



KEMENTERIAN EKONOMI
JABATAN PERANGKAAN MALAYSIA

BANCI EKONOMI
ECONOMIC CENSUS
2023

STATISTIK PENYELIDIKAN DAN PEMBANGUNAN
RESEARCH AND DEVELOPMENT STATISTICS

Pemakluman

Kepengerusian ASEAN-Malaysia 2025: Jabatan Perangkaan Malaysia (DOSM) akan mempengerusikan Jawatankuasa Sistem Statistik Komuniti ASEAN Ke-15 (ACSS15) yang bertujuan untuk memperkukuh kerjasama statistik ke arah pembangunan serantau yang mampan.

Malaysia julung kalinya berjaya menduduki tempat pertama (1) di peringkat global di dalam laporan dwi-tahunan *Open Data Inventory* (ODIN) 2024/25 yang dikeluarkan oleh *Open Data Watch* (ODW), mengatasi 197 buah negara yang lain. Pencapaian ini merupakan lonjakan ketara daripada kedudukan ke-67 dalam penilaian ODIN 2022/23.

Kerajaan Malaysia telah mengisytiharkan 20 Oktober sebagai Hari Statistik Negara (MyStats Day), dengan tema 'Statistik Nadi Kehidupan.' Sementara itu, Hari Statistik Dunia Keempat akan disambut pada 20 Oktober 2025 dengan tema '*Driving Change with Quality Statistics and Data for Everyone*'.

OpenDOSM NextGen adalah medium yang menyediakan katalog data dan visualisasi bagi memudahkan pengguna menganalisis pelbagai data dan boleh diakses melalui portal <https://open.dosm.gov.my>.

Announcement

ASEAN-Malaysia 2025 Chairmanship: The Department of Statistics Malaysia (DOSM) will chair the 15th ASEAN Community Statistical System Committee (ACSS15) which aims to strengthen the statistical cooperation towards sustainable regional development.

Malaysia, for the first time, ranked as number one (1) globally in the biennial Open Data Inventory (ODIN) 2024/25 report released by Open Data Watch (ODW), surpassing 197 other countries. This achievement marks a significant leap from its 67th position in the ODIN 2022/23 assessment.

The Government of Malaysia has declared October 20th as National Statistics Day (MyStats Day), with the theme 'Statistics is the Essence of Life.' Meanwhile, the Fourth World Statistics Day will be celebrated on 20th October 2025, with the theme 'Driving Change with Quality Statistics and Data for Everyone'.

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“Sumber: Jabatan Perangkaan Malaysia”

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KATA PENGANTAR

Penerbitan Banci Ekonomi 2023 Statistik Penyelidikan & Pembangunan (R&D) memaparkan statistik yang diperoleh daripada Banci Ekonomi 2023 bagi tahun rujukan 2022. Banci ini meliputi semua pertubuhan berdaftar yang terlibat dalam aktiviti ekonomi bagi sektor Pertanian, Perlombongan & pengkuarian, Pembuatan, Pembinaan dan Perkhidmatan. Pertubuhan dikelaskan mengikut Piawaian Klasifikasi Industri Malaysia (MSIC) 2008 Versi 1.0 yang selari dengan *International Standard Industrial Classification of All Economic Activities (ISIC), Revision 4, 2008*. Banci terdahulu telah dijalankan pada tahun 2016 bagi tahun rujukan 2015.

Penerbitan ini menyediakan statistik utama berkaitan bilangan pertubuhan, perbelanjaan R&D, output kasar, input perantara, nilai ditambah, bilangan pekerja, gaji & upah dan harta tetap di peringkat sektor, nasional dan negeri. Statistik tersebut boleh digunakan oleh agensi kerajaan, ahli ekonomi, ahli akademik, pihak swasta serta individu bagi membuat perancangan dan penggubalan dasar, analisis ekonomi, unjuran dan membantu merancang pembangunan perniagaan.

Penerbitan ini dibahagikan kepada empat bahagian. Bahagian pertama memaparkan sorotan utama bagi statistik aktiviti R&D di Malaysia diikuti bahagian kedua mengandungi ringkasan penemuan. Sementara itu, bahagian ketiga mengandungi jadual statistik terperinci, manakala bahagian keempat merangkumi aspek teknikal termasuk skop dan liputan, konsep dan definisi serta penjelasan berkaitan pembolehubah utama.

Jabatan Perangkaan Malaysia (DOSM) merakamkan setinggi-tinggi penghargaan atas kerjasama semua pihak yang telah membekalkan data yang diperlukan dan menyumbang kepada kejayaan penerbitan ini. Setiap maklum balas dan cadangan untuk penambahbaikan laporan ini pada masa akan datang amat dihargai.

DATO' SRI DR. MOHD UZIR MAHIDIN

Ketua Perangkawan Malaysia

September 2025

PREFACE

The Economic Census 2023 Research & Development (R&D) Statistics publication presents data obtained from the Economic Census 2023 for reference year 2022. The census covered all registered establishments engaged in economic activities in the Agriculture, Mining & quarrying, Manufacturing, Construction and Services sectors. The establishments are classified according to the Malaysia Standard Industrial Classification (MSIC) 2008 Version 1.0, which is aligned with the International Standard Industrial Classification of All Economic Activities (ISIC), Revision 4, 2008. The previous census was conducted in 2016, based on the reference year 2015.

This publication provides key statistics pertaining to the number of establishments, R&D expenditure, gross output, intermediate input, value added, number of persons engaged, salaries & wages and fixed assets at the sectoral, national and state levels. These statistics can be used by government agencies, economists, academicians, private sectors and individuals for planning and policy formulations, economic analysis, projections and assisting in business development planning.

The publication is divided into four parts. The first part displays the main highlights of R&D statistics in Malaysia, followed by the second part, which contains a summary of the findings. Meanwhile, the third part provides detailed statistical tables, while the fourth part covers technical aspects, including scope and coverage, concepts and definitions and explanations of key variables.

The Department of Statistics Malaysia (DOSM) gratefully acknowledges the cooperation of all parties who have provided the required data and contributed to the success of this publication. Every feedback and suggestion towards improving future reports is highly appreciated.

DATO' SRI DR. MOHD UZIR MAHIDIN

Chief Statistician Malaysia

September 2025

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BAHAGIAN
PART

1

SOROTAN UTAMA *MAIN HIGHLIGHTS*



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BANCI EKONOMI 2023

STATISTIK PENYELIDIKAN DAN PEMBANGUNAN

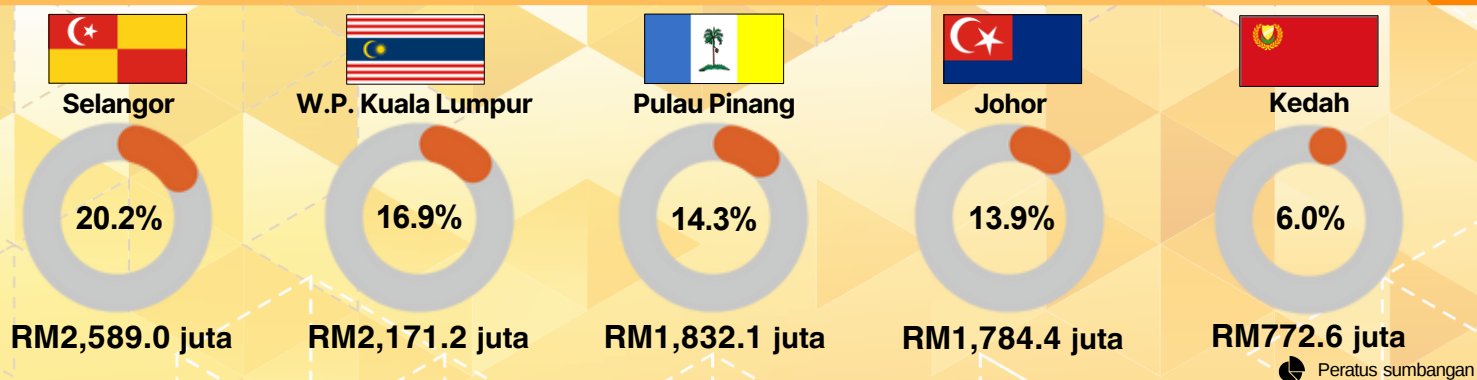
STATISTIK UTAMA



PERBELANJAAN R&D MENGIKUT SEKTOR



PENYUMBANG TERTINGGI PERBELANJAAN R&D MENGIKUT NEGERI



Nota: R&D: Penyelidikan & Pembangunan

Sumber: Banci Ekonomi 2023, Jabatan Perangkaan Malaysia (DOSM)



ECONOMIC CENSUS 2023

RESEARCH AND DEVELOPMENT STATISTICS

KEY STATISTICS



NUMBER OF ESTABLISHMENTS
3,007 establishments



VALUE ADDED
RM450,376.3 million



R&D EXPENDITURE
RM12,813.0 million



NUMBER OF PERSONS ENGAGED
1,125,838 persons



GROSS OUTPUT
RM1,549.8 billion



SALARIES & WAGES
RM65,709.4 million



INTERMEDIATE INPUT
RM1,099.3 billion



FIXED ASSET
RM663,401.6 million

R&D EXPENDITURE BY SECTOR



Agriculture

RM9.9 million
● (0.1%)



Mining & quarrying

RM453.0 million
● (3.5%)



Manufacturing

RM9,498.9 million
● (74.1%)



Construction

RM9.5 million
● (0.1%)



Services

RM2,841.6 million
● (22.2%)

TOP CONTRIBUTORS IN R&D EXPENDITURE BY STATE



Selangor

20.2%

RM2,589.0 million



W.P. Kuala Lumpur

16.9%

RM2,171.2 million



Pulau Pinang

14.3%

RM1,832.1 million



Johor

13.9%

RM1,784.4 million



Kedah

6.0%

RM772.6 million

● Percentage share

Note: R&D: Research & Development

Source: Economics Census 2023, Department of Statistics Malaysia (DOSM)



20 Oktober 2016 - 2030

The background of the slide is a photograph of an industrial manufacturing facility. It shows a long assembly line with several orange robotic arms positioned over a white vehicle chassis. The scene is brightly lit, and the floor is a light grey. The image is partially obscured by a white diagonal shape that contains the text.

BAHAGIAN *PART*

2

RINGKASAN PENEMUAN *SUMMARY OF FINDINGS*



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1. PENGENALAN

Pada tahun 2022, dunia menghadapi pelbagai cabaran dan ketidaktentuan dipengaruhi oleh peningkatan inflasi, konflik geopolitik, kenaikan kadar faedah dan ketidakstabilan pasaran kewangan. Meskipun majoriti negara dalam proses pemulihan ekonomi daripada impak pandemik COVID-19, kadar pemulihan ini berbeza di seluruh dunia. Negara membangun menghadapi cabaran yang lebih ketara berbanding negara maju. Pertumbuhan global lebih perlahan daripada jangkaan telah mendorong kebanyakan negara mempergiatkan inovasi dan menyusun semula dasar ekonomi negara masing-masing.

Walaupun berdepan dengan pertumbuhan global yang perlahan, ekonomi Malaysia pada tahun 2022 mencatatkan prestasi kukuh sebanyak 8.9 peratus. Prestasi ini disokong oleh permintaan domestik yang kukuh, eksport memberangsangkan dan dasar kerajaan yang komprehensif. Walau bagaimanapun, Malaysia tetap berdepan dengan pelbagai cabaran seperti inflasi, gangguan rantai bekalan dan ketidakstabilan pasaran yang memerlukan perancangan dasar strategik.

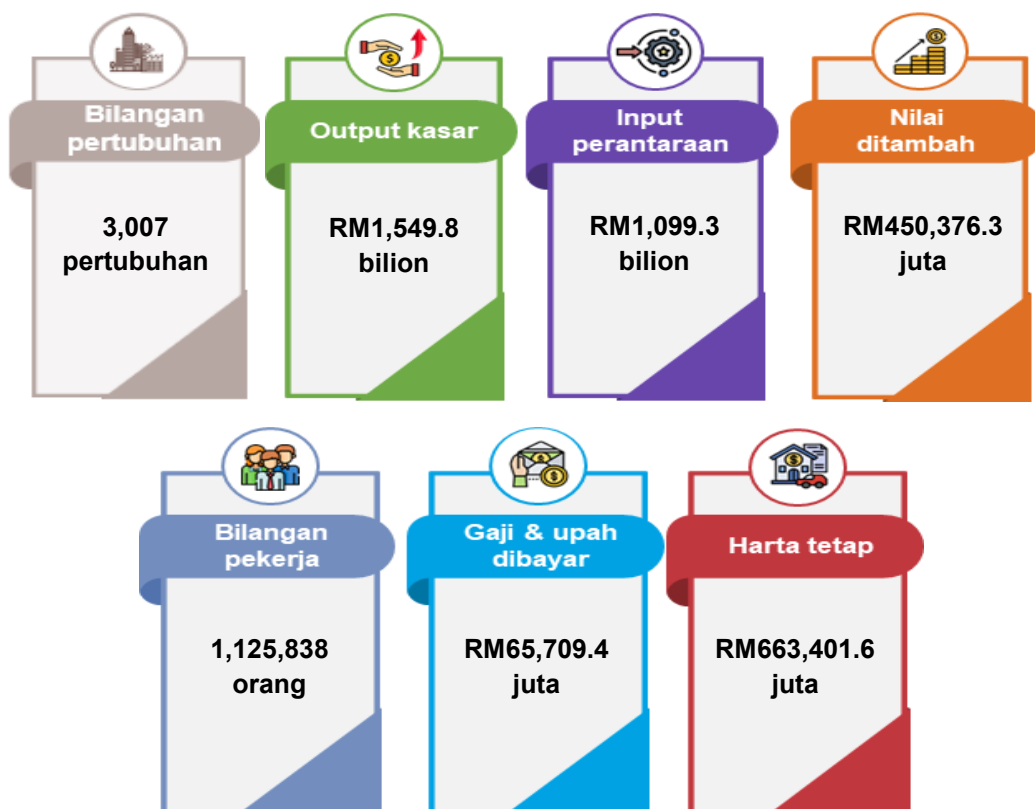
Berdasarkan Laporan Ringkasan Tinjauan Kajian Penyelidikan dan Pembangunan (R&D) Kebangsaan di Malaysia 2021, pandemik COVID-19 memberi kesan yang ketara terhadap perbelanjaan R&D di Malaysia. Keutamaan negara telah beralih kepada menangani kesan pandemik menyebabkan peruntukan aktiviti R&D dikurangkan bagi menampung keperluan lain yang lebih mendesak seperti sektor kesihatan awam. Perbelanjaan Kasar R&D (GERD) telah menurun 10.5 peratus pada tahun 2020 berbanding tahun sebelumnya yang dipengaruhi oleh beberapa faktor, termasuk perubahan dasar kerajaan, keadaan ekonomi yang tidak menentu, penyesuaian strategi R&D, dan kesan daripada pandemik COVID-19 (MASTIC, 2021).

2. PRESTASI KESELURUHAN

Penerbitan Statistik Penyelidikan & Pembangunan (R&D) membentangkan statistik berkaitan perbelanjaan R&D oleh pertubuhan di Malaysia yang diperoleh daripada Banci Ekonomi 2023 bagi tahun rujukan 2022. Banci tersebut meliputi lima sektor utama iaitu Pertanian, Perlombongan & pengkuarian, Pembuatan, Pembinaan dan Perkhidmatan.

Berdasarkan dapatan Banci Ekonomi 2023 bagi tahun rujukan 2022, sebanyak 3,007 pertubuhan yang terlibat dengan aktiviti R&D merekodkan output kasar sebanyak RM1,549.8 bilion dan input perantaraan mencatatkan RM1,099.3 bilion dengan menghasilkan nilai ditambah berjumlah RM450,376.3 juta. Jumlah gaji & upah dibayar merekodkan sebanyak RM65,709.4 juta dengan bilangan pekerja seramai 1,125,838 orang. Sementara itu, harta tetap mencatatkan sebanyak RM663,401.6 juta.

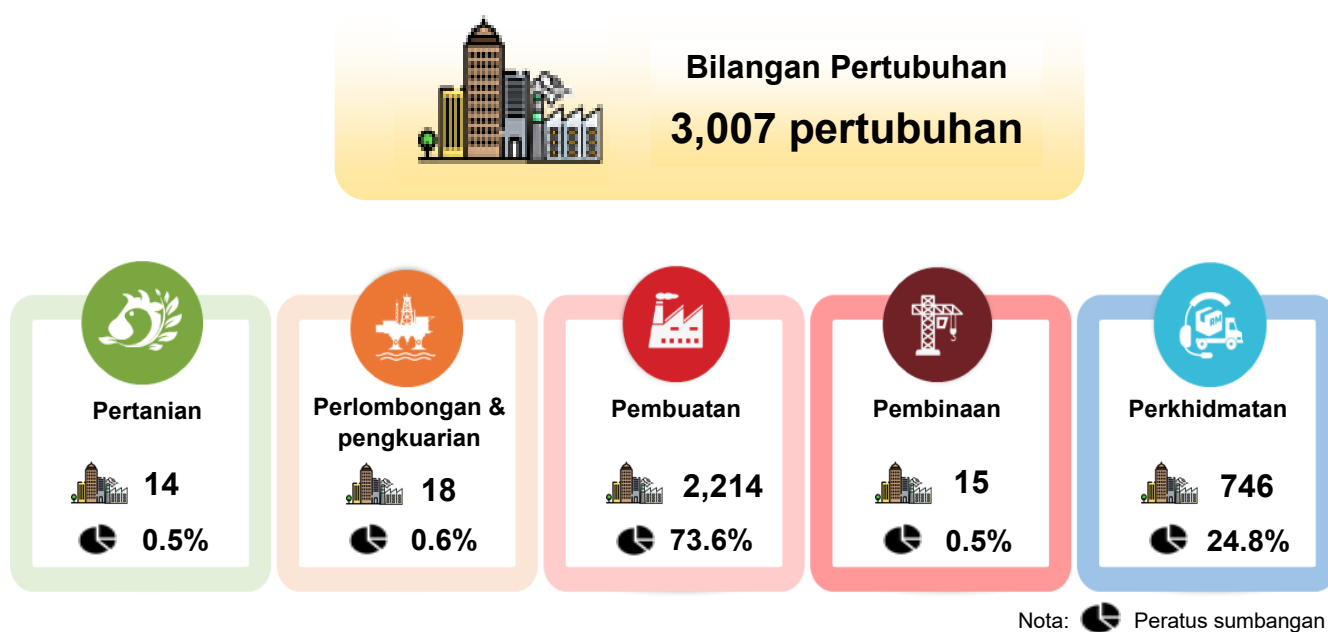
Paparan 1: Statistik Utama Pertubuhan yang Mempunyai Perbelanjaan R&D, 2022



3. BILANGAN PERTUBUHAN

Sejumlah 3,007 pertubuhan yang terlibat dengan aktiviti R&D merentasi semua sektor pada tahun 2022. Sektor Pembuatan merupakan penyumbang tertinggi dengan komposisi 73.6 peratus (2,214 pertubuhan), diikuti oleh Perkhidmatan dengan 24.8 peratus (746 pertubuhan) dan Perlombongan & pengkuarian sebanyak 0.6 peratus (18 pertubuhan). Sementara itu, Pembinaan menyumbang 0.5 peratus (15 pertubuhan) dan Pertanian mewakili sebanyak 0.5 peratus (14 pertubuhan).

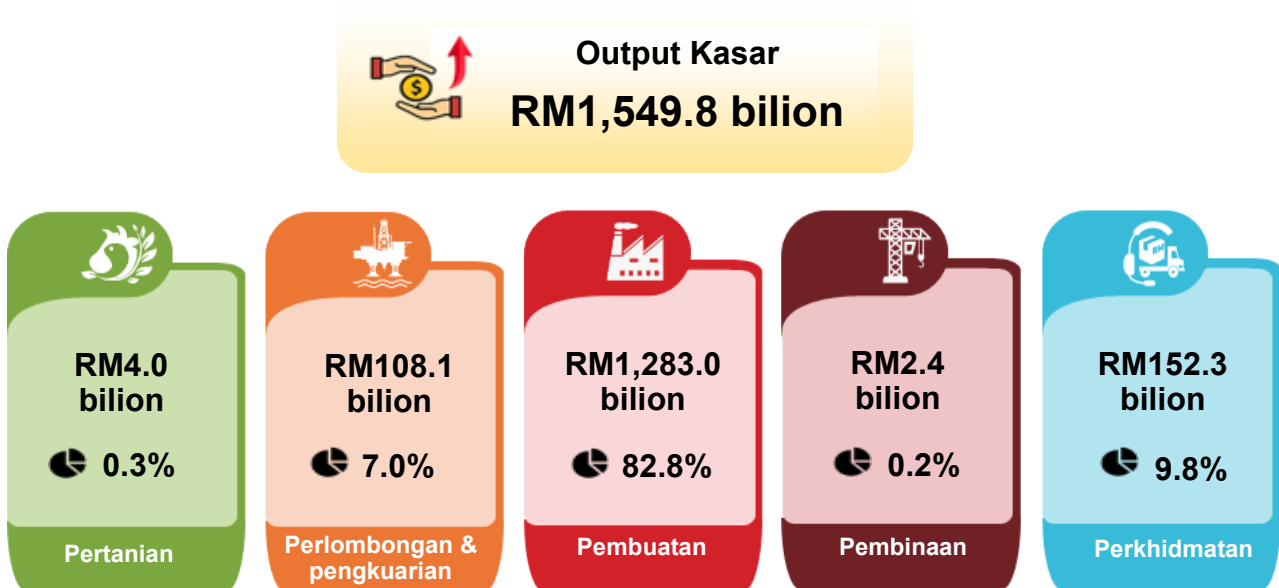
Paparan 2: Bilangan Pertubuhan bagi Aktiviti R&D mengikut Sektor, 2022



4. OUTPUT KASAR

Nilai output kasar berjumlah RM1,549.8 bilion yang didominasi oleh sektor Pembuatan dengan sumbangan sebanyak 82.8 peratus atau RM1,283.0 bilion. Ini diikuti oleh Perkhidmatan dengan RM152.3 bilion (9.8%) dan Perlombongan & pengkuarian, RM108.1 bilion (7.0%). Sementara itu, output kasar bagi Pertanian dan Pembinaan masing-masing merekodkan nilai RM4.0 bilion (0.3%) dan RM2.4 bilion (0.2%).

Paparan 3: Output Kasar bagi Aktiviti R&D mengikut Sektor, 2022

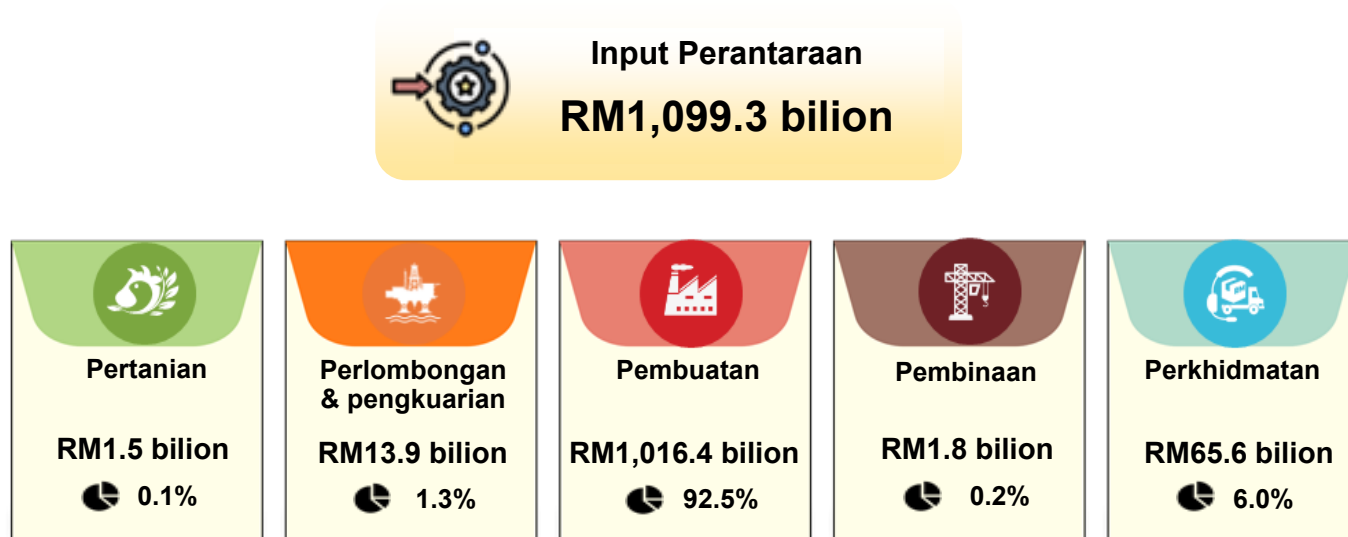


Nota: Peratus sumbangan

5. INPUT PERANTARAAN

Nilai input perantaraan adalah berjumlah RM1,099.3 bilion pada tahun 2022. Sektor Pembuatan mencatatkan nilai tertinggi iaitu RM1,016.4 bilion dengan sumbangan sebanyak 92.5 peratus daripada jumlah nilai input perantaraan. Perkhidmatan mencatatkan nilai RM65.6 bilion (6.0%), diikuti oleh Perlombongan & pengkuarian sebanyak RM13.9 bilion (1.3%). Selain itu, sektor Pembinaan merekodkan RM1.8 bilion (0.2%), manakala Pertanian menyumbang RM1.5 bilion (0.1%).

Paparan 4: Input Perantaraan bagi Aktiviti R&D mengikut Sektor, 2022

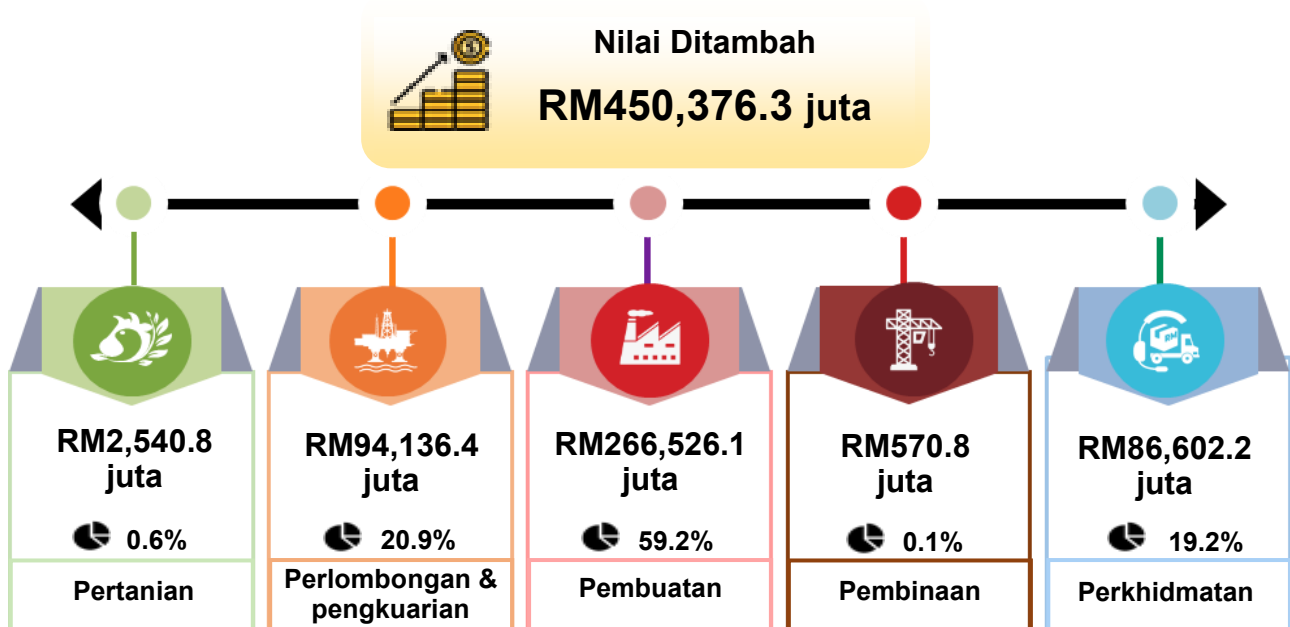


Nota: Peratus sumbangan

6. NILAI DITAMBAH

Nilai ditambah yang dijana pada tahun 2022 berjumlah RM450,376.3 juta. Sektor Pembuatan merupakan penyumbang utama iaitu 59.2 peratus atau RM266,526.1 juta. Ini diikuti oleh sektor Perlombongan & pengkuarian yang merekodkan sebanyak RM94,136.4 juta (20.9%), dengan Perkhidmatan menyumbang RM86,602.2 juta (19.2%) serta Pertanian mencatatkan RM2,540.8 juta (0.6%).

Paparan 5: Nilai Ditambah bagi Aktiviti R&D mengikut Sektor, 2022



Nota: Peratus sumbangan

RINGKASAN PENEMUAN

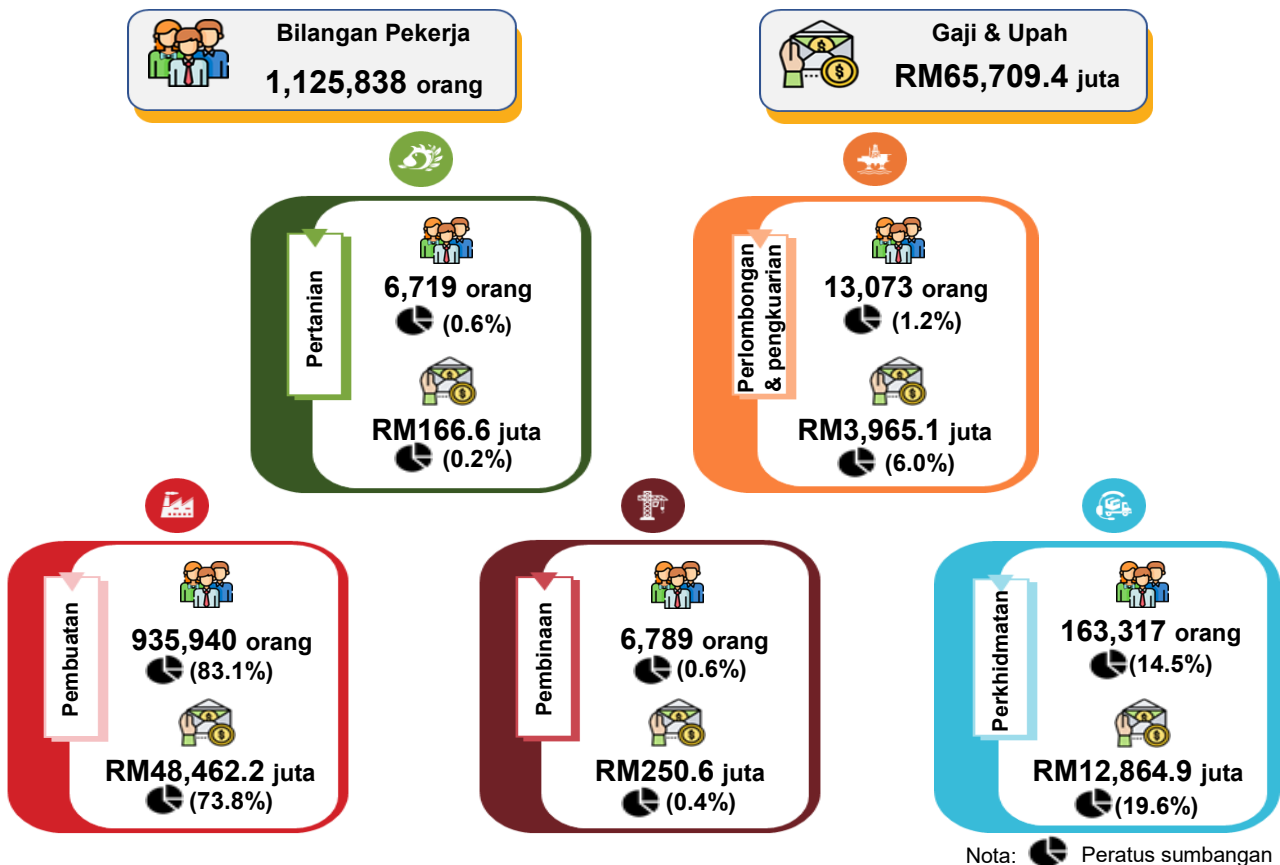
7. BILANGAN PEKERJA DAN GAJI & UPAH

7.1 Bilangan Pekerja dan Gaji & Upah mengikut Sektor

Seramai 1,125,838 orang telah diambil bekerja oleh pertubuhan yang terlibat dalam aktiviti R&D pada tahun 2022. Sektor Pembuatan merekodkan bilangan pekerja tertinggi iaitu 935,940 orang (83.1%), diikuti oleh Perkhidmatan iaitu 163,317 orang (14.5%) dan Perlombongan & pengkuarian seramai 13,073 orang (1.2%). Di samping itu, Pembinaan mencatatkan 6,789 orang (0.6%) dan Pertanian, 6,719 orang (0.6%).

Sementara itu, jumlah gaji & upah yang dibayar pada tahun 2022 merekodkan nilai sebanyak RM65,709.4 juta. Sektor Pembuatan mencatatkan jumlah gaji & upah dibayar tertinggi sebanyak RM48,462.2 juta (73.8%), diikuti oleh Perkhidmatan sebanyak RM12,864.9 juta (19.6%) dan Perlombongan & pengkuarian, RM3,965.1 juta (6.0%). Pada tempoh yang sama, Pembinaan dan Pertanian masing-masing merekodkan RM250.6 juta (0.4%) dan RM166.6 juta (0.2%).

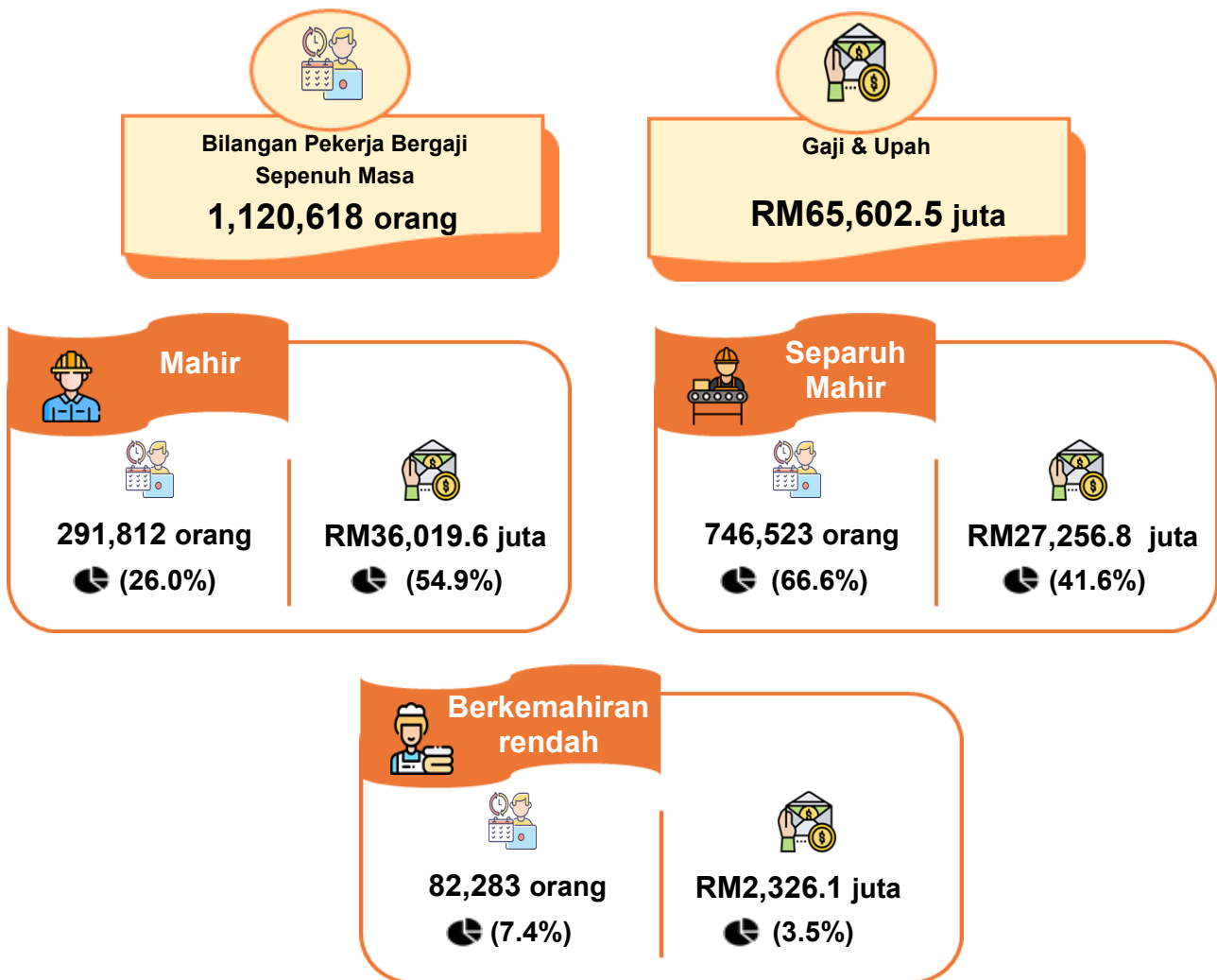
Paparan 6: Bilangan Pekerja dan Gaji & Upah bagi Aktiviti R&D mengikut Sektor, 2022



7.2. Bilangan Pekerja Bergaji Sepenuh Masa dan Gaji & Upah mengikut Tahap Kemahiran

Seramai 1,120,618 orang pekerja bergaji sepenuh masa direkodkan dalam aktiviti R&D pada tahun 2022. Dari segi tahap kemahiran, pekerja separuh mahir merekodkan bilangan pekerja tertinggi dengan 746,523 orang (66.6%), diikuti pekerja mahir seramai 291,812 orang (26.0%) dan pekerja berkemahiran rendah iaitu 82,283 orang (7.4%). Walau bagaimanapun, dari segi gaji & upah, pekerja mahir menerima jumlah tertinggi iaitu RM36,019.6 juta (54.9%), diikuti pekerja separuh mahir sebanyak RM27,256.8 juta (41.6%) dan pekerja berkemahiran rendah RM2,326.1 juta (3.5%).

Paparan 7: Bilangan Pekerja Bergaji Sepenuh Masa dan Gaji & Upah bagi Aktiviti R&D mengikut Tahap Kemahiran, 2022

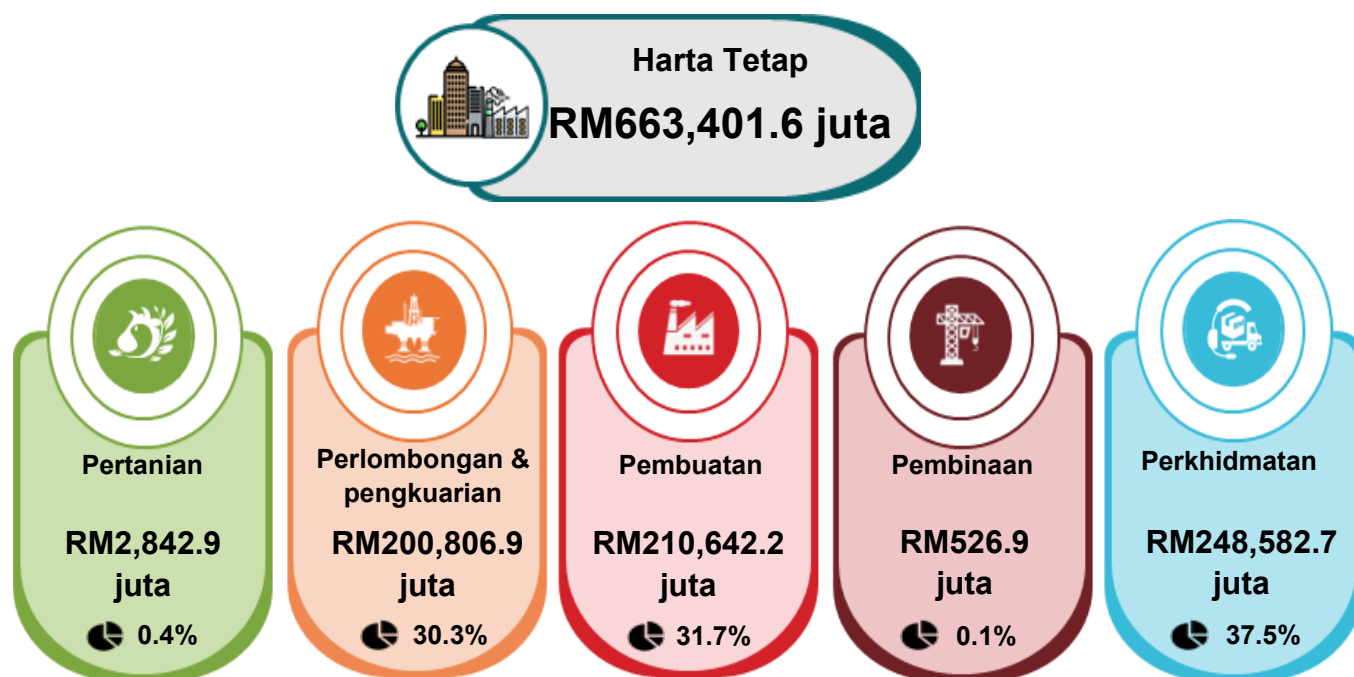


Nota: Peratus sumbangan

8. HARTA TETAP

Nilai harta tetap yang dimiliki oleh pertubuhan yang terlibat dalam aktiviti R&D pada tahun 2022 berjumlah RM663,401.6 juta. Sektor Perkhidmatan merekodkan nilai harta tetap tertinggi dengan RM248,582.7 juta (37.5%), diikuti oleh Pembuatan sebanyak RM210,642.2 juta (31.7%) dan Perlombongan & pengkuarian RM200,806.9 juta (30.3%).

Paparan 8: Harta Tetap bagi Aktiviti R&D mengikut Sektor, 2022

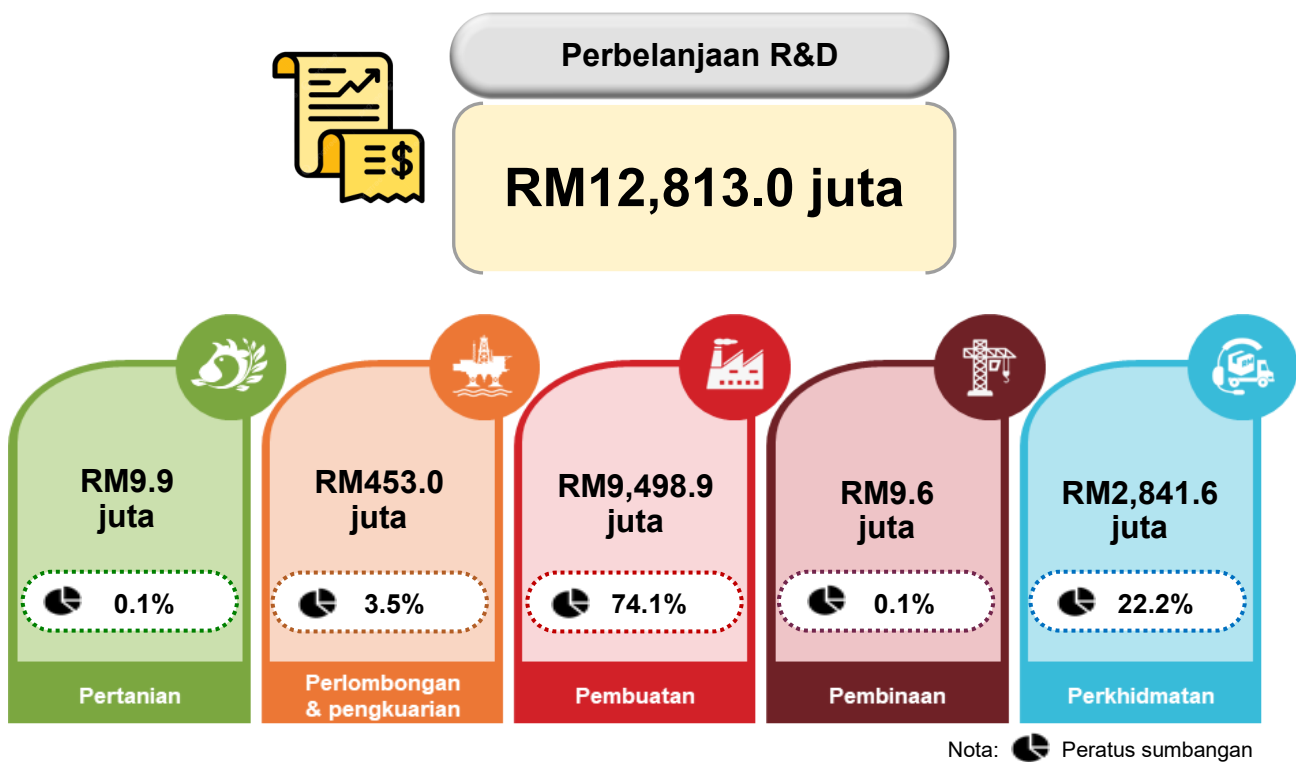


Nota: Peratus sumbangan

9. PERBELANJAAN R&D MENGIKUT SEKTOR

Jumlah perbelanjaan R&D merekodkan sebanyak RM12,813.0 juta pada tahun 2022, dengan sektor Pembuatan merupakan penyumbang utama iaitu sebanyak RM9,498.9 juta atau 74.1 peratus daripada jumlah keseluruhan. Ini diikuti oleh Perkhidmatan mencatatkan nilai RM2,841.6 juta (22.2%) dan Perlombongan & pengkuarian sebanyak RM453.0 juta (3.5%). Sementara itu, sektor Pertanian dan sektor Pembinaan masing-masing merekodkan perbelanjaan R&D sebanyak RM9.9 juta (0.1%) dan RM9.6 juta (0.1%).

Paparan 9: Perbelanjaan R&D mengikut Sektor, 2022

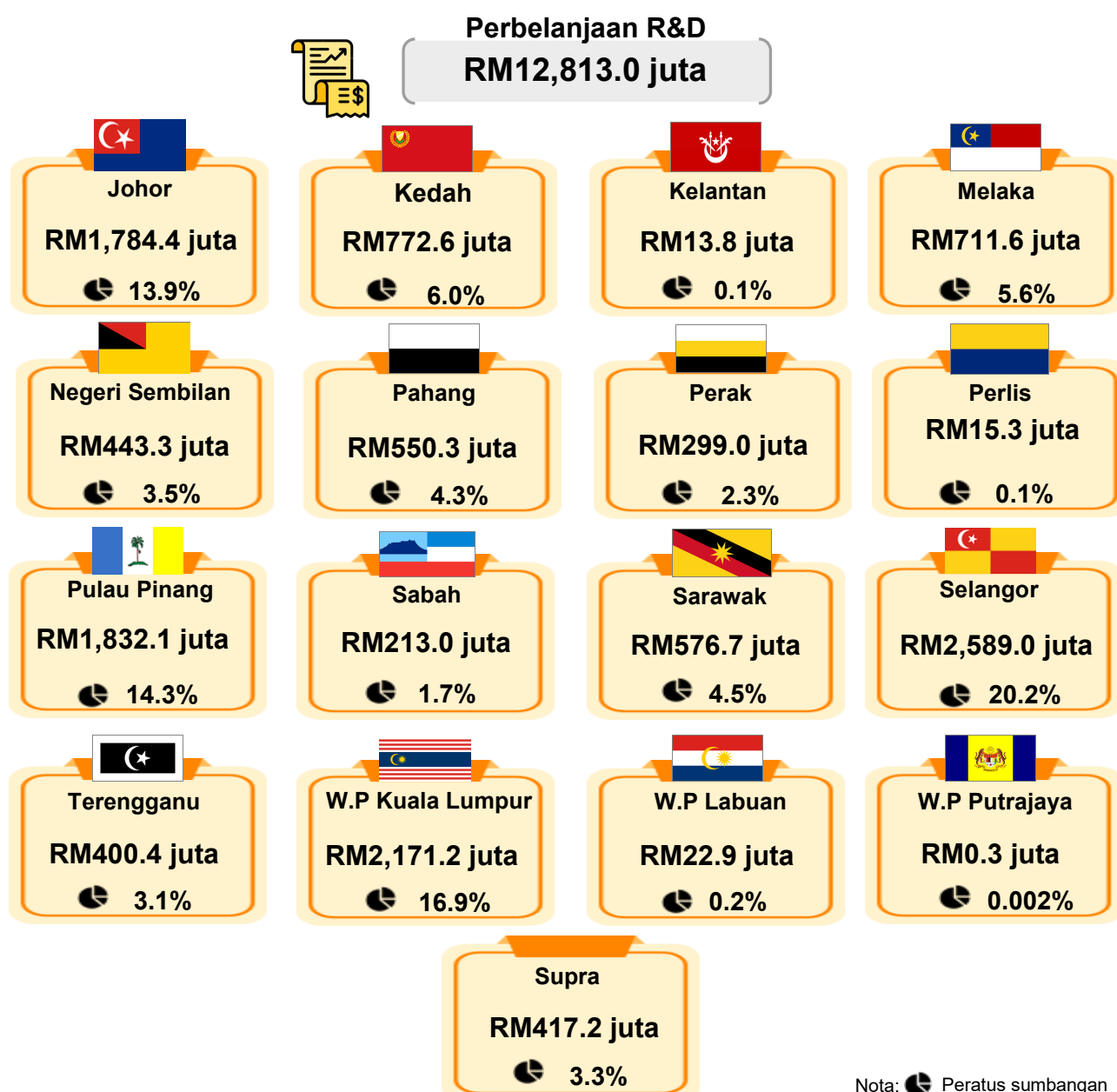


RINGKASAN PENEMUAN

10. PERBELANJAAN R&D MENGIKUT NEGERI

Dari segi prestasi mengikut negeri, Selangor mencatatkan perbelanjaan R&D tertinggi pada tahun 2022 dengan jumlah RM2,589.0 juta (20.2%). Ini diikuti W.P. Kuala Lumpur sebanyak RM2,171.2 juta (16.9%) dan Pulau Pinang, RM1,832.1 juta (14.3%). Seterusnya, Johor dan Kedah masing-masing merekodkan perbelanjaan R&D sebanyak RM1,784.4 juta (13.9%) dan RM772.6 juta (6.0%). Secara keseluruhan, lima negeri tersebut telah menyumbang RM9,149.3 juta atau 71.4 peratus daripada jumlah keseluruhan perbelanjaan R&D.

Paparan 10: Perbelanjaan R&D mengikut Negeri, 2022



1. INTRODUCTION

In 2022, the world faced various challenges and uncertainties due to rising inflation, geopolitical conflicts, higher interest rates, and financial market instability. While most countries were recovering from the effects of the COVID-19 pandemic, the pace of recovery varied globally. Developing nations encountered more severe challenges than developed ones. Slower-than-expected global growth led many countries to increase innovation efforts and realign their economic policies.

Despite facing slower global growth, Malaysia's economy recorded a strong performance in 2022, with a growth rate of 8.9 per cent. This performance was supported by robust domestic demand, encouraging exports and comprehensive government policies. However, Malaysia continued to face various challenges such as higher inflation, supply chain disruptions and market instability, which required strategic policy planning.

According to the 2021 National Research and Development (R&D) Survey Summary Report in Malaysia, the COVID-19 pandemic had a significant impact on R&D spending in the country. The national priority shifted towards addressing the effects of the pandemic, resulting in reduced R&D activities allocations to meet other more pressing needs, such as in the public health sector. Gross Expenditure on R&D (GERD) declined by 10.5 per cent in 2020 as compared to the previous year attributed to a confluence of factors, including shifts in government policy, fluctuations in the economic climate, adjustments to R&D strategies and the disruptive impact of the COVID-19 pandemic (MASTIC, 2021).

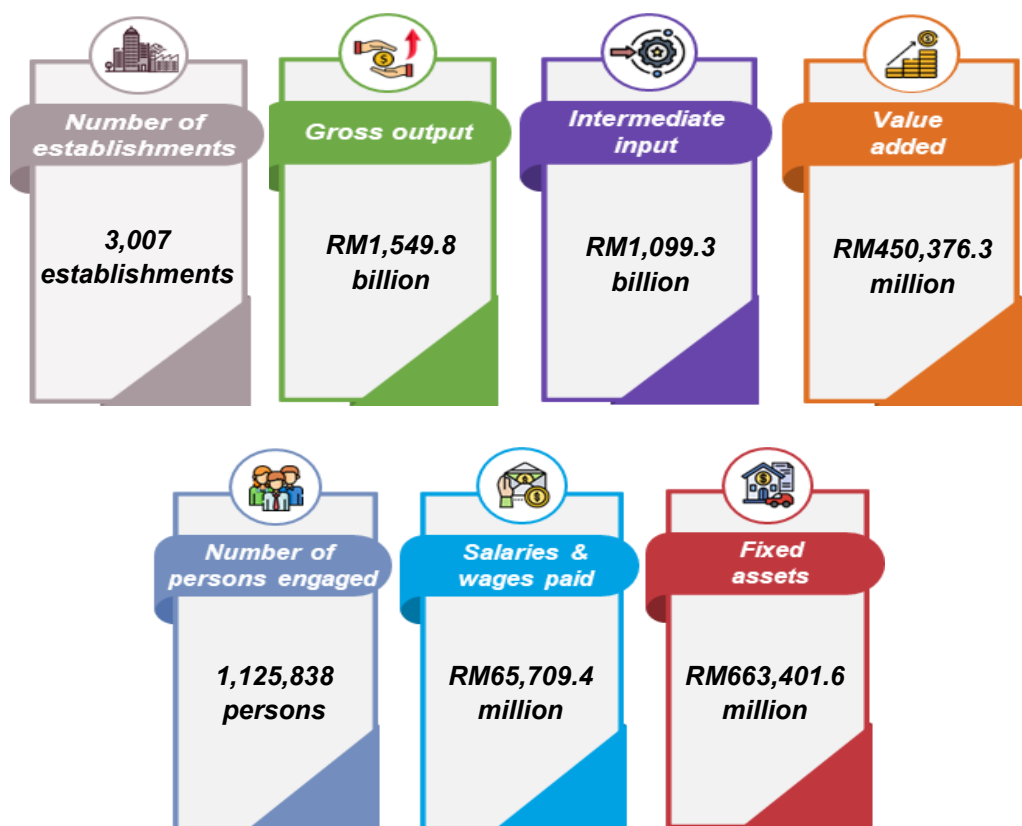
SUMMARY OF FINDINGS

2. OVERALL PERFORMANCE

The Research & Development (R&D) Statistics publication presents statistics on R&D expenditure by establishments in Malaysia, obtained from the Economic Census 2023 for reference year 2022. The census covers five main sectors, namely Agriculture, Mining & quarrying, Manufacturing, Construction and Services.

Based on the findings of the Economic Census 2023 for reference year 2022, a total of 3,007 establishments involved in R&D activities recorded a gross output of RM1,549.8 billion and intermediate inputs registered RM1,099.3 billion and contributed value added of RM450,376.3 million. The salaries & wages paid recorded RM65,709.4 million with a total number of persons engaged of 1,125,838 persons. Meanwhile, fixed assets registered RM663,401.6 million.

Exhibit 1: Principal Statistics of Establishment with R&D Expenditure, 2022

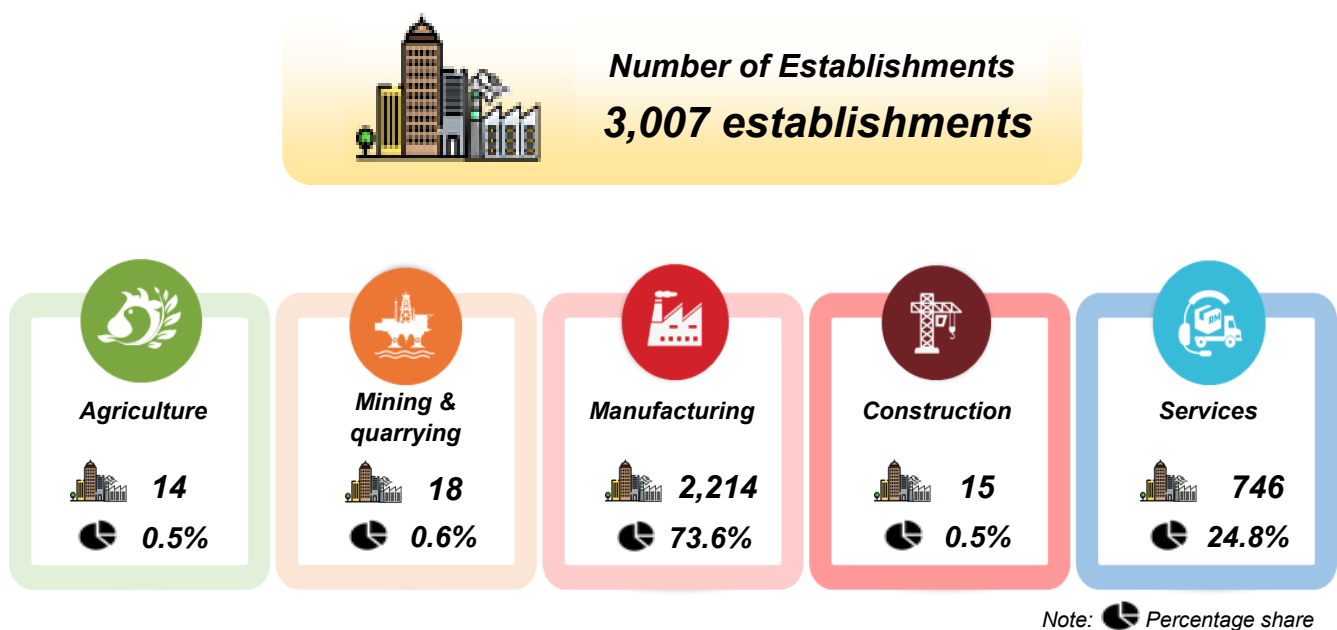


SUMMARY OF FINDINGS

3. NUMBER OF ESTABLISHMENTS

A total of 3,007 establishments were involved in R&D activities across all sectors in 2022. The Manufacturing sector was the highest contributor with a composition of 73.6 per cent (2,214 establishments), followed by Services with 24.8 per cent (746 establishments) and the Mining & quarrying with 0.6 per cent (18 establishments). Meanwhile, the Construction contributed 0.5 per cent (15 establishments) and Agriculture accounted for 0.5 per cent (14 establishments).

Exhibit 2: Number of Establishments in R&D Activities by Sector, 2022

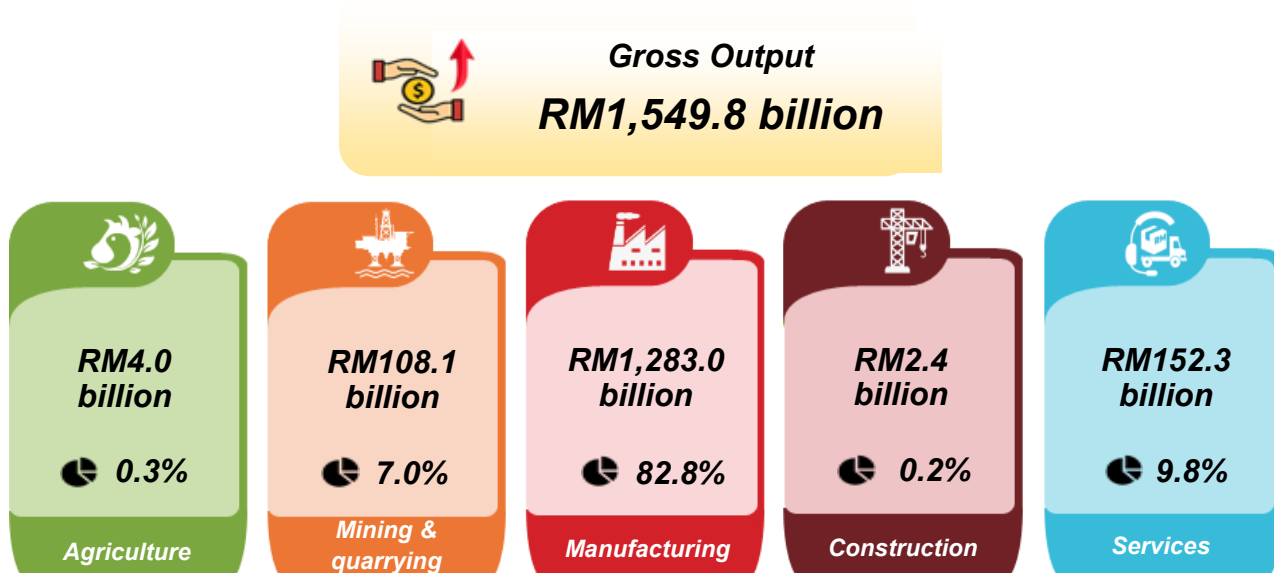


SUMMARY OF FINDINGS

4. GROSS OUTPUT

The value of gross output amounted to RM1,549.8 billion, dominated by the Manufacturing sector, which accounted for 82.8 per cent or RM1,283.0 billion. This was followed by the Services, RM152.3 billion (9.8%) and the Mining & quarrying with RM108.1 billion (7.0%). Meanwhile, the gross output of the Agriculture and Construction recorded a value of RM4.0 billion (0.3%) and RM2.4 billion (0.2%) respectively.

Exhibit 3: Gross Output in R&D Activities by Sector, 2022



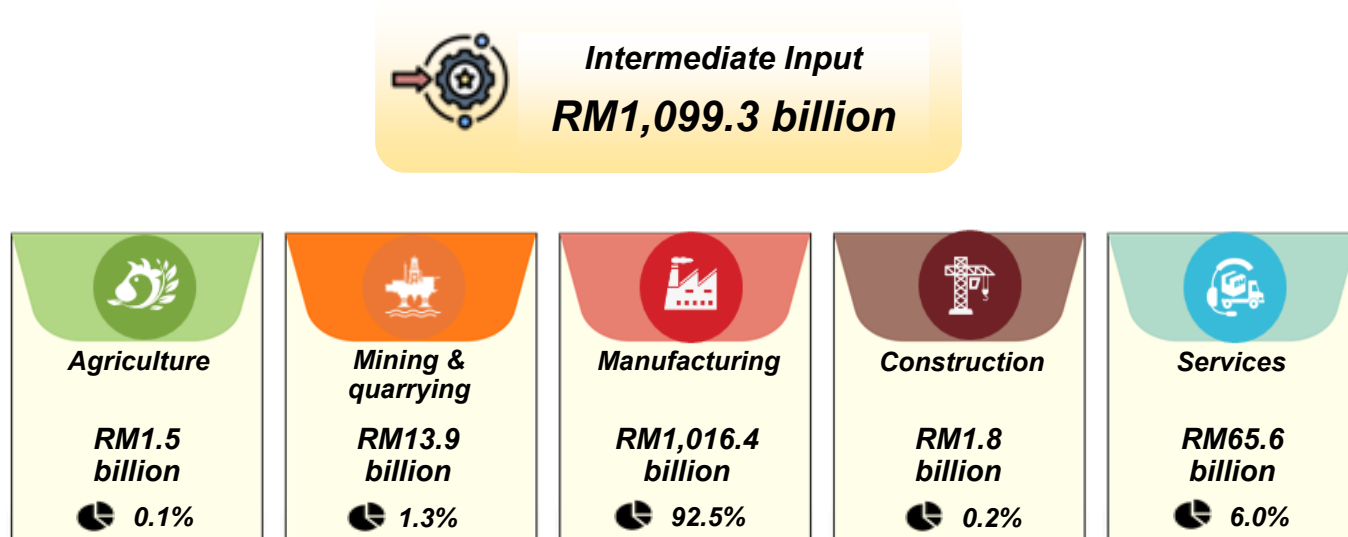
Note: Percentage share

SUMMARY OF FINDINGS

5. INTERMEDIATE INPUT

The value of intermediate input amounted to RM1,099.3 billion in 2022. The Manufacturing sector recorded the highest value of RM1,016.4 billion with a contribution of 92.5 per cent to the total value of intermediate inputs. Services recorded a value of RM65.6 billion (6.0%), followed by the Mining & quarrying with RM13.9 billion (1.3%). In addition, the Construction sector registered RM1.8 billion (0.2%) while Agriculture contributing RM1.5 billion (0.1%).

Exhibit 4: Intermediate Input in R&D Activities by Sector, 2022



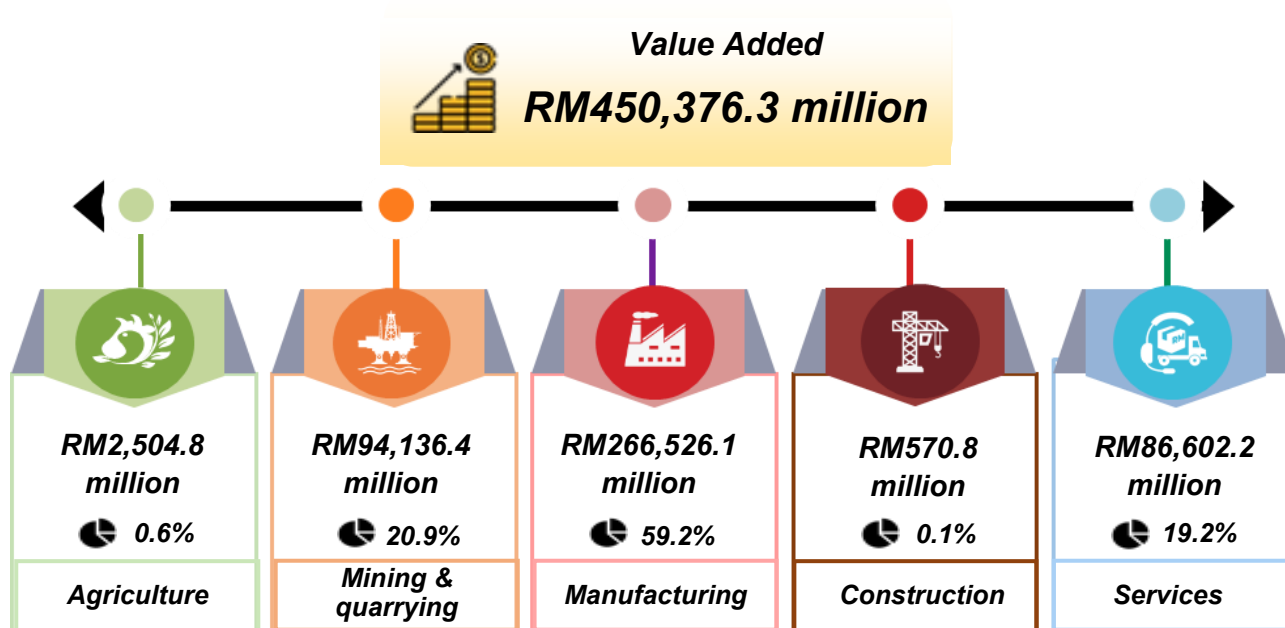
Note: Percentage share

SUMMARY OF FINDINGS

6. VALUE ADDED

The value added generated in 2022 amounted to RM450,376.3 million. The Manufacturing sector was the main contributor, accounting for 59.2 per cent or RM266,526.1 million. This was followed by the Mining & quarrying sector which recorded RM94,136.4 million (20.9%), with the Services contributing RM86,602.2 million (19.2%) and Agriculture registering RM2,504.8 million (0.6%).

Exhibit 5: Value Added in R&D Activities by Sector, 2022



Note: Percentage share

SUMMARY OF FINDINGS

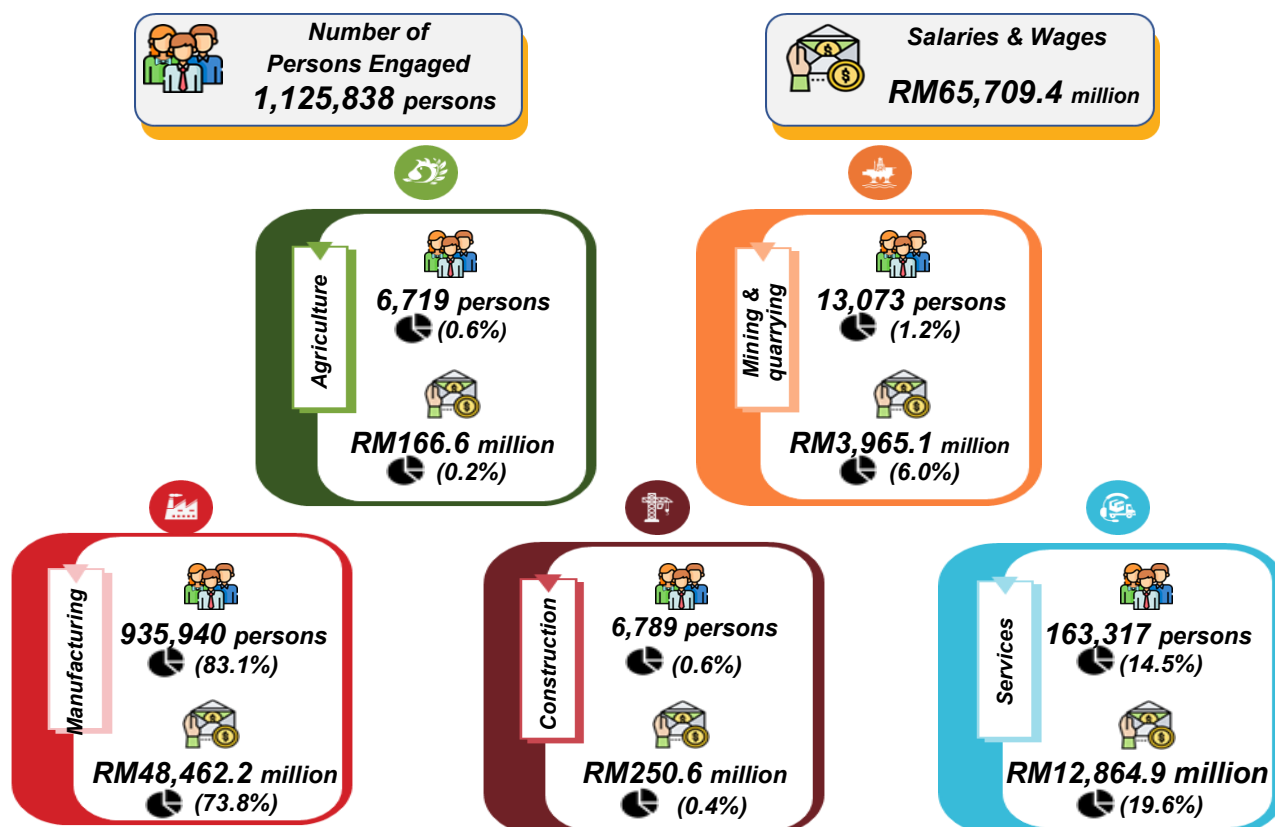
7. NUMBER OF PERSONS ENGAGED AND SALARIES & WAGES

7.1 Number of Persons Engaged and Salaries & Wages by Sector

A total of 1,125,838 persons were employed by establishments involved in R&D activities in 2022. The Manufacturing sector recorded the highest number of workers with 935,940 persons (83.1%), followed by Services with 163,137 persons (14.5%) and Mining & quarrying with 13,073 persons (1.2%). In addition, Construction registered 6,789 persons (0.6%) and Agriculture, 6,719 persons (0.6%).

Meanwhile, the total salaries & wages paid in 2022 recorded a value of RM65,709.4 million. The Manufacturing sector recorded the highest total salaries and wages paid, amounting to RM48,462.2 million (73.8%), followed by the Services with RM12,864.9 million (19.6%), and the Mining & quarrying at RM3,965.1 million (6.0%). In the meantime, Construction and Agriculture recorded RM250.6 million (0.4%) and RM166.6 million (0.2%) respectively.

Exhibit 6: Number of Persons Engaged and Salaries & Wages in R&D Activities by Sector, 2022



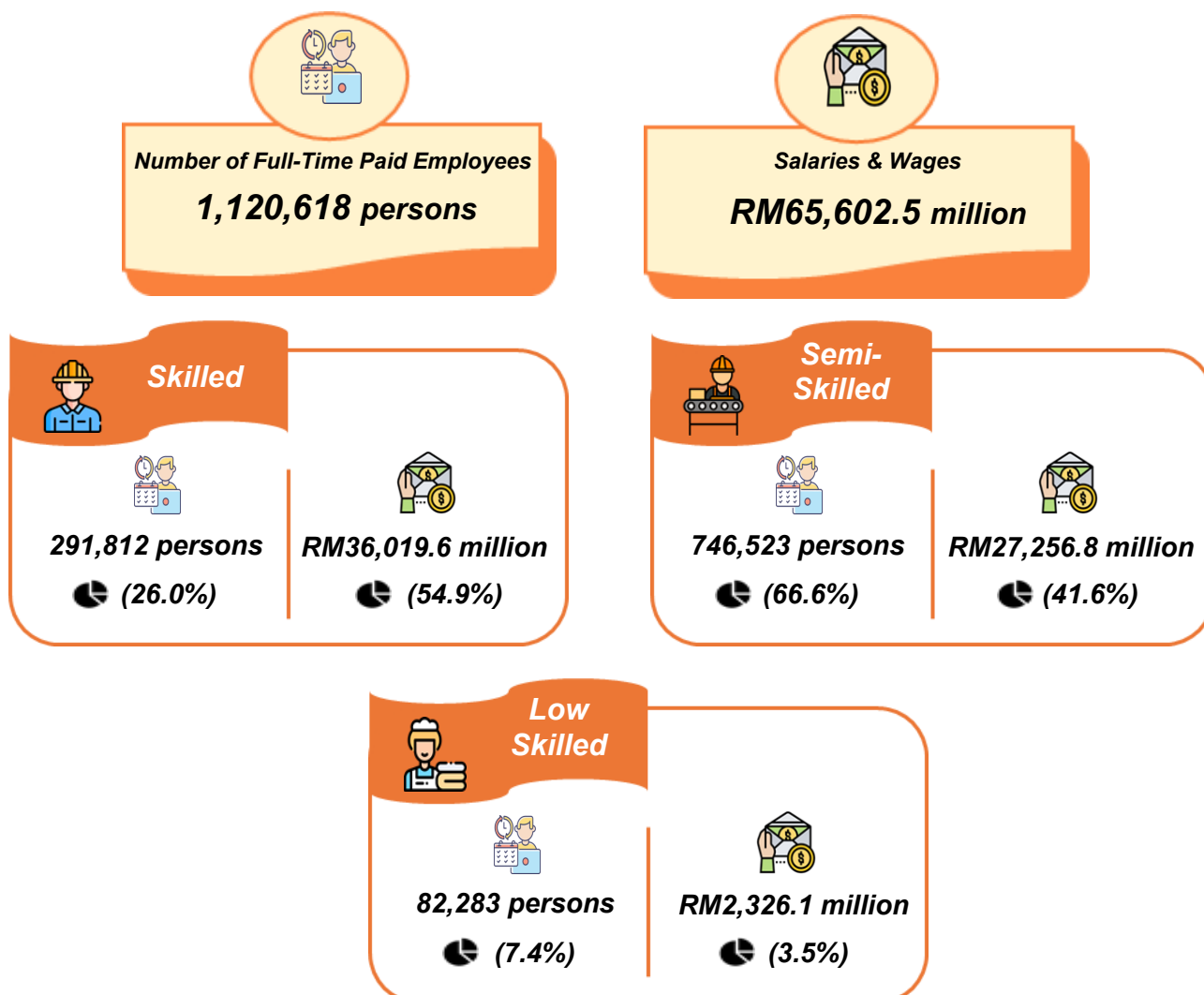
Note: Percentage share

SUMMARY OF FINDINGS

7.2 Number of Full-Time Paid Employees and Salaries & Wages by Skill Level

A total of 1,120,618 persons of full-time paid employees were recorded in R&D activities in 2022. In terms of skill level, semi-skilled workers recorded the highest number of persons engaged at 746,523 persons (66.6%), followed by skilled workers 291,812 persons (26.0%) and low-skilled workers 82,283 persons (7.4%). However, in terms of salaries & wages, skilled workers received the highest amount at RM36,019.6 million (54.9%), followed by semi-skilled workers RM27,256.8 million (41.6%) and low-skilled workers RM2,326.1 million (3.5%).

Exhibit 7: Number of Full-Time Paid Employees and Salaries & Wages in R&D Activities by Skill Level, 2022



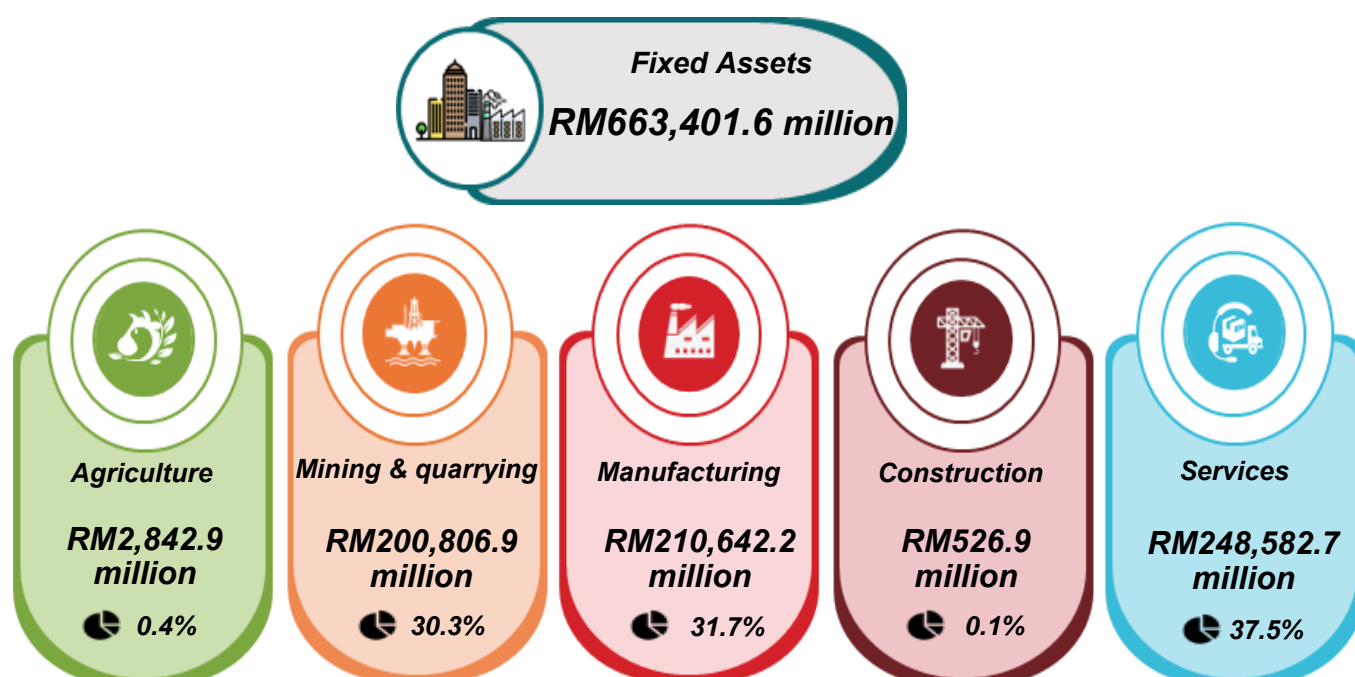
Note: Percentage share

SUMMARY OF FINDINGS

8. FIXED ASSETS

The value of fixed assets owned by establishments involved in R&D activities in 2022 amounted to RM663,401.6 million. The Services sector recorded the highest value of fixed assets at RM248,582.7 million (37.5%), followed by the Manufacturing with RM210,642.2 million (31.7%) and the Mining & quarrying at RM200,806.9 million (30.3%).

Exhibit 8: Fixed Assets in R&D Activities by Sector, 2022



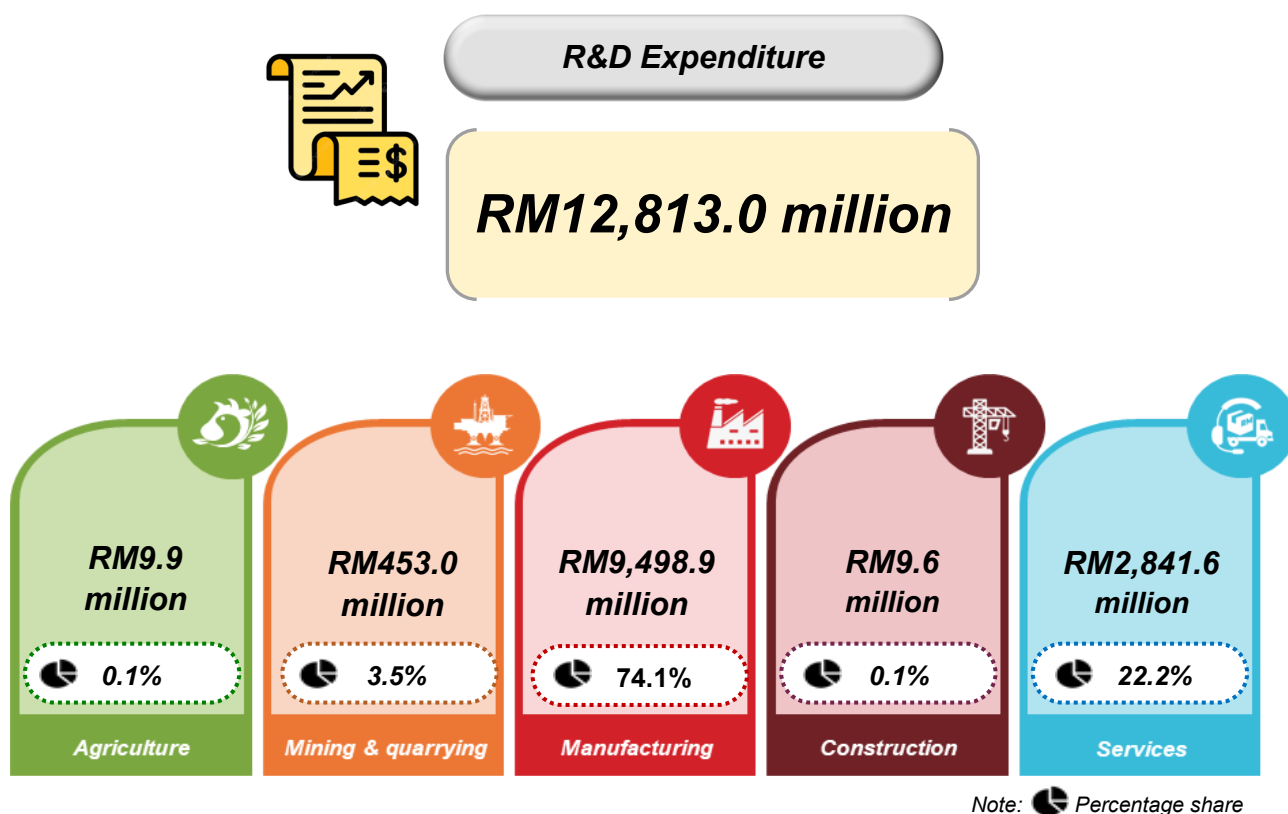
Note: Percentage share

SUMMARY OF FINDINGS

9. R&D EXPENDITURE BY SECTOR

The total R&D expenditure recorded RM12,813.0 million in 2022, with the Manufacturing sector was the dominant contributor, accounting for RM9,498.9 million or 74.1 per cent of the total. This was followed by Services, which recorded RM2,841.6 million (22.2%) and Mining & quarrying with RM453.0 million (3.5%). Meanwhile, Agriculture and Construction sectors registered R&D expenditures of RM9.9 million (0.1%) and RM9.6 million (0.1%) respectively.

Exhibit 9: R&D Expenditure by Sector, 2022

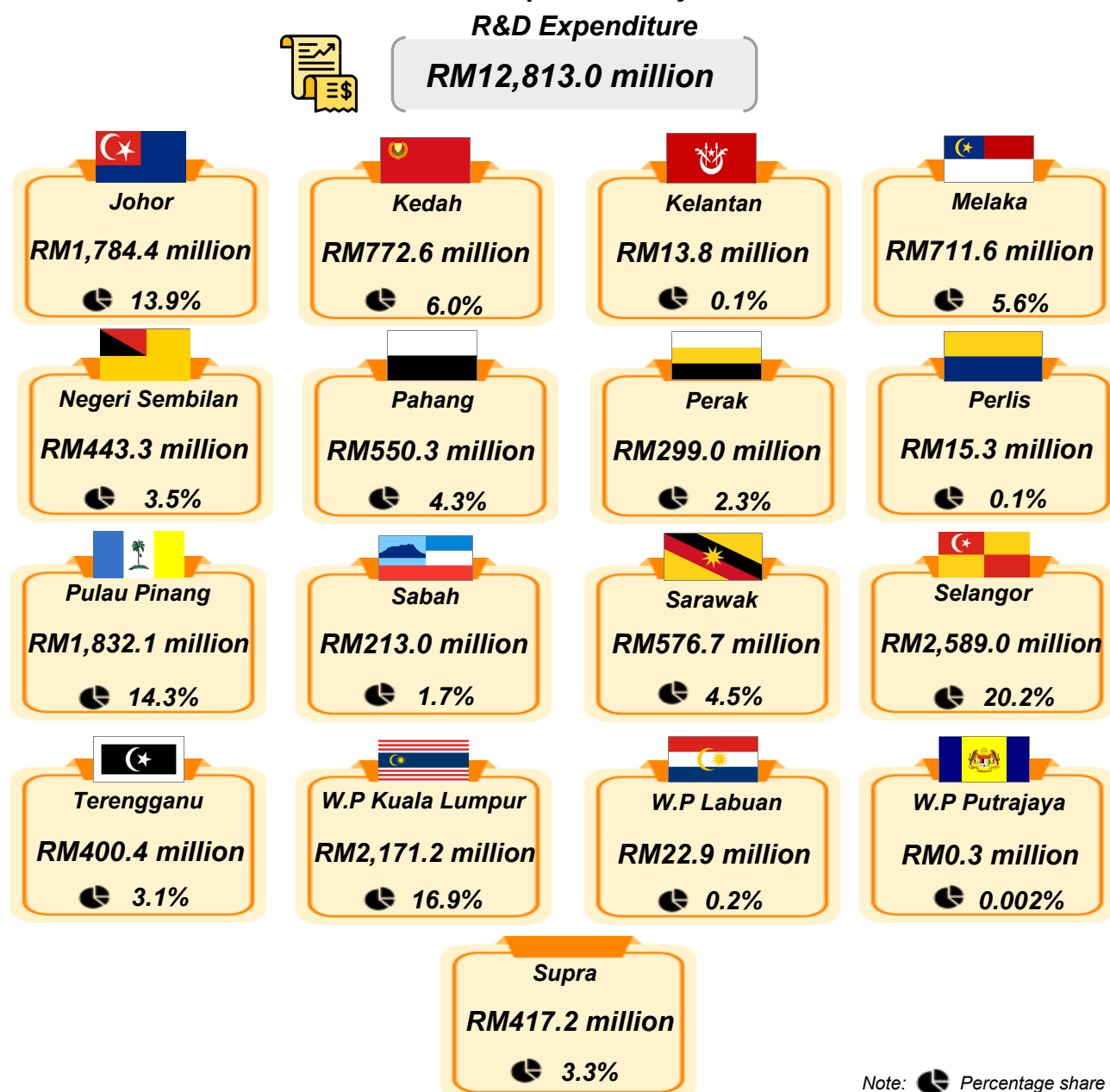


SUMMARY OF FINDINGS

10. R&D EXPENDITURE BY STATE

In terms of state-level performance, Selangor recorded the highest R&D expenditure in 2022, amounting to RM2,589.0 million (20.2%). This was followed by W.P. Kuala Lumpur with RM2,171.2 million (16.9%) and Pulau Pinang, RM1,832.1 million (14.3%). Subsequently, Johor and Kedah recorded R&D expenditures of RM1,784.4 million (13.9%) and RM772.6 million (6.0%) respectively. Overall, these five states contributed RM9,149.3 million or 71.4 per cent of the total R&D expenditure.

Exhibit 10: R&D Expenditure by State, 2022



BAHAGIAN
PART

3

JADUAL STATISTIK
STATISTICAL TABLES



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Jadual 1 : Statistik utama aktiviti R&D mengikut sektor, 2022
Table 1 : Principal statistics of R&D activities by sector, 2022

Sektor Sector	Bilangan pertubuhan Number of establishments	Perbelanjaan R&D R&D expenditure	Nilai output kasar Value of gross output	Nilai input perantara Value of intermediate input	Nilai ditambah Value added	Bilangan pekerja Number of persons engaged	Gaji & upah Salaries & wages	Nilai harta tetap Value of fixed assets
		(RM'000)	(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah Total	3,007	12,813,025	1,549,764,169	1,099,330,192	450,376,337	1,125,838	65,709,400	663,401,613
Pertanian Agriculture	14	9,910	4,017,196	1,476,355	2,540,841	6,719	166,609	2,842,876
Perombongan & pengkuarian Mining & quarrying	18	453,039	108,080,311	13,943,937	94,136,374	13,073	3,965,132	200,806,943
Pembuatan Manufacturing	2,214	9,498,908	1,282,974,038	1,016,447,920	266,526,118	935,940	48,462,171	210,642,233
Pembinaan Construction	15	9,548	2,401,004	1,830,184	570,820	6,789	250,584	526,905
Perkhidmatan Services	746	2,841,621	152,291,620	65,631,796	86,602,184	163,317	12,864,905	248,582,657

Jadual 2 : Statistik utama aktiviti R&D mengikut subsektor, 2022
Table 2 : Principal statistics of R&D activities by sub-sector, 2022

Sektor Sector	Bilangan pertubuhan Number of establishments	Perbelanjaan R&D R&D expenditure	Nilai output kasar Value of gross output	Nilai input perantara Value of intermediate input	Nilai ditambah Value added	Bilangan pekerja Number of persons engaged	Gaji & upah Salaries & wages	Nilai harta tetap Value of fixed assets
		(RM'000)	(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah Total	3,007	12,813,025	1,549,764,169	1,099,330,192	450,376,337	1,125,838	65,709,400	663,401,613
Pertanian Agriculture	14	9,910	4,017,196	1,476,355	2,540,841	6,719	166,609	2,842,876
Tanaman Crops	11	8,984	3,017,228	744,177	2,273,051	6,391	154,378	2,591,095
Ternakan Livestock	3	926	999,968	732,179	267,790	328	12,230	251,781
Perhutanan dan pembalakan Forestry and logging								
Perlombongan & pengkuarian Mining & quarrying	18	453,039	108,080,311	13,943,937	94,136,374	13,073	3,965,132	200,806,943
Perlombongan mineral dan pengkuarian Mineral mining and quarrying	10	34,221	1,331,918	731,560	600,358	2,089	84,789	425,548
Petroleum dan gas asli Petroleum and natural gas	8	418,818	106,748,393	13,212,377	93,536,016	10,984	3,880,342	200,381,395

Jadual 2 : Statistik utama aktiviti R&D mengikut subsektor, 2022 (samb.)
Table 2 : Principal statistics of R&D activities by sub-sector, 2022 (cont.)

Sektor Sector	Bilangan pertubuhan Number of establishments	Perbelanjaan R&D R&D expenditure	Nilai output kasar Value of gross output	Nilai input perantara Value of intermediate input	Nilai ditambah Value added	Bilangan pekerja Number of persons engaged	Gaji & upah Salaries & wages	Nilai harta tetap Value of fixed assets
		(RM'000)	(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Pembuatan Manufacturing	2,214	9,498,908	1,282,974,038	1,016,447,920	266,526,118	935,940	48,462,171	210,642,233
Produk makanan Food products	373	1,262,596	172,622,727	147,758,393	24,864,334	90,496	4,004,671	19,874,678
Minuman dan produk tembakau Beverage and tobacco products	33	35,900	12,383,781	9,035,814	3,347,967	7,351	423,596	2,511,230
Produk tekstil, pakaian, kulit dan kasut Textiles, wearing apparel, leather and footwear products	29	94,591	10,059,311	7,362,192	2,697,119	19,231	575,577	2,733,371
Produk kayu, perabot, keluaran kertas dan percetakan Wood products, furniture, paper products and printing	232	145,866	25,218,702	19,421,919	5,796,782	55,304	1,978,681	7,001,274
Produk petroleum, kimia, getah dan plastik Petroleum, chemical, rubber and plastic products	580	2,830,886	441,265,063	338,415,599	102,849,465	189,426	9,951,704	74,929,747
Produk mineral bukan logam, logam asas dan produk logam yang direka Non-metallic mineral products, basic metal and fabricated metal products	372	627,940	90,013,665	71,677,880	18,335,785	84,605	4,041,005	23,552,256
Produk elektrik, elektronik dan optikal Electrical, electronic and optical products	441	4,064,384	453,629,279	362,381,640	91,247,639	404,271	23,602,523	64,670,204
Peralatan pengangkutan, pembuatan lain dan pembaikan Transport equipment, other manufacturing and repair	154	436,744	77,781,511	60,394,482	17,387,028	85,256	3,884,414	15,369,473

Jadual 2 : Statistik utama aktiviti R&D mengikut subsektor, 2022 (samb.)
Table 2 : Principal statistics of R&D activities by sub-sector, 2022 (cont.)

Sektor Sector	Bilangan pertubuhan Number of establishments	Perbelanjaan R&D R&D expenditure (RM'000)	Nilai output kasar Value of gross output (RM'000)	Nilai input perantara Value of intermediate input (RM'000)	Nilai ditambah Value added (RM'000)	Bilangan pekerja Number of persons engaged	Gaji & upah Salaries & wages (RM'000)	Nilai harta tetap Value of fixed assets (RM'000)
Pembinaan Construction	15	9,548	2,401,004	1,830,184	570,820	6,789	250,584	526,905
Bangunan kediaman Residential buildings	9	5,020	1,243,774	875,129	368,645	2,385	109,532	14,845
Bangunan bukan kediaman Non-residential buildings								
Kejuruteraan awam Civil engineering	6	4,528	1,157,229	955,054	202,175	4,404	141,051	512,060
Pertukangan khas Special trades								
Perkhidmatan Services	746	2,841,621	152,291,620	65,631,796	86,602,184	163,317	12,864,905	248,582,657
Bekalan air, pembentungan, pengurusan sisa dan aktiviti pemulihan Water supply; sewerage, waste management and remediation activities	5	85,765	35,757,287	18,624,509	17,132,778	33,595	2,907,312	121,386,319
Bekalan elektrik, gas, wap dan pendingin udara Electricity, gas, steam and air-conditioning supply	53	28,792	1,633,588	589,974	1,043,614	3,372	157,180	1,612,941
Perdagangan borong dan runcit Wholesale and retail trade	6	17,136	3,395,370	1,167,885	2,227,157	13,766	1,173,829	14,718,927
Pengangkutan dan penyimpanan Transportation and storage	28	1,225,163	81,637,763	34,564,711	47,015,739	36,509	4,290,595	58,473,541
Maklumat dan komunikasi Information and communication								

Jadual 2 : Statistik utama aktiviti R&D mengikut subsektor, 2022 (samb.)
Table 2 : Principal statistics of R&D activities by sub-sector, 2022 (cont.)

Sektor Sector	Bilangan pertubuhan Number of establishments	Perbelanjaan R&D R&D expenditure	Nilai output kasar Value of gross output	Nilai input perantara Value of intermediate input	Nilai ditambah Value added	Bilangan pekerja Number of persons engaged	Gaji & upah Salaries & wages	Nilai harta tetap Value of fixed assets
		(RM'000)	(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Kewangan <i>Finance</i>	127	1,002,239	7,794,925	2,696,115	5,098,810	24,969	1,400,078	20,947,434
Hartanah <i>Real estate</i>	85	44,037	12,780,042	4,300,776	8,479,266	5,171	727,079	20,762,659
Profesional <i>Professional</i>	177	56,498	558,411	205,562	352,849	2,855	148,401	218,225
Pentadbiran dan khidmat sokongan <i>Administrative and support services</i>	24	13,105	54,460	31,366	23,093	474	11,523	17,357
Pendidikan <i>Education</i>	216	274,356	8,045,599	3,066,099	4,979,500	36,165	1,850,103	9,879,207
Kesihatan dan kerja sosial <i>Health and social work</i>	3	1,247	27,196	8,547	18,649	35	388	4,576
Kesenian, hiburan dan rekreasi <i>Arts, entertainment and recreation</i>	14	92,529	276,668	96,313	180,355	4,433	107,582	496,683
Perkhidmatan lain <i>Other services</i>	8	754	330,311	279,939	50,372	1,973	90,836	64,788

Nota/ Note :

Perkhidmatan lain termasuk perkhidmatan persendirian, penginapan dan makanan & minuman
Other services including personal services, accommodation and food & beverages

Jadual 3 : Statistik utama aktiviti R&D mengikut negeri, 2022
Table 3 : Principal statistics of R&D activities by state, 2022

Negeri State	Bilangan pertubuhan Number of establishments	Perbelanjaan R&D R&D expenditure	Nilai output kasar Value of gross output	Nilai input perantaraan Value of intermediate input	Nilai ditambah Value added	Bilangan pekerja Number of persons engaged	Gaji & upah Salaries & wages	Nilai harta tetap Value of fixed assets
		(RM'000)	(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah Total	3,007	12,813,025	1,549,764,169	1,099,330,192	450,376,337	1,125,838	65,709,400	663,401,613
Johor	681	1,784,358	211,319,111	176,524,110	34,795,000	192,605	8,506,356	33,889,007
Kedah	104	772,630	58,702,719	48,144,146	10,558,573	58,535	2,874,107	14,386,944
Kelantan	10	13,819	2,888,777	2,387,232	501,545	6,026	204,877	1,099,437
Melaka	71	711,567	90,800,384	74,797,371	16,003,013	51,913	2,884,192	18,673,759
Negeri Sembilan	96	443,284	87,824,258	69,771,650	18,052,608	42,661	2,702,868	13,663,521
Pahang	53	550,340	40,739,416	30,951,743	9,787,673	18,264	1,019,253	7,473,982
Pulau Pinang	283	1,832,055	239,309,137	197,757,624	41,551,513	190,511	11,399,654	29,547,697
Perak	121	298,957	39,426,781	30,813,616	8,613,164	55,251	2,428,650	12,590,778
Perlis	3	15,339	2,357,865	1,867,575	490,290	3,208	90,610	367,902
Selangor	1,210	2,589,042	346,910,135	254,034,922	92,817,573	321,741	16,581,543	83,278,771
Terengganu	25	400,350	40,605,500	28,060,792	12,544,709	8,820	1,053,729	9,362,640
Sabah	67	212,975	47,275,504	23,102,296	24,173,208	9,034	626,657	22,175,090
Sarawak	103	576,695	176,874,907	103,916,018	72,958,888	54,499	3,716,494	76,272,147
W. P. Kuala Lumpur	168	2,171,210	113,938,879	49,229,707	64,709,172	103,846	8,819,157	194,494,102
W. P. Labuan	4	22,934	3,053,464	1,799,527	1,253,937	816	134,768	1,016,942
W. P. Putrajaya	4	251	317,656	134,117	183,539	181	7,858	144,112
Supra	4	417,217	47,419,679	6,037,745	41,381,934	7,927	2,658,627	144,964,782

Jadual 4 : Perbelanjaan R&D mengikut kategori dan sektor, 2022
Table 4 : R&D expenditure by category and sector, 2022

Sektor Sector	Bilangan pertubuhan Number of establishments	Jumlah Total (RM'000)	Perbelanjaan R&D Total of R&D expenditure		Sumber luaran Outsource (RM'000)
			Dalam In-house (RM'000)		
Jumlah Total	3,007	12,813,025	8,091,537		4,721,488
Pertanian Agriculture	14	9,910	2,266		7,643
Perlombongan & pengkuarian Mining & quarrying	18	453,039	313,823		139,216
Pembuatan Manufacturing	2,214	9,498,908	6,713,676		2,785,232
Pembinaan Construction	15	9,548	39		9,509
Perkhidmatan Services	746	2,841,621	1,061,733		1,779,888

Jadual 5 : Perbelanjaan R&D mengikut kategori dan negeri, 2022
Table 5 : R&D expenditure by category and state, 2022

Negeri State	Bilangan pertubuhan Number of establishments	Perbelanjaan R&D Total of R&D expenditure		Sumber luaran Outsource (RM'000)
		Jumlah Total (RM'000)	Dalam In-house (RM'000)	
Jumlah Total	3,007	12,813,025	8,091,537	4,721,488
Johor	681	1,784,358	1,356,773	427,585
Kedah	104	772,630	689,763	82,867
Kelantan	10	13,819	8,724	5,095
Melaka	71	711,567	405,302	306,265
Negeri Sembilan	96	443,284	301,646	141,639
Pahang	53	550,340	475,557	74,783
Pulau Pinang	283	1,832,055	1,395,294	436,761
Perak	121	298,957	208,487	90,470
Perlis	3	15,339	8,266	7,074
Selangor	1,210	2,589,042	1,581,252	1,007,790
Terengganu	25	400,350	212,610	187,740
Sabah	67	212,975	114,106	98,869
Sarawak	103	576,695	358,856	217,839
W. P. Kuala Lumpur	168	2,171,210	674,394	1,496,816
W. P. Labuan	4	22,934	12,169	10,765
W. P. Putrajaya	4	251	251	-
Supra	4	417,217	288,087	129,130

Jadual 6 : Bilangan pekerja bergaji sepenuh masa dan gaji & upah mengikut tahap kemahiran dan sektor, 2022
Table 6 : Number of full-time paid employees and salaries & wages by skill level and sector, 2022

Sektor Sector	Bilangan pertubuhan Number of establishments	Bilangan Pekerja Sepenuh Masa Number of full time employees		Pekerja Mahir High-Skilled workers		Pekerja Separuh Mahir Semi-Skilled workers		Pekerja Berkemahiran Rendah Low-Skilled workers	
		Bilangan Pekerja Number of persons engaged	Gaji & upah Salaries & wages (RM'000)	Bilangan Pekerja Number of persons engaged	Gaji & upah Salaries & wages (RM'000)	Bilangan Pekerja Number of persons engaged	Gaji & upah Salaries & wages (RM'000)	Bilangan Pekerja Number of persons engaged	Gaji & upah Salaries & wages (RM'000)
Jumlah <i>Total</i>	3,007	1,120,618	65,602,507	291,812	36,019,608	746,523	27,256,785	82,283	2,326,113
Pertanian <i>Agriculture</i>	14	6,718	166,609	385	20,088	4,889	119,151	1,444	27,370
Perlombongan & pengkuarian <i>Mining & quarrying</i>	18	13,071	3,965,099	10,904	3,851,613	1,981	109,030	186	4,456
Pembuatan <i>Manufacturing</i>	2,214	934,971	48,454,560	198,937	23,056,338	673,546	23,650,452	62,488	1,747,769
Pembinaan <i>Construction</i>	15	6,781	250,536	3,167	168,360	3,262	75,321	352	6,856
Perkhidmatan <i>Services</i>	746	159,077	12,765,703	78,419	8,923,209	62,845	3,302,832	17,813	539,662

Jadual 7 : Statistik utama aktiviti R&D mengikut jenis taraf sah, 2022
Table 7 : Principal statistics of R&D activities by type of legal status, 2022

Taraf sah Legal organisation	Bilangan pertubuhan Number of establishments	Perbelanjaan R&D R&D expenditure	Nilai output kasar Value of gross output	Nilai input perantara Value of intermediate input	Nilai ditambah Value added	Bilangan pekerja Number of persons engaged	Gaji & upah Salaries & wages	Nilai harta tetap Value of fixed assets
		(RM'000)	(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah <i>Total</i>	3,007	12,813,025	1,549,764,169	1,099,330,192	450,376,337	1,125,838	65,709,400	663,401,613
Hak milik perseorangan <i>Individual proprietorship</i>	48	5,091	98,903	45,763	53,139	703	21,181	23,651
Perkongsian <i>Partnership</i>	17	7,574	50,445	25,926	24,519	345	12,068	24,771
Perkongsian liabiliti terhad <i>Limited liabilities partnership</i>								
Syarikat sendiri berhad <i>Private limited company</i>	2,817	11,086,245	1,357,389,376	994,910,086	362,421,649	1,013,313	56,139,628	442,666,820
Syarikat awam berhad <i>Public limited company</i>	106	1,506,432	190,002,965	103,561,391	86,441,574	94,411	8,729,502	206,023,620
Perbadanan awam <i>Public corporation</i>	14	205,378	2,160,876	766,686	1,394,190	16,809	786,902	14,639,066
Pertubuhan persendirian yang tidak mencari keuntungan <i>Private non-profit making organisation</i>	5	2,304	61,605	20,341	41,264	257	20,118	23,685

Jadual 8 : Statistik utama aktiviti R&D mengikut struktur hak milik, 2022
Table 8 : Principal statistics of R&D activities by ownership structure, 2022

Hak milik Ownership	Bilangan pertubuhan Number of establishments	Perbelanjaan R&D R&D expenditure	Nilai output kasar Value of gross output	Nilai input perantaraan Value of intermediate input	Nilai ditambah Value added	Bilangan pekerja Number of persons engaged	Gaji & upah Salaries & wages	Nilai harta tetap Value of fixed assets
		(RM'000)	(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah Total	3,007	12,813,025	1,549,764,169	1,099,330,192	450,376,337	1,125,838	65,709,400	663,401,613
Milikan Malaysia Malaysian-Owned	2,649	10,041,118	1,117,512,330	813,768,325	303,686,366	837,080	47,026,419	446,097,031
Milikan Asing Foreign-Owned	338	2,468,612	402,132,279	271,424,315	130,707,964	277,922	17,852,115	209,097,997
Hak milik bersama Joint ownership	20	303,295	30,119,560	14,137,553	15,982,007	10,836	830,865	8,206,586

Jadual 9 : Statistik utama aktiviti R&D dalam pertubuhan milikan wanita mengikut sektor, 2022
Table 9 : Principal statistics of R&D activities in women-owned establishments by sector, 2022

Sektor Sector	Bilangan pertubuhan Number of establishments	Perbelanjaan R&D R&D expenditure	Nilai output kasar Value of gross output	Nilai input perantaraan Value of intermediate input	Nilai ditambah Value added	Bilangan pekerja Number of persons engaged	Gaji & upah Salaries & wages	Nilai harta tetap Value of fixed assets
		(RM'000)	(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah Total	408	267,455	30,559,762	18,255,377	12,304,386	35,618	1,874,239	22,588,017
Pembuatan Manufacturing								
Pembinaan Construction	133	200,691	18,104,371	14,154,235	3,950,136	26,994	991,392	2,517,816
Perkhidmatan Services	275	66,764	12,455,391	4,101,142	8,354,249	8,624	882,847	20,070,201



BAHAGIAN *PART*

4

NOTA TEKNIKAL *TECHNICAL NOTES*



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NOTA TEKNIKAL

1. SKOP DAN LIPUTAN

Penerbitan ini menggunakan data daripada Banci Ekonomi 2023 (tahun rujukan 2022). Banci mengumpul maklumat daripada pertubuhan berdaftar dalam sektor Pertanian, Perlombongan & pengkuarian, Pembuatan, Pembinaan dan Perkhidmatan. Klasifikasi industri merujuk kepada Piawaian Klasifikasi Industri Malaysia (MSIC) 2008 Versi 1.0 yang selaras dengan *International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4, United Nations*. Liputan bagi keseluruhan sektor merangkumi 1,174 kategori industri seperti yang ditunjukkan pada **Jadual 1**. Sementara itu, usahawan dalam sektor Pertanian yang hanya berdaftar dengan agensi-agensi kerajaan yang berkaitan bagi maksud menerima bantuan **TIDAK** diliputi kecuali pengusaha kelapa sawit.

Jadual 1 : Kategori industri mengikut sektor

Sektor	Kategori Industri
Pertanian	142
Perlombongan & pengkuarian	56
Pembuatan	259
Pembinaan	72
Perkhidmatan	645
Jumlah	1,174

2. SUMBER RANGKA STATISTIK

Sumber utama rangka statistik pertubuhan adalah daripada *Malaysia Statistical Business Register* (MSBR). MSBR adalah senarai pertubuhan/perusahaan yang beroperasi di Malaysia yang merangkumi Daftar Syarikat (ROC), Daftar Perniagaan (ROB) dan Perkongsian Liabiliti Terhad (LLP) yang berdaftar dengan Suruhanjaya Syarikat Malaysia (SSM) serta pertubuhan yang berdaftar dengan pihak berkuasa tempatan dan badan profesional. Senarai di MSBR dikemaskini secara berkala berdasarkan survei dan bancian yang dijalankan oleh Jabatan Perangkaan Malaysia dan sumber data pentadbiran daripada pelbagai agensi. Sumber utama data pentadbiran adalah daripada Suruhanjaya Syarikat Malaysia (SSM). Selain itu, DOSM juga bekerjasama untuk mendapatkan maklumat terkini daripada agensi lain seperti Kumpulan Wang Simpanan Pekerja (KWSP), Jabatan Kastam Diraja Malaysia, Lembaga Hasil Dalam Negeri (LHDN), Pertubuhan Keselamatan Sosial (PERKESO), pihak berkuasa tempatan dan badan profesional. Rangka dikemaskini untuk mengambil kira pertubuhan baru dan sebarang perubahan yang berlaku kepada pertubuhan tersebut seperti tutup, tidak beroperasi, perubahan jenis aktiviti dan alamat lokasi/ pos untuk memastikan maklumat yang terdapat dalam rangka adalah yang paling terkini.

3. JENIS AKTIVITI PERNIAGAAN

Jenis aktiviti perniagaan merujuk kepada aktiviti utama dan sekunder. Aktiviti utama merujuk kepada aktiviti yang mana pertubuhan menumpukan sebahagian besar sumbernya atau memberi sumbangan besar dari segi pendapatan. Aktiviti sekunder didefinisikan sebagai aktiviti sampingan kepada aktiviti utama. Klasifikasi industri bagi pertubuhan adalah berasaskan kepada aktiviti utama dan mengikut Piawaian Klasifikasi Industri Malaysia (MSIC) 2008 Versi 1.0 yang diselaraskan dengan *International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4, United Nations* dan pengubahsuaian mengikut keperluan tempatan.

4. KONSEP DAN DEFINISI

Industri tersebut dikategorikan kepada lima sektor utama iaitu Pertanian, Perlombongan & pengkuarian, Pembuatan, Pembinaan dan Perkhidmatan. Definisi sektor adalah seperti berikut:

4.1 Pertanian

Pertanian merangkumi aktiviti penanaman, pemeliharaan dan penternakan haiwan dan pengeluaran produk haiwan, penebangan kayu balak dan tanaman lain serta perikanan tangkapan dan akuakultur termasuk penggunaan sumber semulajadi tumbuh-tumbuhan dan haiwan. Terdapat empat subsektor iaitu tanaman, ternakan, perhutanan & pembalakan dan perikanan.

4.1.1 Tanaman merujuk kepada penanaman dan pengeluaran produk tanaman termasuk pertanian organik. Tanaman juga meliputi penanaman tanaman tidak kekal dan kekal merangkumi penanaman tumbuh-tumbuhan untuk tujuan pengeluaran benih;

4.1.2 Ternakan ialah binatang-binatang unggas yang dipelihara untuk tujuan komersil, sara diri dan pembiakbakaan dan rekreasi. Pengeluaran ternakan termasuk penternakan (ladang) dan pembiakan semua haiwan termasuk pengeluaran ternakan seperti telur, susu, madu dll;

4.1.3 Perhutanan & pembalakan termasuk pengeluaran kayu balak untuk industri berasaskan kayu, meliputi pengestrakan dan pengumpulan produk hutan bukan kayu yang tumbuh liar. Selain pengeluaran kayu balak, aktiviti perhutanan yang menghasilkan produk melalui proses minima seperti kayu api, kayu arang, raja kayu dan kayu balak yang digunakan dalam bentuk yang belum diproses turut disertakan. Aktiviti ini boleh dijalankan dalam hutan asli dan ladang hutan. Ia juga termasuk sebahagian daripada aktiviti operasi perhutanan berdasarkan bayaran atau secara kontrak; dan

- 4.1.4 Perikanan** termasuk perikanan tangkapan dan akuakultur meliputi penggunaan sumber perikanan daripada laut, air payau atau air tawar dengan tujuan menangkap dan mengumpul ikan, krustasia, moluska dan organisma & produk laut lain. Akuakultur ialah proses pengeluaran yang melibatkan pengkulturan (termasuk tuaian) organisma akuatik menggunakan teknik yang direka bentuk untuk meningkatkan pengeluaran organisma tersebut melebihi kapasiti persekitaran semulajadi.

4.2 Perlombongan & pengkuarian

Perlombongan dan pengkuarian termasuk pengekstrakan mineral yang terjadi secara semulajadi seperti pepejal (batu arang dan bijih), cecair (petroleum) atau gas (gas asli). Pengekstrakan boleh dijalankan melalui pelbagai kaedah seperti perlombongan bawah tanah atau dedah, pengoperasian telaga, perlombongan dasar laut dan lain-lain.

4.3 Pembuatan

Perubahan fizikal atau kimia ke atas bahan atau komponen menjadi produk baru sama ada kerja itu dilakukan oleh jentera pacuan kuasa atau yang dijalankan dengan tangan, sama ada dilaksanakan di kilang atau di rumah pekerja dan sama ada barang keluaran dijual secara borong atau runcit.

Pengelasan lapan (8) subsektor mengikut bahagian adalah seperti berikut:

Bahagian	Keterangan
Produk Makanan	
10	Pembuatan produk makanan
Minuman dan produk tembakau	
11	Pembuatan minuman
12	Pembuatan produk tembakau
Produk tekstil, pakaian dan kulit	
13	Pembuatan tekstil
14	Pembuatan pakaian
15	Pembuatan produk kulit dan barangan berkaitan

Produk kayu, perabot, keluaran kertas dan percetakan

16	Pembuatan kayu dan produk kayu dan gabus, kecuali perabot; pembuatan bagi artikel jerami dan bahan-bahan anyaman perabot;
17	Pembuatan kertas dan produk kertas
18	Percetakan dan penerbitan semula media rakaman
31	Pembuatan perabot

Produk petroleum, kimia, getah dan plastik

19	Pembuatan kok dan produk petroleum bertapis
20	Pembuatan kimia dan produk kimia
21	Pembuatan produk farmaseutikal asas, kimia perubatan dan botani
22	Pembuatan produk getah dan plastik

Produk mineral bukan logam, logam asas & produk logam yang direka

23	Pembuatan produk galian bukan logam lain
24	Pembuatan logam asas
25	Pembuatan produk logam, kecuali mesin dan kelengkapan

Produk elektrik, elektronik dan optikal

26	Pembuatan komputer, produk elektronik dan optikal
27	Pembuatan kelengkapan elektrik
28	Pembuatan jentera dan peralatan t.t.t.l.

Peralatan pengangkutan, pembuatan lain dan pembaikan

29	Pembuatan kenderaan bermotor, treler dan semi treler
30	Pembuatan kelengkapan pengangkutan lain
32	Pembuatan lain
33	Pembaikan dan pemasangan mesin dan kelengkapan

4.4 Pembinaan

Ditakrifkan sebagai pembinaan baru, pengubahsuaian, pembaikan dan perobohan. Pemasangan sebarang jenis jentera atau peralatan yang dipasang ketika pembinaan asal adalah diambil kira, demikian juga bagi pemasangan jentera atau peralatan selepas pembinaan asal tetapi memerlukan perubahan struktur bagi pemasangannya.

4.5 Perkhidmatan

Perkhidmatan berkaitan Bekalan elektrik, gas, wap & pendinginan udara; Bekalan air; Pembetulan, pengurusan sisa & aktiviti pemulihan; Perdagangan Borong & runcit; Pengangkutan & penyimpanan; Maklumat & komunikasi; Penginapan; Makanan & minuman; Kewangan; Hartanah; Profesional, saintifik & teknikal; Pentadbiran & khidmat sokongan; Pendidikan swasta; Kesihatan swasta & kerja sosial; Kesenian, hiburan & rekreasi dan Perkhidmatan persendirian & lain-lain aktiviti.

4.5.1 Bekalan elektrik, gas, wap & pendingin udara adalah ditakrifkan sebagai aktiviti pembekalan tenaga elektrik, gas asli, wap, air panas dan seumpamanya melalui satu infrastruktur (rangkaian) tetap bagi talian, saluran utama dan paip. Dimensi rangkaian ini tidak dapat ditentukan; juga termasuk pengagihan elektrik, gas, wap, air panas dan seumpamanya di Kawasan perindustrian atau bangunan tempat kediaman. Oleh itu, seksyen ini termasuk operasi utiliti elektrik dan gas yang menjana, mengawal dan mengagih tenaga elektrik atau gas. Juga termasuk bekalan wap dan pendinginan udara;

4.5.2 Bekalan air; pembetulan, pengurusan sisa & aktiviti pemulihan meliputi aktiviti yang berkaitan dengan pengurusan sisa termasuk pungutan, perawatan dan pelupusan seperti sisa terjadual, sisa pepejal dan air sisa daripada perindustrian dan isi rumah, termasuk juga pemulihan bahan dan tapak yang tercemar. Hasil sisa daripada proses perawatan boleh dilupus atau menjadi input kepada proses pengeluaran yang lain. Aktiviti yang berkaitan dengan perawatan dan bekalan air juga dimasukkan dalam sektor ini;

4.5.3 Perdagangan borong & runcit merangkumi perdagangan borong, perdagangan runcit, dan pembaikan kenderaan bermotor dan motosikal;

4.5.4 Pengangkutan & penyimpanan meliputi pertubuhan yang menyediakan perkhidmatan darat, pengangkutan muatan melalui jalan raya, pengangkutan darat lain, pengangkutan air, pengangkutan & aktiviti sokongan seperti pengoperasian terminal, tempat letak kereta, pengoperasian lebuh raya, pengoperasian pelabuhan, pengendalian kargo/pemunggahan, agensi perkapalan & penghantaran serta lain-lain aktiviti sokongan perkhidmatan pengangkutan;

4.5.5 Maklumat & komunikasi terdiri daripada aktiviti penerbitan, penerbitan wayang gambar, video & program televisyen, rakaman bunyi & penerbitan muzik, pemrograman & penyiaran, perkhidmatan telekomunikasi pengaturcaraan komputer, perundingan & aktiviti yang berkaitan dan perkhidmatan maklumat;

- 4.5.6 Perkhidmatan penginapan** merujuk kepada penyediaan tempat penginapan jangka pendek berbayar, sama ada dibuka kepada orang awam atau terhad kepada ahli sebuah pertubuhan tertentu. Ianya tidak termasuk penyewaan tempat tinggal berperabot jangka panjang yang dikelaskan dalam Hartanah;
- 4.5.7 Perkhidmatan makanan & minuman** termasuk perkhidmatan makanan & minuman yang menyediakan hidangan atau minuman lengkap untuk penggunaan segera, sama ada di restoran tradisional, restoran layan diri atau bawa pulang, yang didirikan secara kekal atau sementara dengan atau tiada kemudahan tempat duduk;
- 4.5.8 Perkhidmatan kewangan** adalah meliputi aktiviti perantaraan kewangan; aktiviti perkhidmatan kewangan lain dan aktiviti sokongan kepada perkhidmatan kewangan; aktiviti insurans/ takaful, insurans takaful semula dan tabungan pencen & hemat; dan aktiviti sokongan kepada insurans/ takaful dan tabungan pencen;
- 4.5.9 Perkhidmatan hartanah** termasuk tindakan seperti pemberi pajak, ejen dan atau broker di dalam satu atau lebih daripada yang berikut: penjualan atau pembelian hartanah, penyewaan hartanah, penyediaan perkhidmatan hartanah lain seperti penilaian hartanah, pengurusan hartanah atau bertindak sebagai ejen hartanah eskrow. Aktiviti dalam bahagian ini mungkin dijalankan di atas hartanah milikan sendiri atau pajakan dan mungkin berlaku atas dasar bayaran atau kontrak. Termasuk juga pembangunan struktur,berserta mengekalkan hak milik atau pajakan bagi struktur tersebut;
- 4.5.10 Perkhidmatan profesional, saintifik & teknikal** termasuk aktiviti profesional khusus, saintifik & teknikal yang memerlukan tahap latihan yang tinggi dan menjadikan pengetahuan dan kemahiran khusus tersedia kepada pengguna. Aktiviti yang dijalankan termasuk guaman & perakaunan, aktiviti ibu pejabat, aktiviti perundingan pengurusan, aktiviti arkitek & kejuruteraan, ujian & analisis teknikal, penyelidikan & pembangunan saintifik, pengiklanan & penyelidikan & pembangunan saintifik, pengiklanan & penyelidikan, penyelidikan pasaran, professional lain, aktiviti saintifik & teknikal dan veterinar;
- 4.5.11 Perkhidmatan pentadbiran & khidmat sokongan** termasuk pelbagai aktiviti yang menyokong operasi am perniagaan meliputi aktiviti sewaan & pajakan, aktiviti pekerjaan, agensi pengembaraan, operator pelancongan & aktiviti perkhidmatan penempahan lain, aktiviti keselamatan & penyiasatan, aktiviti perkhidmatan bangunan & lanskap dan aktiviti pengurusan pejabat, sokongan pejabat & perniagaan lain;

- 4.5.12 Perkhidmatan pendidikan swasta** merujuk kepada pertubuhan yang berdaftar dengan Kementerian Pendidikan Malaysia dan Kementerian Pengajian Tinggi yang menyediakan perkhidmatan pelajaran akademik, vokasional dan perdagangan. Aktiviti yang diliputi dalam kumpulan ini ialah pendidikan pra sekolah & pendidikan rendah, pendidikan menengah, pendidikan tinggi, pendidikan lain dan perkhidmatan sokongan lain;
- 4.5.13 Perkhidmatan kesihatan swasta & kerja sosial** meliputi aktiviti hospital, aktiviti amalan perubatan & pergigian, aktiviti kesihatan dan kemanusiaan lain, aktiviti rumah penjagaan, dan aktiviti kerja sosial tanpa penginapan;
- 4.5.14 Perkhidmatan kesenian, hiburan & rekreasi** termasuk pelbagai aktiviti bagi memenuhi minat orang awam dalam aktiviti kebudayaan, hiburan dan rekreasi meliputi persembahan secara langsung, operasi muzium, perjudian, sukan dan aktiviti rekreasi; dan
- 4.5.15 Perkhidmatan persendirian & lain-lain aktiviti** termasuk aktiviti keahlian organisasi, aktiviti organisasi keahlian perniagaan, majikan & profesional, aktiviti kesatuan buruh, aktiviti keahlian organisasi lain pembaikan komputer & barangan persendirian dan isi rumah dan aktiviti perkhidmatan seperti basuhan dan cucian kering tekstil dan produk berbulu; dandanan rambut dan penjagaan kecantikan lain; dan pengebumian dan aktiviti perkhidmatan lain.

5. TAHUN BANGI

Merujuk kepada tahun pelaksanaan bancian dijalankan.

6. TAHUN RUJUKAN

Tahun rujukan bagi penerbitan ini adalah tahun takwim 2022. Pertubuhan yang mempunyai tahun kewangan yang berbeza daripada tahun takwim diminta menyediakan laporan mengikut tahun perakaunan atau kewangan yang meliputi sekurang-kurangnya enam (6) bulan dalam tahun rujukan.

7. KAEDAH PENGUMPULAN

Bancian ini secara umumnya dijalankan dengan menggunakan tiga (3) kaedah pengumpulan data seperti berikut:

7.1 Kutipan data melalui atas talian

Kaedah ini menyasarkan responden yang telah menggunakan kaedah ini bagi survei rutin terdahulu.

7.2 Kutipan data melalui e-mel, pos, faks dan telefon

Kaedah ini menyasarkan responden yang pernah terlibat dengan survei rutin terdahulu. Responden diberi tempoh satu bulan untuk melengkapkan dan mengembalikan borang soal selidik tersebut kepada DOSM.

7.3 Kutipan data secara bersemuka

Kerja luar operasi di lapangan dijalankan untuk mendapatkan maklum balas daripada pertubuhan yang belum memberi jawapan dari kedua-dua kaedah di atas dan kaedah ini menyasarkan pertubuhan yang tidak pernah terlibat dengan survei rutin DOSM.

8. UNIT PELAPOR

Setiap cawangan daripada organisasi yang mempunyai beberapa cawangan di lokasi yang berbeza dari segi konsep dianggap sebagai pertubuhan yang berlainan. Pertubuhan berkenaan diminta memberikan penyata yang berasingan bagi setiap kegiatannya dari segi nilai. Walau bagaimanapun, dari segi praktis akaun biasanya disediakan secara berpusat kerana kesukaran untuk memperoleh data yang berasingan bagi setiap unit atau cawangan, entiti atau “enterprise” ini akan dianggap sebagai satu unit pelapor dan dibenarkan mengemukakan soal selidik yang menggabungkan semua unit atau cawangannya.

9. TARAF SAH

Taraf sah sesebuah pertubuhan telah ditakrifkan seperti berikut:

9.1 Hak milik perseorangan

Ia merujuk kepada perniagaan yang dimiliki dan dijalankan oleh orang perseorangan semata-mata untuk mendapatkan keuntungan sendiri. Pemilik mempunyai hak mutlak atas segala urusan pertubuhannya.

9.2 Perkongsian

Ia merujuk kepada sekumpulan individu yang telah bersetuju mengikat kontrak dan menjalankan perniagaan dengan matlamat untuk memperoleh keuntungan. Perniagaan tersebut diuruskan oleh kesemua mereka atau salah seorang daripada mereka yang bertindak mewakili semua pihak. Perkongsian perniagaan ini hendaklah mengandungi sekurang-kurangnya dua orang ahli dan tidak melebihi had maksimum dua puluh orang.

9.3 Perkongsian liabiliti terhad

Merujuk kepada perniagaan entiti yang dikawal selia di bawah Akta Perkongsian Liabiliti Terhad 2012. Ia memberi perlindungan liabiliti terhad kepada rakan-rakan kongsinya sama seperti liabiliti terhad yang dinikmati oleh pemegang saham sesebuah syarikat. Ia juga memberi fleksibiliti peraturan perniagaan dalaman melalui pengaturan perkongsian yang serupa dengan sesebuah perkongsian konvensional; dan

9.4 Syarikat sendirian berhad

Merupakan syarikat persendirian yang ditubuhkan bagi tujuan menjalankan perniagaan dengan matlamat untuk mencari keuntungan. Saham dipegang secara tertutup oleh pemegang-pemegang saham yang mempunyai kawalan terhadap operasi syarikat. Ciri-ciri:

- i. Dikawal di bawah Akta Syarikat 1965 dan merupakan entiti yang sah terpisah daripada pemilik;
- ii. Dimiliki oleh 2 - 50 orang pemegang saham;
- iii. Pemilik syarikat mempunyai liabiliti terhad;
- iv. Pemegang saham yang memiliki 51 peratus atau lebih daripada jumlah saham syarikat berhak untuk mengawal syarikat tersebut. Saham syarikat boleh dijual beli tetapi tidak dilakukan di pasaran terbuka;
- v. Penjualan saham mesti dengan persetujuan pemegang saham yang lain;
- vi. Tidak disenaraikan di Bursa; dan
- vii. Jangka hayat perniagaan adalah panjang dan boleh dikenali perkataan Sendirian Berhad (Sdn. Bhd.) pada akhir nama syarikat.

9.5 Syarikat awam berhad

Syarikat awam berhad merupakan perniagaan yang ditubuhkan dengan tanggungan berhad, oleh sekurang-kurangnya dua orang untuk menjalankan perniagaan dengan tujuan untuk mencari keuntungan. Saham syarikat awam berhad ini dipegang secara terbuka dan bagi sesebuah syarikat yang disenaraikan di Bursa Malaysia, sahamnya boleh bertukar milik secara bebas. Ciri-ciri:

- i. Dikawal di bawah Akta Syarikat 1965 dan merupakan entiti yang sah terpisah daripada pemilik;
- ii. Dimiliki oleh pemegang pemegang saham dan tiada had bagi pemilik saham berkenaan;
- iii. Pengurusan dan kawalan syarikat adalah di bawah tanggungjawab Lembaga Pengarah yang dilantik oleh pemegang saham; dan
- iv. Disenaraikan di Bursa Malaysia.

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- v. Penjualan saham mesti dengan persetujuan pemegang saham yang lain;
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- iii. Pengurusan dan kawalan syarikat adalah di bawah tanggungjawab Lembaga Pengarah yang dilantik oleh pemegang saham; dan
- iv. Disenaraikan di Bursa Malaysia.

9.6 Syarikat koperasi

Koperasi adalah organisasi yang ditubuhkan untuk faedah bersama ahli dan didaftarkan di bawah Akta Koperasi 1993. Kumpulan wang yang ada adalah milik bersama untuk memenuhi keperluan ahli-ahlinya.

9.7 Perbadanan awam

Ia merupakan sebuah perbadanan yang ditubuhkan di bawah Akta Khas Parlimen atau Dewan Perundangan Negeri.

9.8 Pertubuhan persendirian tidak mencari keuntungan

Ia merujuk kepada syarikat tanpa saham yang ditubuhkan dengan tanggungan berhad. Kebanyakan syarikat ini terdiri daripada pertubuhan kebajikan, keagamaan, pendidikan, kesihatan, kebudayaan, rekreasi dan pertubuhan yang memberikan perkhidmatan sosial dan kemasyarakatan kepada isi rumah. Perkhidmatan diberikan secara percuma atau pada harga yang tidak melebihi kos perkhidmatan (subsidi). Sebarang keuntungan yang diperoleh dilabur semula ke dalam pertubuhan berkenaan.

10. NILAI OUTPUT KASAR

10.1 Nilai output kasar **Pertanian** (tanaman, ternakan, perhutanan & pembalakan dan perikanan) dikirakan daripada item-item berikut:

Jualan daripada hasil pertanian

- + Stok hasil pertanian (akhir)
- + Barangan dalam proses dan stok barangan siap (pembuatan sendiri) (akhir)
- + Jualan daripada hasil pertanian
- + Pendapatan daripada kerja pertanian yang dibuat untuk pihak lain
- + Pendapatan daripada hasil pertanian yang diproses
- + Nilai jualan daripada barangan/ bahan/ produk berkaitan pertanian yang dibeli untuk dijual semula tanpa proses selanjutnya
- + Pendapatan lain yang berkaitan dengan pertanian
- + Pendapatan daripada aktiviti pertanian lain
- + Kawasan perhutanan dikontrakkan kepada kontraktor (Perhutanan & Pembalakan sahaja)
- + Royalti, hakcipta, pelesenan dan yuran francais
- + Pendapatan daripada agro pelancongan (Tanaman/ Ternakan/ Perikanan)
- + Nilai jualan barangan/ bahan bukan pertanian yang dibeli untuk dijual semula tanpa melalui proses selanjutnya
- + Semua pendapatan lain: Output
- + Perbelanjaan penyelidikan dan pembangunan (Dalam)
- Pendapatan daripada sewa: Tanah
- Stok hasil pertanian (awal)
- Barangan dalam proses dan stok barangan siap (pembuatan sendiri) (awal)
- Kos barangan/ bahan/ produk berkaitan dengan aktiviti pertanian yang dibeli untuk dijual semula tanpa melalui proses selanjutnya
- Kos barangan/ bahan yang dijual (barangan/ bahan bukan pertanian) yang dibeli untuk dijual semula tanpa melalui proses selanjutnya

10.2 Nilai output kasar **Perlombongan & pengkuarian, Pembuatan dan Pembinaan** ditakrifkan dengan memasukkan elemen berikut:

Nilai jualan mineral/ produk kuari/ produk pembuatan dan nilai kerja pembinaan

- + Nilai barangan yang dijual dalam keadaan yang sama seperti dibeli
- Kos barangan yang dijual dalam keadaan yang sama seperti yang dibeli
- + Perbelanjaan modal ke atas binaan sendiri
- + Pendapatan daripada perkhidmatan perindustrian yang diberikan kepada orang lain
- + Pendapatan daripada kerja perindustrian lain
- + Penerimaan bayaran daripada skrap, tenaga elektrik, produk sisa, dll. yang dijual kepada orang lain
- + Komisen dan pembrokeran yang diterima
- + Semua nilai output lain (seperti penerimaan perkhidmatan bukan perindustrian, misalnya bayaran pengurusan, sewa harta, dll.)
- + Stok akhir barangan siap
- Stok awal barangan siap
- + Stok akhir barangan sedang diproses
- Stok awal barangan sedang diproses
- + Perbelanjaan penyelidikan dan pembangunan (Dalamuan)

10.3 Nilai output kasar **Perkhidmatan** ditakrifkan dengan memasukkan perkara berikut:

- + Nilai jualan barangan yang dibeli untuk dijual semula
- + Perkhidmatan pengurusan
- + Komisen dan pembrokeran yang diterima
- + Yuran yang diterima daripada keahlian
- + Pendapatan daripada sewa yang diterima kecuali tanah
- + Pendapatan operasi lain
- + Cukai perkhidmatan dan caj perkhidmatan
- Nilai barang yang dibeli untuk dijual semula dalam keadaan sama seperti dibeli
- + Stok akhir
- Stok awal
- + Perbelanjaan penyelidikan dan pembangunan (Dalamuan)

11 NILAI INPUT PERANTARAAN

11.1 Nilai input perantara **Pertanian** (tanaman, ternakan, perhutanan & pembalakan dan perikanan) ditakrifkan dengan memasukkan unsur berikut:

Kos bahan langsung yang digunakan dalam aktiviti pertanian

- + Jumlah bayaran ke atas kerja-kerja pertanian yang dibuat oleh pihak lain
- + Kos biji/ benih tanaman jangka pendek/ anak ternakan bukan baka
- + Perbelanjaan untuk aktiviti pertanian lain
- + Bahan dan bekas pembungkus yang digunakan
- + Bahan yang digunakan bagi pembaikan dan penyelenggaraan
- + Alat tulis dan bekalan pejabat yang digunakan
- + Air yang dibeli
- + Tenaga elektrik yang dibeli
- + Bahan pembakar, pelincir dan gas yang digunakan
- + Bayaran pembaikan dan penyelenggaraan semasa yang dibuat oleh pihak lain bagi harta tetap pertubuhan ini
- + Pengangkutan barangan (pengangkutan keluar)
- + Perbelanjaan perjalanan
- + Bayaran perakaunan, kesetiausahaan dan audit
- + Perbelanjaan pengiklanan dan promosi
- + Bayaran guaman
- + Bayaran perkhidmatan profesional lain
- + Bayaran pengurusan
- + Komisen dan bayaran agensi
- + Bayaran telekomunikasi
- + Bayaran pos (termasuk perkhidmatan kurier)
- + Caj bank
- + Premium insurans dibayar ke atas bangunan, jentera, alat pengangkutan dan barangan
- + Bayaran bagi perkhidmatan keselamatan
- + Bayaran pemprosesan data dan lain-lain perkhidmatan yang berkaitan dengan teknologi maklumat
- + Bayaran sewa (tidak termasuk bagi sewa untuk penggunaan tanah)
- + Perbelanjaan ke atas agro pelancongan
- + Bayaran royalti: Organisasi bukan kerajaan/ tajaan korporat
- + Cukai Barang dan Perkhidmatan pada pembelian bersih yang tidak boleh dituntut sebagai cukai input
- + Bayaran kepada pengarah tidak bekerja kerana kehadiran mereka dalam mesyuarat Lembaga Pengarah
- + Perbelanjaan lain: Input
- + Nilai pakaian percuma yang disediakan
- + Kos latihan kepada pekerja

11.2 Nilai input perantaraan **Perlombongan & pengkuarian, Pembuatan dan Pembinaan** ditakrifkan dengan memasukkan unsur berikut:

Nilai bahan dan bekalan yang digunakan

- + Kos kerja perindustrian (memproses) yang dilakukan oleh orang lain
- + Tenaga elektrik dan air yang dibeli
- + Nilai bahan pembakar, pelincir dan gas yang digunakan
- + Kos bahan yang digunakan bagi pembaikan dan penyelenggaraan harta tetap (termasuk pembayaran kepada pihak lain ke atas kerja ini)
- + Pembayaran terhadap perkhidmatan bukan perindustrian (termasuk bayaran bagi pengangkutan keluar barangan, perjalanan, pengurusan, bayaran perundangan, teknologi maklumat, pengiklanan, bank, pos, telekomunikasi, dll.)
- + Semua kos input lain (termasuk kos latihan dan nilai pakaian percuma yang disediakan kepada pekerja)

11.3 Nilai input perantaraan **Perkhidmatan** ditakrifkan dengan memasukkan unsur berikut:

Pembelian barangan, bahan dan perkhidmatan

- + Premium insurans
- + Royalti dan bayaran paten
- + Caj bank
- + Tenaga elektrik dan air yang dibeli
- + Nilai bahan pembakar, pelincir dan gas yang digunakan
- + Perbelanjaan penyelidikan dan pembangunan
- + Perbelanjaan pematuhan alam sekitar
- + Perbelanjaan operasi lain

12. NILAI DITAMBAH

Nilai ditambah adalah tambahan kepada nilai barangan dan perkhidmatan yang dikeluarkan oleh sesebuah pertubuhan. Nilai ditambah diperoleh daripada perbezaan antara nilai output kasar dengan nilai input perantaraan.

13. PEKERJA

Bilangan pekerja merujuk kepada bilangan orang yang bekerja pada bulan Disember atau pada tempoh pembayaran gaji terakhir bagi tahun rujukan. Bilangan orang yang bekerja dikategorikan seperti berikut:

i. **Pemilik yang bekerja dan rakan niaga yang aktif**

Kategori ini merujuk kepada semua pemilik perseorangan dan rakan niaga, sambilan atau sepenuh masa, yang bekerja dengan aktif dalam sesebuah pertubuhan itu. Justeru, ia tidak termasuk rakan niaga yang tidak aktif; dan

ii. **Pekerja keluarga tidak bergaji**

Kategori ini meliputi semua ahli isi rumah kepada pemilik pertubuhan yang melaksanakan kerja tertentu (sepenuh masa atau sambilan) dan bekerja sekurang-kurangnya satu pertiga daripada waktu bekerja biasa yang diamalkan oleh pertubuhan berkenaan tanpa mendapat bayaran secara tetap, sama ada dalam bentuk wang tunai atau harta benda bagi kerja yang dilakukan. Biasanya pekerja berkenaan mendapat makanan, tempat tinggal dan bantuan lain sebagai sebahagian daripada ahli isi rumah pemilik tersebut dan terus mendapatnya sama ada ia bekerja atau tidak dalam pertubuhan itu.

13.2 **Pekerja bergaji (sepenuh masa)**

Merujuk kepada semua pekerja bergaji (sepenuh masa) yang bekerja sekurang-kurangnya enam jam sehari dan/atau 20 hari sebulan. Pekerja bergaji (sepenuh masa) telah dikategorikan berdasarkan Piawaian Pengkelasan Pekerjaan Malaysia (MASCO) 2020 seperti berikut:

i. **Pengurus, profesional dan penyelidik meliputi:**

a. **Pengurus**

Merujuk kepada mereka yang menggubal, menganalisa, merumus, mengarah dan memberi nasihat tentang dasar kerajaan, dan membuat, memansuhkan undang-undang, kaedah dan peraturan awam, dan mewakili serta bertindak bagi pihak kerajaan, dan memantau pentafsiran dan pelaksanaan dasar dan undang-undang kerajaan, atau menjalankan tugas yang seumpamanya bagi pihak pertubuhan berkepentingan khas, atau mengatur, memimpin, mengawal dan menyelaras dasar dan aktiviti perusahaan, organisasi, jabatan atau seksyen dalamannya; dan

b. **Profesional**

Merujuk kepada mereka yang bertanggung jawab untuk meningkatkan ilmu pengetahuan sedia ada, mengaplikasikan konsep dan teori saintifik atau artistik, mengajar tentang perkara tersebut dengan cara bersistematik, atau terlibat dalam apa-apa gabungan tiga aktiviti di atas.

ii. **Juruteknik dan profesional bersekutu**

Merujuk kepada mereka yang melakukan tugas teknikal dan tugas yang berkaitan dengan penyelidikan dan pengaplikasian konsep sains atau seni dan kaedah operasi, dan peraturan kerajaan atau perniagaan.

iii. **Perkeranian, pekerja perkhidmatan & jualan, kemahiran khas, operator mesin & loji dan pekerjaan yang berkaitan:**

a. **Pekerja sokongan perkeranian**

Merujuk kepada mereka yang merekod, mengurus, menyimpan dan mendapatkan maklumat yang berkaitan, dan menjalankan tugas-tugas perkeranian berhubung

dengan operasi pentadbiran, pengendalian wang, urusan perjalanan, permintaan maklumat dan janji temu;

b. Pekerja perkhidmatan dan jualan

Merujuk kepada mereka yang menyediakan perkhidmatan peribadi berkaitan dengan perjalanan, pengemasan, katering, penjagaan diri, atau perlindungan dari kebakaran dan undang-undang yang berkaitan, atau menunjuk cara dan menjual barangan di kedai borong atau runcit dan pertubuhan seumpamanya termasuk di gerai dan pasar;

c. Pekerja mahir pertanian, perhutanan, penternakan dan perikanan

Merujuk kepada mereka yang menanam dan menuai tanaman ladang atau pokok dan pokok renek dan mengumpulkan buah-buahan, herba dan tanaman liar; menternak, menjaga atau memburu haiwan dan mengeluarkan pelbagai produk ternakan; menanam, memulihara dan mendapatkan hasil hutan; membiak baka atau menangkap ikan; dan memelihara atau mengumpulkan pelbagai hidupan akuatik lain;

d. Pekerja kemahiran dan pekerja pertukangan yang berkaitan

Merujuk kepada mereka yang mengaplikasikan pengetahuan dan kemahiran khusus dalam bidang perlombongan dan pembinaan, penempaan logam, dan mendirikan stuktur logam; membuat, melaraskan, menyelenggara dan membaik pulih jentera, kelengkapan atau peralatan; menjalankan kerja pencetakan; dan mengeluarkan atau memproses barang makanan, tekstil atau kayu, logam dan barangan lain termasuk barang kraftangan; dan

e. Operator mesin & loji, dan pemasang

Merujuk kepada mereka yang mengendalikan dan mengawasi jentera dan kelengkapan perindustrian dan pertanian; memandu dan mengendalikan kereta api, kenderaan bermotor, jentera dan kelengkapan bergerak; atau memasang bahagian komponen produk mengikut spesifikasi dan prosedur yang ketat.

iv. Pekerja asas

Merujuk kepada mereka yang menjalankan tugas yang mudah, rutin dan tidak sistematik yang biasanya memerlukan penggunaan perkakas tangan atau dengan sokongan mesin yang mudah, dan memerlukan tenaga fizikal yang banyak.

13.3 Pekerja bergaji (sambilan)

Ia merujuk kepada semua pekerja bergaji yang bekerja kurang daripada enam jam sehari dan/ atau kurang daripada 20 hari sebulan.

14. KATEGORI KEMAHIRAN

Kategori kemahiran telah dikelaskan berdasarkan Piawaian Pengkelasan Pekerjaan Malaysia (MASCO) 2020 adalah seperti berikut:

14.1 Mahir

Pengurus, profesional dan penyelidik, dan Juruteknik dan profesional bersekutu;

14.2 Separuh Mahir

Pekerja sokongan perkeranian, perkhidmatan dan jualan, Pekerja mahir pertanian, perhutanan, perternakan dan perikanan dan Pekerja kemahiran & pekerja pertukangan yang berkaitan serta Operator mesin & loji; dan

14.3 Berkemahiran rendah

Pekerja asas.

15. PERTUBUHAN PEMILIKAN WANITA

Pertubuhan milikan wanita merujuk kepada pertubuhan sekurang-kurangnya 51 peratus pemilikan ekuiti dipegang oleh wanita atau pemegang saham terbesar adalah wanita dan pertubuhan diuruskan oleh wanita atau Ketua Pegawai Eksekutif atau Pengarah Urusan adalah wanita yang memiliki sekurang-kurangnya 10 peratus ekuiti.

16. GAJI & UPAH

Semua pembayaran (gaji, upah, bonus, komisyen, bayaran lebih masa dan elaun tunai termasuk belanja sara hidup, perumahan, kereta, makanan dan sebagainya) yang dibuat sepanjang tahun rujukan meliputi semua pekerja bergaji dalam setiap kategori pekerja yang diambil secara langsung termasuk jumlah bayaran yang dibuat adalah sebelum ditolak cukai pendapatan dan caruman pekerja kepada Kumpulan Wang Simpanan Pekerja (KWSP)/ Pertubuhan Keselamatan Sosial (PERKESO)/ Kumpulan wang simpanan lain/ Kumpulan Wang Persaraan (KWAP). Caruman majikan kepada kumpulan wang yang di atas hendaklah dikecualikan.

17. NILAI HARTA TETAP

Aset tetap ialah aset yang dihasilkan dan digunakan secara berulang kali atau berterusan dalam proses pengeluaran melebihi daripada setahun. Aset tetap termasuk struktur, mesin dan peralatan serta aset yang diusahakan seperti pokok atau haiwan yang digunakan berulang kali atau berterusan untuk menghasilkan produk lain seperti buah-buahan atau produk tenusu. Tambahan pula, produk harta intelek seperti perisian atau seni asal yang digunakan dalam pengeluaran juga termasuk dalam aset tetap.

18. PENYELIDIKAN DAN PEMBANGUNAN (R&D)

R&D merujuk kepada sebarang kerja kreatif yang dilakukan secara sistematik untuk meningkatkan pengetahuan termasuk pengetahuan tentang manusia, budaya dan masyarakat dan penggunaan pengetahuan ini untuk merangka aplikasi baru. R&D merangkumi tiga aktiviti: penyelidikan asas, penyelidikan aplikasi dan pembangunan eksperimen terpakai. (Manual Frascati, 2015)

19. PENYELIDIK

Profesional yang terlibat dalam konsep atau penciptaan pengetahuan, produk, proses, kaedah dan sistem baru; serta mereka yang terlibat dalam menguruskan projek berkenaan. Profesional ini termasuk pelbagai saintis, jurutera dan pensyarah yang terlibat dalam menjana pengetahuan, produk dan aplikasi baru melalui penyelidikan.

20. NEGERI SUPRA

Berdasarkan System of National Accounts (SNA) 2008, terdapat tiga jenis unit institusi iaitu yang mempunyai pusat kepentingan ekonomi dan kebanyakan aktiviti adalah di dalam lingkungan satu wilayah; unit pelbagai wilayah dengan pusat kepentingannya di beberapa wilayah tetapi bukan seluruh negara; dan unit yang beroperasi pada peringkat nasional, iaitu pusat kepentingannya tidak boleh dikaitkan dengan kedudukan geografi (negeri Supra). Negeri Supra pada peringkat negeri adalah bersamaan dengan organisasi luar wilayah pada peringkat nasional. Di Malaysia, Negeri Supra merangkumi aktiviti pengeluaran yang melangkaui pusat kepentingan ekonomi utama bagi mana-mana negeri.

21. PEMBUNDARAN

Hasil tambah bagi angka komponen mungkin berbeza dengan sub-jumlah atau jumlah besar disebabkan oleh pembundaran.

22. SIMBOL DAN SINGKATAN

-	:	tiada maklumat
0	:	nilai kurang daripada 500
0.0	:	nilai kurang daripada 0.05 juta
n.a	:	tidak berkenaan
&	:	dan
%	:	peratus
dll.	:	dan lain-lain
RM	:	Ringgit Malaysia
t.t.t.l.	:	tidak terkelas di tempat lain
W.P.	:	Wilayah Persekutuan

TECHNICAL NOTES

1. SCOPE AND COVERAGE

*This publication used data from Economic Census 2023 (reference year 2022). The census collected information from registered establishments in Agriculture, Mining & quarrying, Manufacturing, Construction and Services sectors. The classification for industries refers to Malaysia Standard Industrial Classification (MSIC) 2008 Ver. 1.0, which is in accordance with the International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4 United Nations. The coverage for all sectors encompasses 1,174 categories of industries as shown in **Table 1**. In this census, entrepreneurs in the Agriculture sector which registered with relevant government agencies for the purpose of receiving aid were **NOT** covered except palm oil's entrepreneurs.*

Table 1: Category of industries by sector

Sector	Category of Industries
Agriculture	142
Mining & quarrying	56
Manufacturing	259
Construction	72
Services	645
Total	1,174

2. SOURCE OF STATISTICAL FRAME

The main source of the establishment statistical frame is from the Malaysia Statistical Business Register (MSBR). MSBR is a list of organisations/ enterprises operating in Malaysia that includes the Register of Companies (ROC), Register of Business (ROB) and Limited Liability Partnership (LLP) registered with the Companies Commission of Malaysia (CCM) as well as organisations registered with local authorities and professional bodies. The list in MSBR is updated regularly based on surveys and censuses conducted by the Department of Statistics Malaysia and administrative data sources from various agencies. The main source of administrative data is from the Companies Commission of Malaysia (CCM). In addition, DOSM also works together to obtain the latest information from other agencies such as the Employees' Provident Fund (EPF), the Royal Malaysian Customs Department, the Inland Revenue Board (IRB), Social Security Organization (SOC SO), local authorities and professional bodies. The frame is updated to take into account new establishments and to record any changes in the status of the establishments such as closed down, not in operation, change in activity and location/ correspondence address to ensure the frame is at the most current status.

3. TYPE OF BUSINESS ACTIVITY

Type of business activity refers to both principal and secondary activities. The principal activity refers to the activity to which the establishment devoted most of its resources or activity which derived most of its income. Secondary activities are defined as those incidental or ancillary to the principal activity. The classification of industry for the establishment is based on the principal activity and is in accordance with the Malaysia Standard Industrial Classification (MSIC) 2008 Ver. 1.0 which conforms to the International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4, United Nations, with modifications to suit local conditions.

4. CONCEPTS AND DEFINITIONS

The industries are categorised into five main sectors namely Agriculture, Mining & quarrying, Manufacturing, Construction and Services. The sectoral definitions include the following activities:

4.1 Agriculture

Agriculture comprises the activities of growing, breeding and rearing of animals and production of animal products, felling of trees and other plants, as well as capture fishery and aquaculture includes the use/ utilisation of plants/ vegetal and animals natural resources. There are four sub-sectors; crops, livestock, forestry & logging and fisheries.

4.1.1 Crops refer to production of crops products including organic farming. Crops also include the growing of non-perennial and perennial crops for the purpose of seed production.

4.1.2 Livestocks refer to animals or bird that are preserved for commercial and breeding purposes. Livestock production includes raising (farming) and breeding of all animals, also production of livestock products such as eggs, milk, honey, etc;

4.1.3 Forestry and logging includes the production of round wood for the forest based manufacturing industries as well as the extraction and gathering of wild growing non-wood forest product. Besides the production of timber, forestry activities which produce the product through the minimum process, such as fire wood, charcoal, wood chips and round wood used in unprocessed form are also included. These activities can be carried out in natural or forests plantation. This also includes part of the forestry operation based on fee or contract basis; and

TECHNICAL NOTES

4.1.4 Fisheries comprise of fishing and aquaculture, covering the use of fishery resources from marine, brackish or freshwater, with the purpose of capturing or gathering fish, crustaceans, molluscs and other marine organisms and products. Aquaculture refers to the production process involving the culturing or farming (including harvesting) of aquatic organisms using techniques designed to increase the production of the organisms beyond the natural capacity of the environment.

4.2 Mining & quarrying

Mining and quarrying includes the extraction of minerals occurring naturally as solids (coal and ores), liquids (petroleum) or gases (natural gas). Extraction can be achieved by different methods such as underground or surface mining, well operation, seabed mining, etc.

4.3 Manufacturing

The physical or chemical transformation of materials or components into new products, whether the work is performed by power-driven machines or by hand, whether it is done in a factory or in the worker's home, and whether the products are sold at wholesale or retail.

The classification of eight (8) sub-sectors by division are as follows:

Division	Description
Food products	
10	Manufacture of food products
Beverages and tobacco products	
11	Manufacture of beverages
12	Manufacture of tobacco products
Textiles, wearing apparel and leather products	
13	Manufacture of textiles
14	Manufacture of wearing apparel
15	Manufacture of leather and related products

Division	Description
Wood products, furniture, paper products and printing	
16	Manufacture of wood and products of wood and cork, except
17	Manufacture of paper and paper products
18	Printing and reproduction of recorded media
31	Manufacture of furniture
Petroleum, chemical, rubber and plastic products	
19	Manufacture of coke and refined petroleum products
20	Manufacture of chemicals and chemical products
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations
22	Manufacture of rubber and plastics products
Non-metallic mineral products, basic metal & fabricated metal products	
23	Manufacture of other non-metallic mineral products
24	Manufacture of basic metals
25	Manufacture of fabricated metal products, except machinery and equipment
Electrical, electronic and optical products	
26	Manufacture of computer, electronic and optical products
27	Manufacture of electrical equipment
28	Manufacture of machinery and equipment n.e.c.
Transport equipment, other manufacturing and repair	
29	Manufacture of motor vehicles, trailers and semitrailers
30	Manufacture of other transport equipment
32	Other manufacturing
33	Repair and installation of machinery and equipment

4.4 Construction

Defined as new construction, alteration, repair and demolition. Installation of any machinery or equipment which is built-in at the time of the original construction is included, as well as installation of machinery or equipment after the original construction but which requires structural alteration in order to install.

4.5 Services

Services related to Electricity, gas, steam & air conditioning supply; Water supply; sewerage, waste management & remediation activities; Wholesale & retail trade; Transportation & storage; Information & communication; Accommodation, Food & beverage; Finance; Real estate; Professional, scientific & technical; Administrative & support services; Private education; Private health & social work; Art, entertainment & recreation and Personal services & other activities.

- 4.5.1** ***Electricity, gas, steam & air conditioning supply** are defined as an activity of providing electric power, natural gas, steam, hot water and the like through a permanent infrastructure (network) of lines, mains & pipes. The dimension of the network is not decisive; also included are the distribution of electricity, gas, steam, hot water and the like in industrial parks or residential buildings. This section therefore includes the operation of electric gas utilities, which generate, control and distribute electric power or gas. Also included is the provision of steam & air-conditioning supply;*
- 4.5.2** ***Water supply, sewerage, waste management & remediation** activities comprised of activities related to waste management including collection, treatment & disposal such as scheduled waste, solid waste & waste water from industrial and household, including recovery materials & contaminated sites. The waste from the treatment process can be disposed of or used as input for other production process. Related activities in water treatment and supply are also included in this sector;*
- 4.5.3** ***Wholesale & retail trade** encompasses of wholesale and retail trades, sales and repair of motor vehicles & motorcycles;*
- 4.5.4** ***Transportation & storage** includes all establishments providing land transport, freight transport by road, other land transport, water transport, warehousing & supporting activities such as storage & warehousing, terminal operations, car parking services, highway operations, port operations, cargo handling/ stevedoring, shipping agencies & forwarding of freight and other supporting activities for transportation services;*
- 4.5.5** ***Information & communication** comprises activities of publishing, motion picture, video & television programme production, sound recording & music publishing, programming & broadcasting, telecommunication services, computer programming, consultancy & related activities and information services;*

- 4.5.6** ***Accommodation services** refer to the provision on a fee of short-term lodging, whether open to the general public or restricted to members of a particular organisation. It excludes rental of long term furnished accommodation which is classified in Real Estate;*
- 4.5.7** ***Food & beverage services** include food & beverage serving activities providing complete meals or drinks fit for immediate consumption, whether in traditional restaurants, self-service or take-away restaurants, whether as permanent or temporary stands with or without seating;*
- 4.5.8** ***Financial services** include monetary intermediation activities; other financial service activities and activities auxiliary to financial services; insurance/ takaful, reinsurance/ retakaful and pension & provident funding activities; and activities auxiliary to insurance/ takaful and pension funding;*
- 4.5.9** ***Real estate services** include acting as lessors, agents and/ or brokers in one or more of the following: selling or buying real estate, renting real state, providing other real estate services such as appraising real estate, property management or acting as real estate escrow agents. Activities in this division may be carried out on own or leased property and may be done on a fee or contract basis. Also included is the building of structures, combined with maintaining ownership of leasing of such structures;*
- 4.5.10** ***Professional, scientific & technical** includes specialised professional, scientific & technical activities which require a high degree of expertise and training, and specialised knowledge and skills available to users. Activities performed include legal & accounting activities, activities of head offices, management consultancy activities, architecture & engineering activities, technical testing & analysis, scientific research & development, advertising & market research, other professional, scientific & technical activities and veterinary activities;*
- 4.5.11** ***Administrative & support services** include a variety of activities that support general business operations including rental & leasing activities, employment activities, travel agency, tour operator & other reservation service activities, security & investigation activities, services to building & landscape activities & office administrative, office support & other business support activities;*
- 4.5.12** ***Private educational services** refer to establishments registered with the Ministry of Education, Malaysia and the Ministry of Higher Education that provides academic, pre-primary & primary education, secondary education, higher education, other education and educational support activities;*

- 4.5.13** *Private health & social work services* include hospital services, medical & dental practice activities, other human health activities, residential care activities and social work activities without accommodation;
- 4.5.14** *Arts, entertainment & recreation services* include a wide range of activities to meet varied cultural, entertainment & recreational interests of the general public, including live performances, operation of museum sites, gambling, sport and recreation activities; and
- 4.5.15** *Personal services & other activities* include activities of membership organisations, activities of business, employers and professional membership organisations, activities of trade unions, activities of other membership organisations, repair of computers and personal & household goods and other personal services activities such as washing and dry-cleaning of extiles and fur products; hairdressing and other beauty treatment and funeral and other services activities.

5. CENSUS YEAR

Refers to the year in which a census was conducted.

6. REFERENCE YEAR

The reference year of the census was the calendar year 2022. Establishments whose accounting year differed from calendar year were requested to report according to the accounting year or financial year covering at least six (6) months in the reference year.

7. METHOD OF COLLECTION

This census was generally conducted through three (3) methods of data collection, namely:

7.1 Data collection via online

This method targets respondents who have used this method for previous routine surveys.

7.2 Data collection via e-mail, post, fax and telephone

This method targets respondents who have used this method for previous routine surveys. Respondents were given a period of one month to complete and return the questionnaire to the DOSM.

7.3 Face-to-face data collection

Field work operation is carried out to get feedback from establishments that have not yet given answers from the two methods above and this method also targets establishments that have never been involved in a routine survey of DOSM.

8. REPORTING UNIT

The reporting unit used in the Economic Census 2023 was the establishment. The establishment is defined as “an economic unit engaged in one activity, under a single legal entity and operating in a single physical location”. Each establishment is assigned an industry classification based on its principal activity. In the case of a multi-activity entity, units engaged in separate activities in the same location constituted distinct establishments.

Thus, each branch of a multi-branch organisation at a different location is conceptually treated as a different establishment. The establishment is requested to give separate returns for each activity in terms of value. However, if in practice, the accounts are centrally kept such that it is not possible to obtain separate data for each individual unit or branch, the entity or enterprise is treated as a single reporting unit and allowed to submit a consolidated questionnaire covering all the units or branches.

9. LEGAL STATUS

The legal status of an establishment is defined as follows:

9.1 Individual proprietorship

This refers to a business, owned and operated by one person for his own profit. The owner has the exclusive right to control the operation of the establishment.

9.2 Partnership

This refers to a group of individuals who agree to contract and to carry out a business with the objective of profit making. All shareholders or anyone could manage the business for all parties. A trading partnership must comprise of at least two members and should not exceed a maximum of twenty members.

9.3 Limited liabilities partnership

Refers to business entity regulated under the Limited Liability Partnerships Act 2012. It is featured with the protection of limited liability to its partners similar to the limited liability enjoyed by shareholders of a company coupled with flexibility of internal business regulation through partnership arrangement similar to a conventional partnership; and

9.4 Private limited company

A private company established to undertake a business with the objective of making a profit. The shares are closely held by the shareholders of the company who have control over its operation. Characteristics:

- i. Regulated under the Companies Act 1965 and is a legal entity separate from the owners;*
- ii. Number of its shareholders between 2 - 50 members;*
- iii. Company owners have limited liability;*
- iv. Shareholders who own 51 per cent or more of the total shares shall be entitled to manage the company. The company's shares can be traded but not in the open market;*
- v. Trading of share must be with the consent of the other shareholders;*
- vi. Not listed on the Stock Exchange; and*
- vii. Business life expectancy is longer and can be identified by the words "Sendirian Berhad" (Sdn. Bhd.) at the end of the company name.*

9.5 Public limited company

A public limited company is a company established with limited liability, by a minimum of two persons to operate the business with the objective of making a profit. The shares in a public limited company are openly held and in the case of company listed on the Bursa Malaysia, the shares are freely transferable. Characteristics:

- i. Regulated under the Companies Act 1965 and is a legal entity separate from the owner;*
- ii. Owned by the shareholders and there is no limit to the shareholder;*
- iii. Management of the company is under the board of director responsibilities as appointed by shareholders; and*
- iv. Listed on Bursa Malaysia.*

9.6 Co-operative

This refers to a voluntary association with unrestricted number of members and registered under the Co-operatives Act 1993. Funds are collectively owned to meet the needs of members.

9.8 Private non-profit making organization

This is non-stock company set up with limited liability. It comprises mainly welfare, religious, educational, health, cultural, recreational and other organisations providing social and community services to households. These services are provided free of charge or at prices, which do not necessarily or fully cover the cost of providing such services (subsidy). Any profit made is reinvested in the organisation.

10. VALUE OF GROSS OUTPUT

10.1 The value of gross output of **Agriculture** (crops, livestock, forestry & logging and fisheries) is defined to include the following items:

Sales of agriculture product

- + *Stocks of agricultural products (closing)*
- + *Goods in progress and stocks of finished goods (owned manufactured) (closing)*
- + *Sales of agricultural products*
- + *Income from agricultural work done for others*
- + *Income from products processed from agricultural*
- + *Value of sales from goods/ materials/ products related to agricultural activity that is purchased for resale without further processing*
- + *Other income related to agriculture*
- + *Income from other agricultural activities*
- + *Forestry area sub-contracted to contractors (Forestry & Logging only)*
- + *Royalties, copyrights, licensing and franchise fees*
- + *Rental income received*
- + *Income from agro tourism (Crops/ Livestock/ Fisheries)*
- + *Value of sales from non-agricultural goods/ materials that is purchased for resale without further processing*
- + *All other income: Output*
- + *Research and development expenditure: In House*
- *Rental income received: Land*
- *Stocks of agricultural products (opening)*
- *Goods in progress and stocks of finished goods (owned manufacturing) (opening)*
- *Cost of goods/ materials/ products related to planting activity, purchased for resale without under going further processing*
- *Cost of goods/ materials sold (non-agricultural goods/ material that is purchased for resale without under going further processing)*

10.2 The value of gross output of **Mining & quarrying, Manufacturing and Construction** are defined to include the following items:

Sale of mineral/ quarry products/ manufactured products and construction work done

- + *Values of goods sold in the same condition as purchased*
- *Cost of goods sold in the same condition as purchased*
- + *Capital expenditure on own construction*
- + *Income from industrial services rendered to others*
- + *Income from industrial work done*
- + *Receipt from scrap, electricity, waste product, etc. sold to others*
- + *Receipt from commission and brokerage earned*
- + *All other output (such as receipts of non-industrial services, e.g. payment of management rental of property, etc)*
- + *Closing stock of finished goods*
- *Opening stock of finished goods*
- + *Closing stock of goods being processed*
- *Opening stock of goods being processed*
- + *Research and development expenditure (In-house)*

10.3 The value of gross output of **Services** is defined to include the following items:

- + *Value of goods sold in the same condition as purchased*
- + *Management services*
- + *Commission and brokerage earned*
- + *Fees earned from membership*
- + *Rental income received except land rental*
- + *Other operating income*
- + *Service tax and services charges*
- *Value of goods purchased for resale in the same condition as purchased*
- + *Closing stocks*
- *Opening stocks*
- + *Research and development expenditure (In-house)*

11. VALUE OF INTERMEDIATE INPUT

11.1 Value of intermediate input of **Agriculture** (crops, livestock, forestry & logging and fisheries) is defined to include the following items:

Cost of direct materials consumed in agricultural activities

- + *Total payment on agricultural work done by other establishments*
- + *Cost of non-perennial crops seeds/ non-breeder livestock and fisheries*
- + *Expenditure for other agricultural activities*
- + *Packing materials consumed*
- + *Materials used for repairs and maintenance*
- + *Stationery and office supplies consumed*
- + *Water purchased*
- + *Electricity purchased*
- + *Fuel, lubricants and gas*
- + *Payments for current repairs and maintenance work done by others on this establishment's fixed assets*
- + *Transportation of goods (carriage outwards)*
- + *Travelling expenses*
- + *Accounting, secretarial and auditing fees*
- + *Advertising and promotional expenses*
- + *Legal fees*
- + *Payment for other professional services*
- + *Management fees*
- + *Commissions and agency fees*
- + *Telecommunication fees*
- + *Postage (include courier services)*
- + *Bank charges*
- + *Insurance premium on building, machinery, transport equipment and goods*
- + *Payment for security services*
- + *Payment for data processing and other services related to information technology*
- + *Rental payment (excludes for rent on land)*
- + *Expenses on agro tourism*
- + *Royalties paid to: Non-government organisations/ corporate sponsorship*
- + *GST on net purchasers are not claimable as input tax*
- + *Fees paid to non-working directors for their attendance at Board of Directors' meetings*
- + *Other expenses: Input*
- + *Value of free wearing apparel provided*
- + *Staff training cost*

TECHNICAL NOTES

11.2 The value of intermediate input of **Mining & quarrying, Manufacturing and Construction** are defined to include the following items:

Value of materials and supplies consumed

- + *Cost of industrial work done by others include stripping overburden (earth removal) and internal transport in mines/ quarries site*
- + *Electricity and water purchased*
- + *Value of fuels, lubricants and gas consumed*
- + *Cost of materials used for repairs and maintenance of assets (including payments to others for this work)*
- + *Payments for non-industrial services such as toll, ferry, pilotage, towage and harbour fees and charges (including payments for carriage outwards, travelling, management fees, legal services, information technology, advertising, bank chargers, postage, telecommunication, etc*
- + *All other input costs (including training and value of the free apparel provided for the workers)*

11.3 The value of intermediate input of **Services** is defined to include the following items:

Purchase of goods, materials and services

- + *Insurance premiums*
- + *Royalty and patent fees*
- + *Bank charges*
- + *Purchase of electricity and water*
- + *Purchase of fuels, lubricants and gas*
- + *Research and development expenditure*
- + *Environmental compliance expenditure*
- + *Other operating expenditure*

12. VALUE ADDED

Value added is the increment to the value of commodities and services contributed by the establishment. This value added is derived as the difference between the value of gross output and intermediate input.

13. NUMBER OF PERSONS ENGAGED

Employment covers all persons engaged during December or the last pay period of the reference year. The number of persons engaged is classified under the following categories:

13.1 Working proprietors and unpaid family workers

i. Working proprietors and active business partners

This category refers to all individual proprietors and partners full-time or part-time who are actively engaged in the work of the establishment. Therefore, it excludes silent and inactive partners; and

ii. Unpaid family workers

This category includes all household members (full-time or part-time) to the owners of the establishment who perform a specified job and work for a minimum of one third of the normal working time for the establishment, but do not receive regular payment either in cash or in kind for the work done. Such workers generally receive food, shelter and other support as part of the household of an owner but this would continue whether they worked in the establishment or not.

13.2 Paid full-time employees

Refer to all paid workers (full-time) who work for at least six hours a day and/or 20 days a month. All such employees are to be categorised according to Malaysia Standard Classification of Occupations 2020 (MASCO) as follows:

i. Managers, professionals and researcher included:

a. Managers

Refer to those who devise, analyse, formulate, direct and advise on government policy, and make, amend and repeal laws, public rules and regulations, and represent and act on behalf of the government, and oversee the interpretation and implementation of policies and government legislation, or carry out similar tasks on behalf of special interest organisations, or plan, organise, lead, control and coordinate the policies and activities of enterprises, organisations, departments or the internal section; and

b. Professionals

Refer to those responsible for increasing the existing stock of knowledge, apply scientific or artistic concepts and theories, teach about the foregoing in a systematic manner, or engage in any combination of these three activities.

iv. Elementary workers

Refer to those who perform simple, routine and non-systematic tasks which mainly require the use of handheld tools or with the assistance of simple machines, and in some cases considerable physical effort.

13.3 Paid part-time employees

Refer to all paid workers (part-time) who work less than six hours a day and/ or 20 days a month.

14. CATEGORY OF SKILLS

Category of skills have been classified according to Malaysia Standard Classification of Occupation (MASCO) 2020 as follows:

14.1 Skilled

Managers, professionals and researchers, and Technicians and associate professionals;

14.2 Semi-skilled

Clerical support workers, Service & sales workers, Skilled agricultural, forestry, livestock & fishery workers, Craft & related trades workers, and Plant & machine operators and assemblers; and

14.3 Low-skilled

Elementary occupations.

15. WOMEN-OWNED ESTABLISHMENT

Women-owned establishment refers to a minimum of 51 per cent of the equity held by a women OR the biggest shareholders are women and the establishment is managed by a women OR the Chief Executive Officer or Managing Director is women that owns at least 10 per cent of the equity

16. SALARIES & WAGES

All payments (salaries, wages, bonuses, commissions, overtime pay and cash allowances including cost of living, housing, car, food, etc.) made throughout the reference year to all paid employees in each category. For all directly employed workers, total payments made before deductions for income tax and employees' contributions to Employees' Provident Fund (EPF) / Social Security Organisation (SOCSO)/ Other provident/ Retirement Funds Incorporated (KWAP). The employer's contribution to such funds as mentioned above should be excluded.

17. VALUE OF FIXED ASSETS

Fixed assets are produced assets that are used repeatedly or continuously in production processes for more than one year. Fixed assets include structures, machinery and equipment and cultivated assets such as trees or animals that are used repeatedly or continuously to produce other products such as fruit or dairy products. Additionally, intellectual property products such as software or artistic originals used in production are considered fixed assets.

18. RESEARCH AND DEVELOPMENT (R&D)

R&D comprises creative and systematic work undertaken in order to increase the stock of knowledge including knowledge of humankind, culture and society and to devise new applications of available knowledge. The term R&D covers three types of activity: basic research, applied research and experimental development. (Frascati Manual, 2015)

19. RESEARCHERS

Professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems; as well as, those engaged in managing the projects concerned. These professionals include a broad range of scientists, engineers and lecturers who are involved in generating new knowledge, products and applications through research.

20. SUPRA STATE

Based on the System of National Accounts (SNA) 2008, there are three types of institutional units that have a center of economic interest and most activities are within one region; multi-provincial units with centers of interest in some provinces but not nationwide; and units operating at the national level, i.e. its center of interest cannot be associated with geographical position (Supra State). Supra State at the state level is equivalent to an overseas organisation at the national level. In Malaysia, Supra State covers production activities beyond the centre for the key economic interest of any state.

21. ROUNDING

The sum of the component figures may not tally with the sub-total or total figures due to rounding.

TECHNICAL NOTES

22. SYMBOLS AND ABBREVIATIONS

-	:	<i>no information</i>
0	:	<i>less than 500</i>
0.0	:	<i>less than 0.05 million</i>
n.a	:	<i>not available</i>
&	:	<i>and</i>
%	:	<i>per cent</i>
etc.	:	<i>et cetera</i>
RM	:	<i>Ringgit Malaysia</i>
n.e.c	:	<i>not elsewhere classified</i>
W.P.	:	<i>Federal Territory</i>

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LAMPIRAN

APPENDIX



PERTANYAAN BERHUBUNG DENGAN PENERBITAN INI BOLEH JUGA DIBUAT DI PEJABAT

PERANGKAAAN NEGERI SEPerti BERIKUT:

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Johor,
Tingkat 14, Menara Tabung Haji,
Jalan Air Molek,
80000 Johor Bahru, Johor.
Tel. : 07-225 3700
Faks : 07-224 9972
E-mel : jpjohor@dosm.gov.my

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Kedah,
Aras 1, Zon C, Wisma Persekutuan,
Pusat Pentadbiran Kerajaan Persekutuan,
Bandar Muadzam Shah,
06550 Anak Bukit, Alor Setar, Kedah.
Tel. : 04-700 1240
Faks : 04-733 8412
E-mel : jpkedah@dosm.gov.my

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Kelantan,
Tingkat 8, Bangunan Persekutuan,
Jalan Bayam,
15514 Kota Bharu, Kelantan.
Tel. : 09-741 9449
Faks : 09-748 2142
E-mel : jpkelantan@dosm.gov.my

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Melaka,
Aras 7 & 8, Wisma Persekutuan,
Jalan MITC, Hang Tuah Jaya
75450, Ayer Keroh, Melaka.
Tel. : 06-252 2725
Faks : 06-252 2711
E-mel : jpmelaka@dosm.gov.my

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Sembilan,
Tingkat 12, Wisma Persekutuan,
Jalan Dato' Abdul Kadir,
70000 Seremban, Negeri Sembilan.
Tel. : 06-765 5000
Faks : 06-765 5002
E-mel : jpnsambilan@dosm.gov.my

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Pahang,
Tingkat 7, Bangunan Persekutuan,
Jalan Gambut,
25000 Kuantan, Pahang.
Tel. : 09-516 3931/7
Faks : 09-514 4636
E-mel : jppahang@dosm.gov.my

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Pulau Pinang,
Tingkat 6, Bangunan Persekutuan,
10400 Jalan Anson, Pulau Pinang.
Tel. : 04-226 6244
Faks : 04-229 9499
E-mel : jppulaupinang@dosm.gov.my

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Perak,
Tingkat 3, Blok A,
Bangunan Persekutuan Ipoh,
Jalan Dato' Seri Ahmad Said (Greentown),
30450 Ipoh, Perak.
Tel. : 05-255 4963
Faks : 05-255 1073
E-mel : jpperak@dosm.gov.my

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01000 Kangar, Perlis.
Tel. : 04-977 1221
Faks : 04-977 1223/04-976 8950
E-mel : jpperlis@dosm.gov.my

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Jalan Indah, Seksyen 14,
40000 Shah Alam, Selangor.
Tel. : 03-5515 0200
Faks : 03-5518 0408
E-mel : jpsselangor@dosm.gov.my

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Terengganu,
Tingkat 9, Wisma Persekutuan,
Jalan Sultan Ismail,
20200 Kuala Terengganu, Terengganu.
Tel. : 09-622 3062
Faks : 09-622 9659
E-mel : admin_jptrg@dosm.gov.my

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Sabah,
Tingkat 1-3, Blok C,
Kompleks Pentadbiran Kerajaan Persekutuan Sabah,
Jalan UMS, Beg Berkunci No. 2046,
88999 Kota Kinabalu, Sabah.
Tel. : 088-484 602
Faks : 088-484 659
E-mel : jpsabah@dosm.gov.my

Pengarah,
Jabatan Perangkaan Malaysia, Negeri Sarawak,
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