

Malaysia plants hope in dwarf trees

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● In Malaysia alone, palm oil plantations already cover some 5.8 million hectares



A research officer handling a test tube with a seedling specimen of the newly created dwarf palm oil tree at the Malaysian Palm Oil Board (MPOB) laboratory in Bangi, on the outskirts of Kuala Lumpur



A worker trimming leaves on a newly created dwarf palm oil tree at the Malaysian Palm Oil Board (MPOB) research station in Bukit Lawang in southern Johor state

Bukit Lawang, Malaysia

Test tubes holding plants line shelves in a Malaysian laboratory, the heart of a breeding programme for dwarf palm oil trees which scientists hope will cut costs and limit the environmental damage caused by the controversial industry.

Palm oil has become a key ingredient in everyday goods from biofuels to chocolate, leading to a production boom in the world's top two growers, Indonesia and Malaysia.

But green groups blame rapid expansion of plantations for laying waste to jungle that is home to orangutans and other animals, as well as tribespeople's lands, and sustained environmental campaigns have damaged its image in the West.

The adverse publicity, combined with rising stockpiles and sluggish demand from key importers, has led to precipitous

falls in prices.

Now the Malaysian Palm Oil Board hopes an initiative to breed smaller trees could go some way to improving industry woes.

"With this smaller variety, we can improve yields, maximise land use and improve palm oil sustainability," plant scientist Meilina Ong-Abdullah told AFP in the lab in the town of Bangi, as other women in white gowns and facemasks sliced at plants and transferred them into test



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PLANT SCIENTIST

tubes.

But the plan faces huge challenges, not least the relatively high price of the newly created trees, which may make them too expensive for many of the country's hard-pressed farmers.

Smaller space, more trees

The dwarf trees, which are about 30 per cent smaller than regular ones and have shorter fronds, are the fruit of a decades-long research programme by the palm oil board, which is a government agency.

Their small size makes it easier and quicker for the bunches of red berries from which the oil is extracted to be collected, and means fewer workers are needed for harvesting.

A greater number of the trees can be packed into a smaller space, and they produce about 37.5 metric tonnes of palm oil fruit per hectare -- twice the current per hectare average.

This should mean that less rainforest needs to be logged to cultivate the world's best-selling vegetable oil, and could make more productive use of land that is being replanted after previous clearances.

The plan may help address the problem of land scarcity for cultivation caused by voracious growth of plantations.

In Malaysia alone, palm oil plantations already cover some 5.8 million hectares (14.3 million acres) -- roughly the size of Croatia.

'Killer' price

As part of the palm oil board's breeding programme, the dwarf trees have been planted in several areas, including on an estate in Bukit Lawang in southern Johor state. The dwarf trees there are about five metres (16 feet) tall, compared to an average of about 7.5 metres for conventional trees in the area.

The dwarf trees went on sale in 2017 but take-up has been slow. At about 30 ringgit (seven dollars) each, the seedlings are around twice the price of conventional varieties.

Mohamad Isa Mansor, who has a five-hectare palm oil plantation, said he wanted to buy them -- but the cost was a "killer".

"Smallholders are poor and sustaining our daily life is a challenge due to depressed prices of crude palm oil," he told AFP.

He added: "To replant a hectare with the new variety will cost about 6,000 ringgit. Where are we going to find this huge sum of money?"

Nor does the government appear ready to step in and help. Minister Teresa Kok, whose portfolio includes the palm oil sector, told AFP that the cash-strapped government "doesn't have funds to assist smallholders to do replanting at the moment".

Using smaller trees is unlikely to be enough to take the sting out of environmental campaigns and growing opposition to palm oil, particularly in Europe.

The latest challenge facing Indonesia and Malaysia is a move by the European Parliament to ban the use of palm oil in biofuels, which industry groups claim would devastate the livelihoods of millions of small farmers.

Environmentalists were positive about the dwarf tree programme, but said it needed to be accompanied by efforts to reforest areas already stripped bare for plantations.

"My biggest concern about the palm oil sector is the destruction of biodiversity -- there should be no more clearance of forests," Mohideen Abdul Kader, from Friends of The Earth, said.

"And if possible cleared jungles should be rejuvenated."

Airbus trials drone delivery to ships



Singapore is aiming to use drones for parcel delivery

Singapore, Singapore

Airbus yesterday began trials of drones delivering parcels to ships anchored offshore in Singapore, as the high-tech city rolls out the devices for an array of tasks.

Singapore is aiming to use drones for parcel delivery, inspecting buildings, providing security and other jobs, and is working with companies and regulators to put the ambitious plan into action.

European aerospace giant Airbus said it completed the world's first shore-to-ship package delivery using a drone. It involved the device carrying a 1.5 kilo (3.3-pound) parcel to a vessel anchored 1.5 kilometres (about a mile) from the coast.

The drone took off from a pier and landed safely on the ship's deck, deposited its cargo and returned to base, with the entire flight completed within 10 minutes, Airbus said in a statement.

Airbus has partnered with maritime logistics and port services firm Wilhelmsen Ships Services for the trials.

The drones involved can carry up to four kilos of cargo and navigate autonomously along a pre-determined flight corridor to vessels as far as three kilometres from the coast.

At the moment, deliveries to ships anchored offshore are carried out by small boats.

The use of drones can make deliveries to ships up to six times faster, lower delivery costs by up to 90 per cent, cut companies' carbon footprints and is safer, Airbus said.

Nations agree 'significant' plastic cuts

Nairobi, Kenya

Nations yesterday committed to "significantly reduce" single-use plastics over the next decade, in a series of voluntary pledges that green groups warned fell short of tackling Earth's pollution crisis.

After marathon talks in Nairobi, countries appeared to have reached a deal over throwaway plastic items such as bags, cups and cutlery to reduce the more than eight million tonnes of plastics entering oceans each year.

The final ministerial statement -- issued on a day of youth protests against climate change -- made only two references to man-made global warming and none to the fossil fuels that drive it.

It said countries would "address the damage to our ecosystems caused by the unsustainable use and disposal of plastic products, including by significantly reducing single-use plastic products by 2030."

Sources close to the talks said that several rich nations, led by the United States, were influential in watering down the pledge.

An initial ministerial statement at the beginning of the UN environment assembly this



Children walk on garbage as others take part in an event to clear garbage from Lampung bay in the Sukaraja village in the Bumi Waras subdistrict of Bandar Lampung

week had proposed a commitment to "phase out single-use plastics... by 2025" -- a far stronger promise than the compromise nations appear to have reached.

"It's hard to find one solution for all member states," said Siim Kiisler, UN assembly president,

told journalists before the final decision.

"The environment is at a turning point. We don't need verbose documents, we need concrete commitments."

The world currently produces more than 300 million tonnes of plastics annually, and there

are at least five trillion plastic pieces floating in our oceans, scientists have estimated.

When asked specifically whether the US had played a spoiler role during the week's negotiations, Kiisler told journalists: "I will not answer that question."