

BIMP EAGA Business Council Chairman (Malaysia, Sabah) representing the private sector and representing IUCN Expert provide Independent Ecological Landscape Observation Technical Report after the field trip to SBH Kibing Silicon Material (M) Sdn Bhd Project.

This is part of the Development that is coordinated by Sabah Maju Jaya

Map 1: Shows SBH Kibing Silicon Material (M) Sdn Bhd Project Site Office, Located in Bangau Beach Landscape, Sikuati.



Brief report is prepared at the of the field visit (Carried out on 26 February 2024) to the Project Site that is currently managed by **SBH Kibing Silicon Material (M) Sdn Bhd Project**. The field visit was arranged by Madam Eve Charlie, to allow us to understand the operation of the project including the status of the ecological landscape of the project site. This report is also prepared as a response to the recent report viral by JOAS (Jaringan Orang Asli Sabah).

Photo 1: Presentation made by Madam Eve Charlie, representing the Management of SBH Kibing Silicon Material (M) Sdn Bhd.

Soil Characteristic of the Ecological Landscape

Based on the soil and landform classification made in 1974, the landform within the project area comprises of tidal swamps 20%, beaches 30%, mountain cuestas 15% mountains 35%, with the following parent material which includes sulphidic alluvium, sulphidic peat, alluvium, sandstone and mudstone (Soil Association includes Weston, Tanjung Aru, Maliau and Crocker)

Sulphidic sediments commonly occur in environments with reducing conditions, decaying organic matter and a sufficient availability of iron and sulphur. Sediments settling in sheltered estuarine waters commonly contain a significant amount of pyrite transported from elsewhere in the marine environment. Brackish tidewater contains dissolved sulphate and in sheltered waters lush vegetation quickly colonises soft muds, fuelling sulphate reduction. The highest sulphide contents are found in this environment. Drainage and floodwaters often provide the first indications of sulphidic alluvium or sulphidic peat soils, for example water draining from this area (i) periodically black or dark brown (looks like tea), (ii) Periodically milky, (iii) Periodically red, carrying an oily sheen or scum or depositing gelatinous or curdy ochre.





Photo 2: One of the outlets for the riverine ecosystem which is tidal swamp (periodically black or dark brown (looks like tea), (ii) Periodically milky, (iii) Periodically red, carrying an oily sheen or scum or depositing gelatinous or curdy ochre).

Ecological process may occur within this project landscape. Some of the project site contains of freshwater. The sulphate content of fresh waters is low so significant amounts of sulphides do not accumulate, even in waterlogged environments. However, through changes

in relative sea level or the progradation of the coastline land that was once tidal with brackish water flooding may become riverine with freshwater flooding and sulphidic sediments may be buried by peat or non-sulphidic alluvium.

Suitability for Agricultural

In a sulphidic alluvium and sulphidic peat ecosystem, the soil pH is less than 4 and may be as low as 2. This extreme acidity is damaging and, also, brings into solution toxic concentrations of aluminium, heavy metals and arsenic. Under these conditions, soil micro-organisms are decimated which restricts the release of plant nutrients from decomposition of organic matter; natural vegetation is limited; the range of crops that can be grown is severely restricted and yields are low. Based on the interview with Local Community, it is very difficult to do the agriculture in this ecological landscape.

Photo 3: Interview with the Local Community.

Acidity may be corrected by liming, but raw acid sulphate soils may require more than 100 tonnes of limestone per hectare, and this must be incorporated throughout the normal rooting depth of the crop. Unless limestone is available locally, it is not practicable to apply anything like the required amount. Flooding, for rice cultivation, usually eliminates acidity but iron toxicity and possibly sulphide or other toxicities may then occur.



Suitability for Aquaculture

Floodwaters drainage and floodwaters from sulphidic alluvium and sulphidic peat ecosystem can carry hazards far from the original source of acidity. Very high levels of acidity, dissolved iron and aluminium can appear in drainage waters and low levels of dissolved oxygen have been reported in other similar ecosystems.



Photo 4: Original Vegetation Cover of the Project Site.

Due to the nature of the ecosystem (based on soil characteristics) fish kills occur when fish are trapped by a slug of acid water. Shellfish and worms are probably even more seriously affected because they are unable to escape. Death is caused by damage to the gills by both acid and aluminium. Clogging of gills by iron precipitation has also been reported in aquaculture previously in a similar ecosystem. Acid-induced skin damage has been implicated in ulcerative diseases of fish. The degradation of the

habitat reduces its productivity, particularly in respect of spawning and nursery grounds for fisheries. In some places, surface water or shallow groundwater draining from acid sulphate soils is the only source of potable water and irrigation water in the dry season. This water is commonly polluted by heavy metals and arsenic, and always contains concentration of aluminium that is far in excess of standards for drinking water. Summary, Socio economic activity related to Agricultural and Aquaculture is very restricted in this ecological landscape.

Current employment status

Total Employment is about 1,808 and **90% of them is a Sabahan (1,627)**, where 56 Sabahan working in Management Department, 300 Sabahan working as Professionals Technicians, and 1,271 Sabahan working in the operation site.



Photo 5: Group Photo during the Field Visit. Some of the Kibing's Workers is originated from Sabah.

The usage of the Water in the Project Site



Photo 6: Ground clearance is currently carried out.

The release of the wastewater from the project operation is zero due to the project is using the recycling process. The following paragraph illustrated how the water usage within the project site.

- Water sources are gathered from the man-made reservoir that is located in the mining area.
 - Silica Sand is extracted from the mining site with water, channelled to the processing plant.
 - Processing plant washed the silica sand to gather 98% of silica quality, and water is channelled to water recycle system.
- Zero water is discharged from the overall system. Any water that needs to be released is channelled to sedimentation pond.



Photo 7: Silica Sand Extraction is carried out by Sand-Extraction Machinery



Photo 8: Natural Water is extracted from the Mining Site, to be used in the Silica Washing Process.

Photo 9: Raw Silica Sand is channelled to Processing Plant using 12 inches' diameter piping system.





Photo 10: Silica Sand Processing Plant

Photo 11: Use water or water that is received from the processing plant is gathered here at the Water Recycle centre (to be used in the Processing Plant)



In Summary, no wastewater is released direct to the site. Monthly water analyses were carried out by the project to monitor potential pollution occurred by the project operation. Total Solid Suspended value may increase due to the early construction but during the field visit, the water quality is maintained which is below the risk index.

Access to the Beach



Photo 12: Access to the Beach

The jetty is constructed crossing the beach landscape. However, according to the management, the beach still can be accessed by the public. The main confusion is the current road is previously utilised by the public to access into the beach landscape. Therefore, the management of SBH Kibing Silicon Material (M) Sdn Bhd is recommended to inform the surrounding community that the beach can be still accessed for any kind of activities. However, the vicinity area from the jetty construction is made restricted due to “Risk and Safety Reason”, especially during the operation of the Jetty Construction.

Photo 13: Jetty (Less than 900 meters) is currently constructed.





Photo 14:
Structure of the
Jetty (Below of the
Jetty) still can be
passed by public
except during high
tidal.

Photo 15:
Condition of
the Beach
that is still
unpolluted by
the project.



Other benefits of the Project

The project brings road and electricity development into the vicinity areas shown in the following photo. The project also provides re-settlement plan for the affected community.

Photo 16: Road and electricity development within the project site



Photo 17: Proper Boundary is established by the project. Affected communities are provided new house as a re-settlement plan.

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Ex-Warisan leader claims party only good in criticising

'Warisan did nothing for Sabah'

KOTA KINABALU: Tanjong Kapor Assemblyman, Ben Chong, cautioned the people that the opposition, especially Warisan, would continue with its antic of undermining the GRS-PH State Government.

"This is their modus operandi... which is to criticise others in order for them to look good in the eyes of the people. This is because they have no achievements of their own to show. Therefore, they have to resort to criticising others to make themselves look great," he said.

"They realise that they have nothing much to offer or tantalise so they humiliate or mock others trying to appear more superior and knowledgeable."

Ben said when Warisan President Datuk Seri Shafie Apdal was the Federal Rural Minister from 2009 to 2015, he had a total budget of RM34.6 billion and could have used part of the allocation to resolve all of Sabah's water, electricity and road issues.

"But he did nothing for Sabah. And the same goes when he was the Chief Minister from 2018 to 2020. During this time, we don't expect him to solve the water and electricity issues completely, but even a little was not done to improve the situation.

"But now they are criticising and putting GRS down just so they can hide their own flaws and weaknesses. I feel sorry for people who need to do that. It is so incredibly pathetic.

"If they have realised the plans and projects that GRS had started and is already in the implementation stage, they would know that we are not ignoring the plight of the people but are in the process of solving it," said Ben, who is also Gagasan Rakyat Tanjong Kapor Chief.

He said Hajiji announced recently during his address to the civil servants that the GRS State Government has just taken over the management of SESB from the Federal Government this year and they are now working on ways to improve and stabilise electricity supply.

"Same goes with the water issue where



Ben



Teo

lion will be operational in 2027. And the expansion project of the Kogopon Dam which is to be ready in 2026 will increase the capacity from the current 40 million litres per day (MLD) to 80 MLD. These projects which are already being implemented will resolve the water issues faced by the people," he said.

Ben won the Tanjong Kapor seat in 2008 on a Warisan ticket and retained his seat in the 2020 snap Satta election. However, he left Warisan to throw his support behind Hajiji on Feb 6 last year after the failed coup attempt by some Umno assemblymen and Warisan.

Meanwhile, Gagasan Rakyat Kiulu Deputy Chief, George Teo, said Hajiji has done his utmost best for Sabah after taking over the Chief Ministership three years ago.

"However, the opposition, especially Warisan, has not been fair to Hajiji as they continue to attack the GRS Chairman with lies and slanders, including dragging his family members into it.

"Everyday, one can see on social media about videos mocking the Sabah Maja Jaya slogan as well as Hajiji. The problems, such as bad roads, electricity and water, among others, as mentioned by the opposition, were nothing new.

"The problems were there for the past 20 years or more. Warisan ruled the State for more than two years and what have they done to solve these problems? Nothing. Warisan should give constructive criticisms rather than indulge in lies and slanders," said Teo.

He said Gagasan Rakyat has been growing from strength to strength and this may have made the opposition worried about its



The Bangau Beach in Sikuati. Inset: Dr Raymond.

Sand not from the beachfront

DAVID THION
SIKUATI (Kudat): The silica sand meant for the RM2 billion Kibing solar glass panel project will be sourced from private land, leaving the pristine Bangau Beach untouched.

Allaying the fears of netizens, International Union for Conservation of Nature (IUCN) member, Dr Raymond Alfred said the beach is not going to be mined for the purpose.

IUCN is an international organisation involved in nature conservation and sustainable use of resources. It is a global authority on the status of the natural world and measures need to safeguard it.

Instead the sand for the Kibing project would be derived from private land behind the beach which was previously occupied by a salt extraction enterprise.

The netizens and nature enthusiasts were worried that the beach would be destroyed by sand mining by SBH Kibing Logistics Service (M) Sdn. Bhd.

"The project brings road and electricity to the vicinity. It also provides resettlement for the affected community with new

The China company's investment in the private land that attracted some dissonance on its commercial activities was first dismissed by former Tourism, Culture and Environment Minister Datuk Jafry Ariffin.

Jafry said the Environment Protection Department (EPD) has studied the environmental issues identified during the Environmental Impact Assessment (EIA) process on the project before it started.

According to EPD Director, Vitalis Moduying, every phase of the project was being assessed with a total of four EIA reports presented to the department, two for the processing plant at Kota Kinabalu Industrial Park and two for the Sikuati mining site and that the developers have complied with all stipulated regulatory requirements.

"The environmental issues raised by local residents on the silica mining project in Sikuati were looked into. Based on the EIA report, the proposed project will not involve the extraction of silica sand on the beach, and there will be a sufficient buffer zone provided between the beach area and the project site.

that initial finding by the EPD was that the dark water had overflowed from a natural pond outside the mining area into the white sand beach and sea due to heavy rain.

According to the EPD, the blackish water was a normal characteristic of the water due to the peat soil type in close proximity to the mangrove area.

She said: "I was informed by the EPD director that this is the natural colour of the water even before the sand mining project started."

Sabah Environmental Protection Association (Sepa) President Alexander Yee visited the site to investigate the situation and concurred with the findings of the EPD on Feb 17, this year.

Dr Raymond said, based on the soil and landform classification made in 1974, the project area comprises tidal swamps 20 per cent, beach 30 per cent, mountain cuestas 15 per cent and mountains 35 per cent.

With the following parent material which are sulphidic, alluvium, sulphidic peat and alluvium, alluvium, sandstone and mudstone (soil association includes

