

EAST COAST TO PROSPER: RICH, INDUSTRIALISED, DEVELOPED

1. POIC - the industrial nucleus

In Sabah, the focal point towards a massive, sustained, industrial take-off is in POIC. This is due to the geographic centrality of POIC in relation to Sabah's planted oil palm areas. No other industries in Sabah offer the potential vast spread effects as that of oil palm. Although oil and gas is also very big in Sabah, its employment and economic spread effects are much more limited than that of oil palm. Recent studies undertaken by the foremost researchers in the world have ranked oil palm in Sabah as having tremendous potentials for development – relative to other planted areas in Malaysia for large scale value adding especially of the palm biomass sector.

The noble prize winner for economics, Paul Krugman who won the prize based largely on his work on the importance of geography in relation to development said, "Yet, rivers and ports surely do matter. In new geography models in which a system of cities evolves, these observations are in effect reconciled. Favourable aspects of a location, such as availability of a good harbour, typically have a "catalytic" role: they make it likely that, when a new centre emerges, it will be there rather than some other location in the general vicinity. But once a new centre has become established, it grows through a process of self-reinforcement, and may thus attain a scale at which the initial advantages of the location become unimportant compared with the self-sustaining advantages of the agglomeration itself. In an odd way, natural geography can matter so much precisely because of the self-organising character of the spatial economy.") P. 148, The new economic geography: Past, present and the future, Masahisa Fujita and Paul Krugman, Papers in Regional Science, 2004.



NATIONAL BIOMASS STRATEGY

National Biomass Strategy 2020

The first National Biomass Stragegy, undertaken by Agensi Inovasi Malaysia (AIM) with the help of the world renowned consultant firm, McKenzie, was launched on November 2011. This strategy lays the foundation and directions including a detailed costing of biomass mobilization to create wealth from palm biomass 'waste'.

Of the 25 million dry tonnes of biomass which could be aggregated and used, "about 44 percent of this volume would be available in Peninsular Malaysia and 56 percent in East Malaysia, the bulk of which would come from Sabah" page 25, NBS, 2020) – see Figure 1.

Biomass available Chemicals Bulking Less than RM 250/tonne Million tonnes More than RM 250/tonne Biodiesel Oleochemicals Butterworth (3.84)Sandakan Lahad Datu 2.23 1.62 (5.70)(8.09)0.71 3.00 5.09 Kuantan 4.99 (6.15)Bintulu 3.70 (8.26)1.84 6.43 Port Klang (9.77)Kunak Tawau (1.60)(1.76)Pasir Gudang 0.40 5.75 (7.39)4.28

Figure 1: Biomass Development Potential is in Sabah's East Coast



National Biomass Strategy 2020. Version 2.0, 2013

The excitement and investment opportunities the palm biomass industry possess led AIM to undertake the 2nd Biomass study to keep up with the rapidly developing positive momentum generated globally, especially in developed countries such as Europe, US, Japan, South Korea and China. In this second study, the consultants analysed in detail the mobilization of biomass, assessed the best use of palm biomass, in particular, the specific product segments which Malaysia and Sabah should promote. These are the bio-pellets, bio ethanol and bio-based chemicals product segments. Through their in-depth analysis of the biomass situation, the consultants confirmed the earlier McKenzie study that of all the palm biomass available in Malaysia, Sabah has the greatest cost competitive advantage to mobilise biomass, especially in Sandakan and Lahad Datu (see Pg13, NBS Version 2.0, 2013).

Sabah LEAP 2016-2035 (Sabah Long Term Strategic Action Plan)

In 2015, the State government commissioned the latest development plan. In this study 6 economic sectors have been identified as key growth drivers. Of these, oil palm with a cumulative GPD terms of RM81 billion ranked second, just behind oil and gas in terms of GDP impact for the period 2016-2035. Over this period, the key objectives are:-

- Strengthen productivity growth, competitiveness and the adoption of sustainability practices.
- Accelerate investments to grow high value downstream palm oil sector
- Maximise usable biomass production from palm plantations, including via inter cropping.
- Position Sabah as the premium producer of sustainably produced palm-based products.



Sabah Biomass Strategy

In 2015, AIM in collaboration with the State government launched the State-level biomass strategy. This in-depth study with research provided by Poyry (Poyry Management Consulting Pte Ltd) highlighted the great potential the biomass industry in Sabah holds and the specific regions of where the potentials are (see Figure 2).

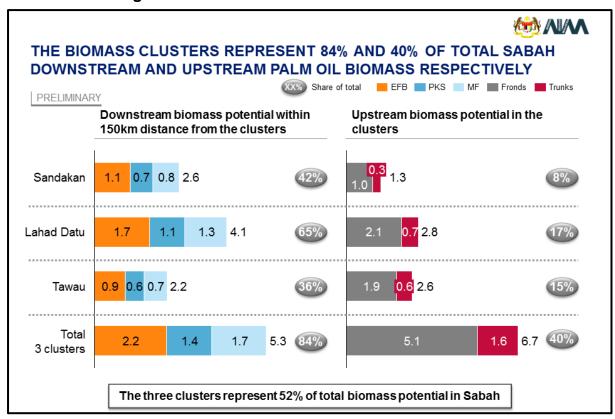


Figure 2: Biomass Clusters in Sabah's East Coast

The study recommended 4 phases of development for the period 2016-2032.

Phase 1: Bioenergy, pellet plants improvement and due diligence for first chemical plants.

Phase 2: 1st wave of bio-based chemical plants and OPF mobilisation (2 Integrated MEG/ethanol and an integrated xylitol/ethanol plant).



Phase 3: 2nd wave of bio-based chemical plants and large scale OPF

mobilisation (integrated MEG/ethanol plant and first integrated

n- Butanol plant).

Phase 4: 3rd wave of bio-based chemical plants (Integrated MEF plant,

Integrated Xylitol plant and integration of n-Butanol plant).

2. Vast East Coast investment potentials

We hold the view that in the East Coast the agriculture, manufacturing and services sectors (tourism) in total has more business and development potential than the West Coast of Sabah. Historically, this has been the case as reflected in the timber and cocoa industries. Much of the timber extracted was in the East Coast. And all cocoa planted (about 240,000 acres in 1985 was in the East Coast. This explains why the East Coast has more major towns (Lahad Datu, Sandakan and Tawau) than the West Coast. It has more airports and seaports than the West Coast.

These developments were determined by location of resource availability and will increasingly be more so as logistics, transportation networks and the world becomes internationally more connected in doing business. The aim would be to continue to find ways to realise potential investment opportunities by first identifying the key economic sectors then bridge the missing links in a production process. An example of this is the current POIC effort in developing the biomass collection centres.

PEMANDU

The main recent study on Sabah's development is that by PEMANDU focusing on the Southern region which covers specifically Tawau and Lahad Datu; Sandakan was later added. The aim of the study was to identify how certain key sectors growth can be accelerated in development. The three focal sectors are oil palm, tourism and agriculture with oil palm as the anchor for



industrialising the East Coast. Specifically the direction recommended is to initiate and expand oleochemical and bio-chemicals manufacturing (see Figure 3).

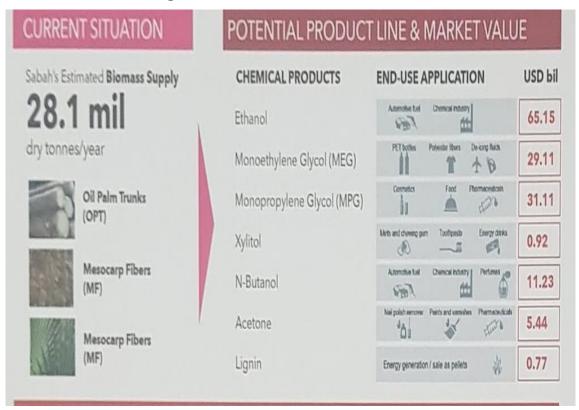


Figure 3: Sabah's Biomass Direction

3. Great potential for further industrial land and port development

As the hinterland logistics improves, in this case through the Pan Borneo Highway currently under construction, the industrial facilities in POIC will serve all manufacturing and industrial – services related needs well along the East Coast of Sabah. Today, the facilities and infrastructure developed in POIC is just a starting point. POIC will continue to develop basic and specialised infrastructure as needed by the producers. In this, the present POIC site has great potential for expansion (see Figure 4). The 112km potential industrial land for development along the coast confers it the potential for developing this area as one of the world's largest industrial and port complex.



Figure 4: Lahad Datu, large industrial land and coastline for port development



4) Moving forward

Apart from the oil palm industry, POIC will want to mobilise resources to develop other industrial clusters. The focal clusters are oil and gas, SMEs, halal sector, logistics, aquaculture, and other resource base sectors (see Figure 5). It does this by drawing on resources within Sabah – Southern Philippines, Sulawesi, P&G and Kalimantan.



Our Business Model PORT & LOGISTICS INDUSTRIALIZING CLUSTER SABAH Through Industrial Clustering BIOREFINERY Concept CLUSTER REFINERIES FERTILIZER OL & GAS Palm Oil CLUSTER Downstream Industries SMI CLUSTER **OLEOCHEMICALS** HALAL CLUSTER ROOD **ACUACUTURE** AGRICUTURE CLUSTER POIC 8 | Copyright® 2017 | POIC Sabah

Figure 5: POIC Lahad Datu, Business Model

5) Conclusion

Conclusion: East Coast to Prosper

- Oil Palm alone is a RM200 billion industry. This by itself is sufficient to propel Sabah into a vibrant industrialised State.
- Geographically, POIC has a locational advantage in relation to access to resources (aquaculture, minerals, fisheries, natural resources) in the Southern Philippines, Kalimantan, Sulawesi and P&G; consolidating these in POIC for further value adding before export. This itself would bring tremendous investment opportunities.
- POIC located along the Lombok-Makassar Straits offers opportunities which Singapore and Rotterdam managed to capitalise on in their early and continuing economic growth and development.



- 4. The centrality of POIC in Asean and South East Asia makes it a cost effective logistics consolidation and distribution hub.
- To realise all these economic and business opportunities, POIC with the recent completion of the container port has the physical foundation and essential infrastructure to get things going.
- 6. Given the economic potentials and the determination of the government both State and Federal to accelerate the development, in particular, the East Coast of Sabah with POIC as a major anchor, it is possible to visualise Lahad Datu as a thriving, large and dynamically growing developed industrial port city, within a 20 year time frame. For which by then it will be a prosperous, dynamic, industrialised and developed area. One which possesses the nucleus and potential in spearheading Sabah's industrial development.