FEATURES

Indonesia takes the chainsaw to illegal palm oil plantations

The lucrative cash crop's march into protected areas is causing massive deforestation that increases Indonesia's carbon emissions and threatens already endangered wildlife

> **BY GILLIAN MURDOCH** REUTERS, ACEH, INDONESIA



or decades, the roar of the chainsaw has meant one thing in Indonesia's national parks: illegal loggers ripping down the rainforest.

Now, the whirring is part of a fight back to cut out illegal palm oil from the international supply chain and slow the deforestation that has pushed Indonesia's carbon emissions sky high, threatening the destruction of some of the world's most ecologically important tropical forests and their animals.

In the country's first, symbolic action to stop the lucrative crop's march into protected lands a chainsaw-wielding alliance led by the Aceh Conservation Agency, Acehnese NGOs, and police teams are sweeping tens of thousands of hectares of illegal palm from the 2.5 million hectare Leuser Ecosystem.

"Plantation speculators, developers, whatever you want to call them, have moved in further and further," said Mike Griffiths of the Aceh Conservation Agency, which was created by Aceh Governor Yusuf Irwandi to manage Leuser in 2006, a year after the province at Sumatra's northern tip won greater autonomy from Jakarta.

"They do it by fait accompli ... Go in, knock the trees down and plant, and all of a sudden the local perception is that you own it. It's Wild West stuff."

Planting a cash crop used in some of the world's best-known brands of chocolate, crisps and soaps inside legally-protected forests and national parks may seem a high-risk strategy.

But with much legal land already allocated, lax law enforcement, large untapped work forces of villagers living inside remote rainforests and high crude palm oil prices, such illegal conversions make sense to many.

"The forest is seen as a green tangle with little real use and filled with dangerous animals and diseases," explained Jutta Poetz, Biodiversity Coordinator at industry environmental standards body the Roundtable on Sustainable Palm Oil.

"If this green tangle can be converted into something profitable, with the dangers largely removed, isn't that good? Plantations will develop the country, create jobs and improve people's lives. This appears to be the prevailing sentiment in Southeast Asia."

One year after Indonesia overtook Malaysia as the world's top palm oil producer, hundreds of illegal plantations are thought to riddle its

A 2007 UN report found forest conversion for palm oil plantations was the country's leading cause of deforestation, with illegal oil palm, illegal logging and illegal land clearances by fire occurring inside 37 of 41 national parks.

Leuser, Sumatra's largest rainforest expanse, and one of the last refuges for endangered Sumatran tigers, elephants, orangutan and rhinos, was one of the worst affected, it said. Industry bodies, such as the

Indonesian Palm Oil Association, insist all plantations follow government regulations, and any found playing fast and loose with the rules are targets.

"We support that illegal oil palm plantations have been cleared if they do not follow all the regulations," said Fadhil Hasan, Executive Director of the Palm Oil Association.

The Leuser chainsaw sting evicted eleven illegal estates covering 12,000 hectares, a fraction of the at least 50 other illegal estates the Aceh Conservation Agency estimates are in the reserve.

NGOs in Aceh say corruption greases the wheels of the plantation concession system. Officials allegedly pocket millions of rupiah for issuing non-binding "recommendations" to companies lacking official permits, and fail to enforce laws stipulating ten years' jail and a US\$500,000 fine

for planting in parks. Forestry officials in the area say confusion, rather than corruption, is

Conflicting maps, clashing tenure claims, and overlapping authorities mean locals, district chiefs, companies and government officials may not be aware of exact park boundaries, even in UNESCO-listed World Heritage rainforests such as

"The boundaries do not match reality in the field," said Syahyahri, head of Aceh Tamiang Forestry

"Villagers don't know who the forest belongs to. They may not have



for making the boundaries now."

Leuser's regenerating forests will form a corridor connecting two otherwise non-viable elephant herds, which became separated by the sea of illegal palm over the last decade said Rudi H. Putra, Aceh Conservation Agency conservation manager.

But keeping the high-yielding crop out will take vigilance.

"The problem is protecting the forest," he said. "Growing oil palm is easy.'

As well as planting in parks, Indonesia's oil palm industry has been accused of converting forests on carbon-rich peatlands more than 2m deep, and setting fires to clear

The Indonesian Palm Oil Association denies knowledge of these illegal activities, which not only harm the industry's reputation, but also release billions of tonnes of carbon into the atmosphere.

While the companies caught in Leuser were domestic, rather than international players, confusion and illegality seeps upwards into the global supply chain.

Blended together at mills and shipped overseas, legal and illegal oils flow into a myriad of products such as chocolate, shampoos, soaps and biofuels, leaving multinational end-users, and consumers, exposed to the risk of illegal ingredients.

While the high price of segregating oils means even Roundtable on Sustainable Palm Oilseen the maps. We are gathering data certified products cannot guarantee

illegal oils are excluded, concerns over governance problems, and the crops environmental and social impacts, are already hitting profits.

Late last month, the World Bank's private finance arm, the International Finance Corp, which has US\$132 million invested in palm oil projects, suspended all palm-related investments, because of complaints about plantations' dubious licensing, land-rights conflicts and illegal logging activities.

The same month Cadbury New Zealand pulled palm oil from its milk chocolate products, after consumer protests over the crop's role in rainforest destruction in Indonesia and Malaysia.

Back in Aceh, the Aceh Conservation Agency and police teams hope their lead can be followed in other areas.

Felling illegal palm will both save forests, and safeguard the industry's long-term financial security by weeding out cowboys, said Hariyanta, police chief of Aceh Tamiang district.

"The local people only get a day's food from a day's work on the illegal plantations, but the companies get so much money," said Hariyanta, who like many Indonesians, goes by one

"That's why we go after the

Police from Aceh's Tamiang district prepare to enter an illegal palm oil plantation inside the Leuser Ecosystem, the largest protected rainforest in Sumatra.



[ARTS & CULTURE]



A blue-and-white stoneware dish with foliate motifs, above, and coralencrusted jars from the Tang Dynasty, below, are among the artifacts recovered from a shipwreck in the Gelasa Strait.

In a Singapore storeroom, treasure awaits

The hoard salvaged from a Tang Dynasty shipwreck is being stored in a museum basement and may one day become the core of a maritime Silk Road museum

BY KAI PORTMANN

r or about 1,200 years, the treasure was lying hidden between rocks and coral reefs in the shallow waters of the Gelasa Strait, a passage between the Indonesian islands of Belitung and Bangka.

Then, in 1998, fishermen diving for sea cucumbers stumbled across ceramic bowls embedded in a pile of sand and corals.

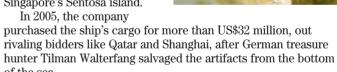
They dug a hole, and 17m beneath the ocean surface, and discovered a sunken vessel with more than 60,000 artifacts on board, mostly ceramics from Tang Dynasty China but also unique pieces dating back to the ninth century.

The discovery excited scholars, who viewed it as a proof of a maritime silk road, the watery counterpart of the overland Silk Road, which connected Asia to the Mediterranean.

Eleven years on, the treasure of the Belitung wreck remains hidden from the eyes of the general public.

Most artifacts are kept in a depot in the basement of Singapore's Hua Song Museum, waiting to possibly become the core of a Maritime Silk Road museum yet to be built in the city-state.

"On board the ship were rare treasures," said Alvin Chia, executive with the Sentosa Leisure Group, which develops tourist attractions on Singapore's Sentosa island.



In the entrance hall of the storeroom, Chia explained the most

impressive pieces, shown on wall charts. "Let's see the real stuff now," he then said, drawing a

Arranged on 25m-wide steps leading up to the ceiling, rows of jars and bowls fill the vast storeroom, all once packed on board a 20m-long and about 5m-wide Arabic dhow that sank on its way from China to Oman, most scholars believe.

At first, it was the sheer scale of the ceramics, originating from different kilns from all over China, which struck the researchers.

"The quantity of pottery on the ship demonstrates that there was a highly organized production system in China ... a mass production system more highly organized than any known previously," said John Miksic, an expert on Southeast Asian archeology at Singapore National University.

An inscription on one bowl reads, "the 16th day of the seventh month of the second year of the Baoli reign," dating it to the year 826 in the latter period of the Tang Dynasty (618 to 907).

It was also the motifs on the pottery that captivated the scholars. "The artists are kind of crazy," Chia said, cautiously pulling out one bowl after the other from the racks. "They go around with a lot of patterns.

Lotuses, dragons, Chinese calligraphy and Buddhist symbols are mixed with geometric decorations from the Muslim world and Islamic scripts praising Allah.

"The fusion of these two cultural worlds," as Miksic put it, was also represented in the presumably most spectacular object — an octagonal cup, made of solid gold and featuring dancers from

With a weight of 684g and a height of 8.9cm, it is "the largest

Tang Dynasty gold cup ever found," Chia said. A cargo with the value found aboard the Belitung shipwreck is

rare, Miksic said. "Perhaps a shipment of this quality left China once every decade or even longer," the archeologist said. "We may never find another." Not surprisingly, the gold cup along with 10,000 pieces of

silverware and blue and white Chinese porcelain, is not kept with "We have it in a very high-security government store," said

Pamelia Lee, head of Singapore's Maritime Silk Road Project. Singapore bought the treasure with the objective "to be able to tell the story of Singapore's early origins and to be able to tell the story with our neighbors," Lee said, adding that the emphasis was now on doing research, studying the artifacts and building up a collection, rather than on constructing an iconic museum.

"We are at the beginning of a big, long and mountainous road,"