

 Manuscript Title:
 Air Laut Macam Daun Pandan (The Sea is Like Pandan Leaf): Penang Fishing

 Communities, Contested Development, and "Anti-Politics"

 Authors:
 Soon Chuan Yean

 Accepted Date:
 16-November-2023

**Please cite this article as**: Soon Chuan Yean. *Air laut macam daun pandan* (the sea is like pandan leaf): Penang fishing communities, contested development, and "anti-politics". *Kajian Malaysia* (Early view).

This is a provisional PDF file of an article that has undergone enhancements after acceptance, such as the addition of a cover page and metadata, and formatting for readability, but it is not yet the definitive version of record. This version will undergo additional copyediting, typesetting and review before it is published in its final form, but we are providing this version to give early visibility of the article.

© Penerbit Universiti Sains Malaysia, 2023. This work is licensed under the terms of the Creative Commons Attribution (CC BY) (http://creativecommons.org/licenses/by/4.0/).

Kajian Malaysia, Vol., Issue no., Year, Page numbers

# *AIR LAUT MACAM DAUN PANDAN* (THE SEA IS LIKE PANDAN LEAF): PENANG FISHING COMMUNITIES, CONTESTED DEVELOPMENT, AND "ANTI-POLITICS"

## Soon Chuan Yean

School of Social Sciences, Universiti Sains Malaysia, Pulau Pinang, Malaysia

Email: chuanyeans@gmail.com

# ABSTRACT

This study identifies the developmental pathway that is taking place in the state of Penang. The focus is on the responses of the ordinary people namely fishing communities in the development pace of Penang (island), the contestation on "developmental" discourses with the state (namely Penang state government), and the ways in which state institution and communities construct the narrative of "development". Through participant observation in the field sites with the fishing community and secondary resources analysis, the paper showcases the contested meaning of "development". The research findings are on one hand by the Penang state government, which is underpinned by neoliberal economic principles, on the other hand, by the communities at large, which is multifaceted in nature.

**Keywords**: Contested development; developmental discourse; fishing community; Penang state

# **INTRODUCTION**

On 24 June 2021, Astro Awani's program, *Consider this.* aired a forum on a topic entitled "Penang Contested Development". The forum focuses on Penang's Transport Master Plan (PTMP) and the controversy of Penang South Reclamation project (PSR). The PTMP aims to achieve Penang state's grand vision to become a sophisticated and livable city, while the PSR's main goal is to create new industrial zones, in turn to finance the PTMP.

The two speakers, Penang State Exco for Infrastructure and Transport, Zairil Khir Johari and Lim Mah Hui, an economist and former local council, have diverge views on these projects, hence on Penang's developmental path. On one hand, Zairil Khir Johari supports the projects in creating job opportunities via the

© Penerbit Universiti Sains Malaysia, 2023. This work is licensed under the terms of the Creative Commons Attribution (CC BY) (http://creativecommons.org/licenses/by/4.0/).

establishment of new industrial zones by building three artificial lands because land is scarce. Environmental impact will be at its minimal level. Through the new expansion of industrial zones, commercial and residential activities will follow. On the other hand, Lim Mah Hui, representative to the civil society's voices (specifically Penang Forum) asserts that these projects will come with a great impact on the environment, quoted lengthy on the environment evaluation report; and civil society at large is not anti-development but emphasizes on a "balance" development, a development that is cost efficient, serving the people's interests vis-à-vis business interests.

This paper highlights this "contested development" in Penang. It identifies the developmental pace that is taking place in Penang. Since the 2008 General Election with the change of state government, we have seen a relatively "open" practices of politics. This change of political regime begs the question on the development processes adhered in Penang, how developmental discourses are negotiated among various stake holders. I would like to highlight the contested meaning of development that one must go beyond the monolithic narrative of developmental (economic) progress. In other words, what are the meanings of development, and its discursivity in Penang's development processes. The paper looks at the contested meaning of "development", on one hand by the Penang state government, which is underpinned by neoliberal economic principles, the development pathway accentuated on the formation of Penang's economic growth since 1970s; on the other hand, by the communities at large, which is multifaceted in nature.

I argue that Penang state development pathways cannot escape from the historical trajectories of its development since 1970s, led to the succeeding neo-liberal vision to become a global city. By "neoliberalism", it refers to a new economic orthodoxy in championing profits, which production and capital are generated via free-market capitalism, deregulation, private-public partnership, while state as prime agency of redistribution, which creates class power and the subsequent uneven development. (Harvey 2006) The discussion extends to investigate Penang state's development strategies, its logics of development, which has never separated from industrialization desire, and neo-liberal in orientation, friendly to open market, technological leaning, which the above said PTPM and PSR have played significant role in materializing them. Development also derives from bottom-up. I would like to illustrate this other aspect of development from the fishing community that desire for the nostalgia of abundance as extrapolate in material resources from the sea, the well-being of sea livelihood, and development that has moral underpinning. Alas, these responses of fishing community, which are politically expressed through local culture are transformed into technical problem.

# DEVELOPMENTAL DISCOURSE AND PRACTICES

The concept of "development" is a contested one. (Abdul Rahman Embong 2018, 13-14) "Development" discourse has its roots in the period of eighteen and nineteen century Europe with ideas of "the Enlightenment and of modernity, science and industrial modernization." (Caouette and Kapoor 2016, 1; Gieben and Hall 1992). Beginning from the period of colonial period of the Western world to decolonialization and the end of Second World War, the model of development has always based on scientific positivism aimed at modernization rooted in notions of progress, scientific methods to extract nature. From 1940s, "development" pertains to issue of economic growth. Poverty became the new problematization of the globe. (Mason 1997; Rapley 2007; Rist 2014) In 1950s and 1960s the focus was on distribution of growth up until the 1980s, with the "lost decade" of development, international organizations such as World Bank and International Monetary Fund came to the "rescue" of many Third World societies and governments. (Larrain 1989; Leftwich 2007). Another discursive shift took place with "globalization embodying the new face of old ideas of modernization, progress, productivity and scientific rationalism." (Caouette and Kapoor 2016, 3) Under the regimes of Ronald Reagan and Margaret Thatcher, neoliberalism became the buzzword of international economic orthodoxy in development industry. (Harvey 2005) In 1990s to 2000, development relates to the virtues of sustainability and human development. (Abdul Rahman Embong 2018, 13)

In short, "development" discourse was based on Western idea of human progress and the idea of enlightenment. The Third World "problems" in the post War period could be remedied through development aids and programs to archive the level of modernity that Western world has enjoyed. A meta-model of "development" based on industrialism was the key to human progress under the beliefs that industrialization and urbanization as necessary routes to modernization. Science and technologies were the new faith and the marker for success to bring progress to the globe. (Escobar 1995) When investigating Malaysian (Penang) development paths, under the pretext of the ongoing challenges of global industrialization pace that is taking place, the practice of development embeds the notion of science as the rational for growth and productivity for human progress.

# **RESEARCH APPROACH & METHODOLOGY**

While analysing the state's developmental strategies and narratives from a topdown perspective, this research also looks at the voices from the community (fishermen). As Dayabati Roy (2014) has indicated, while the state

developmental programs are marginalizing the society, simultaneously, the rural folks devise strategies to engage with the states' programs, to negotiate and resist 'development' programs for survival. I pay attention to fishing community's narrative on development and responses to the imposition of developmental discourse. I would like to borrow Bulloch's (2017) approach on "new ethnography of development." It pays attention to the ethnography of development discourses and the agencies' developmental practices and politics. It investigates the politics of meaning making in development, the contestation, and negotiations, acknowledging the non-linear relations, at the same time putting the agency (the variously positioned state actors) not "as passive recipients...people have room to maneuver within structural constraint." (Bulloch 2017, 12). The approach of "new ethnography of development" allows the researcher to investigate the developmental discourses that are underway under the neoliberal principles of economic activities mostly adapted by the state institutions, while not losing the substance of the agency's interpretation and meaning making of development.

The is qualitative research. The fieldwork was conducted for three months from July to September 2019 such as in-depth interviews and attending fishermen's local events and seminars. Both formal interviews and informal conversations with the folks were conducted. In-depth interviews with the local communities such as fishing folks, environmental group, are the respondents to the research. I conducted interviews with fishing folks at three sites, namely *Teluk Bahang*, *Sungai Pinang*, and *Pulau Betong*. Some of the interviews were conducted more than one time. I conducted an informal meeting with approximately eight fishermen organized by one of the informants and an interview with JEDI (Network for Ecology and Climate or *Jaringan Ecologi dan Iklim*). Secondary resources such as government documents, news reports, NGOs research report, environmental reports were also collected to supplement the field narratives of the fishing community.

Interviewees	Position	Location	Time
Abu	Fisherman	Teluk Bahang	29 August 2019
Abu and several fishermen (names unidentified)	Fishermen	Teluk Bahang	7 September 2019
Ah Boon	Fisherman	Pulau Betong	6 September 2019
Kumar	Fisherman	Sungai Pinang, Jelutong	July 2019

Pak Zul	Fisherman, boat owner	Pulau Betong	28 August 2019
Shamsul	Fisherman	Sungai Pinang, Jelutong	July 2019
JEDI	NGO officer	USM	12 August 2022

# THE DEVELOPMENT PATHWAYS: MALAYSIAN-PENANG INDUSTRIALIZATION PRAXIS

The development inquiry in Malaysia is hardly taken with cynicism. (Lee 2004) When investigating Malaysian development, one would find the inquiry is somehow difficult to identify its developmental trend and scope except to realize that Malaysian "development" follows the interventionist state's highly industrialized agenda. (Lee 2004; Jomo 1993, 1) With the unprecedented growth of Malaysia in the 1980s and 1990s, Malaysia's industrialization has the foundation of the late eighteenth century post-enlightenment idea of economic progress and development that closely identified with industrialization. (Jomo 1993, 1) Michael Heng (2014, 227-230) critically assesses Malaysian modernization that it is aligned with the theory and practice of Western modernization guided by the post-enlightenment ideas of growth and development prioritizing in science and technology. This aspect of development and modernity can be found in Mahathir Mohamad's 'Vision 2020' in 1991. (Khoo 1995; Goh 2002; Jomo 1989; Milne & Mauzy 1999)

In Penang, there is this parallelism between Malaysian state's development path rooted in the idea of industrialization progress as the state adopts the thrust in economic growth through industrialization in bringing positive transformation to human progress. Despite the 2008 General Election with the change of state government in Penang and the subsequent emergence of "open" practices of politics, there is a continuity of development pathways from the previous regime under the *Gerakan*-led BN government. The "unchanged" development pathways can best be identified in Penang government development preferences and discourse, which desire science and technology, market, and capital, as marker for progress. In essence, Penang development pathways are shaped by three major trajectories: the decline of port's status in the region; the adoption for export-oriented industry in the early 1970s in parallel to Malaysian economic transformation period; the subsequent global competition for cheap labor and skilled labor.

Penang lost to Singapore in 1820s as a port that served as trading routes between India-China. With the opening of Suez Canal in 1869, Penang had to reinvent itself that linked European and Chinese traders on tin mines and rubber plantations in Perak, Southern Thailand. The post-independence era saw another economic blow to Penang as it lost its free port status, followed by the competition from Port Swettenham, renamed Port Klang. (Saravanamuttu and Hutchinson 2012, XV)

The incident opened to another development pathway, the start-up of Penang's entrance towards industrialization. The Penang Master Plan also known as Munro Report was established in 1964 to rebuild Penang's economy stated the declined of Penang's economic performance and called for a program for industrialization located on the mainland part of Penang. (Ooi and Goh 2010, xxi) However, industrial growth continued to decline in Penang. In 1968, Penang state's GDP per capita was 12 percent below the national average, with unemployment rate at 15 percent. (Lee, Wein and Loke 2012, 68)

With the loss of Alliance to *Gerakan* in 1960 general election, a new master plan was completed, known as Robert Nathan Report in 1970. Unlike Munro report that focused on ISI (Import Substitution Industry), Nathan Report called for an EOI (Export Oriented Industry) strategy and infrastructure development plan. (Ooi and Goh 2010, XXIII). It called for a basic restructure of Penang economy that focused on manufacturing industries, tourism, fisheries, educational, health, and research facilities to pull Penang out from the "poverty trap." The then Chief Minister Lim Chong Eu, turned Penang's economy from an aging entrepôt into an offshore manufacturing hub for the electronics industry and tourist site. (ibid)

Arguably, Penang's developmental outward looking to become neoliberal and integrated its economy with the outside world has already begun in the 1970s as Malaysia adopted EOI strategy. The Penang Development Council (PDC) was established in 1972 to materialize the tasks. Led by manufacturing sector, it accounted from 12.7 percent of GDP in 1970 to 46.0 percent of GDP in 1990 mainly concentrated in *Bayan Lepas Free Trade Zone*. (Ooi and Goh 2010, xxii-xxiii, xxiv) Within the manufacturing sector, electronics is the primary growth engine, which accounting for 54.5 percent of all employment in 2006. (Lee, Wein and Loke 2012, 69; Raja Rasiah 2019).<sup>1</sup>

In the 1990s, Penang has become one of the major exporters in manufacturing especially in the semi-conductor sector. To continue and enhance the industrial development path, between 1991 to 2000, a new development plan, the Penang Strategic Development Plan (PSDP) recommended to emphasize on service sector in promoting higher order services such as finance, education, and information technology, medical services, in addition to the deepening of

industrial base with skill intensive, technology intensive and high-value added industries. (Ooi and Goh 2010, XXV). In 2017, the services sector remained as major contributors towards Penang's GDP growth accounted for 49.3 percent, while manufacturing was 44.8 percent. In contrast, agricultural, mining and quarrying, and construction sectors accounted for 2 percent, 0.1 percent, and 2.6 percent respectively. (Penang Institute 2019, 22)

Even though Penang has excelled in manufacturing and service sectors, competition continues to haunt Penang especially from China and India in terms of labour market. In addition, these two countries have increasingly invested to develop their innovative capacity. (Wong and Ho 2010, 26) By 2000, most of the lower value added operation of the MNCs (multinational corporations) have moved out from Penang as many of these MNCs were altering their existing operations towards higher value activities, while at the same time looking for a lower cost operations sites. Part of the problems for Penang's less impressive performance in the higher-value added activities was "the industry's inability to leverage its learning base to create increasingly higher value-added products and services in a timely manner to satisfy the higher end needs of a fast changing market." (Yoon 2012, 130) Penang needs to venture and advance its development path.

To stay competitive, middle income economies can no longer remain at its existing economic model – the low-cost producer, labour-intensive. Malaysia, and Penang, ought to shift its economic models that consists of high-value chain, knowledge- and innovation-based products and services. (Yoon 2012, 5) In lieu to these challenges, Penang seeks to move from its "traditional 'high volume, low mix' production to 'low volume, high mix' operations", to invest in more technology intensive works such as in research, design, and development. (Lee, Wein and Loke 2012, 71).

# PENANG2030: A HIGH-TECH INDUSTRIAL DEVELOPMENT AGENDA AND DISCOURSE

In conjunction to the rise for industrial competition at global level that Penang state has muddled through in the changing international industrial relations, Penang state's subsequent development pathways aim at constructing a high-tech industrial framework agenda. Penang has begun to focus on the high value-added electronics industry, information, and communication technology industry, such as chip design, water fabrication, and R & D, which requires high skilled labour with knowledge-technology-capabilities, as continued in its Second Penang Strategic Development Plan (PSDP2) in 2001 to 2010. (Au Yong 2012, 386; Ooi and Goh 2010, xxvi) Technological knowledge aligned in digitalization of market

structures became the marker for the next development path. This relates to the subsequent challenge to Penang, that is the feasibility of sustaining in production domain and the need to progress toward knowledge economy that requires a restructuring and revisiting of Penang's industrialization direction. (Hutchinson 2012, 2, 11; Yoon 2012) Another challenge was that Penang's economy is highly depended on the changes of external factors and vulnerable to external swing of global economy. (Lee, Wein and Loke 2012, 70)

As a result, Penang state government has launched the Penang2030 in 2018 as a catalyst towards building a strong economy in lieu to the changing of industrial relations. One of the development plans is to attract the next generation of electrical and electronic (E&E) companies such as in autonomous vehicles, artificial intelligence (AI), 5G and Internet of Things. (Penang2030 Unit 2019; The Edge Market 2019) This is in addition to the development of medical tourism, biotechnology, and aquaculture that require high-skilled professionals. (Kharas, Zeufack, and Majeed 2010, 82)

Penang2030 is a development plan introduced by the post-2008 DAP-led state government. It contains sixteen strategic initiatives including women's development, community welfare, digital infrastructure, tourism and culture, housing, and green, safer, and smart technology. As indicated by the Chief Minister, Chow Kon Yeow, such vision is to align with the challenges of the Industrial Revolution 4.0. (Hadzlihady Hassan, 2018) In facing the Industrial Revolution 4.0 that has shaped the world, "smart city" is seen as a global trend that Penang state ought to adapt. Penang state has planned its industries to be digitalized savvy state, capable of encountering the technological challenges that the world is operating.

The launching of Penang2030 is not a mere developmental pathway, it is a response to the ongoing global challenge of structural adjustment, which is heading towards knowledge-based economy. To achieve economic growth, productivity through technological advancement namely IT and digitalization is the (new) way to go. One can surmise that the Penang2030 encompasses the desire to build economically resilient industries (knowledge-based economy, manufacturing, and agriculture) that head toward the digital technology era.

# PENANG SOUTH RECLAMATION PROJECT (PSR)

To accommodate this global industrial trend, the necessity of land is the primary to achieve this development vision. Developmental discourse in Penang is made into the necessity of land acquisition. To alleviate land scarcity, the Penang state government began to explore coastal land reclamation and land acquisition to transform the production-based economy (P-economy) to the knowledge-based economy (K-economy). (Lee, Wein and Loke 2012, 82) In the forum, Zairil Khir Johari's justification is not without its basis of references on Penang's developmental path. He adopted this narrative that industrialization was the key to uplift Penang's growth. Penang was once reached at a poverty rate at 44 percent in the 1970s. Since it adopted the industrialization path, poverty rate went to 2 percent in post industrialization period. The reclamation projects to create the three artificial lands are necessity to create additional industrial zones as way to continue the developmental path in Penang.<sup>2</sup>

Penang state government initiated the reclamation of three artificial islands on the south of Penang Island. The reclamation land covers 1,832 hectares of land to generate a fund for an USD11 billion transport plan of the state to avoid traffic congestion, improve public transit services and relieve development pressure on the forest land. The three islands are allocated into an industrial park, housing estates, and green public spaces. For industrial purpose, it focuses on the first island – Penang South Island (PSI), measuring 2,300 acres of land (930 hectares) to attract the next generation of electrical and electronic (E&E) companies. Such initiative is to accommodate the continuous growth of the existing 480 tenants in MNC clusters at the *Bayan Lepas Free Industrial Zone*, covering the next generation E&E industry. (EIA Report 2019; The Edge Market 2019). In short, the PSI is to create a new urban-business center based on a smart city vision with digital connectivity, energy management, intelligent traffic system. (Penang2030 Unit 2019; The Edge Market 2019)

Urban city is the (new) developmental progress in the globalized world. New form of livelihood is planned to accommodate this change. In Malaysia, urban dwellers have increased from 20 percent in 1950 to 75 percent in 2018, by 2050 it is projected to rise at 87 percent. (Tan 2019, 4) The Penang's population density as estimated (2022) is 1,685/km<sup>2</sup>, ranked at the third largest in Malaysia. (See Table 1)

States	Population	Area (km²)	Population Density/km <sup>2</sup>
Johor	4,022,700	19,102	210.6
Kedah	2,170,900	9,447	229.8

Table 1: Population, Area, Population Density in the states of Malaysia,2022 (Preliminary Estimate)

Author

Kelantan	1,829,300	15,101	121.1
Kuala Lumpur	1,945,200	243	8,005
Labuan	96,800	92.0	1,052
Melaka	1,007,700	1,652	610.0
Negeri Sembilan	1,209,000	6,686	180.8
Pahang	1,612,500	35,840	44.99
Perak	2,521,700	21,038	119.9
Perlis	289,800	818	354.3
Pinang (Pulau Pinang)	1,738,600	1,032	1,685
Putrajaya	120,300	49.0	2,455
Sabah	3,390,900	73,904	45.88
Sarawak	2,470,900	124,451	19.85
Selangor	7,038,200	7,931	887.4
Terengganu	1,187,000	12,959	91.60

Source: http://www.citypopulation.de/en/malaysia/cities/

One of the approaches to accommodate this challenge is for the state government to create "Smart Cities." (Tan 2019, 2) Penang has launched its own transformation into a Smart City by 2030 through the launching of Penang2030. This was launched concurrently with the Penang Structure Plan 2030, focusing on becoming a smart and harmonious hub, aiming at three key areas namely public transportation, green building, and disaster management. (Tan 2019, 6) In addition to that is the establishment of PTMP that consists of an integrated transport infrastructure that connects between the PSI and main parts of Penang Island, such as the Pan Island Link, Light Rail Transport, trams, and water taxi services to resolve Penang's traffic congestion and transportation issue in 2009 and to accommodate upcoming urbanization.<sup>3</sup>

In April 2011, the Penang state government together with Northern Corridor Implementation Agency (NCIA) appointed AJC Planning Consultants Sdn Bhd (AJC), in association with Halcrow Consultants Sdn Bhd (Halcrow) and supported by Singapore Cruise Centre (SCC) to come out with a PTMP study. In October 2011, Halcrow submitted four reports that included: Public Transport Approach; Highway-based Strategies; Accessibility Report; Institutional Reforms. In August 2015, the then Chief Minister, Lim Guan Eng announced the appointment of SRS Consortium<sup>4</sup> as the project delivery partner (PDP) for the PTMP that estimated cost at RM27 billion. Aside from the above, there is an addition proposed plan which is a RM6.3 billion three paired roads and undersea tunnel, to be implemented by a different PDP, Consortium Zenith, as part of the plan. (Mok 2019, no page; Penang Forum 2021; JEDI Webinar 2021)

Controversy began in 2015 as the proposed cost of PTMP was estimated at RM27 billion but later risen to around RM46 billion, not including the RM6.3 billion as proposed by Consortium Zenith. As an opposition-led state then, the Penang state government could not obtain the funding from the BN-led federal government. (Vasu 2020) As a result, the Penang state government had to seek for funding for the LRT and PIL1<sup>5</sup> that estimated to cost RM15.9 billion. This was where the PSR enters the scene. To do so, SRS Consortium would need RM11 billion to reclaim the three islands, that has a total of 4,500 acres of lands. Island A will be an industrial park where the lots will be sold to the investors to raise fund for PTMP; Island B covers high-end support services; Island C will be the creation of new tourism products and residential properties. It is estimated that at a price of RM200 psf for the industrial park (Island A), Penang state can raise about RM70 billion that can cover the cost of PTMP.

The controversy as highlighted by the NGOs (non-governmental organizations) and fishing folks, were about the (in)effectiveness of PIL1 to resolve Penang's traffic congestion and unbalanced development between the island and mainland of Penang. Penang Forum's Lim Mah Hui argues that the PSR is not able to finance the PTMP. (Nambiar 2021) The state government then justified the continuation of PSR to establish smart city, expand free trade zone, retain human capital, and release development pressure on George Town. The Penang Forum is critical that all these objectives can be achieved on the mainland and the state government's weakness to recognize the unbalanced development between the island and the mainland that leads to escalating land prices and pressure on the island. (Lim 2021) Penang Forum and CAP (Consumer Association of Penang) preferred to adopt the 2012 Halcrow's proposal that focused more on implementing a public transport network instead of a RM7.5 billion highways. Other concerns are safety and environment of the blasting works under Penang Hill and Paya Terubong (to create tunnels for the highways), the effect on the Air Itam dam area and Jesselton area. Another major concern, especially on the effect of PSR is the fishing communities on fishing resources, livelihood issue, and food security. (Dermawan 2019; FMT Reporters 2022; Penang Forum 2018)

Penang's development pathways, its industrial strategy, and structures are in constant negotiation with the changing of world industrial structures, subscribing to the global trends of digitization of industrial revolution. As such, Penang's development pathways are historically contingent, that is affected by the loss of port status and the subsequent parallelism to federal (Malaysia) industrialized agendas since 1970s up to present day: from the adoption of EOI concentrates on low-value added industry to knowledge-based industry focusing on building an IT city, in pursuit of a new lifestyle and livelihood, while attaching to its urbanized framework of development that creates (industrial) opportunities as the marker for the next development path. The solution to this challenge is by upgrading the basic needs and to head toward technological savvy infrastructures; at the same time empowering the general public's participation in achieving a sustainable and technological environmentally friendly living conditions. In short, a new livelihood is being made that orient toward a combination of technology and nature. The development pathways of Penang state are becoming more neo-liberal, accommodate towards the trends of an urbanized lifestyles, and outward looking parallel to the rapid changing of the globalized economic trends.

# AQUACULTURE AND PROLETARIANIZATION

The PTMP and the PSR have invited protests from the fishing communities, civil organizations groups, politicians, and ordinary people. Beside the investigation on the physical and tangible aspect of development, one must also be critical on the discourses that these developmental pathways (and the subsequent opportunities and threats) have had on the community at large. Putting my inquiry into this perspective, this paper takes its research direction and places emphasis on the discourse of development.

The early study and research on fishing community in Malaysia concentrated in the field of anthropology such as Raymond Firth's (1946) ethnographic study on the Malaysian peasantry (fishing community) economy and Janet Carsten's (1997) study on Langkawi fishing community kinship system. Others look at issues and challenges in fishing development (Mohammad Raduan bin Mohd Ariff, et al. 2011); coastal resources management (Wong 1990; Ogawa 2004; Jahara Yahaya 1988); challenges on fishing industry and overfishing (Mohammad Ferdous Alam, Ishak Haji Omar, and Squires 2002); poverty relations and fishing industry (Saeed Solaymani, Fatimah Kari 2014); the coping strategies of small-scale fishermen in Penang and Malaysia. (Hayrol Azril Mohamed Shaffrila, Asnarulkhadi Abu Samah, Jeffrey Lawrence D'Silva 2017; Ghazali 2009, 2011) Even though these studies contribute to the research on fishing sectors, there is a vacuum in understanding the dynamic relations between the state and the society (fishing community), the politics of development vis-àvis management of development, which my study is complementing into the literature.

In managing the issue of fishing community as affected by the development paces of the state in general, and PSR in specific, the state government introduces new modern fishing industry namely aquaculture industry as the solution. Aquaculture industry provides job opportunities, new source of income, reduce scarcity of fish food source issue, and it is a high value capital generation industry, thus, assumedly to generate income to affected fishing communities. (Penang Institute 2019, 116) Between 1995 and 2015, aquaculture industry in Penang has displayed a significant average annual growth rate of 8.2 percent and 23 percent in production and value in comparison to marine-capture fisheries that has a slower growth rate of 1.7 percent and 8 percent in quantity and value. Aquaculture industry also contributed over 54 percent to the state's food fish production. (58,736 metric tons valued at RM1,090.6mil) (Vaghefi 2017, 3) As predicted by the Department of Fisheries (DOF) Malaysia, aquaculture production in Penang will continue to increase at a rate of 10 percent per year until 2020. (Penang Institute 2019, 116) Furthermore, Penang is the third-largest producer of aquaculture products in Malaysia after Sabah and Perak.

The former State Health, Agricultural and Agro-based Industry and Rural Development Committee chairman, Afif Bahardin in responding to the affected fishing folks from the PSR projects, asserts that with the introduction of aquaculture, together with deep sea fishing, water taxies, entrepreneurship and tourism, jobs will be created. In addition to that is the venture into tuna fish industry as potential site to increase the income of fishing folks. (McIntyre 2019) To the state, dealing with the issue of fishing community is about the transformation of mode of production as a way forward toward progress.

Shamsul, a fisherman, is critical to the state government's proposal to transform the fishing folks and their economic affairs to becoming breeder in aquaculture or to become watchers to boats. In the aspect of the state as the interventionist regime, proletarianization is taking place, that is "the set of process which increases the number of people who lack control over the means of production, and who survive by selling their labor power." (Tilly 1979, 1) The fishermen's peasantry identity is gradually being transformed into wage workers as breeders (*penternak*), turning the fishermen vulnerable to the new capitalist relations of production in the aquaculture industry. This uncertainty is expressed in the fishermen's nostalgia on the sea, "it is difficult to work on land, we want to go to the sea (*payah kerja di darat, nak pergi laut jugak*)." Another fisherman, Kumar, asserts that,

Even when I do not go fishing, I still go to the jetty, sit there and look out at the ocean, even without doing anything, I need to look at the ocean, it calms me down.<sup>6</sup>

To Abu, it is unrealistic to become a breeder as it requires a capital at RM1.5 million to start the business. In addition to that is the acquisition of new skill to become breeder, the new knowledge about market mechanisms. All these are beyond the fishing folks' ability to accommodate the (new) challenges in the industry rendering to their loss of autonomy in skills and industrial capacity. In the current situation of Penang, sea water pollution because of overflow from land development, low water quality has headed to incidents of disease that cause damage to the fish farms. For instance, in 2015, the production of cockles dropped by a dramatic 78 percent mostly due to water pollution. (Vaghefi 2017, 6) In addition is the environmental change that affects the quality and quantity of aquaculture production such as severe water stress caused by the El Nino phenomenon. Another challenge is labor shortage in aquaculture sector especially the competition for labor and wages in electronic and manufacturing sectors and local youths prefer to work in factories for the higher income.

From an economic perspective, Shamsul welcomes development programs; but from a fishermen's welfare perspective, "the state government does not take care of the people at the bottom" (*tidak menjaga orang bawah*). Shamsul's expression of not being concerning (*tidak prihatin*) can be taken as a local expression against the development management toward fishermen's welfare.

Fishermen are not anti-development, but the ways state government is not concerning (*tidak prihatin*) the welfare of the fishermen when handling the issues.<sup>7</sup>

Shamsul is contesting the narrative of development, one that is long-term livelihood as desired by the fishing community vis-à-vis state's over-idealized aquaculture industry. He does not agree to the way the state government handles the dispute especially compensation matter is not feasible because the fishermen cannot purchase housing property due to difficulty to secure bank loan. He suggests a cooperative structure that allows the fishermen to purchase housing from the state government, which is more secure and sustainable. The nuance of fishing folks' critical reactions to the state government's initiatives is the despair on fishing cultural lifestyle, stripping off the identity of being "real" fishing folks, whose life has relied on (sea) nature and rights to fish, and the incompatibility of the compensation programs to fishing livelihood. The issue is about the identity politics of fishing community and the transformation of that identity into a commercial category as breeder that integrates to marketization of capitals at the expense of traditional fishing culture.

Traditional fishermen will become extinct (*pupus*) and this will happen when development projects such as reclamation land projects are ready to be implemented.<sup>8</sup>

Another justification for the Penang state to adopt aquaculture is that traditional fishing as a trade has become outdated. From the state's narration, the reason for the "backward" of the industry is the shrinking of fish productivity and overfishing caused by trawl fishing. The remedy to overfishing is commercialization of fishing industry or aquaculture. To Ah Boon,<sup>9</sup> the persistence of overfishing caused by trawls fishing has to do with the negligence of local authority on the illegal encroachment of "foreigners" into the traditional fishermen's sea territory and the illegal usage of trawl fishing net within the designated area. It is a bureaucratic problem in dealing with the trawling fishing operation and the compromise of the authority when executing rule of law in protecting the traditional fishermen. The "Siamese" people work for the "*tekong*" and have encroached into the traditional fishermen territory of 5 nautical from the epi-continental sea (浅海), which they are supposed to be out about 15 nautical.<sup>10</sup>

Ah Boon was annoyed with the local authority on the negligence of reports made to the marine about the foreigners' encroachment. As many occasions have taken place, the traditional fishermen were disturbed (*kacau*) by the authority, such as checking the license and permit. Subsequently, the fishermen refused to make any report and instead approached the foreigners by themselves. Abu has similar complaint that fishermen rarely make report to the authority because they have been accused of making false report. As a result, fishermen took the matter into their own hands. To the fishermen, overfishing caused by trawl fishing is a longhauled issue and it is bureaucratic inefficiency on the authority side to capture the illegal fishing practices. However, the state de-politicizes overfishing issue and turns it into a technical and programmatically one that can be resolved by increasing productivity through aquaculture.

"Anti-politics machine" is at work. (Ferguson 1994).<sup>11</sup> By "anti-politics machine", it refers to practices of the state in "depoliticizing everything it touches, everywhere whisking political realities out of sight, all the while performing, almost unnoticed, its own pre-eminently political operation of expanding bureaucratic state power." (Ferguson 1994, XV) That is to say, we are seeing the de-politicization of development related PSR vis-à-vis fishing community's livelihood and tradition, whereby the problems of "human development" and negligence that embedded the social and political inquiries are transformed into technical problems as exercised by the bureaucratic regime.

There is a contestation on developmental progress and the threats between the fishing folks and the state. To the fishing folks' language of development,

development simply connotes the narrative of long-term survivalism, heritage sustenance (fishing culture and tradition), development with apprehension over productivity, conscience management. The conception of "traditional fishermen". the political and structural issues that faced by fishing community, are reduced to the level of individual values, attitudes, and motivations instead of seeing it as socio-political and developmental problems casted upon the fishing community by the bureaucratic state. The struggles, demands, responses from the fishermen, their political vocabulary, and statements in relation to development agendas are narrowed down as mundane and pristine from politics that the official thinking of state's development agencies incline to see the developmental projects as neutral instruments of "development" that technical solutions and social services to the fishermen can mobilize and remedy. (Ferguson 1994, 87) In this developmental discourse, fishermen's mundane livelihood and the problematique can be resolved through commercial fishing (aquaculture), open-market infrastructures, new industrial zones, land reclamation, a creation of liveable life with ICT thus ushering the policy and solution into an inquiry of productivity and growth based on science and technology akin to the Penang2030 agendas pushed by the expanding bureaucratic power. Put it simply, there is the expansion of bureaucratic power to dictate the narrative of development on how the fishermen should earn a living in the midst of the ongoing development challenges and as such marginalizing and displacing the heritage, traditions, and autonomy of the fishing community.

# LOCAL KNOWLEDGE AS 'OTHER WAYS' TO DEVELOPMENT

# "Air laut macam daun pandan" (The sea is like pandan leaf)

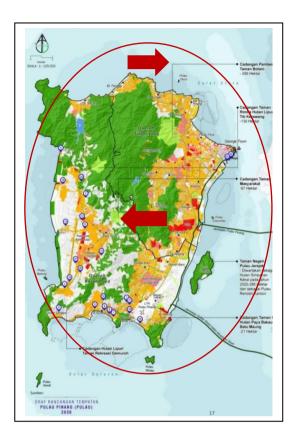
A leader of fishing community in Penang nostalgically narrated the memory of fishing life and the color and the cleanliness of the sea, the abundance of fishes to catch in comparison to the present-day destruction of the ocean. The fishing communities are declaring their version of development in the language of culture. The state's narrative of development and 'modern' workers are resisted, and their language of development is hybridized within local forms, logics, a sort of cultural assertiveness of livelihood that needs to be understood its 'other ways' of what development is not.

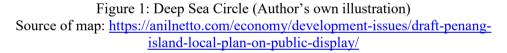
Despite the environment report published by the relevant authority on environment pollution, fishermen are incomprehensible on the scientific jargons and concepts. Abu expresses that the fishermen have practical experiences (*pengalaman*) to deal with the environmental problems of the sea, while the government authority has the letter of recognition (*surat pengiktirafan*) that filled with technical jargons on environment.

To Abu,<sup>12</sup> fishermen's local knowledge on ecology can provide tremendous inputs to fishing industry and food security. Unfortunately, this is neglected by the state government's development apparatus, as echoed by JEDI.<sup>13</sup> One negligence of fishermen's local knowledge is the ways fishermen identify pollution. Shamsul's way of identifying ecology and pollution is the identification on mud (*selot*) quality and marine fauna. Places where mud had been destroyed (*selot rosak*) are *Teluk Kumbar*, *Batu Feringgi*, and *Batu Maung* that has destroyed food (plankton) for fishes and the breeding ground for prawn. Another indication of environmental degradation is that *beranggas* (a type of shell on the rock) has become poisonous due to chemical infection, "when one's leg is cut, the wound takes longer to heal because the water is poisonous."

The sea pollution caused by reclamation is associated to sea current that is unique to Penang Island. From the fisherman's description, which is not based on marine science or oceanography explanation, sedimentation of oceanic soil, changes of water depth, and so on, their description is based on local experiences and idioms, which I describe as the following: Increasingly, the seafront (dasar laut) is polluted and has become muddy. When the digging of mud is happening, pollution takes place and affects other area especially the western part of Penang Island. Abu asserts that Pinang Island is located in the Peninsular Sea (laut selat) (between the mainland Penang and Penang Island). Pollution takes place when the sea current circles around the island in an unrestrained fashion (air jalan banyak hala), which would bring pollution (garbage, sand) from different direction around the island. The state government does not understand this sea phenomenon, known as "the deep sea is circling around" (laut selut berpusingpusing) as indicated by the red circle in Figure 1. The storm would bring the soil (that has been dig from the reclamation) into different direction of the island and gradually the soil would settle into the sea and enter the seafront. The mud is stuck and subsequently causes fishes to run away and not laying eggs.

The cause of sea pollution is man-made rather than nature. Abu complains that sea pollution was due to the irresponsible boats that carried the mud dig from the seabed from land reclamation. These boats were paid per trip. These boats which were supposed to throw the mud outside 20 nautical instead threw at 5 or 6 nautical to save cost and petrol, which is the fishing area of the traditional fishermen. This action had destroyed the harvest of the fish within 1 to 2 nautical, where the fishes lay eggs. Pak Zul's reiterates that sea water becomes muddy because of the sand thrown into the ocean from the reclamation and caused reduction of shrimps because they live on clean water surface.





The contestation of development discourse is that on one hand, sea pollution is caused by climate changes, while another narrative is sea pollution is man-made. The consideration of local tradition and logic of economy among the fishing community, their responses and resistance towards the Penang's development path (and projects) evoke a strong cultural value – morality and rights to fish, environment, and sustenance of the sea - is in constant contestation with a technocratic and programmatic logic of development adopted by the bureaucratic power of the state. We are observing the practice of local knowledge, to borrow James Scott's concept on the *mētis*, "cunning intelligence", which means "a wide array of practical skills and acquired intelligence in responding to a constantly changing natural and human environment." (1998, 313) With the practical

knowledge that the fishing community has acquired through their life experiences, they are resisting the simplification of the principles of the state's programmatic solutions because the oceanic life, in which they have lived and exercised their work are so complex and unpredictable that formal procedures and programs based on scientific rational are impossible to apply and control. The fishing folks' responses derive from the 'other ways' of seeing development deeply related to the local livelihood beyond the technology of developmental apparatus would subscribe. Sea is not a commodity, it is life.

# CONCLUSION

A closer look on Penang state's developmental projects, taking the PSR as case study, the developmental agendas of the Penang state are underpinned by a technocratic, programmatic discourse vis-à-vis fishing folks' livelihood issues pertaining to environment, human security, and moral underpinning. Development issues have become apolitical and technical one under this new political regime, paradoxically a regime that is considered more "open" and "democratic", in comparison to the previous regime.

The developmental agencies, including the politicians, their preferential orientation in comprehending the problematiques of poverty, rapid development, class disparity, are causes pressured by the neo-liberal challenges, lacking in industrial capacity to compete at international level, which requires a set of technical "solutions" to those problems: scarcity of land vis-à-vis over-populated space; commercialization of agricultural vis-à-vis traditional agricultural; modernization of livelihood and trades to catch up with the world vis-à-vis heritage and traditional livelihood; national economy vis-à-vis local economy.

In retrospect, the danger of de-politization of development, the exercises of the "anti-politic machines", is that the seemingly "open" politics in a (new) regime is the recurrent of a new form governmentality that conforms to the developmental design of the state, which only recognizes the technical and programmatically problematiques at the expense of a more democratic exercises of political rights, citizenship, and cultural autonomy.

If we continue to observe that development is indeed a discourse and practice as constructed by "a set of relations" (Escobar 1995), we will only limit our observation of meaning making (of development) within the relations of contestations, risk in losing the other meanings of development arises from other social relations. There is another proposition that development indeed has other meanings especially from the subaltern voices, deriving from local histories, values, ideologies, traditions and cultural autonomy that are always intertwine,

negotiate, and resist, with the capitalist and neoliberalist values and structures. Developmental discourse and practice are more fluid in form and that this relation is in constant change in a non-liner fashion.

# NOTES

- 1. The next industry is tourism that registered 5.96 million tourist arrivals in 2009 compared to 6.3 million in 2008. (Lee, Wein and Loke, 2012, 70) In the northern coast area of the island, small fishing villages were transformed and turned to cater local and international tourists. (Goh and Ooi 2010, XXV).
- 2. In May 2023, it is announced that the three-island reclamation project is reduced to only one island from 4,500 acres to 2,300 acres.
- 3. For a detail plan, please refer to PTMP websites at <a href="https://pgmasterplan.penang.gov.my/en/">https://pgmasterplan.penang.gov.my/en/</a>
- SRS Consortium comprises of Gamuda Berhad (60%), Penang-based Loh Phoy Ten Holdings Sdn Bhd (20%), and Ideal Property Development Sdn Bhd (20%). (Mok 2019)
- 5. Pan Island Link is a proposed 20km toll-free highway to reduce traffic congestion on the Tun Dr Lim Chong Eu Expressway (LCE) and adjacent roads.
- 6. Note that all names of the interviewees are pseudonyms. Kumar, interview by the author, July 2019, Sungai Pinang, Jelutong.
- 7. Shamsul, interview by the author, July 2019, Sungai Pinang, Jelutong.
- 8. Ibid.
- 9. Ah Boon, interview by the author, 6 September 2019, Pulau Betong.
- 10. "Tekong" refers to fisherman who own boat, while "awak-awak" or "awekawek" are working for the "tekong". The "tekong" receives bigger share of the catch as "tekong" are responsible to shoulder the cost of operation such as petrol, boat services, net, and others. "Awak-awak" takes minimum salary in which usually derives from the profit of the catch.
- Ferguson's analysis on the live stocks' economy in Lesotho, demonstrates the development apparatus of the state denies the "politics" of the incompatibility of Lesotho culture and suspend the political effects of the resistance. See Ferguson, J. (1994, 141)
- 12. Abu, interview by the author, 29 August 2019, Teluk Bahang.

13. JEDI, interview by the author, 12 August 2022, USM.

# REFERENCES

- Abdul Rahman Embong. 2018. *Pembangunan dan kesejahteraan: Agenda kemanusiaan abad ke-21* (Development and well-being: A humanitarian agenda for the 21st century). Bangi: Penerbit Universiti Kebangsaan Malaysia.
- Astro Awani's program. 2021. *Consider this.* aired a forum on a topic entitled "Penang Contested Development". Available at <u>https://www.youtube.com/watch?v=ddTraxaF2OI&list=PLFHO\_OVcpzK</u> <u>L80irpDyAzMjKxYBgmvynG&index=54</u> Downloaded on 16 August 2021.
- Au Yong, H. N. 2012. "Regional Development of Penang: A Shift-Share Approach," *Pertanika: Journal of Social Science and Humanities*, 20 (2): 375-390.
- Bulloch, H. C. M. 2017. In Pursuit of Progress: Narratives of Development on A Philippine Island. Honolulu: University of Hawaii Press.
- Caouette, D. and Kapoor, D. 2016. "Beyond Colonialism, Development and Globalization." In *Beyond Colonialism, Development and Globalization: Social Movements and Critical Perspectives*, edited by Dominique Caouette and Dip Kapoor, pp. 1-23. London: Zed Books.
- Carsten, J. 1997. The Heat of the Hearth: The Process of Kinship in a Malay Fishing Community. New York: Oxford University Press.
- Dermawan, A. 2019. "Fishermen to march to Parliament to protest against PSR project." *News Straits Times.com*, 8 July. Available at <u>https://www.nst.com.my/news/nation/2019/07/502592/fishermen-march-parliament-protest-against-psr-project</u> Downloaded on 29 May 2023.
- EIA (Environmental Impact Assessment) Report. 2019. The Proposed Reclamation & Dredging Works for the Penang South Reclamation (PSR). Volume 2: Main Report. Available at <u>https://govdocs.sinarproject.org/documents/ministry-of-natural-resources-</u>

and-environment/eia-reports/projek-tambakan-laut-bahagian-selatan-pulaupinang?b\_start:int=20\_Downloaded on 27 May 2023

- Escobar, A. 1995. *Encountering Development: The making and unmaking of the Third World*. Pricenton, New Jersey: Princeton University Press.
- Ferguson, J. 1994. The Anti-Politics Machine: "Development," Depoliticization, and Bureaucratic Power in Lesotho. Minneapolis, London: University of Minnesota Press.
- Firth, R. 1946. Malay fishermen: Their peasant economy. London: Kegan Paul.
- FMT Reporters. 2022. "Penang groups urge federal govt to review transport master plan." *FreeMalaysiaToday.com*, 8 Dec. Available at <u>https://www.freemalaysiatoday.com/category/nation/2022/12/08/penang-groups-urge-federal-govt-to-review-transport-master-plan/</u> Downloaded on 1 June 2023.
- Ghazali, S. 2009. "'No fish, no money': The livelihoods of the Malay fishing community in Teluk Bahang, Penang, Malaysia." Proceedings of the National Seminar on the Natural Heritage of the Northern Peninsular Malaysia (CD Proceeding) Hotel Equatorial, Penang, December: 182-192.

. 2011. "Safeguarding Natural and Cultural Heritage: The Experiences of Teluk Bahang Fishing Communities, Penang, Malaysia." *Malaysian Journal of Environmental Management* 12(1): 47-58.

Gieben, B. and Hall, S. eds. 1992. Formations of Modernity. Polity Press.

- Goh, Beng-Lan. 2002. *Modern Dreams: An Inquiry into Power, Cultural Production, and the Cityscape in Contemporary Urban Penang, Malaysia.* Ithaca: Cornell SEAP.
- Hadzlihady Hassan. 2018. "Visi Penang2030 untuk semua rakyat." (Penang2030 vision for all citizens) *BH Online*, 31 December. Available at <u>https://www.bharian.com.my/berita/wilayah/2018/12/514771/visi-penang2030-untuk-semua-rakyat</u> Downloaded on 7 October 2021

Harvey, D. 2005. A Brief History of Neoliberalism. UK: Oxford University Press.

\_\_\_\_\_. 2006. Spaces of Global Capitalism: Towards a Theory of Uneven Geographical Development. London and New York: Verso.

- Hayrol Azril Mohamed Shaffrila, Asnarulkhadi Abu Samahb, Jeffrey Lawrence D'Silva. 2017. "Adapting towards climate change impacts: Strategies for small-scale fishermen in Malaysia." *Marine Policy* 81: 196–201.
- Hutchinson, F. E. 2012. "Situating Penang in Asia and Malaysia." In *Catching the Wind: Penang in a Rising Asia*, edited by Francis E. Hutchinson & Johan Saravanamuttu, pp. 1-19. Singapore and Penang: ISEAS & Penang Institute.
- Jahara Yahaya.1988. "Fishery Management and Regulation in Peninsular Malaysia: Issues and Constraints." *Marine Resource Economics*, 5(2), 83–98.
- JEDI Webinar. 2021. *PSR: What Happens Next to Penang Will Make You Cry*, by Khoo Salma Nasution, Mar 28. Available at <u>https://www.youtube.com/watch?v=xFpO-oe2IAA</u> Downloaded 1 June 2023.
- Jomo K. S. ed. 1993. *Industrialising Malaysia: Policy, Performance, Prospects*. London and New York: Routledge.

. 1989. Mahathir's Economic Policies. Malaysia: INSAN.

- Kharas, H., Zeufack, A., and Majeed, H. 2010. *Cities, People & The Economy: A Study on Positioning Penang.* Kuala Lumpur: Khazanah Nasional Berhad.
- Khoo, Boo Teik. 1995. Paradoxes of Mahathirism: An Intellectual Biography of Mahathir Mohamad. Kuala Lumpur: Oxford University Press.
- Larrain, J. 1989. The Theories of Development: Capitalism, Colonialism, and Dependency. UK: Polity Press.
- Lee, H. A. 2004. "Development in Malaysia: Economics and Politics of an idea." *Akademika* 64: 65-81.
- Lee, K. C., Wein, S. W. and Loke, S. 2012. "Investment Opportunities in Penang." In *Catching the Wind: Penang in a Rising Asia*, edited by Francis E. Hutchinson & Johan Saravanamuttu, pp. 68-83. Singapore and Penang: ISEAS & Penang Institute.
- Leftwich, A. 2007. States of Development: On the primacy of politics in development. Reprint version. UK & USA: Polity Press.
- Lim, Mah Hui. 2021. "Questions still unanswered on justification for PTPM, PSI." *FreeMalaysiaToday.com*, 30 May. Available at

https://www.freemalaysiatoday.com/category/opinion/2021/05/30/questionsstill-unanswered-on-justification-for-ptmp-psi/ Downloaded on 19 September 2023.

- Mason, M. 1997. Development and Disorder: A History of the Third World since 1945. Toronto, Canada: Between The Lines.
- McIntyre, I. 2019. "Land reclamation not the lone reason for drop in seafood catch: Dr Afif." *The Sun Daily*, 25 June. Available at https://www.thesundaily.my/local/land-reclamation-not-the-lone-reason-for-

drop-in-seafood-catch-dr-afif-EB1021372

Downloaded on 22 June 2023.

- Michael Heng, Siam-Heng. 2014. "Malaysian Modernization and Its Potential Contributions to Modern Asian Civilization." In *Revisiting Malaysian Modernizatioon: Essays on Science, Technology, Religion and Environment*, edited by Mohd Hazim Shah, pp.227-236. Selangor, Malaysia: Persatuan Sains Sosial Malaysia (Malaysian Social Science Association) and Strategic Information and Research Development Centre (SIRD).
- Milne, R.S. and Mauzy, Diane K. 1999. *Malaysian Politics under Mahathir*. London and New York: Routledge.
- Mohammad Ferdous Alam, Ishak Haji Omar & Squires, D. 2002. "Sustainable fisheries development in the tropics: trawlers and licence limitation in Malaysia." *Applied Economics*, 34:3, 325-337.
- Mohammad Raduan bin Mohd Ariff, et al. 2011. "Perkembangan Perusahaan Perikanan di Semenanjung Malaysia: Isu dan Persoalan (The Development of Fishing Industry in Peninsula Malaysia: Issues and Questions)." *Jati*, Volume 16: 265-299.
- Mok, O. 2019. "So what exactly is the Penang Transport Master Plan and how is it being funded?" *Malaymail.com*, 27 June. Available at <u>https://www.malaymail.com/news/malaysia/2019/06/27/so-what-exactly-isthe-penang-transport-master-plan-and-how-is-it-being-fun/1765894</u> Downloaded on 16 October 2021.
- Nambiar. P. 2021. "It's lose-lose for Penang in PSR privatization plan, says economist." *FreeMalaysiaToday.com*, 21 May. Available at <u>https://www.freemalaysiatoday.com/category/nation/2021/05/21/its-lose-lose-for-penang-in-psr-privatisation-plan-says-economist/</u> Downloaded on 19 September 2023.

- Ogawa, Y. 2004. "Marine Fisheries Management and Utilization of Fishing Ground in Malaysia." *Japan Agricultural Research Quarterly: JARQ*, Volume 38, Issue 3: 209-212.
- Ooi, K. B. and Goh B. L. 2010. "Introduction: Political Masters and Master Plan." In *Pilot Studies for a New Penang*, edited by Ooi Kee Beng and Goh Ban Lee, pp: XII - XVII. Singapore and Penang: ISEAS and SERI.
- Penang2030 Unit. 2019. Penang 2030: A Family-focused Green and Smart State That Inspires the Nation. First Edition. Available at <u>https://storage.googleapis.com/penang2030-website-downloadsbucket/Reports/The-Penang2030-Guide\_First-Edition-2019\_eBook\_.pdf</u> Downloaded 4 June 2021.
- Penang Forum. 2018. *Call for review of mega project: Penang transport masterplan.* Press release 7 June. Available at <u>https://penangforum.net/press-release/call-for-review-of-mega-project-penang-transport-masterplan/</u> Downloaded 1 June 2023.

. 2021. "Reject Reclamation, Save Our Seas."19 June. Available at https://penangforum.net/press-release/reject-reclamation-save-our-seas/ Downloaded 31 May 2023.

Penang Institute, 2019. Penang Economic and Development Report 2017/2018.

- Penang Transport Master Plan (PTMP) websites at <u>https://pgmasterplan.penang.gov.my/en/</u>
- Population, Area, Population Density in the states of Malaysia, 2022 (Preliminary Estimate) <u>http://www.citypopulation.de/en/malaysia/cities/</u>
- Raja Rasiah. 2019. "From Swamps to Semiconductors." In From Free Port to Modern Economy: Economic Development and Social Change in Penang, 1969-1990, edited by Singh, C, Rasiah R., & Wong, Y. Books and Monographs. pp: 199-220. Singapore: ISEAS-Yusok Ishak Institute.
- Rapley, J. 2007. Understanding Development: Theory and Practice in the Third World. UK & US: Lynne Reinner.
- Rist, G. 2008. *The History of Development: From Western Origins to Global Faith*. London & New York: Zed Books.

- Roy, D. 2014. Rural Politics in India: Political Stratification and Governance in West Bengal. New Delhi: Cambridge University Press.
- Saeed Solaymani, Fatimah Kari. 2014. "Poverty evaluation in the Malaysian Fishery Community." *Ocean & Coastal Management*, Volume 95: 165-175.
- Saravanamuttu, J. and Hutchinson, F. E. 2012. "Introduction." In Catching the Wind: Penang in a Rising Asia, edited by Francis E. Hutchinson & Johan Saravanamuttu, pp: XV – XVIII. Singapore and Penang: ISEAS & Penang Institute.
- Scott, J. 1998. Seeing Like A State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven and London: Yale University Press.
- Tan, L. I. 2019. "Penang: Becoming A Smart State." Penang Institute Issues, 13 September: 1-11.
- Tilly, C. 1979. "Proletarianization: Theory and Research." *CRSO Working Paper No.202.* Paper prepared for the presentation at the annual meeting of the American Sociological Association, Boston.
- The Edge Markets, 2019. "Creating a catalyst for growth in Penang". *The Edge Markets.com.* 10 December. Available at <u>https://www.theedgemarkets.com/content/advertise/creating-a-catalyst-for-growth-in-Penang</u> Downloaded on 21 October, 2020.
- Vaghefi, N. 2017. "Penang's Aquaculture Industry Holds Great Economic Potential." *Penang Institute Issues*, 29 August.
- Vasu, P. 2020. "Penang seeks fund for LRT after federal govt's rejection." *The Malaysian Reserve*, 2 December. Available at <a href="https://themalaysianreserve.com/2020/12/02/penang-seeks-fund-for-lrt-after-federal-govts-rejection/">https://themalaysianreserve.com/2020/12/02/penang-seeks-fund-for-lrt-after-federal-govts-rejection/</a> Downloaded on 21 June 2023.
- Wong, PK. and Ho Y. P. 2020. "Asia's Shift towards Innovation and Its Implications for Penang." In *Pilot Studies for a New Penang*, edited by Ooi Kee Beng & Goh Ban Lee, pp. 23-56. Singapore and Penang: ISEAS & SERI.
- Wong, PP. 1990. "Coastal Resources Management: Tourism in Peninsular Malaysia." ASEAN Economic Bulletin, 7(2), 213–221.

Air Laut Macam Daun Pandan

Yoon, C. L. 2012. "Penang's Technology Opportunities." In *Catching the Wind: Penang in a Rising Asia*, edited by Francis E. Hutchinson & Johan Saravanamuttu, pp. 128-159. Singapore and Penang: ISEAS & Penang Institute.