

MINISTRY OF INVESTMENT, TRADE AND INDUSTRY

NEW INDUSTRIAL MASTER PLAN 2030

FOOD PROCESSING INDUSTRY



e ISBN No.: 978-967-0020-25-9

PUBLISHED BY:



MINISTRY OF INVESTMENT, TRADE AND INDUSTRY

Menara MITI, No. 7, Jalan Sultan Haji Ahmad Shah, 50480 Kuala Lumpur, Malaysia.

Tel : 603-8000 8000 Fax : 03-6206 4693 Email : webmiti@miti.gov.my

© MINISTRY OF INVESTMENT, TRADE AND INDUSTRY

MITI, 2023

All rights reserved

No part of this document may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission from Ministry of Investment, Trade and Industry (MITI). The information in this document has been updated as accurately as possible until the date of publication.

TABLE OF CONTENTS

| | Preface | 2 |
|---------|--|--|
| | Introduction | 5 |
| | Overview of the Document | 6 |
| Section | Background | 6 |
| | Areas Covered Value Chain Market Players Policies, Laws and Regulations | 6 7 8 |
| Section | 2 Performance | 8 |
| | IMP3 Focus and Performance Investments Exports Imports Value-added Employment Labour Productivity Institutional Support | 8 9 11 12 12 13 13 13 |
| Section | Trends and Opportunities | 14 |
| | Shift in Consumer Demands Food Safety | 15 |
| Section | Challenges | 16 |
| | Food Security Food Wastage Export Ecosystem | 18 |
| Section | Strategies and Action Plans | 18 |
| | NIMP 2030 Focus Action Plans | 18 |
| | Appendix 1: Incentives | |
| | i de la construcción de la constru | |

PREFACE

Malaysia's strength in the manufacturing sector has been significantly driven by the implementation of robust and forward-thinking Industrial Master Plans, first launched in 1986.

The success of the IMP3 (2006-2020) was anchored on innovation, research and development (R&D) and human capital development to drive high value-added industries to transform Malaysia into a knowledge-based economy.

The journey towards formulating the NIMP 2030 is underscored by the need to build a robust industrial sector as an important prerequisite to achieve socioeconomic prosperity. Three previous iterations of the Industrial Master Plans have driven industrial development in Malaysia, with the Government adopting industrial development strategies relevant to the period to transform the economy. Malaysia flourished from a low-productivity agrarian-based economy and is heading towards achieving developed nation status, underpinned by robust manufacturing and services sectors. The strategy has successfully raised the living standards of the Rakyat and propelled remarkable growth in Gross National Income (GNI) per capita, increasing 34 times between 1967 to 2019, making Malaysia one of the fastest growing economies in modern history.

Industrial policies have since become more diverse and complex, incorporating new imperatives including the integration into the global value chain (GVC), development of indigenous capabilities in a knowledge economy, evolution of environmental, social and governance (ESG) criteria and disruptions from the new industrial revolution. The question is not about the necessity of such policies, but rather what new policies are required and how to proceed.

Given the current challenging environment, benchmarking and learning from other country's experiences are no longer sufficient. Malaysia needs to embark on its own path into unchartered territory, to steer the nation into the challenging future. The combined impact of the new imperatives and the recent pandemic has compelled the Government to rethink Malaysia's industrial strategy.

With the NIMP 2030, Malaysia intends to transform the industry into greater heights, capitalising on emerging global trends, supply chain disruptions, current geopolitical landscape, digitalisation and ESG considerations. These trends are moving at an unprecedented pace and Malaysia has to act fast.

Therefore, the NIMP 2030 is designed to achieve the aspirations in a span of seven years and takes on a Mission-based approach for industrial development. This approach unites Malaysia by encouraging collaboration between the Government and the private sector to rally the industries.

Purpose of the NIMP 2030

The NIMP 2030 sets forth Malaysia's future direction in industrial transformation. It provides a national integrated plan for resilient industrial development until 2030 – setting the fundamentals for future policy development and enabling the industry at all levels. It articulates Malaysia's position and participation in the global economic environment. The NIMP 2030 serves to:

- · Provide national strategic direction to lead the industrial development policies;
- Be a conversation piece for investors and other economies on Malaysia's position and direction; and
- Feature the role of the Malaysian Government in shaping the economy.

INTRODUCTION

New Industrial Master Plan 2030

The Missions and Enablers identified will be executed through 21 Strategies and 62 Actions Plans to unlock the needed enabling ecosystems. Several catalytic Mission-based Projects (MBPs) have been identified to catapult the mission-based implementation. The NIMP 2030 strategic framework is illustrated below:

| VISION | Our vision for Malaysia is to have:Competitive industry with high economic complexityHigh income workforce | me and skilled |
|---|--|--|
| GOALS | | te high-value pportunities Extend domestic linkages |
| MISSIONS | MISSION 1 Advance economic complexity | MISSION 2 Tech up for a digitally vibrant nation |
| STRATEGIES AND ACTION PLANS 21 Strategies 62 Action Plans | Expand to high value-added activities of the value chain Create global IC design champions from Malaysia Attract global leader to establish wafer fabrication in Malaysia Shift from basic to specialty chemical Build Malaysian champions for game changing advanced materials Identify high value-added opportunities in the aerospace, pharmaceutical and medical devices sectors Develop entire ecosystem to support the high value-added activities Build strong local SMEs in manufacturing and related services to support the industry champions Integrate value chains between: M&E and Medical Devices Semiconductor and EV Chemical and Pharmaceutical Everage alliance with ASEAN countries to integrate the semiconductor, advanced materials and clean energy value chain Leverage alliance with ASEAN countries to integrate the semiconductor, advanced materials and clean energy value chain Develop vertical integration programmes through IndustryConnect conferences Foster Research, Development, Commercialisation and Innovation (RDCI) ecosystem Assign specific topics and KPIs to universities for industrial-linked R8D Digitalise IP application and launch enhanced National IP Policy Increase manufacturing exports Implement national trade advocacy campaign to increase industry utilisation of FTAs Quedate FTA based on geopolitical conditions Update FTA based on geopolitical conditions Address trade restrictive non-tariff measures (NTMs) and compliance of standards Update FTA based on geopolitical conditions MBP 1.1 Create global IC design champions in EV, RE and Al MBP 1.2 Attract new advanced wafer fabrication in Malaysia | 2.1 Accelerate technology adoption 2.1 Enhance Industry4WRD programmes to increase technology adoption 2.2 Accelerate digital infrastructure rollout (JENDELA) 2.3 Shift away from low-skilled labour model 2.1 Introduce multi-tiered levy mechanism for low- skilled labour to accelerate automation 2.2 Introduce automation condition in new Manufacturing Licence 2.3 Spur technology innovation 2.3 Develop generative and industrial Al solution leaders and system integrators 2.3 Develop generative and industrial Al solution leaders and system integrators 2.3 Drive data analytics through a national digital platform for manufacturing 2.4 Accelerate government digitalisation and integration 2.5 Digitalise end-to-end government touch points across business life cycle 2.4 Strategies, 8 Action Plans MESON-based Projects: MBP 2.1 Transform 3,000 smart factories MBP 2.2 Establish Malaysia as Generative AI Hub |



NIMP 2030 SECTORAL PLAN

There are individual enclosures of 21 sectors included as a supplementary reference to the main NIMP 2030 document.

They provide a view of the respective sectoral perspective in the context of the main NIMP 2030 document, and were developed with reference to individual sectoral roadmaps, where applicable.

The 21 sectors are:

| Category | Industry |
|---------------------|---|
| Priority Sectors | Aerospace Chemical Electrical and Electronics (E&E) Pharmaceutical Medical Devices |
| Sectors | Digital and Information and Communication Technology (ICT) Automotive Food Processing Global Services and Professional Services <i>Halal</i> Machinery and Equipment (M&E) Manufacturing-Related Services (MRS) Metal Mineral Palm Oil-based Products Petroleum Products and Petrochemicals Rubber-based Products Shipbuilding and Ship Repair (SBSR) Textile, Apparel and Footwear Wood, Paper and Furniture |

This document is the NIMP 2030 Sectoral Plan – Food Processing Industry.

4

OVERVIEW OF THE DOCUMENT

This NIMP 2030 Sectoral Plan – Food Processing Industry (Document) provides insights into the sector and its prospects during the NIMP 2030 period.

This Document offers a comprehensive understanding of the industry's direction during the NIMP 2030 period based on its historical performance, opportunities and strategies to overcome existing challenges and achieve its targets.

The Document is presented in five sections:

1. Background

- This section sets the foundation to help readers understand the industry.
- It delves into the industry's focus area, encompassing its sub-sectors, for a comprehension of the industry's breadth.¹
- Readers will find details about the industry's value chain and its key players, including the relevant industry associations, in this section.
- The section lists the policies that are related to the industry.

2. Performance

- This section reports the industry's performance during specific periods.
- There are two notable periods for the review of the industry's historical performance:
 - the IMP3 period (2006 to 2020); and
 - from 2021 to 2022.
- The performance review of the industry's development includes its investment trends, export and import dynamics, employment figures, value-added and productivity measures.

3. Trends and Opportunities

• This section highlights the opportunities and potential avenues for growth that the industry can leverage during the NIMP 2030 period.

4. Challenges

• This section provides insights into potential obstacles that could impact the industry's growth and development.

5. Strategies and Action Plans

- The final section of the document outlines the future trajectory for the industry.
- This section provides the Strategies and Action Plans that are intended to catalyse the industry during the NIMP 2030 period.
- The Strategies and Action Plans set in this Document have been aligned to the Missions set in the main NIMP 2030 document.

¹ Incentives available for this industry as of time of writing can be found in Appendix 1

SECTION 1 BACKGROUND

Areas Covered

- 1. The scope of Malaysia's food processing industry can be categorised as below:
 - i. Cocoa and cocoa preparations;
 - ii. Cereals and flour preparations;
 - iii. Processed seafood;
 - iv. Dairy products;
 - v. Prepared and preserved vegetables and fruits;
 - vi. Sugar and sugar confectionery;
 - vii. Processed meat;

viii. Coffee and tea;

- ix. Other edible products and preparations;
- x. Edible oils and fats (including margarine and shortening);
- xi. Beverages and tobacco; and
- xii. Animal feed.

Value Chain

2. The food processing industry is a sub-set of a broader food value chain spanning from agriculture production to the marketing and distribution of processed, packaged or cooked food (Figure 8.1).

Figure 8.1: Value Chain of Food Processing Industry



Source: Ministry of Investment, Trade and Industry (MITI)

- 3. The value chain of the industry consists of three core processes:
 - i. industrial preparation involves dressing, freezing, chilling and grinding of agricultural inputs and raw materials;
 - ii. cooking involves processing value food products from the dressed, frozen, chilled and ground food products; and
 - iii. packaging involves filling the end-products into containers, wrapping, case packing, and palletising for storage and transportation purposes. This process is important to ensure the safety, quality and preservation of food products. End products include food ingredients, flavours and additives.

Market Players

- 4. The key stakeholders in Malaysia's food processing industry can be categorised into three categories, which are:
 - i. industry players;
 - ii. industry associations; and
 - iii. Ministries and Government Agencies.

- 5. The industry is dominated by Malaysian-owned small and medium enterprises (SME) and supported by multinational corporations (MNC) which have established their regional production facilities in Malaysia to serve domestic and international markets.
- 6. The industry associations in Malaysia's food processing industry play important roles in representing the interests of manufacturers, promoting nutrition, and safeguarding the welfare of farmers and consumers. Non-exhaustive examples of these associations include:
 - i. FMM Malaysian Food Manufacturing Group (FMM MAFMAG);
 - ii. Malaysian Food Canners' Association (MFCA);
 - iii. Nutrition Society of Malaysia (NSM);
 - iv. Federation of Livestock Farmers' Associations of Malaysia (FLFAM); and
 - v. Malaysian Feedmillers Association (MFA).
- 7. Several Ministries and Government Agencies have prominent roles in developing and promoting the industry, as well as ensuring safety and quality of food products. These include:
 - i. Ministry of Agriculture and Food Security (MAFS);
 - ii. Ministry of Plantation and Commodities (KPK);
 - iii. Ministry of Investment, Trade and Industry (MITI);
 - iv. Ministry of Health (MOH);
 - v. Department of Islamic Development Malaysia (JAKIM);
 - vi. Halal Development Corporation (HDC);
 - vii. Malaysian Investment Development Authority (MIDA); and
 - viii. Malaysia External Trade Development Corporation (MATRADE).

Policies, Laws and Regulations

- 8. The industry's development is guided by the following:
 - i. National Agrofood Policy 2021-2030 (NAP 2.0);
 - ii. National Food Security Policy Action Plan 2021-2025; and
 - iii. National Nutrition Policy of Malaysia (DPKM) 2.0.
- 9. Laws and regulations related to the food processing industry are:
 - i. Trade Descriptions Act 1972; and
 - ii. Food Regulation 1985.

SECTION 2 PERFORMANCE

IMP3 Focus and Performance

- 10. During the period of the IMP3 (2006 to 2020), the food processing industry was focused on areas including:
 - i. expansion of its capacities and enhancing competitiveness to meet domestic and export demands; and
 - ii. emphasising on *Halal* food production as a key step to develop Malaysia as a regional food production and distribution hub.
- 11. As a result, exports² of food processing industry grew by a CAGR³ of 8.7 per cent from RM8.3 billion (2006) to RM31.2 billion (2022) and its contribution to Gross Domestic Production (GDP⁴) grew by 5.5 per cent from RM21.0 million (2015) to RM30.5 billion (2022).

Investments

- 12. The investment performance of the food processing industry for the period of 2006 to 2022 is recorded in Table 8.1 and is classified into two categories:
 - i. food manufacturing; and
 - ii. beverages and tobacco.

Table 8.1: Approved Investments of Food Processing Industry

| lt | 11 | | IMP3 | ; | 2021 | 2022 | 2021 2022 |
|----------------------|------------|-------|-------|-----------|--------|-------|-----------|
| Items | Units | 2006 | 2020 | 2006-2020 | 2021 | 2022 | 2021-2022 |
| Food Manufacturing⁵ | | | | | | | |
| Total Investment | RM billion | 1.6 | 3.3 | 42.7 | 5.4 | 3.5 | 8.9 |
| Domestic Investment | RM billion | 0.7 | 2.3 | 25.0 | 1.6 | 2.1 | 3.6 |
| Foreign Investment | RM billion | 0.9 | 1.0 | 17.6 | 3.8 | 1.5 | 5.3 |
| Number of projects | # | 74 | 103 | 1,082 | 77 | 93 | 170 |
| Employment | persons | 4,744 | 4,891 | 78,134 | 5,354 | 5,344 | 10,698 |
| Beverages and Tobacc | 0 | | | | | | |
| Total Investment | RM billion | 0.063 | 1.971 | 4.3 | 0.03 | 0.113 | 0.14 |
| Domestic Investment | RM billion | 0.062 | 1.028 | 2.4 | 0.029 | 0.112 | 0.14 |
| Foreign Investment | RM billion | 0.001 | 0.944 | 1.9 | 0.0001 | 0.001 | 0.001 |
| Number of projects | # | 8 | 17 | 93 | 6 | 8 | 14 |
| Employment | persons | 232 | 792 | 7,355 | 38 | 431 | 469 |

Source: MIDA

² The export data includes processed food, beverages and tobacco; excludes animal feed

- ³ Compound annual growth rate
- ⁴ Based on constant 2015 prices and includes processed food, beverages and tobacco products
- ⁵ The investment data for food manufacturing includes animal feed

8

Food Manufacturing

- 13. During the IMP3 period, a total of 1,082 projects were approved in the food manufacturing category with a total investment of RM42.7 billion. These investments committed a total of 78,134 job opportunities.
- 14. In 2021 and 2022, a total of 170 projects were approved with a total investment of RM8.9 billion. These investments committed a total of 10,698 job opportunities.
- 15. From 2006 to 2022, 1,005 (80.3 per cent) of the 1,252 approved projects were implemented.

Beverages and Tobacco

- 16. During the IMP3 period, a total of 93 projects were approved in the food manufacturing category with a total investment of RM4.3 billion. These investments committed a total of 7,355 job opportunities.
- 17. In 2021 and 2022, a total of 14 projects were approved with a total investment of RM0.14 billion. These investments committed a total of 469 job opportunities.
- 18. From 2006 to 2022, 94 (87.9 per cent) of the 107 approved projects were implemented.
- 19. The industry's investment trend was largely attributed to the:
 - i. increased demand for sustainable products such as plant-based foods, that created opportunities in high-value food product manufacturing;
 - ii. adoption of Industry 4.0 technologies to enhance productivity and to ensure a sustainable food production; and
 - iii. recovery from disruptions caused by the COVID-19 pandemic.

Exports

20. The export performance of the food processing industry during the period of 2006 to 2022 is recorded in Table 8.2 below.

| ltems | | IMP3 | 3 | 2021 | 2006-2020 2020 | 2020-2021 | 2021-2022 | |
|--|------|------|-----------|-----------|----------------|-----------|-----------|--------|
| | 2006 | 2020 | 2006-2020 | 2021 2022 | | CAGR | Annual | Growth |
| Total Exports (RM billion) | 8.3 | 23.9 | 265.1 | 27.1 | 31.2 | 7.9% | 13.5% | 15.0% |
| Processed Food (RM billion) | 6.3 | 21.3 | 216.0 | 24.6 | 28.4 | 9.0% | 15.6% | 15.5% |
| Beverages and Tobacco (RM billion) | 1.9 | 2.6 | 49.0 | 2.5 | 2.8 | 2.1% | -3.8% | 10.5% |

Table 8.2: Exports of Food Processing Industry

Source: MATRADE

- 21. During the IMP3 period, the industry's total exports grew by a CAGR of 7.9 per cent, from RM8.3 billion (2006) to RM23.9 billion (2020).
- 22. In 2021 and 2022, industry's exports saw an increase of 13.5 per cent and 15.0 per cent to RM27.1 billion and RM31.2 billion respectively.
- 23. The growth in export was driven by the growing acceptance of Malaysia's food products among international consumers reflected by the increased demand for cocoa and cocoa products, cereals and flour-based products, and processed seafood.
- 24. In 2022, top export countries for the industry were as follows (Table 8.3).

Table 8.3: Top Export Countries of Food Processing Industry

| Proc | essed Food | Beverages and Tobacco | | | | |
|------|-----------------------------------|--------------------------------------|--|--|--|--|
| i. | Singapore (RM3.6 billion, 12.7%) | i. Singapore (RM1.4 billion, 51.0%) | | | | |
| ii. | China (RM3.6 billion, 12.7%) | ii. Indonesia (RM0.4 billion, 12.8%) | | | | |
| iii. | Indonesia (RM2.0 billion, 7.1%) | iii. Thailand (RM0.2 billion, 8.2%) | | | | |
| iv. | Philippines (RM1.7 billion, 6.0%) | iv. Brunei (RM0.09 million, 3.1%) | | | | |
| V. | Thailand (RM1.6 billion, 5.6%) | v. Hong Kong (RM0.08 million, 3.0%) | | | | |

Source: MATRADE

25. In 2022, top exported products were as follows (Table 8.4).

Table 8.4: Top Exported Products of Food Processing Industry

| Proc | essed Food | Beverages and Tobacco | | | |
|------|---|--|--|--|--|
| i. | Edible products and preparations (RM9.8 billion, 34.6%) | i. Non-alcoholic beverages (RM1.6 billion, 55.7%) | | | |
| ii. | Cocoa and cocoa preparations (RM6.7 billion, 23.5%) | ii. Alcoholic beverages (RM1.0 billion, 37.5% iii. Manufactured tobacco (RM0.2 billion, | | | |
| iii. | Prepared cereals and flour preparations (RM4.5 billion, 15.9%) | 6.7%) | | | |
| iv. | Prepared vegetables and fruits (RM1.9 billion, 6.6%) | | | | |
| V. | Sugar and sugar confectionery (RM1.5 billion, 5.3%) | | | | |

Source: MATRADE

Imports

26. The import performance of the food processing industry during the period of 2006 to 2022 is recorded in Table 8.5 below.

| ltems | | IMP | 3 | 2021 2022 | 2022 | 2006-2020 | 2020-2021 | 2021-2022 |
|--|------|------|-----------|-------------|------|-----------|-----------|-----------|
| | 2006 | 2020 | 2006-2020 | | CAGR | Annual | Growth | |
| Total Imports (RM billion) | 7.8 | 24.4 | 260.9 | 27.5 | 32.6 | 8.5% | 12.7% | 18.5% |
| Processed Food (RM billion) | 6.7 | 21.8 | 221.9 | 24.9 | 28.9 | 8.8% | 14.2% | 16.4% |
| Beverages and Tobacco (RM billion) | 1.1 | 2.6 | 39.0 | 2.6 | 3.6 | 6.0% | -0.1% | 38.8% |

Table 8.5: Imports of Food Processing Industry

Source: MATRADE

- 27. During the IMP3 period, industry's total imports grew by a CAGR of 8.5 per cent from RM7.8 billion (2006) to RM24.4 billion (2020).
- 28. In 2021 and 2022, the industry's imports saw an increase of 12.7 per cent and 18.5 per cent to RM27.5 billion and RM32.6 billion respectively.
- 29. The growth in import were mainly due to the:
 - i. growing population with higher disposable income led to an increase in consumption of imported food products;
 - ii. imports of processed and re-exported products (e.g. cocoa beans); and
 - iii. increased demand for goods that cannot be produced domestically such as temperate cereals, fruits and vegetables.
- 30. In 2022, top import countries for the industry were as follows (Table 8.6).

Table 8.6: Top Import Countries of Food Processing Industry

| Proc | essed Food | Beverages and Tobacco | | | | |
|------|--|--|--|--|--|--|
| i. | Thailand (RM3.4 billion, 11.7%) | i. United Kingdom (RM0.6 billion, 16.7%) | | | | |
| ii. | China (RM3.3 billion, 11.3%) | ii. France (RM0.5 billion, 14.9%) | | | | |
| iii. | New Zealand (RM2.8 billion, 9.7%) | iii. Indonesia (RM0.4 billion, 10.7%) | | | | |
| iv. | Singapore (RM2.6 billion, 9.1%) | iv. Singapore (RM0.4 billion, 10.7%) | | | | |
| V. | United States (US) (RM2.5 billion, 8.8%) | v. Australia (RM0.3 billion, 8.1%) | | | | |

Source: MATRADE

31. In 2022, Malaysia's major imported products were as follows (Table 8.7).

Table 8.7: Top Imported Products of Food Processing Industry

| Processed Food | Beverages and Tobacco | | | |
|--|--|--|--|--|
| i. Edible products and preparations (RM8.8 billion, 30.4%) | i. Alcoholic beverages (RM2.5 billion, 67.8%) | | | |
| ii. Dairy products (RM6.3 billion, 21.6%) | ii. Manufactured tobacco (RM0.60 | | | |
| iii. Sugar and sugar confectionery (RM4.9 | billion, 16.6%) | | | |
| billion, 17.1%) | iii. Non-alcoholic beverages (RM0.57 | | | |
| iv. Prepared and preserved vegetables and fruits (RM2.8 billion, 9.8%) | billion, 15.6%) | | | |
| v. Prepared cereals and flour preparation (RM2.8 billion, 9.6%) | | | | |

Source: MATRADE

Value-added

32. The value-added (GDP) of the food processing industry for the period of 2006 to 2022 is recorded in Table 8.8.

Table 8.8: Value-added of Food Processing Industry

| ltonoo | IM | P3 | 2021 | 2022 | 2006-2020 | 2020-2021 | 2021-2022 |
|--|------|------|------|------|------------------|-----------|-----------|
| ltems | 2006 | 2020 | 2021 | 2022 | CAGR Annual Grov | | Growth |
| Value-added ⁶ (RM billion) | 9.8 | 25.8 | 27.7 | 30.5 | 7.2% | 7.2% | 10.4% |

Source: Department of Statistics Malaysia (DOSM)

- 33. During the IMP3 period, the industry's GDP contribution grew by a CAGR of 7.2 per cent from RM9.8 billion (2006) to RM25.8 billion (2020).
- 34. In 2021 and 2022, the industry's GDP contribution grew further by 7.2 per cent and 10.4 per cent to RM27.7 billion and RM30.5 billion respectively.
- 35. The increase in GDP was attributed to the population and urbanisation growth with shifts in lifestyle led to growing demand for high nutrient food products.

Employment

36. The employment in the food processing industry for the period of 2019 to 2022 is recorded in Table 8.9 below.

Table 8.9: Employment in Food Processing Industry

| ltonor | IM | P3 | 2021 | 2022 | 2019-2022 |
|--------------------------------------|---------|---------|---------|---------|-----------|
| Items | 2019 | 2020 | 2021 | 2022 | CAGR |
| Employment ⁷ (persons) | 222,300 | 219,506 | 224,658 | 234,832 | 1.8% |

Source: DOSM

⁶ Value added is measured by the GDP of the industry; 2006 GDP data is based on constant 2005 prices, while 2020 to 2022 data are based on constant 2015 prices. Includes food processing, beverages, and tobacco products

⁷ This employment data is based on Monthly Manufacturing Statistics December 2022 and includes processed food, beverages, tobacco and animal feed, excludes manufacturing of vegetable and animal oils and fats. Due to the change in methodology for employment statistics tabulation in 2019, industry's employment breakdown from 2006 to 2018 is not available

- 37. Industry employment grew by a CAGR of 1.8 per cent, from 222,300 persons (2019) to 234,832 persons (2022).
- 38. The employment growth was an outcome of the increased investments which created additional employment opportunities for the industry.

Labour Productivity

39. The labour productivity of the food processing industry for the period of 2019 to 2022 is recorded as follows (Table 8.10).

Table 8.10: Labour Productivity of Food Processing Industry

| ltems | IMP3 | | 2021 | 2022 | 2019-2022 |
|---|---------|---------|---------|---------|-----------|
| | 2019 | 2020 | 2021 | 2022 | CAGR |
| Labour Productivity ⁸ (RM) | 118,988 | 117,601 | 123,160 | 130,042 | 3.0% |

Source: DOSM

- 40. The industry's labour productivity grew by a CAGR of 3.0 per cent from RM118,988 (2019) to RM130,042 (2022).
- 41. The increased labour productivity was attributed to the technological advancements in the food processing industry.

Institutional Support

- 42. Recognising the need to increase the availability of raw materials required by food processing companies, the Government introduced NAP 2.0 in 2021.
 - i. With the NAP 2.0, the Government aims to develop a sustainable, resilient and technology driven agrofood sector that prioritises food security, while driving economic growth and enhancing the wellbeing of Malaysians.
 - ii. The NAP 2.0 focuses on modernising agriculture, strengthening the agrofood value chain, developing skilled manpower, promoting sustainable agriculture and creating a supportive business ecosystem.
- 43. As the *Halal* food processing sector expanded both domestically and globally, Government initiated various efforts to promote *Halal* food, including:
 - i. the establishment of *Halal* Development Corporation (HDC) established in 2006, HDC is the central coordinator that promotes participation and facilitates the growth of industry players in the development of Malaysia's *Halal* ecosystem.
 - *ii. Halal* Industry Masterplan 2030 (HIMP 2030) to further develop Malaysia's *Halal* industry and establish Malaysia as the global leader to produce *Halal* certified goods and services.

⁸ Annual labour productivity is derived from value added per employment

SECTION 3 TRENDS AND OPPORTUNITIES

- 44. By 2028, the global food market is expected to reach RM58.1 trillion⁹ at 6.7 per cent growth.¹⁰
- 45. The Malaysian market is projected to grow at 8.0 per cent, leading to a market size of RM310.9 billion¹¹ by 2027.¹²
- 46. Malaysia plays a vital role in fulfilling the global demand for *Halal* food products that are widely accepted the Muslim community worldwide.
- 47. Malaysia has the opportunity to capitalise on key emerging trends to strengthen the food processing industry including shifts in consumer preferences and advertisement in food safety practices.

Shift in Consumer Demands

- 48. By 2050, the global population is projected to reach approximately 10.0 billion¹³, leading to a significant increase in food demand with food producers needing to increase production.
- 49. In parallel, with rapid urbanisation occurring rapidly worldwide, 70.0 per cent of the global population is expected to live in urban areas by 2050. As a result, this has led to shifts in consumer trends.
 - i. Increased demand for ready-to-eat meals
 - a. Higher urbanisation leads to the increased demand for readily consumable meals including fast food, store-bought convenience items and street vendor offerings.
 - b. As people's schedules become busier, their food choices often lean towards a higher consumption of processed products.
 - ii. Changes in dietary preferences
 - a. As incomes rise, consumers are transitioning from consuming staple cereals to adopting protein-based diets. Malaysians have demonstrated a tendency to decrease carbohydrate intake and at the same time increase protein consumption.
 - b. Consumers are shifting their preference towards alternative protein options (i.e. nonmeat-based) due to rising concerns relating to health and environment as well as animal welfare. The consumption of plant-based food (e.g. soy and pea), the largest source of alternative protein, is expected to grow.
 - c. Apart from protein-based meals, the interest in functional foods is growing especially in developing countries as people are becoming more health-savy. Whole oat products, fermented foods and nuts are some examples of functional foods that are in demand as they provide health benefits beyond basic nutrition.
 - d. At the same time, there is a growing demand for animal feed such as livestock feed, and aqua feed due to higher consumption of animal-based products. Similarly, increasing plant-based diet adopted by consumers drove the upward trend for plant-based pet feed.
 - iii. Greater expectations regarding food information and sourcing
 - a. Contemporary consumers not only consider price, taste, and convenience but have greater concerns on the origin, production methods and nutritional value of their food.
 - b. Transparency and ethical sourcing play an important role alongside price and taste.

⁹ USD12.96 trillion, converted based on exchange rate USD1.0 to RM4.48 ^{10, 12} Source: Statista

¹¹ USD 69.4 trillion, converted based on exchange rate USD 1.0 to RM4.48

¹³ Source: Food and Agriculture Organization of the United Nations

- 50. It is crucial to invest in the development of high value-added food products that aligns with emerging consumption patterns.
- 51. This involve producing ready-to-eat meals, alternative proteins and functional foods with substantiated health advantages as well as focusing on branding to fulfil consumers' demand on comprehensive food information and sourcing transparency.
- 52. Refer to Action Plan 1 (AP1) in Section 5 for strategies and action plans related to addressing new consumption patterns.

Food Safety

- 53. Ensuring food safety as well as adherence to quality standards and food regulatory requirements are vital to facilitate market access to increase the demand for food testing, inspection and certification.
- 54. Malaysia's strategic location in Southeast Asia and its extensive trade networks provide a unique advantage in the field of food testing, inspection, certification and training.
 - i. As a regional hub for trade and commerce, Malaysia can leverage its connectivity to establish efficient and reliable services that cater to the growing demand for food safety and quality assurance.
 - ii. With a solid foundation in food production and processing, Malaysia can build upon this strength to establish robust testing, inspection, certification and training services.
 - iii. By integrating these services into the existing food processing ecosystem, Malaysia possesses the capability to guarantee the quality and safety of its food products while creating new avenues for growth and innovation.
- 55. Malaysia's approach in these services will be strengthened through enhanced collaboration between research institutions and the industry in order to drive industrial application.
 - i. This collaborative approach will enhance the relevance of research output by aligning it with industry needs.
 - ii. Greater exchange of information and insights between these parties will foster innovation and ensure technological advancements are effectively applied in the agrofood sector.
- 56. Malaysia can capitalise on its existing strengths in the food processing industry by integrating food testing, inspection, certification and training services into its ecosystem. By leveraging on its strong food processing industry, Halal certification expertise and strategic location, Malaysia has the opportunity to position itself as a regional leader in providing high-quality and reliable food-related services.
- 57. Refer to Action Plan 7 (AP7) in Section 5 for specific food processing industry action plan related to food testing, inspection, certification and training services.

SECTION 4 CHALLENGES

Food Security

- 58. The COVID-19 pandemic, unstable geopolitical landscape and climate change have significantly impacted food security as global supply chains are disrupted.
- 59. Malaysia remains committed to safeguard food security through the transformation of the nation's food system. Within the wider food supply network, food processing industry plays a part towards developing a resilient food system in several ways:
 - i. extending shelf life through packaging and preservation methods such as freezing, canning and drying;
 - ii. improving food safety strict hygiene and sanitation practices to prevent foodborne illnesses; and
 - iii. increasing quality improve nutritional value, taste and appearance.
- 60. In this regard, research, development, commercialisation and innovation (RDCI) efforts are crucial to focus on enhancing of food processing methods, packaging, storage and distribution.
 - i. This involves development of new technologies for food preservation and fortification.
 - ii. Other efforts include strengthening coordination among relevant agencies, increasing resources for RDCI, streamlining intellectual property certification processes and promoting international knowledge exchanges.
 - iii. Establishing a supportive ecosystem that includes research institutions, industry players and Government Agencies will encourage collaboration and drive innovation. Clear policy guidelines, allocation of resources, and attractive incentives will further enhance the RDCI ecosystem.
- 61. By fostering a conducive RDCI ecosystem, Malaysia can strengthen its food security and achieve self-sufficiency.
- 62. Refer to Action Plan 2 (AP2) in Section 5 for strategies and action plans related to improving RDCI rate.

Food Wastage

- 63. Food losses and wastages are significant challenges that need to be addressed to ensure sustainable food production and consumption. Globally, 14.0 per cent of food is lost before reaching the retail level.¹⁴
 - i. In developed countries, a majority of food loss and waste occurs at the retail and consumption stages, driven by behaviours of retailers, food service providers and consumers.
 - ii. Developing countries such as Malaysia experience higher food loss due to inefficient handling across the entire supply chain, leading to reduced quantities and compromised food quality.
- 64. To achieve sustainable consumption and production patterns, the United Nations has set a target to halve per capita global food waste at the retail and consumer levels by 2030.

¹⁴ Source: Food and Agriculture Organization of the United Nations

- 65. Meeting the rising demand for food requires exploration of innovative ways to increase production without negatively impacting the environment.
 - i. Land expansion and agricultural input intensification can lead to negative outcomes such as soil degradation and higher greenhouse gas emissions.
 - ii. Therefore, the industry needs to focus on developing new agricultural technologies to enhance productivity while minimising the emission.
- 66. By-product recycling is one of the sustainable practices that use waste materials from industries for the production of food products such as animal feed and food additives. This production method requires technological advancement to ensure safety and nutritional value.
- 67. By embracing these innovative approaches, the industry will be able to meet global food demands while supporting the circular economy that minimise food loss, waste and negative environmental impacts.
- 68. Refer to Action Plan 6 (AP6) in Section 5 for strategies and action plans related to adopting technology to reduce food lost and wastage.

Export Ecosystem

- 69. The European Union (EU) has imposed several requirements for food imports including traceability and environmental, social and governance (ESG) practice standards to ensure the safety, quality and sustainability of food products imported to the EU. The ESG requirement have posed difficulty for the local industry players due to their limited capabilities to comply with the requirement.
- 70. These requirements are usually associated with high costs of compliance, hindering foreign market access for Malaysian exporters as there are limited local facilities and infrastructure to support these new standards.
- 71. Apart from that, Malaysian exporters are losing its competitiveness due to complex regulatory processes required prior to exporting. Extended approval procedures involving multiple authorities lengthens the export process.
- 72. It is vital to strengthen export ecosystem to increase the global presence of Malaysian brands.
 - i. Utilisation of Free Trade Agreements (FTA) and streamline the regulatory processes can help to widen market access and expedite trade processes.
 - ii. Malaysia has the opportunity to meet global requirements and standards by elevating local food processing standards through upgrade of training facilities and infrastructure.
 - iii. Export promotion programmes and related activities are required to be intensified to link Malaysian products to potential buyers and importers.
- 73. Refer to Action Plan 3 (AP3), Action Plan 4 (AP4) and Action Plan 5 (AP5) in Section 5 for strategies and action plans related to the export ecosystem.

SECTION 5 STRATEGIES AND ACTION PLANS

NIMP 2030 Focus

- 74. During the period of the NIMP 2030, the industry will:
 - i. intensify RDCI to support food security goals and new consumption patterns;
 - ii. strengthen the export ecosystem; and
 - iii. improve food processing efficiency, optimise resources and reduce wastage.

Action Plans

75. Strategies and Action Plans relating to the NIMP 2030's Missions and Enablers are applicable to this industry (Figure 8.2).

Figure 8.2: Strategies and Action Plans for Food Processing Industry



APPENDIX 1 INCENTIVES

There is an array of incentives offered for key players of food processing industry, these include the following:

| Incentives | Agency | |
|---|---|--|
| Incentives for General Investments | Malaysian Investment Development | |
| Incentives for Small Scale Companies | Authority (MIDA) | |
| Incentive for Reinvestments by Existing Company | | |
| Incentives for Research and Development (R&D): In-House R&D Contract R&D Company R&D Company | | |
| Commercialisation of Public Sector R&D Findings in Resource-based and Non-Resource-Based Industries | | |
| Incentive for Automation Capital Allowance (Automation CA) | | |
| Import Duty and/ or Sales Tax Exemption on Machinery/ Equipment/ Raw Materials/ Components | | |
| Incentive for Food Production Project | Ministry of Agriculture and Food Security (MAFS) | |
| Incentive for <i>Halal</i> Industry Players (Companies proposing to undertake projects in the designated <i>Halal</i> Parks) | Halal Development Corporation (HDC) | |
| Reinvestment Allowance | Inland Revenue Board of Malaysia (LHDN) | |





