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.

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

Note: Entrepreneurs in the agricultural sector who are only registered with related government agencies for the purpose of receiving assistance is NOT covered except for oil palm operators.

The entire census coverage for the Agriculture sector consists of 140 industries at the 5-digit level. This industry is classified according to the Malaysian Industry Classification Standard (MSIC), 2008 Ver. 1.0.. The complete list of industries covered is shown in the Appendix of the Malaysian Industry Classification Standard, 2008 Ver. 1.0.

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 (LA) and professional bodies. The list in MSBR is updated regularly based on surveys and censuses conducted by the Department of Statistics Malaysia (DOSM) and administrative data sources from various agencies. The main source of administrative data is from the 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 (SOCSO), LA 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 top principal and secondary activities. The principal activity refers to the activity to which the establishment devoted most of its resources or contributes significantly in terms of income. Secondary activities are defined as those incidental or ancillary to the principal activity. The classification of the industry of the establishment is based on the principal activity and is in accordance with the Malaysia Standard Industrial Classification (MSIC), 2008 Ver 1.0. The MSIC 2008 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

Concepts and definitions used are based on the recommendations of the United Nations Statistical Division¹ and Food and Agriculture Organization (FAO). These concepts adhere to accepted practices, thereby facilitating international comparability of data.

4.1 Agriculture Definition

Agriculture comprising 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/utilization of plants/ vegetal and animals natural resources (based on MSIC 2008). There are four subsectors: crop, livestock, forestry & logging and fishing.

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.

¹ International Recommendations for Industrial Statistics, United Nations Statistical Division, Statistical Papers, Series M No. 90, United Nations, New York, 2009.

- ¹ International Recommendations for Industrial Statistics, United Nations Statistical Division, Statistical Papers, Series M No. 90, United Nations, New York, 2009.
 - **4.1.2 Livestock** refer to animals or bird that 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 include 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. 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 breeding of all animals, also production of livestock products such as eggs, milk, honey, etc.
 - 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, mollusks and other marine organisms and products. Aquaculture refer 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.

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 census was the establishment. An 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 was assigned an industry classification based on its principal activity and not according to the activities of the parent company.

Each branch of a multi-branch organization at a different location was conceptually treated as a different establishment. The establishment is requested to give separate returns for each sub-sector in terms of value. However, if in practice, the accounts are centrally kept such that it was 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. In the agriculture sector, the concept of establishment usually refers to a farm.

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:

Regulated under the Companies Act 1965 and is a legal entity separate from the owners:

- i. Number of its shareholders between 2 50 members;
- ii. Company owners have limited liability;
- iii. 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;
- iv. Trading of share must be with the consent of the other shareholders:
- v. Not listed on the Stock Exchange; and
- vi. 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:

Regulated under the Companies Act 1965 and is a legal entity separate from the owner:

Owned by the shareholders and there is no limit to the shareholder;

- 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.

9.7 Public corporation

This refers to an undertaking set up under a Special Act Parliament or by the State Legislature.

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. OWNERSHIP

The ownership of an establishment is classified by the residential status of the owner (s) of the majority (more than 50%) of the paid-up capital and not by their citizenship status. In instances where each party (Malaysian Resident and Non-Malaysian Resident) held equal shares in the business, the establishments were classified as "Joint Ownership".

A Malaysian Resident is any individual, company or other organisation ordinarily domiciled in Malaysia for a period of at least one year. Malaysian registered branches and incorporated subsidiaries of foreign based/ origins are also regarded as Residents.

A Non-Malaysian Resident is any individual, company or other organisation ordinarily domiciled in a country other than Malaysia. Foreign branches and/ or subsidiaries abroad owned by Malaysian Residents are also regarded as Non-Residents.

11. VALUE OF GROSS OUTPUT

The value of gross output of Agriculture (Crops, Livestocks, Forestry & Logging and Fisheries) is defined to include the following items:

- Stocks of agricultural (closing)
- + Goods in progress and stocks of finished goods (owned manufactured) (closing)
- + Sales from crops and crops production
- + Income from planting work done for others (e.g. contract farming, planting, clearing of land)
- + Income from products processed from crops (e.g. potato crackers, preserved vegetables, fruit drinks)
- + Value of sales from goods / materials / products related to planting activity, that is purchased for resale without further processing (e.g. fruits, vegetables, fertilizers)
- + Other income related to crops (e.g. advisory services)
- + Sales of livestock products: live animal
- + Sales of livestock products : livestock products
- + Income from livestock work done for others (e.g. contract livestock, 'pawah')
- + Income from products processed from livestock (e.g. nugget, burgers)
- Value of sales from goods / materials / products related to livestock activities, that is purchased for resale without further processing (e.g. livestock, animal food, minerals)
- + Other income related to livestock (e.g. animal waste fertilizer, advisory services)
- + Income from products processed from crops (e.g. potato crackers, preserved vegetables, fruit drinks)
- + Income from fishing work done for others (e.g. contract fishing, fishing)
- + Income from products processed from fish (e.g. fish crackers, fish ball, dried fish, sea cucumber ointment, fertilizers from fish)
- + Value of sales from goods / materials /products related to fishing activities, that is purchased for resale without further processing (e.g. fish, feed, fishing net)

- + Other income related to fishing (e.g. repairing of boats / fishing nets, rental from cold room, advisory services)
- + Sales of logs
- Income from forestry work done for others (e.g. measuring, tagging, felling)
- + Value of sales from goods / materials / products / related to forestry activity purchased for resale without further processing (e.g. logs, chain saws, log hammers)
- + Other income related to forestry activity (e.g. professional and surveying services etc)
- + Forestry area sub-contracted to contractors
- + Royalties, copyrights, licensing and franchise fees
- Rental income received: Non-residential
- + Rental income received: Residential
- + Rental income received: Transport equipment
- + Rental income received: Machinery and equipment
- + Rental income received: Furniture and fittings
- Rental income received: Others
- + Income received from agro tourism
- + Commissions and brokerage earned
- 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
- Stock of agriculture (opening)
- Goods in process and stocks of finished goods (own manufactured) (opening)
- Cost of goods / materials / products related to planting activity, purchased for resale without under going further processing (e.g. fruits, vegetables)
- Cost of goods / materials / products related to livestock activity, purchased for resale without under going further processing (e.g. cattle, chicken)
- Cost of goods / materials / products related to fishing activity, purchased for resale without under going further processing (e.g. fish)
- Cost of goods / materials / products related to forestry activity purchased for resale without undergoing further processing (e.g. logs, chain saws, log hammers)
- Cost of goods / materials sold (non-agricultural goods / materials that is purchased for resale without undergoing further processing)

12. VALUE OF INTERMEDIATE INPUT

Value of intermediate input of Agriculture (Crops, Livestock, Forestry & Logging and Fisheries) is defined to include the followin items:

- + Cost of direct materials consumed in crops activities
- + Cost of non-perennial crops seeds (e.g. vegetable seeds)
- + Total payments on planting work done by other establishments (sub-contract)
- + Cost of direct materials consumed in livestock activities
- + Cost of non-breeder livestock (e.g. day old chicks / day old ducks)
- + Total payments on livestock work done by other establishments (sub-contract)
- + Cost of direct materials consumed in marine / aquaculture activities
- + Cost of non-breeder fisheries (e.g. fish fry / shrimp fry)
- + Total payments on livestock work done by other establishments (sub-contract)
- + Cost of direct materials consumed in forestry activities
- + Total payments (contract value) for work done by others on materials supplied by this establishment: Cost for census done on tree (includes measuring and tagging trees)
- Total payments (contract value) for work done by others on materials supplied by this establishment: Planning costs of logging
- + Total payments (contract value) for work done by others on materials supplied by this establishment: Felling and cutting activities
- Total payments (contract value) for work done by others on materials supplied by this establishment: Transportation cost of logs (eg. unloading / loading charges, rafted charges etc.)
- + Total payments (contract value) for work done by others using their own materials:

 Cost for census done on tree (includes measuring and tagging trees)
- Total payments (contract value) for work done by others using their own materials:
 Planning costs of logging
- Total payments (contract value) for work done by others using their own materials:
 Felling and cutting activities
- + Total payments (contract value) for work done by others using their own materials: Transportation cost of logs (eg. unloading / loading charges, rafted charges etc.)
- Packing materials and containers consumed (excludes costs of direct materials in Question 17)
- + Materials used for repairs and maintenance
- + Stationery and office supplies
- + Water purchased

- + Electricity purchased
- + Fuel, lubricant and gas
- Payments for current repairs and maintenance work done by others on this establishment's fixed assets
- + Transportation of goods (carriage outwards)
- + Operation expenditure
- + Accounting, secretarial and audit fees
- + Advertising and promotion
- + Legal fees
- + Payment for other professional services
- + Management fees
- + Entertainment expenses
- + Commission and agency fees
- + Postage
- + Bank charges
- Insurance premium on building, machinery, transport equipment and goods
- + Telecommunication fees (e.g. telephone, internet etc.)
- + Payment for security services
- + Payment for data processing and other services related to information technology
- + Rental payments: Operational lease
- + Expenses on agro tourism
- + Royalties paid to: Non-government organisations / corporate sponsorship
- 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

13. VALUE ADDED

Value added is the difference between the value of gross output and intermediate input. It is approximately equivalent to commercial profit, salary and wages, depreciation and indirect taxes; plus, interest paid less interest received.

14. NUMBER OF PERSONS ENGAGED

Number of persons engaged refers to all persons working during December or the last pay period of the reference year. The number persons engaged was classified under the following categories

14.1 Working proprietors and unpaid family workers

i. Working proprietors and active business partners

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

ii. Unpaid family workers

Include 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.

14.2 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. Manager, professional and researcher included:

a. Manager

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. Professional

Refer to those responsible for increase 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.

ii. Technicians and associate professionals

Refer to those who perform technical and related tasks connected with research and the application of scientific or artistic concepts and operational methods, and government or business regulations.

iii. Clerical, services & sales workers, craft workers, plant & machine operators and related occupations includes

a. Clerical support workers

Refer to those who record, organise, store and retrieve related information and perform clerical duties especially in connection with administrative operations, handling of money, travel arrangements and requests for information and appointments;

b. Service and sales workers

Refer to those who provide personal services related to travel, housekeeping, catering, personal care, or protection against fire and unlawful acts, or demonstrate and sell goods in wholesale or retail shops and similar establishments as well as at stalls and markets;

c. Craft and related trades workers

Refer to those who apply their specific knowledge and skills in the fields of mining and construction, metal forming, and erect metal structures, make, fit, maintain and repair machinery, equipment or tools, carry out printing work as well as produce or process foodstuffs, textiles, or wooden, metal and other articles including handicraft goods; and

d. Plant & machine operators, and assemblers

Refer to those who operate and monitor industrial and agricultural machinery and equipment, drive and operate trains, motor vehicles and mobile machinery and equipment, or assemble product component parts according to strict specifications and procedures

iv. Elementary occupations

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.

14.3 Part-time employees

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

14.4 Agricultural, Forestry, Livestock and Fisheries Skills Workers

i. Agriculture labour workers

This is defined as full-time agriculture labourers who are directly employed. It includes workers who are directly engaged in cultivating, livestock rearing, fisheries (awak-awak), persons engaged in truck driving, vessels and other machinery.

ii. Workers employed through labour contractors

This is defined as full-time agriculture employees employed through labour contractors. Labour contractors refer to contractor who supply only labour to that establishment.

14.5 Workers under subcontractors

Refer to those who worked under a contractor appointed by that establishment where the materials and equipment are supplied by the contractor themselves.

15. CATEGORY OF SKILLED

Category of skilled has been categorized according to Malaysia Standard Classification of Occupations 2020 (MASCO) as follow:

15.1 High-skilled

Managers; Professionals; Technician and Associate Professionals;

15.2 Semi-skilled

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

15.3 Low-skilled

Elementary Occupations

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 ASSEST

Fixed assets cover all goods, new or used, tangible or intangible, which have a normal economics life span of more than one year. For instance land, building & structure, transport equipment, computer, machinery & equipment, furniture & fittings and other assets. Other assets also include biological assets namely trees/ crops (except for logging trees that intended for logging), livestock and aquaculture fisheries which can produce products repeatedly and have a life expectancy of more than one year.

Value of assets as at the beginning and end of 2022 was based on net book value. Purchases alterations and major repairs or capital expenditure during the year were valued at actual costs incurred. Value of assets sold during the year refers to the actual value.

18. WOMEN-OWNED ESTABLISH

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.

19. ROUNDING

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

20. COMPOUND ANNUAL GROWTH RATE

The calculation of compound annual growth rate (r) is based on the following formula:

$$Y_t = Y_o (1 + r)^t$$

Where r.

$$r = \left[e^{\frac{1}{t} \ln \left(\frac{Y_t}{Y_0} \right)} - 1 \right] \times 100$$

Where,

 Y_t = Value at current year

Y_o = Value at previous year

 $t = Number of years, Y_t - Y_o$

r = Compounded annual growth rate

21. SYMBOLS AND ABBREVIATIONS

The following symbols and abbreviations have been used throughout the publication:

- : no information n.a : not available 0 : less than 500

0.0 : less than 0.05 million

& : and
% : per cent
< : less than
} : combined
etc. : ec cetera

CAGR : compound annual growth rate

RM : Ringgit Malaysia

n.e.c : not elsewhere classified

W.P. : Federal Territory