the know-how, and we want to bring that know-how to Australia," Shitautsubo tells *AFR Weekend* during an early morning boat tour of the "ranch", where his sea urchins are harvested before being sold around the world.

"If Japan's fishing industry doesn't change there won't be a future for the next



generation, so we would like to work with friendly nations like Australia to not only make money but to invest back in Japan's fisheries and make them profitable for the next generation."

It is the final week of the harvesting season and divers are busy at work scooping plump urchins from the ocean floor where they are cleaned, processed and packaged. The grand prize is the short-spined sea urchin, which are less common than the long-spined variety but far tastier.

I think we can create something like this in Australia.

Yukinori Shitautsubo, CEO Kita-Sanriku Factory Inc

Our boat is drifting over one of the 178 trenches dug into the shallow bedrock by the local villagers 55 years earlier to more efficiently accumulate seafood. The ditches have been utilised by Shitautsubo as part of a four-year process to cultivate high-quality sea urchins.

The method, which Shitautsubo has worked with scientists at Hokkaido University to implement, involves hatching baby sea urchins on land which are raised in



Kita-Sanriku Factory CEO Yukinori Shitautsubo at the sea urchin farm (above). Baby sea urchins during cultivation (above left). PHOTO: CHRISTOPHER JUE

tanks for a year before being released into the ocean. After another two to three years, when they grow to a plump 6 centimetres, they are moved to the trenches and fed high-quality kelp for another year.

Shitautsubo and his supporters, which now include three Australian state governments, believe this method creates a tastier product because they are cultivated before their quality deteriorates after the age of five, and based on what they eat. Left unsupervised, sea urchins eat lower-quality kelp and ingest plastic and other human waste.

He now wants to bring the same model to Australia. In April, he set up a local subsidiary of his company KSF in Australia, and is discussing partnerships with Australian companies and universities as well as getting advice from Austrade.

Shitautsubo is now in talks with potential investors to raise 2 billion yen (\$21 million) for his vision to create sea urchin operations in Melbourne in 2024, Tasmania in 2026 and Sydney by 2027.

Sea urchins have been a growing problem along the coastline of south-eastern Australia for decades, devouring crucial kelp fields off Victoria, New South Wales and Tasmania. The sought-after roe is absent from most of the wild urchins, which means little commercial incentive to harvest them.

As part of his venture, Shitautsubo is exploring alternative uses for long-spined urchins, including working with pharmaceutical companies to develop fertility supplements.

His company has also pledged to address environmental damage caused by sea urchins and generate blue carbon.

Ultimately, though, Shitautsubo believes Australia could become a major global source of sea urchins. Currently, Chile is the world's top exporter at 37,464 tonnes a year, followed by Russia at 9480 tonnes. He says Australia could potentially be third at 8330 tonnes. Japan exports around 7880 tonnes.

"I think we can create something like this in Australia," he says. "The reason why I'm convinced I can do this in Australia is that short-spine sea urchins exist – about 11,000 tonnes in Port Phillip Bay – and the short-spine urchins are very tasty."

Like many Japanese people of his generation, Shitautsubo left his small community to work in the city. However, after graduating from university and a stint as a salesman he came back to Hirono when his father fell ill. He decided to try to reinvent a dying industry. In 2010, he set up his company Kita-Sanriku, which initially was focused on farming kelp. A year later, the 2011 earthquake and tsunami hit Japan. Hirono, which is more than 500 kilometres north of Tokyo, was far from the epicentre, but the fishing community was still devastated.

While cleaning up his grandfather's house, which was damaged by the tsunami, Shitautsubo found old family photos of his great-grandfather exporting abalone to Hong Kong and became inspired.

In 2018, he moved ahead with a more ambitious vision to co-operate with local producers and fisheries co-operatives to reinvent the local sea urchin industry.

In Japan, where an ageing population and a stagnant economy threatens many traditional industries such as fisheries, Shitautsubo's enterprise is a rare commodity. He believes countries like Australia are more open to innovation and new entrants than Japan, where the fishing industry is controlled by co-operatives.

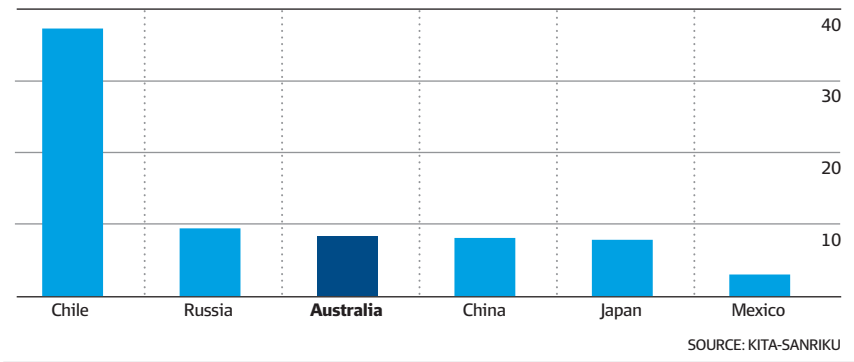
"Australia is a place that is favourable for new entrants, whereas in Japan there are too many old stakeholders. If we succeed in working with Australia, we can bring this model elsewhere."

Veteran divers from the Hirono community, who for decades have witnessed the devastation to the ocean floor from climate change, are supportive.

"It is getting harder to make a living and the industry has been impacted heavily," says Kichimatsu Hatakawa, 85. ■

At the sharp end

World's top sea urchin exporters ('000s tonnes)



ing role in global sports. Qualification for the Champions League has gone a long way to stilling criticism of Saudi investment in Newcastle United. US President Joe Biden, having described the kingdom as a "pariah" in 2019, is now keen to repair America's alliance. But its reputation may make deals more fiddly. The proposed PGA Tour-LIV golf merger has created a stink and is being assessed by the US Justice Department to see if it violates antitrust law.

PGA Tour executives were hauled before a Senate committee last month. Senator Richard Blumenthal complained that a gagging clause in the deal, which could stop players from badmouthing Saudi Arabia, is "about as broad a non-disparagement clause as I have ever seen".

The deal's backers at the PGA Tour are doubtless keen to suggest the Saudis will have a backseat role: probably a very differ-

ent vision from that of Mohammed bin Salman, in which the Saudis are in control and no longer just the "dumb money".

But even if some deals do not transform

The moves also reflect a sense that there is a new window of opportunity in global sports.

the country in the way Mohammed bin Salman hopes, Saudi Arabia is part of a broader shift that is changing global sports.

The surge in capital from the kingdom is part of the rise of a new cohort of sovereign and private-equity funds that are investing in sports at scale. Bloomberg reported that

private equity firms spent \$US51 billion on sports transactions in 2021, nearly double the total of 2017.

Ownership rules are being liberalised as clubs and tournaments seek new sources of capital to stay competitive. American sports leagues are the world's best at raking in money. Since 2019, several big American leagues have relaxed their rules to allow minority investments by institutional investors. In July, Qatar's investment authority reached a deal to buy 5 per cent of the parent company of the Washington Wizards, an American basketball team.

Digital disruption has also finally reached live sports, which had been one of the last bastions of traditional television.

Increasingly viewers who have "cut the cord" on television instead watch sports through streaming services that offer live games but also on-demand highlights,

analysis and other digital add-ons. Saudi Arabia's sports splurge partly reflects the dynamics within the kingdom: a new flood of petrodollars; Mohammed bin Salman's ambition to create a more socially liberal society and to restore his tarnished reputation in the West.

But the moves also reflect a sense that there is a new window of opportunity in global sports: to grab bigger and newer audiences, to create different kinds of events and tournaments and to reinvent old ones.

The latest annual report from PIF, released this week, includes the announcement of a sports-specific investment vehicle, hinting at broader future plans.

Benzema and Ronaldo are likely to be hitting the back of the net come the Saudi autumn. The kingdom itself has plenty of other goals of its own. ■

THE ECONOMIST