

# Regenerating land to generate income?

I VISITED North Kalimantan two months ago, with Tarakan as one of the stops. As our boat approached the Tarakan jetty, I noticed a vast construction site, initially thinking it might be the long-awaited bridge connecting the mainland.

However, my local friend informed me that it was, in fact, a large pulp and paper mill. Although I couldn't find much information about this project online, it sparked my curiosity about the state of timber plantations in North Kalimantan.

Upon examining the online Nusantara Atlas, I discovered that about 36,000 ha and 31,000 ha in Nunukan Regency and Tana Tidung Regency, respectively, were covered by timber plantations. However, close to 0.8 million ha of the North Kalimantan province was considered non-forested or degraded. Much of this land was deforested in the 80s and 90s, with some deforestation occurring in the last two decades.

Unfortunately, many of these lands were abandoned without subsequent rehabilitation or utilisation, even though some were designated to be timber plantations. Regrettably, such mistakes were prevalent throughout Borneo, with these sites serving as reminders of past misjudgments.

There has been an idea to revitalise such degraded lands in Borneo, offering dual benefits. Firstly, the proposal suggests growing wood for energy, particularly in the form of wood pellets, to meet the increasing demand from Japan and South Korea.

In recent years, Indonesia and Malaysia have witnessed a growing export of palm kernel shells (PKS) and wood pellets to these countries due to their decarbonisation policies. While the potential of PKS can be estimated more accurately, as it can be sourced directly from mills, the potential of wood pellets remains unclear,



with Dr. Goh Chun Sheng

considering the numerous degraded or abandoned timber plantation sites scattered throughout Borneo.

Secondly, the current trend of pursuing carbon credits has also prompted the idea of carbon sequestration through timber plantations, provided it is done sustainably. Given the extensive areas of degraded land, a significant amount of carbon could be sequestered, offering opportunities for companies seeking carbon offsetting solutions.

Ideally, the cost of regeneration might be fully covered with both pellet production and carbon payments. However, the implementation of such a strategy in Borneo is yet to be defined.

The next day, our journey continued as we took another boat from Tarakan to Malinau via the Mentarang river.

Malinau Regency, situated at a relatively higher altitude, is known for its vast area and low population density. It was established in 1999 when Bulungan Regency was divided and later became part of the newly formed province of North Kalimantan in 2012. The regency encompasses the Kayan Mentarang National Park, which covers approximately a quarter of its total area. Meanwhile, about half of the total area is classified as limited production forest or Hutun Produksi Terbatas (HPT).

Malinau is an intriguing site that has long been a subject of study and experimentation



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for various conservation and tourism projects. In the early 2000s, a series of research and conservation projects were launched in Malinau, aiming to conserve the intact forests through incentive schemes, including payment for biodiversity and eco-tourism.

Setulang was developed as a tourism site, emphasising its 'Village Forests' well-conserved with traditional Tane'olen forest management practices. Although I did not have the chance to visit Setulang, I saw the Padan Liu' Burung cultural stage near the Regent's office in Kota Malinau and the great crocodile statue.

I also learned that the Indonesian coal producer, Mitrabara Adiperdana (MBAP), is currently constructing the first pellet plant in Malinau through its subsidiary, Malinau Hijau Lestari (MHL).

According to the latest news in May 2023, the commercial operation date is set to be in 2025, with an annual output capacity of 150,000 tonnes. Its 10,000-hectare timber plantation, mainly consisting of eucalyptus, kalinda, and

sengon, will serve as the raw material source. The pellets will be exported through Tarakan port to Japan, capitalising on the country's feed-in-tariff scheme.

Japan has shown keen interest in promoting bioenergy since the Fukushima incident in 2011. During my two-year stay in Japan, I witnessed various efforts to reactivate abandoned forest plantations in rural areas, driven by bioenergy policies and the aim of revitalising these regions.

The primary focus is on decentralised heat and power generation for local use. However, the declining rural population presented challenges to these endeavours. Nevertheless, the government is determined to create high-income green jobs and attract young people to rural areas.

Additionally, the Japanese government is encouraging companies to source biomass from overseas for co-firing with coal in large-scale power plants, primarily to meet the needs of industries and major cities like Tokyo. However, this has sparked debates regarding the sustainability of biomass and

the concept of co-firing with coal.

The government is now exploring various monitoring mechanisms, including certification, to ensure the sustainability of imported biomass, particularly from Southeast Asia. However, Japan seems to have limited options available to achieve its decarbonisation targets.

Vietnam stands as a major supplier of wood pellets to Japan and South Korea. Notably, its timber plantation area has been expanding without depleting natural forests. While these plantations hold lower biodiversity value compared to natural forests, they store carbon and produce wood pellets for renewable energy.

This makes it compelling for Borneo to explore new opportunities for reviving abandoned timber plantations and degraded lands. However, careful and honest assessments must be conducted before embarking on large-scale projects to ensure they align with the objectives of deploying bioenergy without creating

further harm to the already damaged environment.

A few years back in Central Kalimantan, I once heard an honest confession that resonated deeply: "If you bring in chainsaws, they will cut down the forest in no time for quick money."

It would be unrealistic to overlook this aspect of human nature. Therefore, designing a proper incentive system to drive more sustainable development remains a crucial challenge. It will likely require multiple rounds of trials and errors to find the most effective approach.

The question that remains is whether we have enough time in the face of the climate crisis?

*Dr Goh Chun Sheng is a researcher at Harvard University. He studies sustainable development in Borneo, captivated by the myriad complexities and possibilities it holds.*

*His book, Transforming Borneo: From Land Exploitation to Sustainable Development, was published by ISEAS - Yusof Ishak Institute in Singapore in March 2023.*

# Cancer survivor takes up sea swimming challenge

Jenne Lajjun

**KOTA KINABALU:** Three women and a man, including a breast cancer survivor, braved the open sea to swim 10km to the Mamutik and Manukan islands in preparation for an open water swim event in September this year.

They are Pamela Fletcher, Jerry Joibi, Claire Andrew and Rainy Tioh, who survived cancer.

Rainy, who is organising an upcoming Pink Ribbon Open Water Challenge, took up the challenge with the trio as she wanted to bring home the message of strength, courage and hope espoused by the Kinabalu Pink Ribbon, a non-governmental organisation (NGO) that raises awareness and provide support for those affected by breast cancer.

She said she took up swimming only a few years ago when she started participating in triathlon events where swimming is one of the three disciplines involved.

This was the longest swim she attempted and was an opportunity to inspire other breast cancer survivors to stay strong in battling their illness.

"Facing the challenges of



Jerry (right) and Pamela swimming with Rainy on the boat.

in case of an emergency.

Route logistics and safety were provided by Borneo Paddle Monkeys, Kota Kinabalu's most experienced SUP tour operator.

BPM already had experience escorting swimmers as it was

swim, Pamela, 57, said that the four of them have known each other for a few years, mainly through their participation in triathlon events in Malaysia.

"We would train together. The longest distance we've swum

plans that suited their abilities.

"We swim mainly in the swimming pool and would occasionally swim at Tanjung Aru beach but early this year, there were a lot of obstacles doing this - the crocodile sighting, red tide,

Facing the challenges of an open water swim is like battling my cancer. The currents, waves, swells, and the chopiness of the water were similar to how I dealt with the side effects of my treatments. Life is full of challenges, so staying positive is crucial. I am grateful for my journey as it has taught me to be grateful for every moment.

Rainy Tioh

swim, especially because of the storm on the way back.

"We are now more determined to continue open water swimming and want to swim to all the islands in the Tunku Abdul Rahman Park because it was just so beautiful," she added.

She said that they started swimming at sunrise so the atmosphere was calm and serene.

"When we rested during our swim, we could see the city and islands in one panoramic view. It was a cloudy morning so we couldn't see the mountain but if it was clear, it would have been visible.

"Then, when we approached the islands, the water was

She said there were really big swells during Kapas Marang and it was her first experience so that was a bit intimidating but noted that one just have to learn to be calm and confident to swim through it.

On the other hand, there were no big waves during their swim to Mamutik and Manukan, but it rained a bit so that was again another challenge, she said.

The important thing about open water swimming is safety, so we made sure we had escorts and a rescue boat to accompany us," she said, adding that they wore safety buoys and goggles.

On that note, Pamela felt that Kota Kinabalu has all the potential to become an open water swimming destination.



an open water swim is like battling my cancer," said Rainty, describing the unexpected storm when she was first diagnosed.

The currents, waves, swells, and the chopiness of the water were similar to how I dealt with the side effects of my treatments. Life is full of challenges, so staying positive is crucial. I am grateful for my journey as it has taught me to be grateful for every moment," she said.

The swimmers were escorted by stand-up paddlers (SUP) Nick Boura, Lizzie Chin Ming Hwan and Louise Lang Chong San of Borneo Paddle Monkeys, with Kahmis driving a rescue boat provided by Kinabalu Yacht Club

benih last March's record-breaking five-island swim.

Starting from Tanjung Aru, the swimmers headed for Mamutik and Manukan with rest stops on each before swimming the longest and toughest stretch from Manukan back to Tanjung Aru.

The first leg of the swim was perfect with clear weather and fantastic views of beautiful coral reefs with myriad species of marine life visible through the clear waters around the islands, but the sea condition became turbulent when a sudden storm blew through on the return leg.

One of her teammates in the

is 3.8km in the Ironman so this year, we decided we wanted to challenge ourselves to do a marathon open water swim as we didn't have any plans to participate in any triathlon events. There are many distances for a marathon swim but the minimum would be 10km.

"In preparation, we (Jerry, Rainty and Pamela) participated in the Kapas Marang International Swimathon (6.5km) in March and the Labuan Cross Channel Swim Challenge (5.5km) with Jerry, Rainty, Claire and myself, in May," she said.

Pamela added that they were self-coached, watched YouTube videos, and selected training

is jenuh - so it was difficult to get in a lot of open water swim practice," she said.

She added that Rainty was very inspired by her participation in the Kapas Marang and Labuan Cross Channel swims and wanted to organise an open water swim event for this year's Breast Cancer Awareness Month.

"We would like to help give the Kinabalu Pink Ribbon some mileage from our swim," explained Pamela.

"Basically, we all just enjoy open water swimming and have always wanted to swim to the islands. From Tanjung Aru, the islands look so close and reachable but it was a tough

clear and corals were gorgeous with different colourful fishes swimming about.

"We actually slowed down to admire the view! It was so different from Kapas Marang and Labuan where there were no corals or fish ... That's why we were so keen to swim to the islands because the deep water is beautiful," she said.

Pamela also shared that she believes open water swimming help builds up confidence "because of the water depth, waves, current ... really have to work hard to overcome those fears but once you have, it's so much fun!"

water swimming destination suitable for all levels.

"Novice swimmers can keep to the shallower waters of Tanjung Aru while more experienced swimmers can venture further out to the islands and enjoy its beautiful underwater world.

"It's an exciting sport that challenges your mental and physical strength while at the same time rewards you with an incredible opportunity to admire and bond with mother nature," she said.

The Kinabalu Pink Ribbon Open Water Swim event is on Sept 16. For registration and more details, log on to <https://www.facebook.com/sabahkpr>.

