

Singapore gives the world a peek into our food future

By David Goldman and
Victoria Milko
The Associated Press

Like much of the rest of the world, Singapore is racing to feed a growing population with limited natural resources. But with almost no land for agriculture, the small, wealthy, fast-paced, and densely-packed nation is doing so by embracing and encouraging new food technologies that may someday help feed us all.

In 2019, Singapore launched a program called 30 by 30, designed to spur the country to produce 30% of its food by 2030, while still using less than 1% of its land for agriculture. The program has encouraged innovation that may offer a peek into the world’s food future as land and resources become more scarce around the world.

There are rooftop farms that produce greens such as kale, lettuce, and herbs using a system that relies on nutrient-rich water instead of soil, powered by solar panels. Shrimp are grown in warehouses. The company’s largest egg farm uses automated machines to feed the chickens and sort, scan, and check each egg.

Researchers are working to develop varieties of plants that can flourish in extreme, unnatural environments — and ways to grow lobster in a lab, from cells.

But for all the country’s government-supported entrepre-



FUTURISTIC FARMING. A worker, top left photo, looks over a tank growing fish at the Eco-Ark floating fish farm in Singapore. The “closed-container” aquaculture farm designed by Leow BanTat can produce 400 tons of Asian seabass and fourfinger threadfin per year. Also pictured are threadfin fish swimming in a tank, bottom left photo, and the exterior view of the Eco-Ark, bottom right photo. In the top right photo are plants growing at ComCrop, Singapore’s first commercial rooftop farm. ComCrop produces about 20 tons of kale, lettuce, and herbs per month using a system that relies on nutrient-rich water instead of soil, solar power, and carefully controlled temperatures, wind, and light levels. (AP Photos/David Goldman, File)

neurs and sparkling new technology, the country is also learning that this kind of transformation is not so easy. Consumers can be reluctant to change, and producers have found it hard to turn a profit because costs are high. It is far from clear that Singapore will reach its 30% goal by 2030, but along the way it may help teach the world — through successes and failures — how to reduce the amount of land needed to produce our favorite dishes. The Associated Press Health and Science Department receives support from the Howard Hughes Medical Institute’s Science and Educational Media Group. The AP is solely responsible for content. Editors’ note: This story is part of The Protein Problem, an AP series that examines the question, “Can we feed this growing world without starving the planet?”

Baby mammoth preserved for 50,000 years is unveiled in Russia’s Siberia

MOSCOW (AP) — The 50,000-year-old remains of a baby mammoth uncovered by melting permafrost have been unveiled to the public by researchers in Russia’s Siberia region who call it the best-preserved mammoth body ever found.

Nicknamed Yana, the female mammoth weighs more than 100 kilograms (220 pounds) and is 120 centimeters (47 inches) tall.

Scientists believe that Yana was 1 year old when she died. Her remains are one of seven mammoth carcasses recovered worldwide.

Yana was found among the melting permafrost at the Batagaika crater in the far-eastern Russian area of Yakutia. Known as the “gateway to the underworld,” the crater is 1 kilometer deep and has previously revealed the remains of other ancient animals including bison, horses,

and dogs.

As permafrost melts, affected by climate change, more and more parts of prehistoric animals are being discovered.

Yana will be studied by scientists at Russia’s North-Eastern Federal University, which has a dedicated mammoth research center and museum.

The university described the find as “exceptional” and said it would give researchers new information about how mammoths lived and adapted to their surroundings.

In this photo released by the Mammoth Museum at the Russian North-Eastern Federal University on December 23, 2024, the university’s scientists show the remains of a 50,000-year-old baby mammoth uncovered by melting permafrost in Russia’s Siberia region. (Michil Yakovlev, Mammoth Museum at the Russian North-Eastern Federal University telegram channel via AP)



Go paperless!

Read The AR – exactly as it’s printed here – online! Visit www.asianreporter.com and click the “Online Paper (PDF)” link to view our last two issues.

Miss you,
Janice ♥

**STOP
AAPI
HATE**

Please report all hate crimes committed against Asian Americans and Pacific Islanders.
www.stopaapihate.org
www.doj.state.or.us
www.ReportHatePDX.com



**Have a safe & prosperous
Year of the Snake!**

January 29, 2025 to
February 16, 2026

Our Lunar New Year special section begins on
page 8. The issue is also available online at
www.asianreporter.com.

AFFORDABLE RETIREMENT LIVING

FOR SENIORS 62 YEARS & OLDER

WESTMORELAND’S UNION MANOR 6404 SE 23rd Ave Portland, OR 97202 503•233•5671	MARSHALL UNION MANOR 2020 NW Northrup St Portland, OR 97209 503•225•0677
KIRKLAND UNION MANORS 3530 SE 84th Ave Portland, OR 97266 503•777•8101	KIRKLAND UNION PLAZA 1414 Kauffman Ave Vancouver , WA 98660 360•694•4314

- STUDIO & ONE-BEDROOM APARTMENTS
- AFFORDABLE RENTS & NO APPLICATION FEES
- FEDERAL RENT SUBSIDIES AVAILABLE
- GARDEN AREAS & PLANNED ACTIVITIES
- EASY ACCESS TO BUS LINES & SHOPPING



WWW.THEUNIONMANORS.ORG