INSTITUT MASA
DEPAN MALAYSIA

SOCIOECONOMIC INSIGHT
NO.9 / 2023

Malaysia's Rice Fiasco May Loom into A Crisis

POLICY AND RESEARCH DIVISION
INSTITUT MASA DEPAN MALAYSIA
22 SEPTEMBER 2023

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Dated 22 September 2023

Theme:
Malaysia's Rice Inflation

Introduction

Malaysia is currently facing a looming rice crisis, particularly with **a shortage of rice supply including local white rice and increase in the price of imported rice**, forcing consumers into panic. According to Amir Mat Amin, the Deputy Director of Farmers' Organisation Authority (LPP), the paddy yield per harvest usually reaches an average of 7 metric tonnes per hectare, but this dipped to only 4 tonnes during the last harvest season[1].

According to Datuk Wira Haji Dr. Ameer Ali Mydin[2], Managing Director of Mydin Mohamed Holdings Bhd, the largest halal wholesaler and retailer chain in Malaysia, whilst the **percentage of local rice production is commonly known to be 70%, whereas in reality, it is only around 62%**.

Of this amount, **approximately 43% goes into the end market to be sold as local white rice (BPT) to consumers** (after taking into account usage by industry, rice seeds etc.). Hence, **imported rice needs to cover the remaining 57% to achieve domestic rice demands**. This problem is further **exacerbated by India's rice export ban**[3] which caused the price of Basmati rice to rise from RM32 to RM40 per 5kg.

Thus, this urgent issue requires immediate attention from the government. Looking at the current conditions of the market and data, it is clear that the rice crisis stems from our **low self-sufficiency level (SSL) caused by a high dependency on imported rice as well as the lack of capacity in local rice production**.

In light of the various factors that can be attributed to this crisis, it is therefore crucial to identify the root cause and deal with it effectively, with proper management and good governance in order to reduce local rice shortages and subsequent price increases.

[1] Floods, crop diseases to blame for local white rice shortage
[2] Meeting with Datuk Wira Haji Dr. Ameer Ali Mydin, Managing Director of Mydin Mohamed Holdings Bhd. dated 21 September 2023
[3] India bans non-basmati rice exports to check local prices

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Low Self-Sufficiency Level (SSL)	
Elaboration	Self-Sufficiency Level (SSL) refers to the extent in which a country's supply of agricultural commodities to meet domestic demands. An SSL that reaches 100% or more indicates production is sufficient to meet domestic needs and no longer depends on imports from foreign countries. **Issues:** **1) High Dependency on Imports** - With a population of 33.4 million people, Malaysia consumes about 2.7 million tonnes of rice a year[4] with rice import of up to 900,000 metric tonnes, which is approximately 30% of the country's rice needs (DOA, 2018). - Based on latest Supply and Utilisation Accounts (SUA) of Selected Agricultural Commodities 2018-2022 by the Department of Statistics Malaysia (DOSM), the **Malaysian Self-Sufficiency Level (SSL) for rice has fallen to 62.9% in 2022[5] from 71.6% in 2014**[6]. - Rice production has also decreased to 1,575 thousand tonnes in 2022 as compared to 1,686 thousand tonnes in 2021. In comparison, **rice imports increased by 51 thousand tonnes to 1,113 thousand tonnes in the same period**[7]. - This indicates **Malaysia's high dependency**

[4] Malaysia's move to break rice import monopoly could backfire on farmers' welfare: Analysts
[5] Supply and Utilization Accounts Selected Agricultural Commodities, Malaysia 2018-2022
[6] Supply and Utilization Accounts Selected Agricultural Commodities, Malaysia 2010-2014
[7] Supply and Utilization Accounts Selected Agricultural Commodities, Malaysia 2018-2022

towards rice imports to cater to the needs of the Rakyat over and above the local production of rice.

Exhibit 8: Production, Import, and Per Capita Consumption (PCC) for Rice, Malaysia, 2020-2022

	2020	2021	2022
Paddy production ('000 tonnes)*	2,356	2,442	2,282
Rice			
Production ('000 tonnes)	1,624	1,686	1,575
Import ('000 tonnes)	1,110	1,062	1,113
Per capita consumption (kg/year)	79.7	79.5	77.0

*Note: * Wetland paddy and dryland paddy*

Source: Ministry of Agriculture and Food Security

a) Inconsistent Policies on SSL

- Among other problems that caused Malaysia's low SSL is the **inconsistency in policies** relating to it.

- A high level of SSL had initially been targeted since the First Malaysia Plan, RMK1 (1966 - 1970) at the level of 80%, this target increased to 87% in the Second Malaysia Plan, RMK2 (1971 - 1975) and 92% in Third Malaysia Plan, RMK3 (1976 - 1980).

- However, from the Fourth to Ninth Malaysia Plans, the SSL target had since **declined** between the range of 76.5% to 71.4%.

- The Eleventh Malaysia Plan (2016 - 2020) had set the country's SSL target at only 72%. These illustrate the invariant government policies on national SSL target yet with **inconsistent achievements**.

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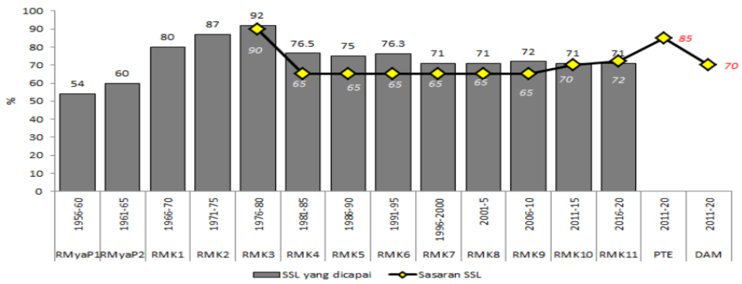
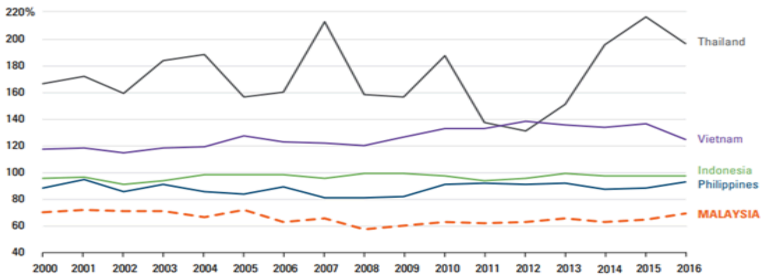


Malaysia's SSL through the years (Source: Fatimah, 2019)

The rice self-sufficiency level for Malaysia remained the lowest compared to Thailand, Vietnam, Indonesia and the Philippines

Figure 1.8. Self-sufficiency level (SSL) in the Southeast Asia region, 2000 – 2016 (percentage)



Source:
SSL calculations by KRI based on production, import, and export data from OECD-FAO Agricultural Outlook 2018-2027 (Accessed 17 Aug 2018) and FAO's SSL formula (Refer to Box Article 2)
Chart by KRI

- The inconsistency can be seen again when the Economic Transformation Program (ETP) (2011 - 2020) set the national SSL target at 85%, but the target in National Agrofood Policy (2011 – 2020) was set at a lower value of 70%.

Policy measures in the paddy and rice industry

Category of policy	Intervention programmes	Period
Input subsidy	*Skim Baja Padi Kerajaan Persekutuan* (SBPKP)	1979 to present
	Skim Insentif Pengeluaran Padi (SIPP)	2007 to present
	Insentif Peningkatan Pengeluaran Beras Negara (IPPB)	2008 to 2015
	Insentif Benih Padi Sah (IBPS)	2007 to present
	Skim Baja dan Racun Padi Bukit/Huma	2015 to present
Output subsidy	*Skim Subsidi Harga Padi* (SSHP)	1980 to present
Market & trade	GMP	1949 to present
	Stockpiling	1949 to present
	Single rice importer	1974 to present
Others	Granary areas as permanent paddy areas	2010 to present

Source: Full references in KRI Rice Report
Table by KRI

- The governance of the entire paddy and rice supply

	chain involves various ministries and agencies although the main responsibility falls under the MOA. These regulators oversee the implementation of legislations and policies related to the industry such as the Control of Paddy and Rice Act 1994. - However, **data consistency and transparency across different reports** are pertinent issues which often resulted in delayed and inefficient market responses and research outcomes based on outdated data. - Whilst Malaysia's paddy and rice-related policies are production-centric or SSL-centric policy targets, it should incorporate other food security factors in the production of domestic rice. **2) Lack of Capacity in Local Rice Production** - Another aspect of Malaysia's low SSL stems from the **lack of capacity** in local rice production. - Malaysia is currently producing around 1.8 million metric tonnes of rice per year and imports up to 31% of rice to fulfil domestic needs, equivalent to 1,000,000 metric tonnes from Vietnam, Thailand, Pakistan and other countries (IRRI, 2019; DOSM, 2019).

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Items / Year - SSL (total population)	2019 - SSL 69% (32.5 mil population)	2019 - SSL 100% (32.5 mil population)	2030 - SSL 100% (38.0 mil population)
Rice cultivation area (ha)	**684,416**	**991,907***	**1,159,768****
Paddy production (MT)	**2,912,203**	**4,220,584***	**4,934,836****
Rice production (MT)	1,876,922	**2,720,176***	**3,180,513****

**If we are 100% self-sufficient, calculated based on 2019 real data*
*** Average growth rate over time of average paddy yield per hectare is maintained at current 1.41% (based on 2015 - 2019 average yield per ha) and efficiency of rice recovery rate at 64%.*

Rice Cultivation Area and Paddy and Rice Production in 2019 and Requirements by 2030 to Achieve 100% SSL

- World rice prices are volatile due to the low elasticity in the factor of production of rice, the sudden growth of demand and the limited quantity of world rice traded. In the case of Malaysia's SSL, further growth in capacity is further hindered by the declining number of land cultivated for paddy.

- Paddy fields have rapidly been developed for purposes other than agriculture. In 2018, statistics from the Ministry of Agriculture (MOA) indicated that Malaysia has 7,857,434 hectares of agricultural land in total and only 408,162 hectares (rice parcel) are involved in paddy cultivation areas (DOA, 2016; DOA, 2018).

- In 2012 alone, the MOA confirmed that more than 100,000 hectares of paddy fields have changed status. Industrial-based economic development has since reduced the size of paddy fields and this trend poses a threat to local rice supply if the paddy cultivation area continues to be replaced.

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The amount and percentage growth of Malaysia's rice production, consumption and area harvested are relatively small compared to its neighbouring countries

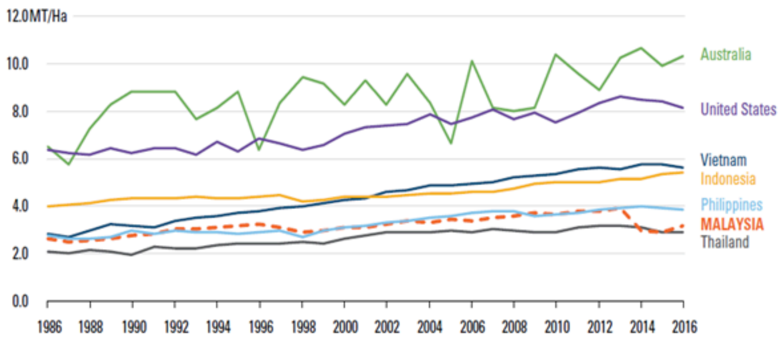
Table 1.1. Rice production, consumption, area harvested and yield for the Southeast Asia region, 2000 – 2016

Country	Population	Production		Consumption		Area Harvested		Rice Yield[c]	
	Thousand	Million MT[a]	Average Annual Growth (%)[b]	Million MT[a]	Average Annual Growth (%)[b]	Thousand Ha[a]	Average Annual Growth (%)[b]	MT/Ha[a]	Average Annual Growth (%)[b]
World	7,466,964	501.5	1.46	497.5	1.36	162,510	0.36	3.1	1.09
Asia	4,462,677	453.2	1.43	434.4	1.20	143,072	0.25	3.2	1.16
Indonesia	261,115	45.6	2.11	46.7	1.88	13,870	1.04	3.3	1.06
MALAYSIA	31,187	1.8	1.62	2.7	1.75	700	0.03	2.5	1.60
Philippines	103,320	12.1	2.61	13.5	2.82	4,722	1.03	2.6	1.53
Thailand	68,864	21.6	1.80	13.6	2.03	10,780	0.69	2.0	0.99
Vietnam	94,569	28.1	1.83	22.1	1.21	7,743	0.07	3.6	1.75

The Status of the Paddy and Rice Industry in Malaysia, KRI (2019)

Malaysia's growth in paddy yield over three decades is smaller compared to other rice producing countries

Figure 4.7. Paddy yield by country over three decades, 1986 – 2016 (MT/Ha)



Source:
Crops: Yield: Rice, paddy, FAOSTAT (Accessed 23 Oct 2018)
Chart by KRI

- Even within the same region, there can be significant differences in paddy yield as the performance of the granary areas has a direct influence on the performance of the paddy industry nationwide including Pertubuhan Peladang Kawasan (PPK).

- This low capacity of local rice production are also hampered by:

a) Low socioeconomic attainment among

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	paddy farmers. - This includes the suppression and marginalisation of farmers through unfair dealings and the problem of debt traps.The local Bumiputera rice millers wade through a strategically and systematically process that only benefits the giant companies. ***b) Monopoly in supplying paddy costs of productions.*** - Market is dictated by price exploitation of agricultural inputs, monopsony in rice purchasing and retailing. This is related to the single gatekeeper system by BERNAS and its subsidiary companies. ***c) Slow adaptation of technology.*** - Many farmers are enthusiastic about integrating technology into farming practices. The bureaucratic processes of organisations such as Muda Agricultural Development Authority (MADA) and Kemubu Agricultural Development Authority (KADA) have hindered timely adaptation. Mechanisation, technological integration and advancements in AI stand as indispensable trends for augmenting yields across various sectors, such as paddy cultivation, palm oil, vegetables, poultry or fish farming.
Recommendations	In addressing these pertinent issues, the government must take a holistic approach and proactive measures by taking into account, inter alia: **Immediate term**

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	1. **Implementation of price floating mechanisms** and raising it to the level of a free market determined by all industry players and supply chain. - When the price of rice increases, the price of paddy cultivated by farmers also rises. This will help increase their incomes to a more reasonable level based on their productivity. - It is also essential to benchmark against producer countries and their average or median production costs. 2. Enhance **transparency and accessibility through digitalisation of paddy and rice data** and information across the supply chain (e.g. Blockchain technology). - This for instance allows farmers and midstream players to leverage on the resources to develop a shared-risk approach through contract farming. 3. Intensify efforts to **modernise farming through IR 4.0 and R&Ds** such as Large-Scale Smart Paddy Field (SMART SBB) and deployment of drones for crop spraying. - This in turn helps to identify the level of readiness for farmers to switch to new technology with continuous support of technology transfer and dissemination, including maintenance and trouble-shooting related to the technology. - It also helps to strategically plan for future development training and reskilling of on-the-ground farmers and experts to support this industry.

	4. **Reduce monopsony in rice purchasing and retailing** by creating a transparent system that can be easily accessed by all farmers, e.g. adoption of Big Data to indicate the deduction rate. Further, it can also be done by reducing monopoly control within the industry. **<u>Medium term</u>** 1. **Enabling regulatory and policy environment for breeding and seed production** is needed to encourage the entry of new players as opposed to reliance on a single R&D entity to drive paddy breeding in Malaysia. - This can help facilitate the growth of the private sector breeders for development of new paddy varieties. - Compared to other rice producing countries, Malaysia has been relatively slow in its release of new varieties. India has been the most prolific variety producer with over 1,900 varieties released, followed by South Korea with 277 varieties and other ASEAN countries such as the Philippines, Indonesia, Vietnam, Thailand and Myanmar. - In comparison, Malaysia has released 49 varieties according to MARDI in 2018. 2. **Reduce monopoly in the provision of cost of production** by introducing more suppliers and choices towards a more sustainable and eco-friendly cost of production. - There is also a need to **reduce dependency on certain companies that provide seedlings, fertiliser and pest controls** by introducing better

	and cheaper options to farmers, such as incentives for farmers who produce their own seeds. 3. **Strengthen rice management by restructuring the Paddy Industry Development Division (IPB)** under the Ministry of Agriculture and Food Industries (MAFI). - This allows IPB to focus solely on the planning, monitoring and implementation of programmes which aim to increase the welfare of paddy farmers, quality of services and subsidised items to farmers. **Long term** 1. To promote a platform that encourages free, fair and transparent trade as well as healthy competition, by **reexamining the monopolistic power of BERNAS or replacing it with a new framework/institution** akin to the-then *Lembaga Padi Negara* (LPN) as a GLC. - With improved opportunities through free, fair and transparent trade and healthy competition, local paddy farmers will be able to improve their socio-economic attainment. 2. To curtail rice cartel and monopolistic activities through **State-Zakat Board initiatives such as the SMART Large-Scale Asnaf Rice Field Program.** - In this regard, the Kedah State Government through its Zakat Board (LZNK) took initiative to purchase idle lands and redistribute them to selected recipients among the needy *(Asnaf)* to venture into

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	paddy farming with cash aid and other assistance such as rice seeds. The LZNK only recovers the initial investment capital, while the profits and rice sales are handed over 100% to the needy.

Prepared by: Dr. Khalid Abdul Hamid - Head of Research & Policy Division
Mohd Noor Musa - Research Analyst (Social)
Maryam Husna Maznorzuhairi - Research Analyst (Economy)
Sim Why Jean - Research Analyst (Politic)
Nur Zalikhaa' Zainal Abidin - Research Analyst (Social)

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