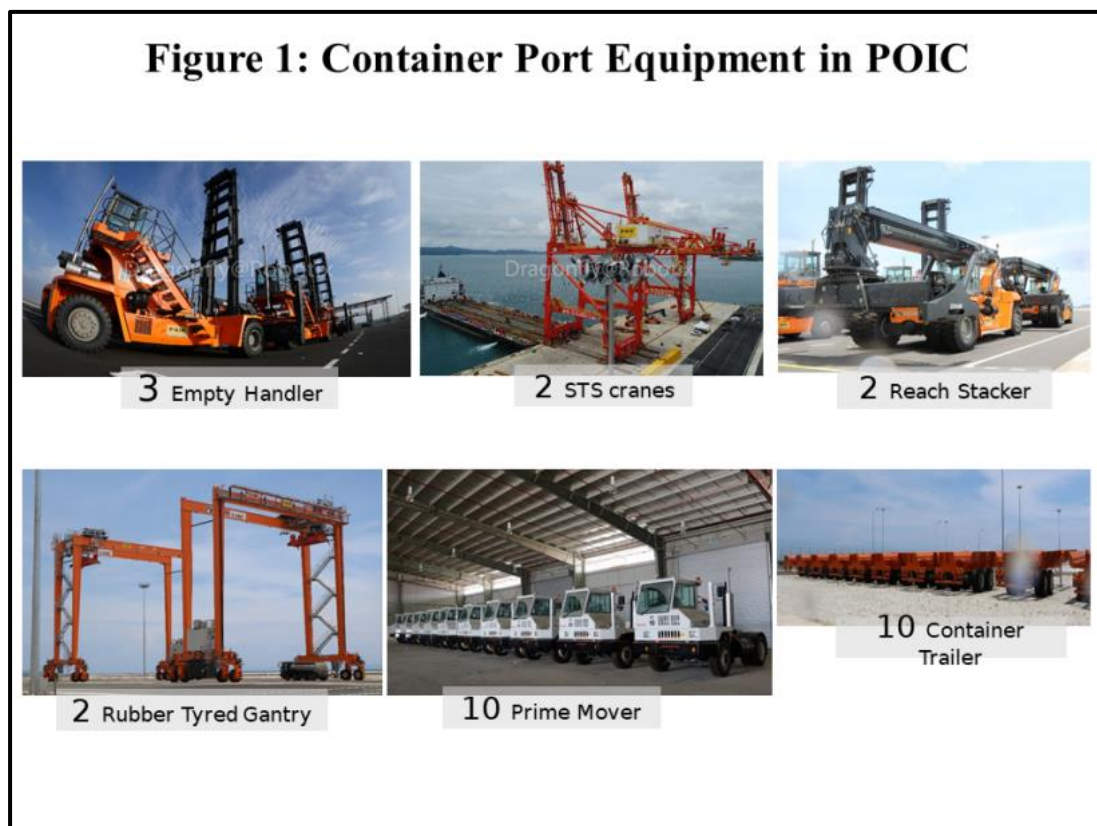
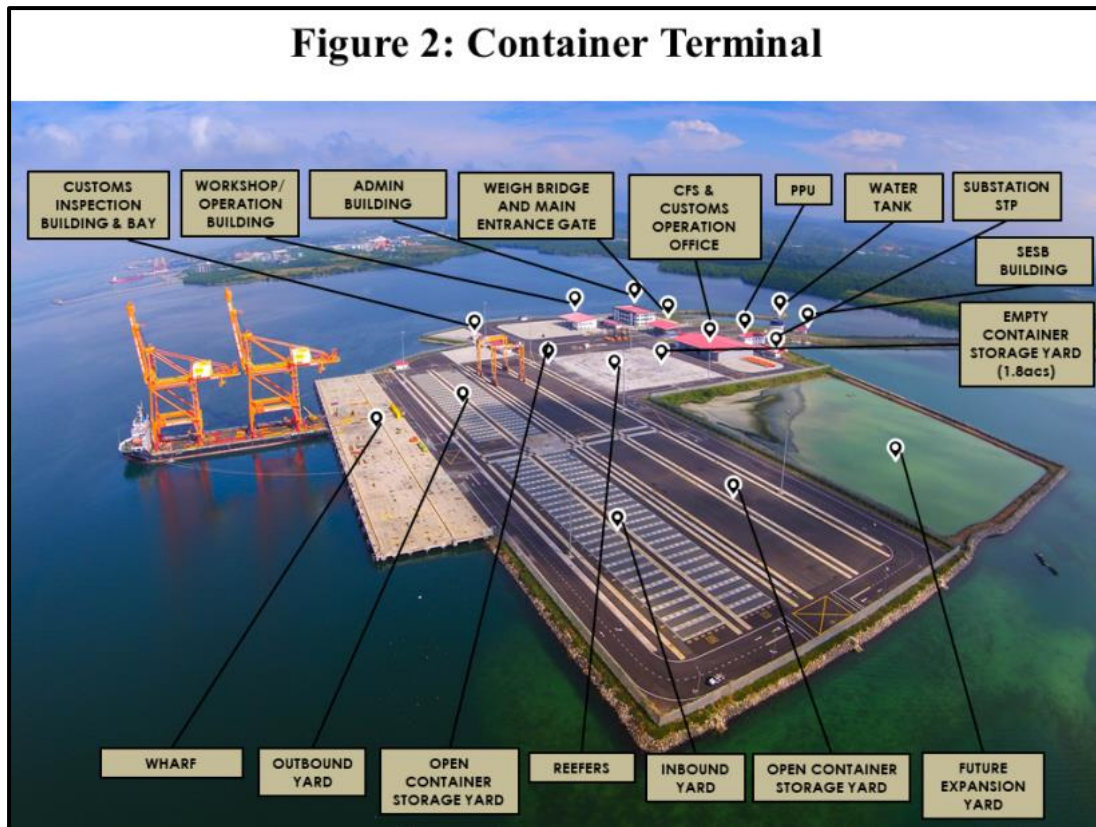


POIC'S CONTAINER PORT – OPENING UP THE REGION

(1) The Container Port

On the 17th February 2012, the Prime Minister, YAB Dato' Seri Najib visited POIC Lahad Datu. There, he approved the funding and construction of a container port in POIC. This promise was fully realised with the successful unloading of the last major equipment; the STS cranes onto the POIC container berth on the 25th March 2018. The 50,000 TEU capacity port is the first STS equipped port in Sabah's east coast. This port with a water draft of 15 meters is designed to handle Panamax sized ship and is fully equipped with 3 Empty Handlers, 2 STS Cranes, 2 Reach Stackers, 10 Prime Movers, 10 Container Trailers and 2 Rubber Tyred Gantry cranes (see Figure 1). Other facilities on the Container Port is in Figure 2).



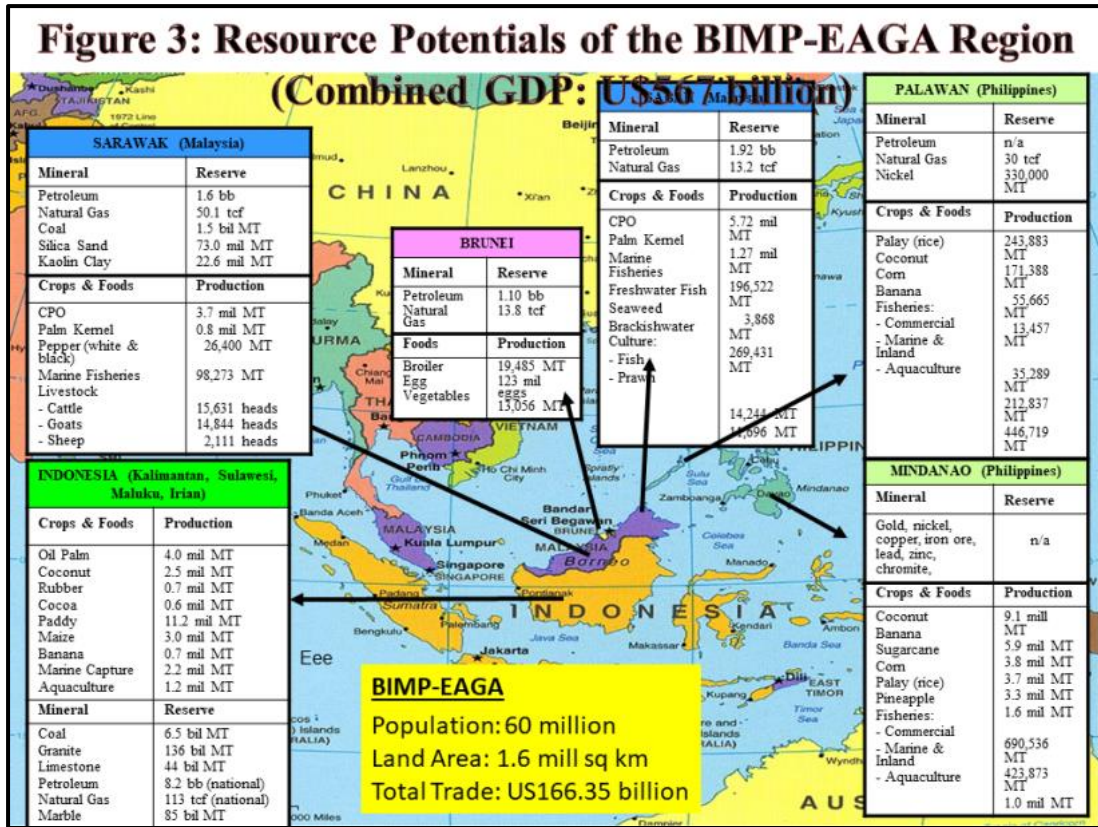


(2) Why the container port is important

The completion of the container port signifies the completion of all major port infrastructure in POIC, namely POIC’s dry bulk, liquid bulk and barge landing facilities needed to support an industrial take-off of the oil palm industry and to truly ‘open up the region’ both on land and at sea, as the Prime Minister so visualised in 2012.

SEA

On the Eastern front, seawards, the container port opens up the rich resource regions (see Figure 3) of the Southern Philippines, Kalimantan, Sulawesi, Papua New Guinea and the Northern Territory of Australia.



The strategy is to secure resources in largely the BIMP-EAGA region, consolidate these in POIC for further value adding before exporting. The geographic centrality of POIC in East Asia yields tremendous advantages in bulk cargo handling, processing before exporting especially to resource deficit developed economies such as China, Japan, Korea, Taiwan and Hong Kong (see Figure 4).

Figure 4: Resources in the East Asean Region



LOMBOK – MAKASSAR STRAIT

The Lombok-Makassar Straits could replace the Straits of Melaka as the world’s main sea shipping lane, according to shp-andbunker.com quoting Indonesian Coordinating Minister of Maritime Affairs and Natural Resources, Rizal Ramli, in 2016.

Supported by ship movement maps by UCL Energy Institute and London-based Kiln, he showed that the Lombok-Makassar Strait sandwiched between Borneo island and Sulawesi, and passing Sabah’s Dent Peninsula, is a busy shipping lane.

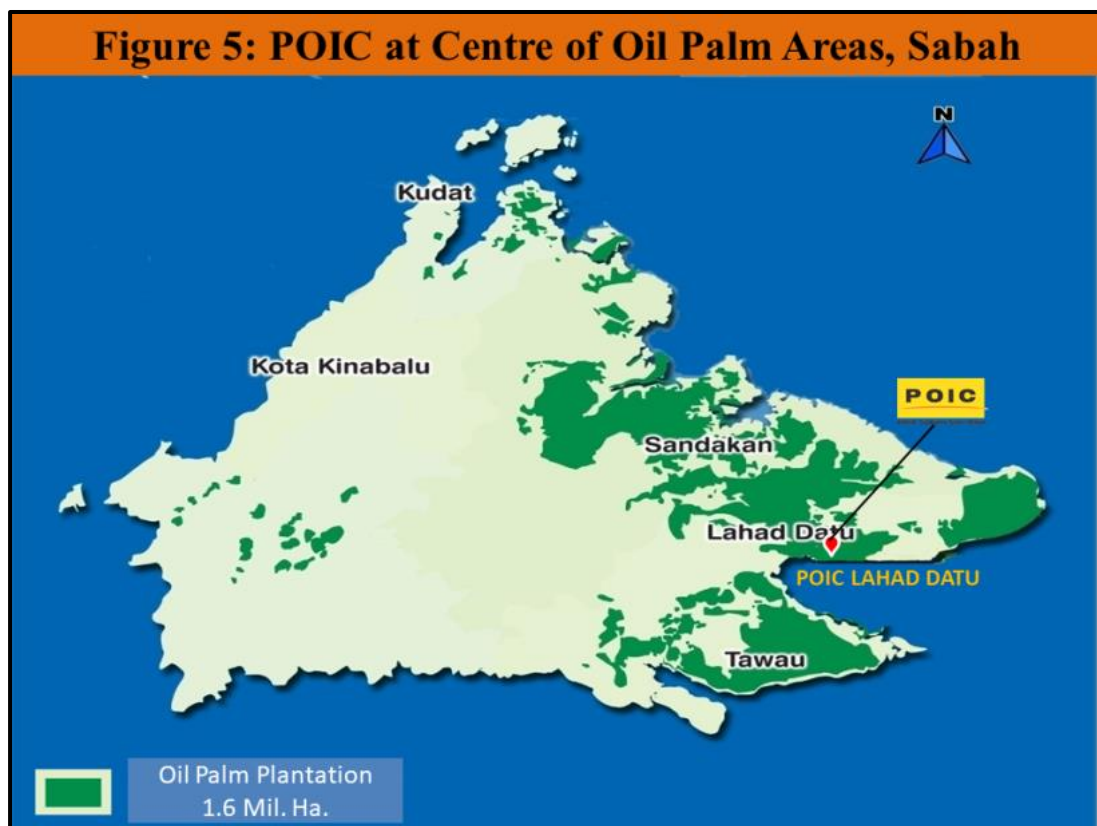
The Indonesian minister was overly enthusiastic, but the fact shows the potential. With a world now scrambling for resources, especially renewable types, the territories that POIC Lahad Datu could service represent a big-ticket item.

The comprehensive port infrastructure at POIC Port coupled and the natural deep harbour capable of accommodating Panamax class vessels have combined to put it ahead of potential competitors of the Lombok-Makassar shipping lane.

Assuming biochemical can be produced, a major necessary condition for it to reach users globally is a container port.

LAND: UNLOCKING RM200 BILLION

On land, the container port now means the entire large oil palm industry in Sabah, where POIC sits centrally (see Figure 5), can now move towards unlocking the palm oil and palm biomass potential : A RM200 billion industry, yearly. A RM200 billion every year is about 3 times the size of Sabah's economy currently. No other economic sector in Sabah offers such a scope especially in terms of job opportunities, backward and forward economic linkages and wide ranging business opportunities both big and small.



Port, especially a container-capable port, has been a hindrance for investors going into high value export-oriented downstream products. For example, although Sabah is the biggest palm oil producing state in Malaysia with about 6.5 million tonnes per year, none of the 20 oleochemical plants currently operating in Malaysia is located in Sabah. This is because a wide range of oleochemical finished products require containerisation for export. The container terminal at POIC Lahad Datu, the only one in Sabah's east coast and probably in BIMP-EAGA equipped with ship-to-shore cranes, will unlock this bottleneck and open the door to billions of ringgit in investments.

JOBS AND VAST INVESTMENT OPPORTUNITIES

When well implemented, the opening up of the oil palm industry to produce wide ranging high value products, now made possible by the POIC Container Port, would mean 'every one can have a job – especially high paying jobs'. It would mean graduates from schools, polytechnics, skill development centres, training institutes both specialised or general and universities are likely to secure jobs in this industry.

It would mean for the very first time in Sabah's economic history that there will be business opportunities at a scale never before seen in Sabah in building factories to produce industrial and household products sufficient to lay the industrial base needed to transform Sabah towards becoming an industrialised, developed and high income economy. The container port is a game changer.

In time, Lahad Datu will be the largest industrial city in Sabah, much like what the Port of Rotterdam is to the City of Rotterdam, where much of the wealth, revenue to local authorities, jobs and business opportunities are created and sustained by activities of the Port.

Like the Port of Rotterdam emerging from a tiny fishing known as Villahermosa in the Netherlands, and Singapore rising from a resource-less city state to one of the world's biggest port, Lahad Datu with it's deep water port, a strategic

location within BIMP-EAGA and lying along the Lombok-Makassar shipping route, possesses the ingredients to be, as the Port of Rotterdam concluded after a study, the Rotterdam of the East.

Therein lies the importance of the POIC container port without which, as it is now commonly known, that further downstream processing of palm oil into oleochemicals and biochemicals is not possible.

(3) Getting ahead of the competition

Indonesia now has 12 million hectares of oil palm planted as against Malaysia's 5.7 million hectares. Sabah, being the largest oil palm planted state in Malaysia has only 1.6 mil hectares.

In the world of edible oil, some 190 million MT is being produced. With palm oil (at 33% of the world's total) as the largest contributor followed closely by soyabean oil. Sabah's 6.5 million MT is thus relatively small. This means Sabah is presently necessarily a price taker in edible oils, resulting in lower margin for producers as a result of intense competition in the lower value adding palm oil segment as well as making Sabah's economy more susceptible to international 'commodity price instability'.

However, Sabah could circumvent these issues by producing products where the competition is least, such as in the area of biochemicals where there is presently limited interest generally among oil palm producers.

(4) How is a RM200 billion industry possible?

If all the palm oil and palm biomass available in Sabah are used to produce very high value added products, this industry can generate an equivalent RM200 billion worth of revenue per year. Broadly, the industry has reached a stage where the technologies and markets are ready to use palm oil and biomass to produce products previously produced from fossil fuel.

The world now demands products from sources which are sustainable and bio-degradable and the oil palm industry fits into this equation.

Essentially, palm oil and palm biomass can do most of what petroleum can do (see Figures 6,7,8). Examples of products which can be produced are as follows:-

Palm Oil use, e.g.

- Synthetic fabrics, nylon polymers,
- ferrous corrosion inhibitors
- Motor oil, lubricants, gels
- Plastics, paints
- Synthetic rubber
- Soaps, detergents, cosmetics
- Adhesive, printing inks
- Pesticides
- Food additives, nutraceuticals
- Personal care products, lycopene, beta carotene
- Nano Graphene
- Antioxidants, food colouring, UV protection, bone growth, immunity
- Sugars, xylitol
- Insulators, connectors, wheel covers for cars
- Solvents, agro chemicals, biofuel

Palm Biomass use, e.g.

- Biochar, activated carbon, biocoal
- Biopellets, bio chemicals
- Compost, fibre, animal feed
- Building materials, cushion, mattress
- Pulp & paper, plywood, block board, MDF, furniture
- Fillers in thermoplastics
- Fertilizer, soil stabilisation

Figure 6: Value Adding Opportunities in Palm-based Biomass Downstream Industries



Figure 7: Bio-Gas Industries

