TRAINING COURSE UNDER THE STATISTICAL CAPACITY BUILDING (StatsCab) PROGRAMME: Online Training Course on Basic Statistics for Diplomats

Labour Statistics

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PRIMARY DATA DIVISION | MALAYSIAN BUREAU OF LABOUR STATISTICS
22nd MARCH 2023 | 14.30 – 16.15 (MYT)
01 Introduction

02 Labour Supply

03 Labour Productivity

04 Labour Market Analysis
Labour Statistics

Section 1 – Introduction
The establishment of MBLS

**Outlined in the 2017 Budget, Malaysia Productivity Blueprint and the Economic Reports 2017/2018**

**Economic Council Meeting No. 8/2017**

The establishment of the MBLS Core Team to study data gaps and implement establishment of MBLS

**JKKPO Meeting No. 1/2018**

The Chief Secretary to the Government of Malaysia Weekly Meeting

**JKTT Meeting No. 3/2018**

**2016-2017**

10 Apr 2017

22 May 2017

7 March 2018

11 Apr 2018

27 Sep 2018

**Preparation of the cabinet notice paperwork**

**Received reviews from MOF, JPA, BNM and MOHR**

**Approval from the Cabinet Meeting**

**Agreement in principle in the JKKPO Meeting No. 2/2020**

**Agreed in the JKTT Meeting No. 2/2020**

**Approval of employment warrant by MOF**

**Nov 2018 – March 2019**

Apr – Sep 2019

29 Nov 2019

25 Feb 2020

21 May 2020

29 June 2020
DOSM’s Organisation Chart

ECONOMY PROGRAMME
- National Accounts Statistics Division
- Services Statistics Division
- Balance of Payments Statistics Division
- Economic Indicators Division
- International Trade Statistics Division
- Industrial Production & Construction Statistics Division

CORPORATE MANAGEMENT PROGRAMME
- Management Services Division
- Information Management Division
- Strategic Communication and International Division
- Malaysia Statistical Training Institute

TECHNICAL DEVELOPMENT AND SOCIAL PROGRAMME
- Price, Income & Expenditure Statistics Division
- Manpower & Social Statistics Division
- Population & Demographic Statistics Division
- Agriculture & Environment Statistics Division
- Methodology & Research Division
- Integration & Data Management Division

MALAYSIAN BUREAU OF LABOUR STATISTICS (MBLS)
- Employment and Unemployment Division
- Smart Integration and Statistics Division
- Primary Data Division
- Labour Cost and Productivity Indicators Division
- Administrative and Support Unit

STATE OFFICES
- performing the role and responsibility of collecting data from various sources, analyzing and disseminating related information regularly and timely;
- support the integration and sharing of labour market information from various agencies and become a center for the integrated collection of labour market statistics; and
- providing consultation services to various national and international agencies on the labour market information.

MBLS WAS ESTABLISHED FOR THE PURPOSE OF

Structure of positions
Management & Professionals
23 positions (60.5%)
Support
15 positions (39.5%)
BNM Executive Officers
10 positions

MBLS WAS ESTABLISHED FOR THE PURPOSE OF

STATE OFFICES
- performing the role and responsibility of collecting data from various sources, analyzing and disseminating related information regularly and timely;
- support the integration and sharing of labour market information from various agencies and become a center for the integrated collection of labour market statistics; and
- providing consultation services to various national and international agencies on the labour market information.
OVERVIEW
What is the role of labour in the circular flow of economic activity?

**Product market:** Goods and services

**Economic resources:** Land, **Labour**, Capital & Entrepreneurship

**Establishment**
- Good & Services production
- Establishment revenues
- Hiring of workers
- Wage payment

**Household**
- Sale of product
- Purchase of products
- Employment earnings

**Source:** Stiglitz 2020

**Note:** Some type of self employment, public sector, capital market and other key elements of the economy not shown
Dimensions of Labour Market Statistics

**Notes:** Adapted by DOSM based on the framework of the International Labour Organization
Labour Market Framework
Difference between Work and Employment

Form of work in 19th International Conference of Labour Statisticians (ICLS)

Work
(i.e. ALL activities to produce good and services)

For own final use (by household)

For use by others (i.e. other units)

For remuneration
(i.e. for pay or profit)

Without remuneration

Own-use production work
Services Goods

Employment
(Work for pay or profit)
Services Goods

Unpaid trainee work
Services Goods

Other work activities
(e.g. unpaid compulsory work)
Services Goods

Volunteer work
Goods and Services, excluding Households Producing Services
In Households Producing Services

Activities within the SNA Production Boundary

Activities within the SNA General Production Boundary
Labour Market Framework

Work

Comprises any **activity performed by persons** of any sex and age **to produce goods or to provide services** for **use by others or for own** use (Para 6, Resolution I. [19th ICLS, 2013]).

a) Irrespective of its formal or informal character or the legality of the activity.

b) Excludes activities that do not involve producing goods or services (e.g. begging and stealing), self-care (e.g. personal grooming and hygiene) and activities that cannot be performed by another person on one’s own behalf (e.g. sleeping, learning and activities for own recreation).

c) Aligned with the **General Production Boundary** as defined in the System of National Accounts (SNA) 2008 and its concept of economic unit that distinguishes between:

1. Market units (i.e. corporations, quasi-corporations and household unincorporated market enterprises);
2. Non-market units (i.e. government and non-profit institutions serving households); and
3. households that produce goods or services for own final use.

d) Can be performed in any kind of economic unit.
Importance of Labour Statistics

Macro-economic monitoring
- Inform on economy’s performance and the impact in term of employment such as current job crisis

Formulate, implement policies & programmes
- Jobs creation;
- Human resource development;
- Poverty reduction; and
- Income support & social assistance programmes

Monitor the progress and effectiveness of global and national agendas
- Sustainable Development Goals (SDG) 2030
- Decent work agenda
- Country’s economic development planning
Training Course Under the Statistical Capacity Building (StatsCab) Programme: Online Training Course on Basic Statistics for Diplomats

Labour Statistics

Section 2 – Labour Supply
LABOUR SUPPLY
Outline

01
OVERVIEW OF LABOUR FORCE FRAMEWORK
• Background
• Chronology of Labour Force Survey
• Labour Force Framework

02
LABOUR SUPPLY: CONCEPTS & DEFINITIONS
• Labour Supply
• Key Concepts & Definitions

03
METHODOLOGY
• Sampling Design
• Data Collection Methods
  • Questionnaire
  • Manual & References
Background

The Labour Force Statistics describes the labour supply situation in Malaysia based on Labour Force Survey (LFS).

• LFS provides principal statistics of the labour force according to demographic and socioeconomic characteristics such as sex, age group, urban and rural strata, ethnic groups, educational attainment, occupation and industry.

• the implementation of LFS is based on guidelines and recommendations of the International Labour Organization (ILO) with reference to the Surveys of Economically Active Population, Employment, Unemployment and Underemployment: An ILO Manual on Concepts and Methods.

INTRODUCTION

OBJECTIVE

• to collect information on the structure and characteristic of labour force, employment and unemployment;

• to provide timely and up-to-date indicators for monitoring activities in the labour market;

• as an input for labour market analysis, policy formulation as well as planning, implementing and monitoring programmes related to human resource development; and

• serve as an essential reference to researcher, economists, academicians, private sector and individuals in research related to employment and the labour market.

LEGAL PROVISION

• The survey is conducted under the provisions of the Statistics Act 1965 (revised 1989). Section 5 of this Act requires any establishment operating in Malaysia to provide actual information or best estimate to the Department of Statistics Malaysia (DOSM).

• Under this Act, the content of the questionnaire is confidential and only aggregated figures are published.
Chronology of Labour Force Survey

1974
The first nationwide Labour Force Survey

1993
Quarterly LFS was conducted in four rounds/quarters

1998
Quarterly LFS upgraded to Special Data Dissemination Standard (IMF) level

1999
Dissemination of quarterly Labour Force Statistics

2004
Labour Force Survey conducted monthly

2007
Dissemination of monthly Labour Force Statistics
Overview of Labour Force Framework
## Generic Statistical Business Process Model (GSBPM)

<table>
<thead>
<tr>
<th>Quality Management / Metadata Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specify Needs</strong></td>
</tr>
<tr>
<td>1.1 Identify needs</td>
</tr>
<tr>
<td>1.2 Consult &amp; confirm needs</td>
</tr>
<tr>
<td>1.3 Establish output objectives</td>
</tr>
<tr>
<td>1.4 Identify concepts</td>
</tr>
<tr>
<td>1.5 Check data availability</td>
</tr>
<tr>
<td>1.6 Prepare business case</td>
</tr>
<tr>
<td><strong>Design</strong></td>
</tr>
<tr>
<td>2.1 Design outputs</td>
</tr>
<tr>
<td>2.2 Design variable descriptions</td>
</tr>
<tr>
<td>2.3 Establish output objectives</td>
</tr>
<tr>
<td>2.4 Identify concepts</td>
</tr>
<tr>
<td>2.5 Check data availability</td>
</tr>
<tr>
<td>2.6 Prepare business case</td>
</tr>
<tr>
<td><strong>Build</strong></td>
</tr>
<tr>
<td>3.1 Build collection instrument</td>
</tr>
<tr>
<td>3.2 Build or enhance process components</td>
</tr>
<tr>
<td>3.3 Establish output objectives</td>
</tr>
<tr>
<td>3.4 Identify concepts</td>
</tr>
<tr>
<td>3.5 Check data availability</td>
</tr>
<tr>
<td>3.6 Prepare business case</td>
</tr>
<tr>
<td><strong>Collect</strong></td>
</tr>
<tr>
<td>4.1 Create frame &amp; select sample</td>
</tr>
<tr>
<td>4.2 Set up collection</td>
</tr>
<tr>
<td>4.3 Run collection</td>
</tr>
<tr>
<td>4.4 Finalise collection</td>
</tr>
<tr>
<td><strong>Process</strong></td>
</tr>
<tr>
<td>5.1 Integrate data</td>
</tr>
<tr>
<td>5.2 Classify &amp; code</td>
</tr>
<tr>
<td>5.3 Review &amp; validate</td>
</tr>
<tr>
<td>5.4 Edit &amp; impute</td>
</tr>
<tr>
<td>5.5 Derive new variables &amp; units</td>
</tr>
<tr>
<td><strong>Analyze</strong></td>
</tr>
<tr>
<td>6.1 Prepare draft outputs</td>
</tr>
<tr>
<td>6.2 Validate outputs</td>
</tr>
<tr>
<td>6.3 Interpret &amp; explain outputs</td>
</tr>
<tr>
<td>6.4 Apply disclosure control</td>
</tr>
<tr>
<td>6.5 Finalise outputs</td>
</tr>
<tr>
<td>6.6 Calculate weights</td>
</tr>
<tr>
<td>6.7 Calculate aggregates</td>
</tr>
<tr>
<td>6.8 Finalise data files</td>
</tr>
<tr>
<td><strong>Disseminate</strong></td>
</tr>
<tr>
<td>7.1 Update output systems</td>
</tr>
<tr>
<td>7.2 Produce dissemination products</td>
</tr>
<tr>
<td>7.3 Manage release of dissemination products</td>
</tr>
<tr>
<td>7.4 Promote dissemination products</td>
</tr>
<tr>
<td>7.5 Manage user support</td>
</tr>
<tr>
<td>8.1 Gather evaluation inputs</td>
</tr>
<tr>
<td>8.2 Conduct evaluation</td>
</tr>
<tr>
<td>8.3 Agree an action plan</td>
</tr>
</tbody>
</table>

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**Notes:**
- This diagram outlines the stages involved in the generic statistical business process model (GSBPM).
- It emphasizes the process of connecting the collection of data to its interpretation and dissemination, ensuring a systematic approach to statistical business operations.
## Labour Force Framework (cont’d)

### Statistical & Analytical Units

<table>
<thead>
<tr>
<th>Persons</th>
<th>Basic unit for producing statistics on the population engaged in each form of work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs or work activities</td>
<td>A set of tasks and duties performed, or meant to be performed, by one person for a single economic unit</td>
</tr>
<tr>
<td>Time units</td>
<td>Are used for producing statistics of volume of work in reference to each form of work or to any combination thereof.</td>
</tr>
</tbody>
</table>
Concepts & Definitions
Labour Supply in Malaysia (Household Approach)

Population

Working Age Population
(15 – 64 years)
Based on guidelines and recommendations of the International Labour Organization (ILO)

Labour Force
Population in the working age group who are either employed or unemployed

Employed
Worked at least one hour within a week

Unemployed
Person who were available for work and looking work

Outside Labour Force
Population in the working age which not classified as employed or unemployed

Outside Working Age Population
(0-14 years and 65 year & above)
Based on guidelines and recommendations of the International Labour Organization (ILO)
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour Force</td>
<td>All persons in the working age who are either <strong>employed</strong> or <strong>unemployed</strong>.</td>
</tr>
<tr>
<td>Employed</td>
<td>All persons who, at any time <strong>during the reference week</strong> worked <strong>at least one hour for pay, profit or family gain</strong> either as an employer, employee, own-account worker or unpaid family worker. They are also considered as employed if they:</td>
</tr>
<tr>
<td></td>
<td>• did not work during the reference week because of illness, injury, disability, bad weather, leave, labour dispute and social or religious reasons but had a job, farm, enterprise or other family enterprise to return to.</td>
</tr>
<tr>
<td></td>
<td>• were temporary laid-off with pay and would definitely be called back to work.</td>
</tr>
<tr>
<td></td>
<td>• were employed less than 30 hours during the reference week because of the nature of their work or due to insufficient work and are able and willing to accept additional hours of work. This group is underemployed.</td>
</tr>
<tr>
<td>Unemployed</td>
<td>All persons who <strong>did not work during the reference week</strong> and are classified into two groups that are <strong>actively unemployed</strong> and <strong>inactively unemployed</strong>. The <strong>actively unemployed</strong> include all persons who were available for work and were actively looking for work during the reference week.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Long term unemployment</strong> are those who were unemployed and seeking work for more than a <strong>year</strong>.</td>
</tr>
<tr>
<td></td>
<td><strong>Inactively unemployed</strong> persons include those in the following categories:</td>
</tr>
<tr>
<td></td>
<td>• did not look for work because they believed no work was available or that they were not qualified;</td>
</tr>
<tr>
<td></td>
<td>• would have looked for work if they had not been temporarily ill or had it not been for weather condition; and</td>
</tr>
<tr>
<td></td>
<td>• had looked for work prior to the reference week and were waiting for result of job applications.</td>
</tr>
<tr>
<td>Outside labour force</td>
<td>All persons not classified as employed or unemployed are classified as outside labour force. This category consists of housewives, students, retirees, disabled person and those not interested in looking for jobs.</td>
</tr>
</tbody>
</table>
Methodology
Scope and Coverages

Population

Covered

Household

Private Living Quarters (LQ)

Strata

1

2

3

4

5

6

7

8

Citizenships

Citizen

Non-citizen

Types of EB

Normal

Mixed

Island

Condominium

Squatters

Estate

Orang Asli (Indigenous)

Not Covered

Types of EB

Hostel

Prisons

Construction site

Hotels

Security Areas

Area

9

0

Notes: EB – Enumeration Block

Enumeration Block (EB)
An enumeration block is a land area that is artificially created and consists of specific boundaries.
Sampling

By using a two-tier stratification design (Two Stage Stratified Random Sampling)

First stage sampling unit: EB (Selection of EB: Probability Proportionate to Size Sampling)

EB: 99,356
Population: 32,447,385

Second stage of sampling unit: LQ (Selection of LQ: Systematic Random Sampling)

Analysis/ Domain stage: Administrative District

EB: 92,122
EB: 12,648

EB – Enumeration Block
Determination of sample size

- The sample size is determined based on:

  - **Population**
    - Total households in 2022

  - **Response Rate**
    - LFS July 2022 (actual)

  - **Variable of Interest (VOI)**
    - Labour Force Participation Rate (actual).

  - **Precision**
    - Margin of Error (e): 5% / 7% / 9% / 10%
    - Confidence Level (z): 95%

- The sample size was calculated based on the administrative district level.

- Distribution of EB by strata based on the population by strata in terms of administrative district.

- Criteria needed in the determination of sample size is value of Relative Standard Error (RSE) and sample size in 2022.
Summary of sample size 2023 (Monthly)

EB – Enumeration Block

Perlis: 23 EB
Perak: 90 EB
Selangor: 95 EB
Negeri Sembilan: 61 EB
Melaka: 39 EB
Johor: 97 EB
Kedah: 85 EB
Kelantan: 66 EB
Terengganu: 57 EB
Pahang: 78 EB
WP Putrajaya: 13 EB
WP KL: 38 EB
Sabah: 121 EB
Sarawak: 125 EB
Labuan: 11 EB
# Summary of Sample Size 2023 (Yearly)

<table>
<thead>
<tr>
<th>State</th>
<th>LFS 2022</th>
<th>LFS 2023</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td></td>
</tr>
<tr>
<td>Johor</td>
<td>871</td>
<td>293</td>
<td>1,164</td>
</tr>
<tr>
<td>Kedah</td>
<td>670</td>
<td>350</td>
<td>1,020</td>
</tr>
<tr>
<td>Kelantan</td>
<td>366</td>
<td>438</td>
<td>804</td>
</tr>
<tr>
<td>Melaka</td>
<td>425</td>
<td>43</td>
<td>468</td>
</tr>
<tr>
<td>Negeri Sembilan</td>
<td>493</td>
<td>239</td>
<td>732</td>
</tr>
<tr>
<td>Pahang</td>
<td>518</td>
<td>394</td>
<td>912</td>
</tr>
<tr>
<td>Pulau Pinang</td>
<td>595</td>
<td>65</td>
<td>660</td>
</tr>
<tr>
<td>Perak</td>
<td>772</td>
<td>284</td>
<td>1,056</td>
</tr>
<tr>
<td>Perlis</td>
<td>174</td>
<td>126</td>
<td>300</td>
</tr>
<tr>
<td>Selangor</td>
<td>950</td>
<td>190</td>
<td>1,140</td>
</tr>
<tr>
<td>Terengganu</td>
<td>442</td>
<td>242</td>
<td>684</td>
</tr>
<tr>
<td>Sabah</td>
<td>803</td>
<td>649</td>
<td>1,452</td>
</tr>
<tr>
<td>Sarawak</td>
<td>580</td>
<td>896</td>
<td>1,476</td>
</tr>
<tr>
<td>F.T. K. Lumpur</td>
<td>456</td>
<td>-</td>
<td>456</td>
</tr>
<tr>
<td>F.T. Labuan</td>
<td>101</td>
<td>31</td>
<td>132</td>
</tr>
<tr>
<td>F.T. Putrajaya</td>
<td>144</td>
<td>-</td>
<td>144</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8,360</strong></td>
<td><strong>4,240</strong></td>
<td><strong>12,600</strong></td>
</tr>
</tbody>
</table>

**EB** – Enumeration Block
1. **Personal interview method (Face to face Interview)**
   - To collect information on all selected household members including their demographic particulars;

2. **Starting 2013, Computer Assisted Telephone Interview (CATI) were used for repeated sample every quarter**

3. **Information on labour force** is collected for household members who are **15 years and over only**;

4. **The LFS is conducted monthly beginning January 2004**
   - to produce monthly labour force indicators at national level

5. **Overall, the number of staffs involved in the LFS is about ± 300 persons**;
   - SMD – 15 officers
   - State Offices – ±280 Enumerators at state offices (permanent staffs)

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### Reference Period

1. **Moving reference period**
2. **Refers to 7 days (a week) preceding the commencement date of the interviews**

<table>
<thead>
<tr>
<th>Reference week</th>
<th>Survey week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1-7</td>
<td>8-14</td>
</tr>
<tr>
<td>Day 8-14</td>
<td>15-21</td>
</tr>
<tr>
<td>Day 15-21</td>
<td>22-28</td>
</tr>
</tbody>
</table>
Objective
To collect information on the structure and characteristic of labour force, employment and unemployment;

To provide timely and up-to-date data for activities in the labour market.

Sample Size
The sample size for this survey is required to represent overall population at the fixed level of analysis. This sample size has accounted for the following elements:

i. response rates of the previous survey;
ii. labour force participation rate of the previous survey as the variable of selection;
iii. level of sampling design; and
iv. the maximum desired error.

Sample Unit
Household

Sample Size of Labour Force Survey 2023

<table>
<thead>
<tr>
<th>STATE</th>
<th>EB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johor</td>
<td>1,164</td>
</tr>
<tr>
<td>Kedah</td>
<td>1,020</td>
</tr>
<tr>
<td>Kelantan</td>
<td>792</td>
</tr>
<tr>
<td>Melaka</td>
<td>468</td>
</tr>
<tr>
<td>Negeri</td>
<td>732</td>
</tr>
<tr>
<td>Sembilan</td>
<td>936</td>
</tr>
<tr>
<td>Pahang</td>
<td>660</td>
</tr>
<tr>
<td>Pulau Pinang</td>
<td>1,080</td>
</tr>
<tr>
<td>Perak</td>
<td>276</td>
</tr>
<tr>
<td>Perlis</td>
<td>1,140</td>
</tr>
<tr>
<td>Selangor</td>
<td>684</td>
</tr>
<tr>
<td>Terengganu</td>
<td>1,452</td>
</tr>
<tr>
<td>Sabah</td>
<td>1,500</td>
</tr>
<tr>
<td>Sarawak</td>
<td>456</td>
</tr>
<tr>
<td>W.P. Kuala Lumpur</td>
<td>132</td>
</tr>
<tr>
<td>W.P. Labuan</td>
<td>156</td>
</tr>
<tr>
<td>W.P. Putrajaya</td>
<td>TOTAL 12,648</td>
</tr>
</tbody>
</table>

Sampling
A stratified Two-staged Sample Design is adopted.

Population estimates by the following categories were used to produce labour statistics estimates: State, Gender, Age group, Urban/Rural, Ethnic group.

- Adjusted weight takes into account non-response cases.
- Population factor is then used as external weight.

Estimation Procedure
Household frame made up of Enumeration Blocks (EBs) based on Population & Housing Census 2010 which is updated from time to time

Average of 80-120 Living Quarters (LQs)

State
- Johor
- Kedah
- Kelantan
- Melaka
- Negeri
- Sembilan
- Pahang
- Pulau Pinang
- Perak
- Perlis
- Selangor
- Terengganu
- Sabah
- Sarawak
- W.P. Kuala Lumpur
- W.P. Labuan
- W.P. Putrajaya

TOTAL

Sample of EBs

Sample of 8 LQs
Manual & References

Manual on Concepts and Methods - Survey of Economically Active Population, Employment, Unemployment, and Underemployment, ILO

Key Indicators of The Labour Market (KILM) 9th Edition 2015, ILO

System of National Accounts 2008

International Conference of Labour Statistician (ICLS)

Malaysian Standard Classification of Occupation 2013

Malaysian Standard Industrial Classification 2008
Questionnaire

FOR ALL HOUSEHOLD MEMBERS

1. Demographic particulars
   - Sex, age, citizenship, ethnic, relationship to the head of household, marital status

2. Education
   - School attendance, highest level of formal education, highest certificate obtained, field of study of the certificate

FOR ALL HOUSEHOLD MEMBERS 15+

1. Labour force particulars
   - Hours worked, occupation, activities/industry, status in employment
   - Reason for working less than 30 hours, additional hours for working less than 30 hours, reason for not being at work during reference week
   - Duration of unemployment, step taken to obtain a job, work experience
   - Reason for not in the labour force, work experience, benefit received from employers, career enhancement and remote working
Questionnaire (cont’d)

FOR ALL HOUSEHOLD MEMBERS 15+ (cont’d)

2. Salaries and wages particulars (employees)
   • Basic salaries/wages, allowance, other cash, payment in kind, overtime payment, mode of payment, working hours and days in reference period

3. Informal sector particulars (non-agriculture, non-government)
   • No. of employees, registration status, financial report, private profit organisation, workplace, contract of emp., employees benefit, gross income

4. Migration particulars (aged 1+)
   • Movement status, place of origin (Administrative District, Strata, State, Country), reason for migrating, occupation before migrating
Survey Process Transition

Mainframe (1982-2007)

PC-based (2008-2009)

Integrated system (2010 until now)

- Integrated system known as **National Enterprise-Wide Statistical System (NEWSS)** was developed under Department’s ICT Strategic Planning Project;

- **Integrates the business processes** of:
  - frame development,
  - sampling procedure,
  - monitoring the field operation,
  - data capture and validation,
  - estimation procedure,
  - tabulation and analysis, and
  - business intelligence.
Data Quality Assurance

The LFS sample survey was designing based on 95 per cent confidence intervals.

The maximum Relative Standard Error (RSE) set at 5% of the second level stratification.

To ensure high quality data, several steps were taken to minimize the NON-SAMPLING ERRORS which arise as a result of:

- Incomplete survey coverage
- Weaknesses in the sampling frame
- Poor feedback, non-response; and
- Processing (editing, coding and data capture)

Response error can occur due to difference and difficulty in interpreting questions, be it on the part of the enumerator or respondent. To minimize this, intensive training is conducted for the enumerators as well as supervisors.

Random quality checks were carried out on households that were already canvassed by the enumerators to ensure validity of the information recorded.

To ensure the completeness of the survey coverage, the sampling frame is frequently updated and the living quarters were selected after EB listing exercise.

With regards to editing and processing errors, several consistency checks were done, either manually or computerised, to ensure the quality and acceptable data generated.
Dissemination

Time series data

- Annual Data: Available starting 1982
- Half yearly data: Available starting 2005
- Quarterly data: Available starting 1999
- Monthly data: Available starting 2004

Statistical Release Process by DOSM

1. Teaser

2. Announcement in the official DOSM Facebook

3. Infographic

4. Media Statement

5. Video Montage

6. Report

https://fb.watch/2raUkV8j4g/
Periodic Publication

Monthly Labour Force Report

Quarterly Labour Force Report

Annual Labour Force Report

52 indicators

426 indicators

24,120 indicators
Evaluation

Specify need
We evaluate the stakeholder’s need in line with the present situation such as by adding an additional question to portray the current labour market condition.

Collect
During the pandemic, the data collection method was reviewed by using CATI and telephone interview.

Analyse
New indicator was released to provide more insight on country’s labour supply situation such as underemployment indicator.

Dissemination
From time to time we strengthen the dissemination by using teaser, infographic and video montage via the social media (Facebook, Twitter, Instagram).
Findings for January 2023
Main Indicator for January 2023

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Total</th>
<th>YoY (%)</th>
<th>MoM (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jan 2022</td>
<td>Nov 2022</td>
<td>Dec 2022</td>
</tr>
<tr>
<td>1 Labour Force ('000)</td>
<td>16,366</td>
<td>16,709</td>
<td>16,730</td>
</tr>
<tr>
<td>2 a) Employed ('000)</td>
<td>15,686</td>
<td>16,109</td>
<td>16,130</td>
</tr>
<tr>
<td>3 b) Unemployed ('000)</td>
<td>680</td>
<td>601</td>
<td>600</td>
</tr>
<tr>
<td>4 Outside Labour Force ('000)</td>
<td>7,332</td>
<td>7,236</td>
<td>7,240</td>
</tr>
<tr>
<td>5 Labour Force Participation Rate (LFPR)(%)</td>
<td>69.1</td>
<td>69.8</td>
<td>69.8</td>
</tr>
<tr>
<td>6 Unemployment Rate (%)</td>
<td>4.2</td>
<td>3.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>
## Main Indicator for January 2023 (cont’d)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Total</th>
<th>YoY (%)</th>
<th>MoM (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jan 2022</td>
<td>Nov 2022</td>
<td>Dec 2022</td>
</tr>
<tr>
<td>1 Labour Force ('000)</td>
<td>16,366</td>
<td>16,709</td>
<td>16,730</td>
</tr>
<tr>
<td>2 Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 a) Male</td>
<td>10,052</td>
<td>10,266</td>
<td>10,201</td>
</tr>
<tr>
<td>4 b) Female</td>
<td>6,314</td>
<td>6,444</td>
<td>6,529</td>
</tr>
<tr>
<td>5 LFPR by Sex (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 a) Male</td>
<td>81.9</td>
<td>82.7</td>
<td>82.9</td>
</tr>
<tr>
<td>7 b) Female</td>
<td>55.3</td>
<td>55.8</td>
<td>55.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Total</th>
<th>YoY (%)</th>
<th>MoM (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jan 2022</td>
<td>Nov 2022</td>
<td>Dec 2022</td>
</tr>
<tr>
<td>1 Employed ('000)</td>
<td>15,686</td>
<td>16,109</td>
<td>16,130</td>
</tr>
<tr>
<td>2 Status in employment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 a) Employers</td>
<td>517</td>
<td>555</td>
<td>556</td>
</tr>
<tr>
<td>4 b) Employees</td>
<td>12,029</td>
<td>12,215</td>
<td>12,226</td>
</tr>
<tr>
<td>5 c) Self-employed</td>
<td>2,656</td>
<td>2,848</td>
<td>2,861</td>
</tr>
<tr>
<td>6 d) Unpaid family workers</td>
<td>484</td>
<td>491</td>
<td>488</td>
</tr>
</tbody>
</table>
## Main Indicator for January 2023 (cont’d)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Total</th>
<th>YoY (%)</th>
<th>MoM (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jan 2022</td>
<td>Nov 2022</td>
<td>Dec 2022</td>
</tr>
<tr>
<td>1 Number of Unemployed ('000)</td>
<td>680</td>
<td>601</td>
<td>600</td>
</tr>
<tr>
<td>2 Unemployment Rate (%)</td>
<td>4.2</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>a) Graduate</td>
<td>4.0</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>4 b) Youth (15-30 tahun)</td>
<td>8.3</td>
<td>7.0</td>
<td>6.9</td>
</tr>
<tr>
<td>5 c) Youth (15-24 tahun)</td>
<td>13.2</td>
<td>11.9</td>
<td>11.8</td>
</tr>
<tr>
<td>6 d) Male</td>
<td>4.0</td>
<td>3.5</td>
<td>3.3</td>
</tr>
<tr>
<td>7 e) Female</td>
<td>4.4</td>
<td>3.7</td>
<td>4.0</td>
</tr>
<tr>
<td>8 Period of Unemployment</td>
<td>321</td>
<td>296</td>
<td>295</td>
</tr>
<tr>
<td>a) Less than 3 months</td>
<td>134</td>
<td>105</td>
<td>104</td>
</tr>
<tr>
<td>b) 3 – less than 6 months</td>
<td>72</td>
<td>57</td>
<td>56</td>
</tr>
<tr>
<td>c) 6 – less than 1 year</td>
<td>43</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>
Findings for January 2023: Employed persons & employment-to-population ratio

The number of employed persons in January 2023 further increased by 0.2 per cent (+28.9 thousand persons) to record 16.16 million persons (December 2022: 16.13 million persons). In January, the employment-to-population ratio, which indicates the ability of an economy to create employment, remained at 67.3 per cent.
The employees’ category accounted for **75.7 per cent** of the total employed persons in January 2023. As compared to the previous month, this category recorded a marginal increase of **0.1 per cent (+11.8 thousand persons)**, reaching a total of **12.24 million persons** (December 2022: 12.23 million persons).
The number of unemployed persons declined further in January 2023 to record 596.1 thousand persons, reduced by 0.6 per cent (-3.5 thousand persons) as against 599.6 thousand persons in December 2022. The unemployment rate during the month remained at 3.6 per cent.
By category of unemployment, the majority of the unemployed persons were the **actively unemployed** or those who were available for work and actively seeking jobs, encompassed **80.8 per cent**. Meanwhile, those who believed that no jobs were available or the **inactively unemployed**, decreased by **0.8 per cent** to register **114.5 thousand persons** (December 2022: 115.4 thousand persons).
Findings for January 2023: Labour force and LFPR

The number of labour force improved further in January 2023, increased by 0.2 per cent or 25.4 thousand persons to record 16.76 million persons (December 2022: 16.73 million persons). Meanwhile, the labour force participation rate (LFPR) was unchanged at 69.8 per cent.
In January 2023, the number of persons outside the labour force posted a decline of 1.2 thousand persons (-0.02%) to 7.24 million persons (December 2022: 7.24 million persons). Housework/ family responsibilities were the main reason for the outside labour force with a contribution share of 43.0 per cent, followed by schooling/ training with 40.8 per cent.
Data Dissemination
January 2023
1. SOFTCOPY

b. Media Statement: F:\KSS\MEDIA STATEMENT LABOUR JANUARY 2023.pdf
c. Infographic: JANUARY 2023\INFOGRAFIK STB JAN 2023_BI.v5.pdf
d. Video Montage: F:\KSS\VIDEO MONTAJ STB JAN 2023.pptx
e. Stats Alert: JANUARY 2023\7. StatsAlert48_LFS JANUARY 2023_BI (FINAL).pptx

2. SOCIAL MEDIA

Facebook: https://www.facebook.com/StatsMalaysia
Instagram: https://www.instagram.com/statsmalaysia
Twitter: https://twitter.com/StatsMalaysia
The number of unemployed in January 2023 continued to decrease, reaching 596.1 thousand persons, registering a 3.6 per cent unemployment rate.

- In January 2023, the country’s labour market continued on an upward trend following the current improvement of the country’s economic position, in keeping with the expansion of the global economy. Therefore, the number of labour force in January 2023 improved further, increased by 0.2 per cent month-on-month to 16.76 million persons (December 2022: 16.73 million persons).

- The labour force participation rate during the month remained at 69.8 per cent (December 2022: 69.8 per cent).

- The number of unemployed persons during the month continued to decline, with a reduction of 0.6 per cent to 596.1 thousand persons (December 2022: 599.6 thousand persons).

- January’s unemployment rate stood at 3.6 per cent.

- The number of employed persons in January further increased by 0.2 per cent month-on-month to record 16.16 million persons (December 2022: 16.13 million persons).

- In terms of economic sector, the number of employed persons in the Services sector continued to increase, largely in Wholesale & retail trade; Food & beverage services; and Administrative & support service activities. A similar trend of employment was also observed in the Manufacturing, Construction and Mining & quarrying sectors, as well as in the Agriculture sector.

- The number of persons outside labour force in January 2023 posted a decline of 0.02 per cent to register 7.24 million persons (December 2022: 7.24 million persons).

Released by: Department of Statistics Malaysia (DOSM)
End of section 2
Labour Statistics

Section 3 – Labour Productivity
Productivity is commonly defined as a ratio between the output volume and the volume of inputs. In other words, it measures how efficiently production inputs, such as labour and capital, are being used in an economy to produce a given level of output.

Labour productivity is an important economic indicator that is closely linked to economic growth, competitiveness, and living standards. Labour productivity represents the total volume of output (measured in terms of GDP) produced per unit of labour (measured in terms of the number of employed persons) during a given time reference period.

Volumes of output per hour worked (or per person employed) are described as measures of labour productivity.
What is labour productivity?

Labour productivity can be defined as a measure of economic efficiency which shows how effectively economic inputs are converted into output. It is the ability to produce more with the same or less input, are a significant source of increased potential national income. The economy are able to produce more goods and services over time by making production more efficient.

How to measure labour productivity?

Labour productivity refers to the efficiency and effectiveness of each employee to generate value added or overall output. It is calculated by using the ratio of value added to the total hours worked or employment by sector in Malaysia. It can be measured by various methods depending on the requirements and availability of data.
Why is productivity important?

1. used in economic analysis, public and private policymaking
2. to drive economic growth and provide the basis for sustained economic growth
3. create new economic opportunities
4. ensure continued wellbeing and prosperity of the people
5. shift from labour intensive to knowledge and innovation based economic activities
6. unleash innovation to generate new sources of revenue
Restoring Growth Momentum
- Boosting Productivity Growth.

Labour productivity per employment by economic activity

<table>
<thead>
<tr>
<th>Sector</th>
<th>Target</th>
<th>Value added per employment (RM’000)</th>
<th>Average Annual Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td></td>
<td>60.3</td>
<td>2.5</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td></td>
<td>1,341.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td>148.7</td>
<td>4.3</td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td>46.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td>100.6</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td></td>
<td><strong>106.1</strong></td>
<td><strong>3.6</strong></td>
</tr>
</tbody>
</table>

Source: Twelfth Malaysia Plan, 2021-2025
Policy monitoring by government

Unlocking the potential of productivity to propel economic growth

Productivity is a game changer in the Eleventh Malaysia Plan, 2016-2020 to propel Malaysia to become an advanced economy and inclusive nation.

“Economic growth during the Eleventh Malaysia Plan, 2016-2020, must be driven by more sustainable sources of growth, particularly improvements in productivity. Targetted initiatives will be introduced at the national, sector and enterprise levels to ensure tangible and measurable improvements in productivity. Specific productivity targets will be set and the outcomes will be closely monitored.”

Comprehensive, transparent and coordinated efforts via institutionalised governance mechanism

Source: Malaysia Productivity Blueprint
Policy monitoring by government

Sector Productivity Nexus will play a key role in supporting enterprises on the ground, simultaneously improving the visibility of the implementation progress.

Source: Malaysia Productivity Blueprint
The estimation of labour productivity are based on the recommendations from manual and references as listed below:

<table>
<thead>
<tr>
<th></th>
<th>Manual and references</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>System of National Accounts (SNA) 2008</td>
</tr>
<tr>
<td>3</td>
<td>International Conference of Labour Statistician (ICLS)</td>
</tr>
<tr>
<td>4</td>
<td>Malaysian Standard Classification of Occupation (MASCO) 2013</td>
</tr>
<tr>
<td>5</td>
<td>Malaysian Standard Industrial of Classification (MSIC) 2008</td>
</tr>
<tr>
<td>6</td>
<td>Manual on Concepts and Methods - Survey of Economically Active Population, Employment, Unemployment, and Underemployment, ILO</td>
</tr>
<tr>
<td>7</td>
<td>Key Indicators of The Labour Market (KILM) 9th Edition 2015, ILO</td>
</tr>
<tr>
<td>8</td>
<td>Measuring Informality - A Statistical Manual on The Informal Sector and Informal Employment, ILO</td>
</tr>
</tbody>
</table>
Productivity is defined as the ratio of output (goods and services) to inputs (labour, hours worked and capital), measuring how efficiently inputs are used to produce output.

Productivity can be measured by Single Factor Productivity and Multifactor Productivity.

The choice between them depends on the purpose of productivity measurement and the availability of data.

Single Factor Productivity (SFP) is a synonym for partial productivity measure. It relates output to one particular type of input.

Multifactor Productivity (MFP) reflects the overall efficiency with which labour and capital inputs are used together in the production process.
Single factor productivity (SPF)

Labour productivity (LP) can be measured by 3 approaches.

It measures how efficiently labour input is used in the production process.

Labour Productivity

\[
\text{LP} = \frac{\text{Output (Real GDP)}}{\text{Labour Input}}
\]

Output
Real Gross Domestic Product (GDP)

Labour input
Employment/ total hours worked/ jobs

LP per Employment
How productive labour is used to generate output

LP per Hour worked
If productivity rises, it takes fewer hours of work for the economy to produce the same amount of output.

LP per Jobs
How much output produced based on number of jobs
Labour productivity per hour worked is most commonly used in measuring labour productivity.

How productive labour is used to generate output.

Provide a better picture of labour productivity developments in the economy, as it eliminates differences in the full time/part time composition of the workers.
Labour productivity measurement

Measurement Unit

With the labour productivity level, we can measure the time series data over time by calculating the annual percentage change and indexes.

Annual percentage change

Measuring annual percentage change from current corresponding quarter to the same quarter of previous year

Indices

Measuring annual percentage change from a base period

Indices
How to calculate percentage change?

- With the level of labour productivity which has been calculated, the analysis of labour productivity is normally be measured by changes over time.

- As an example, year-on-year (YOY) annual percentage change may indicate how much labour productivity has changed over time from one reference quarter to another reference quarter.

- YOY annual percentage change can be calculated by dividing current level of labour productivity of corresponding quarter to the corresponding quarter of the previous year which is stated in the unit of currency per hour.

Example:

YOY annual percentage change

$$\text{YOY} (Q_n) = \left( \frac{Q_n}{Q_{n-1}} - 1 \right) \times 100$$

where:

YOY (Qn)
annual percentage change
Qn
level of quarter year n (current year)
Qn-1
level of quarter year n - 1 (previous year)
Components of labour productivity

There are six variables of labour productivity

- Value added
- Employment
- Employment Leave
- Employment Hours Worked
- Average Hours Worked
- Total Hours Worked
Main data sources of the statistics produced by Department of Statistics Malaysia

Administrative Data:
- **Employment Statistics** in Financial Activity by Central Bank of Malaysia
- **Public Servant Statistics** by Public Service Departments
- **Foreign Workers** by Ministry of Home Affairs

Data sources:
- Gross Domestic Product
- Economic Census
- Annual Economic Statistics
- Informal Sector Workforce Statistics
- Labour Force Statistics
- Monthly Manufacturing Statistics
- Quarterly Services Statistics
- Quarterly Employment Statistics
**Questionnaire: Labour Force Survey**

**INDENTIFICATION OF EMPLOYED HOUSEHOLD MEMBERS**

<table>
<thead>
<tr>
<th>S1</th>
<th>Did you work at least ONE HOUR during the (Reference Week) for pay or profit or for family gains? (Include own account work). Work include:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>i) Online sales activities such as selling clothes, accessories, cup cakes, etc.</td>
</tr>
<tr>
<td></td>
<td>ii) Assist family members to operate their enterprises/ businesses</td>
</tr>
<tr>
<td></td>
<td>iii) Activities carried out at home (home-based) such as folding boxes, shelling of prawns, sending school children and sewing beads</td>
</tr>
<tr>
<td>Yes</td>
<td>Proceed to S3 and onwards</td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S2</th>
<th>Although you did not work during the reference week, do you have any employment, work on farm, enterprise or other family enterprise to return to?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Proceed to S6 and onwards</td>
</tr>
<tr>
<td>No</td>
<td>Proceed to S9 and onwards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S3</th>
<th>How many hours did you work during the reference week (including extra work, secondary occupation, third occupation and others)?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hour If 30 hours or more, proceed to S7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S4</th>
<th>What was the reason for working less than 30 hours during the reference week?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Insufficient work:</td>
</tr>
<tr>
<td></td>
<td>In the nature of the job:</td>
</tr>
<tr>
<td></td>
<td>Retired:</td>
</tr>
<tr>
<td></td>
<td>Old age:</td>
</tr>
<tr>
<td></td>
<td>Housework/ family/ community responsibilities:</td>
</tr>
<tr>
<td></td>
<td>On leave:</td>
</tr>
<tr>
<td></td>
<td>Illness/ injury:</td>
</tr>
<tr>
<td></td>
<td>Weather condition:</td>
</tr>
<tr>
<td></td>
<td>Proceed to S7 and onwards</td>
</tr>
</tbody>
</table>
### Questionnaire: Labour Force Survey

#### LABOUR FORCE PARTICULARS (ONLY FOR THE MEMBER AGED 15 YEARS AND OVER)

**S18 Occupation**

i) What is your principal occupation?


ii) Describe your duties/nature of your occupation?


**S19 Industry**

i) What is the name of your establishment or the establishment which you are employed? (If any)


ii) What are the main activities/product of this establishment?


iii) Specify the address of the establishment or where is your usual state/country of work place?


   a) State code
   b) Country code

**S20 Status in employment.**

Were you a/an...

<table>
<thead>
<tr>
<th>Employer</th>
<th>1 Unpaid Family Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Employee</td>
<td>2 Paid Apprentice or Trainee</td>
</tr>
<tr>
<td>Private Employee</td>
<td>3 Others (Specify):</td>
</tr>
<tr>
<td>Own Account Worker</td>
<td>4</td>
</tr>
</tbody>
</table>

**S21 Is the establishment or the organisation you are working at registered with the Companies Commission of Malaysia (CCM), Local Authorities (LA) or other related authorities?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>In the process of registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**S22 Do you have a written contract or oral agreement with your employer?**

<table>
<thead>
<tr>
<th>Yes, Written contract</th>
<th>Yes, Oral agreement</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**S23 Where is your place of work?**

- At your home (no special work space) [01]
- Work space inside or attached to your home [02]
- Factory, office, workshop, shop, kiosk, etc. (independent from home) [03]
- Home or workplace of client (except construction) [04]
- Employer’s home [05]
- Construction site [06]
- Market or bazaar stall [07]
- Street stall (separate from the dwelling) [08]
- Market/Bazaar/Store (festival season only) [09]
- No fixed location (mobile) [10]
- Plantation, farms, estates, shades, sea etc. (agricultural related) [11]

**S24 Do you work in a...**

<table>
<thead>
<tr>
<th>Full time</th>
<th>Part time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
## Questionnaire: Quarterly Employment Survey

<table>
<thead>
<tr>
<th>No</th>
<th>Occupation</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pengurusan Manajemen</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Profesional Profesional</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Jurutera dan Profesional Ekersekutu Teknik dan Associate Professionals</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Pekerja Seksi Kemasaran</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>Pekerja Perkhidmatan dan Jualan</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>Pekerja Perkhidmatan dan Jualan</td>
<td>60</td>
</tr>
<tr>
<td>7</td>
<td>Pekerja Mahir Perniagaan, Perniagaan, Perbanasan, dan Perkhidmatan</td>
<td>70</td>
</tr>
<tr>
<td>8</td>
<td>Pekerja Kemasaran dan Pekerja Perkhidmatan yang Berkhidmat</td>
<td>80</td>
</tr>
<tr>
<td>9</td>
<td>Operator Mesin dan Laju, dan Pemanasan</td>
<td>90</td>
</tr>
<tr>
<td>10</td>
<td>Pekerja Anas</td>
<td>100</td>
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</table>

**No.**

<table>
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<th>2</th>
<th>3</th>
<th>4</th>
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<th>7</th>
<th>8</th>
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<th>10</th>
</tr>
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<tbody>
<tr>
<td>2010</td>
<td>25</td>
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<td>24</td>
<td>23</td>
<td>06</td>
<td>05</td>
<td>04</td>
<td>03</td>
<td>02</td>
</tr>
</tbody>
</table>

Jumlah Total
# Questionnaire: Monthly Manufacturing Survey

Name of establishment: ____________________________

(Please provide the information above if you are sending via fax or e-mail)

<table>
<thead>
<tr>
<th>Name</th>
<th>40</th>
<th>41</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

## QUESTION 4: EMPLOYMENT AND SALARIES & WAGES FOR THE MONTH

1. Working proprietors, active business partners and unpaid family workers (all members of family and friends not receiving regular wages).

2. Employees (full-time and part-time).

3. Workers employed through labour contractors.

4. Total: ____________________

\[1 + 2 + 3\]

<table>
<thead>
<tr>
<th>Number of workers</th>
<th>RM (Salaries &amp; wages payments, including bonuses, other cash allowances &amp; overtime payments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td></td>
</tr>
<tr>
<td>02</td>
<td></td>
</tr>
<tr>
<td>03</td>
<td></td>
</tr>
<tr>
<td>04</td>
<td></td>
</tr>
</tbody>
</table>

## QUESTION 5a: NUMBER OF DAYS AND SHIFTS DURING THE MONTH

| Number of days operated during the month | 01 |
| Number of shifts in one day            | 02 |
| Number of hours in one shift           | 03 |

## QUESTION 5b: TOTAL OVERTIME MAN-HOURS DURING THE MONTH

Total overtime man-hours: ____________________

Example: 10 workers x 2 hours overtime each day x 26 days (number of days this factory operated for the month) = 520 hours
Labour Productivity Estimation
General approach of labour productivity estimation

Quarterly labour productivity estimation is measured using the Single Factor Productivity method.

This estimation is based on information of value added with total hours worked and total employment by economic activity.

The value added used at constant prices where it refers to the value of goods and services at 2015 prices.

Total hours worked are the aggregate number of hours actually worked during the period in employees and self-employment jobs.

Total employment refers to the overall number of employees in the reference period.

The methodology of estimating employment data are based on the calibration of household information and information of establishment.

Labour productivity is derived from the ratio of the value added at constant prices with the total hours worked and total employment.
Recap: what is productivity?

https://www.youtube.com/watch?v=mRxICdUYaCs

Source: U.S. Bureau of Labor Statistics,
Labour Productivity (LP) per Employment
Labour productivity per employment is measured as output (real value added) of goods and services per labour input ratio (number of employment).

\[
LP(E) = \frac{VA}{Emp}
\]

1. Labour productivity per employment is measured as output (real value added) of goods and services per labour input ratio (number of employment).

2. Number of employment included persons who worked for pay or profit (or pay in kind).

3. Include persons who were temporarily absent from work due to illness, maternity, holiday, training or labour dispute; and unpaid family workers who worked for at least one hour within a week.

Labour productivity per employment is measured as value added per employment.
Components of LP per employment

Value added

The difference between output and intermediate consumption. It represents the value added of goods and services by economic activity.

Employment

All persons who engaged with the production, at any time during the reference week worked at least one hour for pay, profit or family gain (as an employer, employee, own-account worker or unpaid family worker).

Also considered as persons categorized as:

- did not work during the reference week because of illness, injury, disability, bad weather, leave, labour dispute and social or religious reasons but had a job, farm, enterprise or other family enterprise to return to.
- temporary lay-off with pay who would definitely be called back to work.
- worked less than 30 hours during the reference week because of the nature of their work or due to insufficient work and are able and willing to accept additional hours of work are considered underemployed.
Labour productivity per employment is measured as value added per employment.

\[
LP(E) = \frac{VA}{Emp}
\]

Example: Labour Productivity per Employment

In Q1 2021, value added for Manufacturing sector was RM85.2 billion while total employment 2.3 million persons. Calculation of labour productivity per employment is as follows:

\[
LP(E)_{Q121} = \frac{VA}{EMP}
\]

\[
LP(E)_{Q121} = \frac{RM\ 85.2\ billion}{2.3\ million\ persons}
\]

\[
LP(E)_{Q121} = RM37,043\ per\ person
\]

Based on the calculation, labour productivity per employment for Manufacturing sector in Q1 2021 was RM37,043 per person. In other word, each employee in this sector produced RM37,043 value added in Q1 2021.
Labour Productivity per Hour Worked
<table>
<thead>
<tr>
<th>Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labour productivity</strong> per hour worked</td>
</tr>
<tr>
<td>is the most appropriate Single Factor Productivity</td>
</tr>
</tbody>
</table>

| 1 | Labour productivity per hour worked is defined as the ratio of output (goods and services) to input (total working hours). |
| 2 | Labour productivity by number of working hours reflects the amount of output produced within an hour based on the category of employees either in full time, part time or self-employed. |
| 3 | The most appropriate single factor productivity input measurement is based on the number of hours worked. |
| 4 | Average hours worked is defined as the total number of hours worked divided by the number of people in employment. |
| 5 | Total hours worked for all employment during the reference period are the aggregate number of hours actually worked for a quarter. |
Components of LP per hour worked

Employment Leave

Refers to the number of workers did not work (because of illness, injury, disability, bad weather, leave, labour dispute and social or religious reasons) during the reference period.

Employment Hours Worked

It is defined as the difference between total employment and employment leave. It also refers to the overall number of employees at the end of the reference period excluding the employees who did not work during the reference period because of illness, injury, disability, bad weather, leave, labour dispute and social or religious reason.

Average Hours Worked

Defined as the number of hours worked per the number of people in employment. This employment refers to the employment hours worked or the overall number of employees at the end of the reference period.

Total Hours Worked

Total hours worked is the result of multiplying average hours worked with the employment hours. It is defined as the aggregate number of hours actually worked during the reference period.
Box 1. International definition of hours actually worked, 10th ICLS (1962)

Statistics of hours actually worked should include --

1. hours actually worked during normal periods of work;
2. time worked in addition to hours worked during normal periods of work, and generally paid at higher rates than normal rates (overtime);
3. time spent at the place of work on work such as the preparation of the workplace, repairs and maintenance, preparation and cleaning of tools and the preparation of receipts, time sheets and reports;
4. time spent at the place of work waiting or standing-by for such reasons as lack of supply of work, breakdown of machinery, or accidents, or time spent at the place of work during which no work is done but for which payment is made under a guaranteed employment contract;
5. time corresponding to short rest periods at the workplace, including tea and coffee breaks.

Statistics of hours actually worked should exclude --

1. hours paid for but not worked, such as paid annual leave, paid public holidays, paid sick leave;
2. meal breaks;
3. time spent on travel from home to work and vice versa.

ILO (2000)
What is average hours worked (AHW)?

AHW is defined as the total number of hours worked during the reference period divided by the number of employment hours worked engaged in the production.

Head-counts the number of employment will hide changes in average hours worked.

**Include:**
- ✓ Normal periods of work;
- ✓ All types of employment by status of employment;
- ✓ Paid and unpaid overtime;
- ✓ Time spent for additional jobs;
- ✓ Time spent at the place of work on work; and
- ✓ Time corresponding to short rest periods at the workplace (max. 15 minutes)

**Exclude:**
- ✗ Meal breaks longer than 30 minutes;
- ✗ Time not worked because of public holidays
- ✗ Annual paid leave
- ✗ Own illness
- ✗ Injury and temporary disability
- ✗ Maternity leave
- ✗ Parental leave
- ✗ Schooling or training
- ✗ Slack work for technical or economic reasons
- ✗ Strike or labour dispute
- ✗ Bad weather
- ✗ Compensation leave and other reasons
- ✗ Time spent on travel from home to work and vice versa
How is average hours worked (AHW) estimated?

1. Determine the number of employment who worked during the reference period.

2. Determine the total hours worked for the number of employees who worked during the reference period.

3. AHW by economic activity is obtained by dividing (2) with (1).

4. Verify the time series of AHW by economic activity.

5. If outliers of AHW by economic activity are found, there is a need for compiler to identify the outliers in raw database of LFS.

6. Re-estimate the AHW based on identified outliers from the raw data.

AHW is defined as the total number of hours worked during the reference period divided by the number of employment hours worked engaged in the production.

Head-counts the number of employment will hide changes in average hours worked.
How is total hours worked calculated?

1. Employment by economic activity must be minus with the employment leave during the reference period, which is at the quarterly basis.

2. Employment leave is obtained from Labour Force Statistics Survey.

3. Employment hours worked is obtained from the employment by economic activity deducted from employment leave.

4. As the average hours worked reported by Labour Force Survey Statistics is reported by weekly basis, the average hours worked for the reference period must be multiplied by 13 weeks during the quarter.

5. Total hours worked by economic activity is obtained by multiplying average hours work with employment hours worked.
### Steps to estimate total hours worked

<table>
<thead>
<tr>
<th>No.</th>
<th>Step</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Determine the number of Employment Hours Worked in hospital activities.</td>
<td>There are 55,000 number of employment in Q2 2021.</td>
</tr>
<tr>
<td>2.</td>
<td>Determine the average hours worked per week for hospital activities</td>
<td>Average hours worked was 45.0 hours per week.</td>
</tr>
<tr>
<td></td>
<td>for the reference period.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Derive the average hours worked for the reference period, which is</td>
<td>Average hours worked for Q2 2021</td>
</tr>
<tr>
<td></td>
<td>is at quarterly basis.</td>
<td>= 45.0 X 13 weeks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= 585.0 hours per quarter</td>
</tr>
<tr>
<td>4.</td>
<td>Derive total hours worked for reference period by multiplying the</td>
<td>Total hours worked per quarter</td>
</tr>
<tr>
<td></td>
<td>number of Employment Hours Worked in hospital activities with average</td>
<td>= Employment Hours Worked X Average hours worked per quarter</td>
</tr>
<tr>
<td></td>
<td>hours worked for the reference period.</td>
<td>= 55,000 X 585.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= 32,175,000 hours</td>
</tr>
</tbody>
</table>
Calculation of LP per hour worked

Labour productivity per hour worked is measured as value added per total hours worked.

\[
LP(HW) = \frac{VA}{THW}
\]

Example: Labour Productivity per Hour Worked

In the first quarter of 2020 (Q1 2021), value added for Manufacturing sector was RM85.3 billion while total hours worked was 1.7 billion hours. Calculation of labour productivity per hour worked is as follows:

\[
LP(HW)_{Q121} = \frac{VA_{Q121}}{THW_{Q121}}
\]

\[
LP(HW)_{Q121} = \frac{RM85.3\text{ billion}}{1.7\text{ billion hours}}
\]

\[
LP(HW)_{Q121} = RM50.2\text{ per hour}
\]

Based on the calculation, labour productivity per hour worked for Manufacturing sector in Q1 2021 was RM50.2 per hour (each hour worked in this sector can produce RM50.2 value added during the quarter).
Labour productivity and economic growth

Labour productivity measured by value added per employment and value added per hour worked.

Malaysia's labour productivity per employment, 2015 - 2022

Malaysia's labour productivity per hour worked, 2015 - 2022

Source: Department of Statistics, Malaysia
## Productivity: international comparisons

### Labour productivity per hour worked

<table>
<thead>
<tr>
<th>Economy</th>
<th>Rank</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxembourg</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Norway</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Denmark</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Belgium</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Malaysia</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Belgium</td>
<td>4</td>
<td>4</td>
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<tr>
<td>Malaysia</td>
<td>58</td>
<td>58</td>
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<tr>
<td>Thailand</td>
<td>81</td>
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<td>Indonesia</td>
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<tr>
<td>Phillipines</td>
<td>96</td>
<td>96</td>
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<tr>
<td>Vietnam</td>
<td>97</td>
<td>98</td>
</tr>
<tr>
<td>Myanmar</td>
<td>119</td>
<td>119</td>
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<tr>
<td>Cambodia</td>
<td>126</td>
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</table>

### labour productivity per employment

<table>
<thead>
<tr>
<th>Economy</th>
<th>Rank</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Ireland</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>United States</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>United States</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Bosnia &amp; Herzegovina</td>
<td>48</td>
<td>49</td>
</tr>
<tr>
<td>Chile</td>
<td>50</td>
<td>48</td>
</tr>
<tr>
<td>Malaysia</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Gabon</td>
<td>49</td>
<td>50</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>55</td>
<td>53</td>
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</table>

Source: The Conference Board Total Economy Database™, 2021
## National Target: Twelfth Malaysia Plan

### Twelfth Malaysia Plan (12th MP):
Labour productivity growth target 2021-2025

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>National</th>
<th>Agriculture</th>
<th>Mining &amp; quarrying</th>
<th>Manufacturing</th>
<th>Construction</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>Mid-term review 11MP</td>
<td>Performance 2020</td>
<td>Twelfth Malaysia Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td>3.7</td>
<td>1.1</td>
<td>3.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>0.2</td>
<td>0.5</td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mining &amp; quarrying</td>
<td>4.2</td>
<td>-0.9</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3.9</td>
<td>1.8</td>
<td>4.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>4.3</td>
<td>1.0</td>
<td>3.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>3.9</td>
<td>1.3</td>
<td>3.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Labour Productivity Target by Economic Activity

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>Twelfth Malaysia Plan (RM)</th>
<th>Mid-term review 11 MP (RM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>106.1</td>
<td>89.0</td>
</tr>
<tr>
<td>Agriculture</td>
<td>60.3</td>
<td>53.3</td>
</tr>
<tr>
<td>Mining &amp; quarrying</td>
<td>1,341.9</td>
<td>1,247.6</td>
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<tr>
<td>Manufacturing</td>
<td>148.7</td>
<td>124.0</td>
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<tr>
<td>Construction</td>
<td>46.2</td>
<td>44.0</td>
</tr>
<tr>
<td>Services</td>
<td>100.6</td>
<td>80.7</td>
</tr>
</tbody>
</table>

Sources: Twelfth Malaysia Plan, 2021-2025
Malaysia’s labour productivity as expressed by value added per employment in the fourth quarter 2022 increased 3.6 per cent (Q3 2022: 10.2%), as the economy continued to expand in this quarter.
Value added per hour worked in 2022 rebounded to 1.8 per cent (2021: -2.6%) with a value of RM41.7 (2021: RM41.0 per hour).
## Labour productivity by 5 main sectors

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>VA</th>
<th>EMP</th>
<th>LPEMP</th>
<th>EMPHW</th>
<th>THW</th>
<th>LPHW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q421</td>
<td>Q322</td>
<td>Q422</td>
<td>Q421</td>
<td>Q322</td>
<td>Q422</td>
</tr>
<tr>
<td>Total</td>
<td>3.6</td>
<td>14.2</td>
<td>7.0</td>
<td>1.8</td>
<td>3.6</td>
<td>3.2</td>
</tr>
<tr>
<td>Agriculture</td>
<td>2.8</td>
<td>1.2</td>
<td>1.1</td>
<td>-0.1</td>
<td>-0.6</td>
<td>-0.5</td>
</tr>
<tr>
<td>Mining &amp; Quarrying</td>
<td>-0.6</td>
<td>9.2</td>
<td>6.8</td>
<td>11.0</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9.1</td>
<td>13.2</td>
<td>3.9</td>
<td>3.6</td>
<td>4.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Construction</td>
<td>-12.2</td>
<td>15.3</td>
<td>10.1</td>
<td>-1.2</td>
<td>0.3</td>
<td>0.02</td>
</tr>
<tr>
<td>Services</td>
<td>3.2</td>
<td>16.7</td>
<td>8.9</td>
<td>2.1</td>
<td>4.8</td>
<td>4.7</td>
</tr>
</tbody>
</table>

VA : Value Added  EMP : Employment  LPEMP : Labour Productivity per Employment  EMPHW : Employment Hours Worked  THW : Total Hours Worked  LPHW : Labour Productivity per Hours Worked
1. In 2017, to further boost growth in productivity, the Malaysia Productivity Blueprint (MPB) was launched in May, that highlighted the need for productivity to be addressed holistically at all levels to ensure a systemic change across economy.

2. 9 priority subsectors have been established; 5 on services, 3 on manufacturing and 1 on the agriculture sector.

<table>
<thead>
<tr>
<th>9 Priority Sub-sectors</th>
<th>LP per Employment (%)</th>
<th>LP per Hour Worked (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
<td>2021</td>
</tr>
<tr>
<td>Total</td>
<td>8.0</td>
<td>3.3</td>
</tr>
<tr>
<td>Agro-Food</td>
<td>-1.4</td>
<td>3.1</td>
</tr>
<tr>
<td>Chemicals and Chemical Products</td>
<td>2.0</td>
<td>10.3</td>
</tr>
<tr>
<td>Machinery and Equipment</td>
<td>4.7</td>
<td>9.0</td>
</tr>
<tr>
<td>Electrical and Electronics</td>
<td>9.1</td>
<td>12.0</td>
</tr>
<tr>
<td>Retail and Food &amp; Beverage</td>
<td>12.9</td>
<td>-1.7</td>
</tr>
<tr>
<td>Tourism</td>
<td>144.2</td>
<td>-28.9</td>
</tr>
<tr>
<td>ICT</td>
<td>1.2</td>
<td>3.7</td>
</tr>
<tr>
<td>Professional Services</td>
<td>11.6</td>
<td>-5.6</td>
</tr>
<tr>
<td>Private Healthcare</td>
<td>5.8</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Source: Department of Statistics, Malaysia
Labour Productivity Dissemination
Quarterly publication

Labour productivity was first published by the Department of Statistics, Malaysia on 22 November 2017
Components published

1. Produktiviti buruh tahunan, nilai tambah per jam bekerja mengikut aktiviti ekonomi, 2017 - 2022
   Annual labour productivity, value added per hour worked by economic activity, 2017 - 2022

2. Produktiviti buruh tahunan, nilai tambah per jam bekerja mengikut aktiviti ekonomi, 2017 - 2022: Perubahan peratusan tahunan
   Annual labour productivity, value added per hour worked by economic activity, 2017 - 2022: Annual percentage change

3. Produktiviti buruh tahunan, nilai tambah per jam bekerja mengikut aktiviti ekonomi, 2017 - 2022
   Annual labour productivity, value added per hour worked by economic activity, 2017 - 2022

4. Produktiviti buruh tahunan, nilai tambah per jam bekerja mengikut aktiviti ekonomi, 2017 - 2022: Perubahan peratusan tahunan
   Annual labour productivity, value added per hour worked by economic activity, 2017 - 2022: Annual percentage change

5. Produktiviti buruh tahunan, nilai tambah per jam bekerja mengikut aktiviti ekonomi, 2017 - 2022
   Annual labour productivity, value added per hour worked by economic activity, 2017 - 2022

   Annual labour productivity, value added per hour worked by economic activity, 2017 - 2022: Annual percentage change

   Annual Gross Domestic Product (GDP) by economic activity at constant 2015 prices, ST1 2018 - ST4 2022

   Annual Gross Domestic Product (GDP) by economic activity at constant 2015 prices, ST1 2018 - ST4 2022: Percentage change from corresponding quarter of preceding year

   Annual total hours worked by economic activity, 2017 - 2022

    Annual total hours worked by economic activity, 2017 - 2022: Annual percentage change

11. Jumlah jam bekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022
    Quarterly total hours worked by economic activity, Q1 2018 - Q4 2022

12. Jumlah jam bekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022: Perubahan peratusan dari suku tahun yang sama tahun sebelumnya
    Quarterly total hours worked by economic activity, Q1 2018 - Q4 2022: Percentage change from corresponding quarter of preceding year

13. Pekerja tahunan mengikut aktiviti ekonomi, 2017 - 2022
    Annual employment by economic activity, 2017 - 2022

    Annual employment by economic activity, 2017 - 2022: Annual percentage change

15. Pekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022
    Quarterly employment by economic activity, Q1 2018 - Q4 2022

16. Pekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022: Perubahan peratusan dari suku tahun yang sama tahun sebelumnya
    Quarterly employment by economic activity, Q1 2018 - Q4 2022: Percentage change from corresponding quarter of preceding year

Level of dissemination

- Vegetable and animal oils & fats and food processing
- Beverages and tobacco products
- Textiles, wearing apparel and leather products
- Wood products, furniture, paper products and printing

Economic activity

- Agriculture
- Mining and quarrying
- Construction

Services
- Utilities
- Wholesale and retail trade
- Food & beverages and accommodation
- Transportation and storage
- Information and communication
- Finance and insurance
- Real estate and business services
- Other services

Manufacturing
- Petroleum, chemical, rubber and plastic products
- Non-metallic mineral products, basic metal and fabricated metal products
- Electrical, electronic and optical products
- Transport equipment, other manufacturing and repair
<table>
<thead>
<tr>
<th>Level of dissemination (cont’d)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level</strong></td>
</tr>
<tr>
<td><strong>Percentage change</strong></td>
</tr>
</tbody>
</table>

### Level

#### 1. Pertanian (Agriculture)
- **2017**: 35.6
- **2018**: 35.7
- **2019**: 25.8
- **2020**: 36.2
- **2021**: 25.9
- **2022**: 24.7

#### 2. Perindustrian dan pengkajian (Mining and quarrying)
- **2017**: 540.2
- **2018**: 508.3
- **2019**: 536.3
- **2020**: 534.4
- **2021**: 533.3
- **2022**: 531.1

#### 3. Perbankan (Banking)
- **2017**: 48.9
- **2018**: 56.5
- **2019**: 51.3
- **2020**: 67.8
- **2021**: 57.6

### Percentage change

#### 1. Pertanian (Agriculture)
- **Change**: -1.2

#### 2. Perindustrian dan pengkajian (Mining and quarrying)
- **Change**: -0.3

#### 3. Perbankan (Banking)
- **Change**: -0.8

#### 4. Pekerjaan pengangkutan, pembangunan, dan pembantu (Transportation, construction and repair)
- **Change**: -0.3

### Notes
- Level of dissemination (cont’d)
- Percentage change
Data dissemination

Press Statement

Infographic

Stats Alert

Summary Findings
Data dissemination: video

Labour Productivity
Fourth Quarter 2022

https://fb.watch/jjB8MJqEMK/
End of section 3
TRAINING COURSE UNDER THE STATISTICAL CAPACITY BUILDING (StatsCab) PROGRAMME:
Online Training Course on Basic Statistics for Diplomats

Labour Statistics

Section 4 – Labour Market Analysis

ROSNAH MUHAMAD ALI | PRINCIPAL ASSISTANT DIRECTOR
PRIMARY DATA DIVISION | MALAYSIAN BUREAU OF LABOUR STATISTICS
22nd MARCH 2023 | 14.30 – 16.15 (MYT)
Alignments with global and national agendas

**Global Agenda**

Measurements of labour statistics lay across many goals and targets, but is specifically identified in three goals:

1. Multiplying the size of the economy and increasing added value in the supply chain;
2. Creating high-paying jobs;
3. Increasing labour participation, increasing skilled workers and effective workforce.

**Medium term national plan**

Focus to create skillful, knowledgeable and innovative human capital to meet the requirements of the industry; hence subsequently provide opportunities for quality employment and access to quality education and training towards building a more inclusive, equitable and prosperous nation.

**Long term national plan**

With emphasis to continuous prosperity with specific outcomes including:

- multiplying the size of the economy and increasing added value in the supply chain;
- creating high-paying jobs; and
- increasing labour participation, increasing skilled workers and effective workforce.

**Pillar 4: Human Capital Development**

**Pillar 6: Strengthening Economic Growth**

**Recovery initiatives**

**Moving forward**

Twelfth Malaysia Plan
Budget 2022
Regular labour statistics
Regular products on labour statistics

- Monthly Labour Force Report
  - 106 indicators

- Quarterly Labour Force Report
  - 455 indicators

- Quarterly Employment Statistics
  - 1,562 indicators

- Quarterly Labour Productivity Report
  - 484 indicators

- Quarterly Labour Market
  - 772 indicators

- Annual Labour Force Survey Report
  - 26,920 indicators

- Salaries & Wages Survey Report
  - 764 indicators

- Graduates Statistics Report
  - 1,354 indicators
## Labour force data analysis

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Annual</th>
<th>Quarterly</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregation</td>
<td>26,920 indicators</td>
<td>455 indicators</td>
<td>106 indicators</td>
</tr>
<tr>
<td>▪ Demography i.e. sex, age group and ethnic group</td>
<td>▪ Selected demographic characteristics i.e. sex, age group and ethnic group</td>
<td>▪ Selected demographic characteristics i.e. sex and age group</td>
<td></td>
</tr>
<tr>
<td>▪ Socio-economy i.e. marital status, educational attainment, highest certificate obtained, occupation, industry and status in employment</td>
<td>▪ Socio-economy i.e. educational attainment, occupation, industry and status in employment</td>
<td>▪ Socio-economy i.e. status in employment</td>
<td></td>
</tr>
<tr>
<td>▪ Geography i.e. urban &amp; rural strata, state and administrative district</td>
<td>▪ Geography at urban &amp; rural strata and state</td>
<td>▪ Provide detail analysis of labour force situation for the month</td>
<td></td>
</tr>
</tbody>
</table>

Note: District level statistics are enhancement made in 2020, available for reference period of 2017 – 2021

Note: State level statistics are enhancement made in 2021, available for reference period of Q1 2017 – Q4 2022

### Time series availability

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Annual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarterly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td></td>
<td></td>
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</tbody>
</table>
## Other labour supply data analysis

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Aggregation</th>
<th>Time series availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual</td>
<td>764 indicators</td>
<td>2010 – 2021</td>
</tr>
<tr>
<td></td>
<td>• <strong>Demography</strong> i.e. sex, age group and ethnic group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Socio-economy</strong> i.e. marital status, educational attainment, highest certificate obtained, occupation, industry and status in employment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Geography</strong> i.e. urban &amp; rural strata and state</td>
<td></td>
</tr>
<tr>
<td>Annual</td>
<td>1,354 indicators</td>
<td>2016 – 2021</td>
</tr>
<tr>
<td></td>
<td>• <strong>Demography</strong> i.e. sex, age group and ethnic group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Socio-economy</strong> i.e. highest certificate obtained (with disaggregation of diploma and degree holders), occupation, industry and status in employment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Geography</strong> i.e. urban &amp; rural strata and state</td>
<td></td>
</tr>
</tbody>
</table>
## Other quarterly labour statistics analysis

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Quarterly Employment Statistics</th>
<th>Quarterly Labour Productivity Reports</th>
<th>Quarterly Labour Market Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregation</td>
<td>1,562 indicators Disaggregation by kind of economic activity &amp; skill for: Jobs</td>
<td>484 indicators Disaggregation by kind of economic activity for: Labour productivity per hour worked</td>
<td>772 indicators ▪ Further analyses and narrative of the three main segments of labour market statistics. ▪ One or more article(s) highlighting the most recent labour market issues through statistics or methodologies to strengthen labour market statistics.</td>
</tr>
<tr>
<td>Time series availability</td>
<td>Q1 2018 – Q4 2022</td>
<td>Q1 2015 – Q4 2022</td>
<td>12 quarterly data points until most recent quarter (Q3 2018 – Q4 2022)</td>
</tr>
</tbody>
</table>
Labour market indicators release: A case of Labour Force Report

PREVIOUSLY

Labour Force, Malaysia

JUNE 2021

1. In June 2021, employed persons slipped by 5.5 per cent (777 thousand persons) to stand at 10.21 million persons (May 2021: 10.77 million persons), after registering a marginal increase in the previous month. The employment-population ratio slipped due to the overall decline in the labour force participation rate and an increase in the number of unemployed persons. While the number of employed persons in the labour market increased, the number of unemployed persons also increased significantly.

2. Employed persons by economic sector in June showed that all sectors registered a decline, particularly in services. Employment in the sector decreased by more than 1.5 million persons. The reduction was due to the lockdown measures in place.

3. The largest contributor to the drop in employment was in the services sector, which accounted for the largest number of employed persons. The sector saw a drop of 1.3 million persons in June compared to May.

4. The unemployment rate in June increased to 4.9 per cent (2.4 million persons), up from 4.7 per cent in May.

5. The employment-population ratio dropped to 51.9 per cent in June, down from 52.6 per cent in May.

NOW

Labour Force, Malaysia

JUNE 2021

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5. The employment-population ratio dropped to 51.9 per cent in June, down from 52.6 per cent in May.

28-page report

• 7-page write-up based on the principal labour force indicators

50-page report

• 6-page write-up based on the principal labour force indicators
• 13 additional tables on annual and quarterly statistics on top of a table on monthly statistics
Opportunities for expansion of research areas

Research opportunities

- Development of new indicators
  - Box articles
  - Presentation in international conferences
- Analysis of labour market issues
  - Box articles
  - Presentation in international conferences
- Development work
Development of new labour market indicators
Development of New Labour Market Indicator

Box Article

Assessment Of Underemployment Situation In Malaysia

Supplementary Measure of Labour Underutilisation

Published


Labour Market Review, Malaysia, Q2 2020

Labour Force Report September 2020
Assessment of Underemployment Situation in Malaysia

Objective

The article would describe the most recent labour force situation in Malaysia by using the LFS data, delving further on time-related underemployment and skill-related underemployment.

Results

- Among others, this includes reducing operating hours and limiting number of employees working at one particular period. As a result of this, in Q1 2020, the time-related underemployment rate increased sharply to 2.5 per cent, and went up further to 2.8 per cent in Q2 2020.
- The number in time-related underemployment doubled as against the previous quarter to record 383.3 thousand persons in Q1 2020. The highest number was observed in Q2 2020 at 412.1 thousand persons (Chart 1c).

- Based on Chart 1d, the share of persons who were in skill-related underemployment has been on the increasing trend for the past ten years, from 27.2 per cent in 2010 to 34.4 per cent in 2019.
- From the labour demand perspective, the share of skilled job vacancies in private sector hovers between 22.2 per cent to 25.3 per cent (DOSM, 2020c).
- This signaled lower demand of skilled labour as against the supply

Conclusion

In spite of being widely used to inform the labour market situation at a point of time, the unemployment, when reported as a headline indicator on its own was inadequate to provide the understanding of the overall labour market. The low unemployment rate did not necessarily indicate an efficient labour market. In order to fully comprehend the country’s labour market situation, it is vital to also investigate the underlying issues of employment. In this regards, the measurement of underemployment indicators would give additional insights to inform policy decisions.
Supplementary Measure of Labour Underutilisation

Objective
This article aims to measure the labour underutilisation based on available variables in LFS to provide preliminary statistics of labour underutilisation; and to use this as a basis for identification and strengthening the measurement gap of labour force statistics.

Results
Based on the indicators of labour underutilisation calculated for Malaysia as in Table A5, the increase in the number of unemployment and the decrease in the number of time-related underemployment influence the overall labour underutilisation indicators. The time series of labour underutilisation is illustrated in Chart A2.

Conclusion
As there are many causes of labour underutilisation that goes beyond unemployment, there is no single solution to address the issue. Nevertheless, from the economic perspective, there is a clear need to ensure full capability and capacity of the labour force within a country are understood and properly utilised. Moving forward, strengthening the measure of labour underutilisation through the LFS will provide the necessary information with respect to the labour market, hence providing input to stakeholders as they work towards prescribing remedial actions.
Analysis of labour market issues
Analysis on Labour Market Issues

Box Article

The Review Of Hours Worked In Malaysia

Published

Labour Market Review, Q3 2020, Malaysia

Initial Review Of Labour Migration In Malaysia

Labour Market Review, Q4 2020, Malaysia

The Other Side Of The Coin: Outside Labour Force And Its Potential

Labour Market Review, Q1 2021, Malaysia

Exploring The Relationship Between Investment Of Fixed Assets And The Labour Market: An Experimental Study

Labour Market Review, Q2 2021, Malaysia
Objective

This article aims to review the employee work hours in Malaysia during containment. These containment actions, although aimed to protect lives, have resulted in the depth and magnitudes of collapse in activities like never before (IMF, 2020). Therefore, COVID-19 is first and foremost a health crisis, but as a consequence, is also an economic crisis.

Results

As hours worked reduced, it was observed that the performance of Malaysia’s labour productivity measured by value added per hours worked increased 15.5 per cent in Q2 2020 (Q1 2020: 2.1 %). The large increase of labour productivity per hour worked during the quarter occurred as hours worked fell at a larger magnitude than the contraction of value added. As both the hours worked and value added registered slower decline in Q3 2020, Malaysia’s labour productivity posted marginal increase of 0.1 per cent. [Chart D]

Conclusion

Hence, in managing labour market efficiency during the crisis and leveraging upon the situation to rejuvenate the economy, it is pertinent to continuously strategise, review and innovate business model to remain relevant in order to increase skilled labour demand as the enabler of a higher value added. Meanwhile, labour force should strive towards increasing agility and adaptability, embracing changes and adopting the right attitude towards lifelong learning in order to be of high value to the industry.
This article will review the presence and roles of non-citizen employment in the country’s labour market based on the statistics produced by DOSM.

**Objective**

- **In terms of skill category**, it was recorded more than 90 per cent of non-citizen workers were in semi-skilled and low-skilled categories since 1995.
- **Thus, this resulted the increase in share of skilled non-citizen workers** in 2010 onwards. [Chart G]
- **Additionally**, based on the number of expatriates by Immigration Department of Malaysia (2021), there were 122,869 of expatriates in 2019.

**Results**

- Between 1988 to 1997, Malaysia recorded strong economic growth surpassing 7 per cent, with the highest increase posted in 1996 at 10.0 per cent (DOSM, 2020).
- The influx of foreign workers in 1990s and 2000s could be due to the continuous economic reform initiatives.
- After a sharp downturn in 1998 due to Asian Financial Crisis, gross domestic product rebounded by 6.1 per cent and sustained a positive growth except for decline of 1.5 per cent in 2009 because of the Global Financial Crisis, and a drastic fall of 5.6 per cent in 2020 due to COVID-19. [Chart H]

**Conclusion**

- Moving forward, there are plans for Malaysia to only allow foreign workers in three sectors namely construction, plantation and agriculture (Idris, 2020). In addition, the other sectors that currently use migrant labours will be required to employ locals instead.
- Under Budget 2020, government established a program to develop human capital and reduce Malaysia’s reliance on low-skilled foreign workers as the country shifts toward a digital economy.
The Other Side Of The Coin: Outside Labour Force And Its Potential

Objective

This article aimed to identify the number and share of this group in and outside the labour force; and subsequently study the trend and characteristics of persons outside labour force. In doing so, it is hoped that we can better locate the potential labour force group among those outside the labour force.

Results

Looking at the educational attainment of those outside the labour force, a remarkable shift is observed whereby the share of those with tertiary education experienced gradual increase from 5.3 per cent in 1990 to 27.6 per cent in 2015. (Chart 1.G)

Table 1.C: Outside labour force & potential labour force, Malaysia, 2019 & 2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Outside labour force ('000)</th>
<th>Potential labour force ('000)</th>
<th>Share of potential labour force (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>7,103.5</td>
<td>224.9</td>
<td>3.2</td>
</tr>
<tr>
<td>2020</td>
<td>7,225.5</td>
<td>209.5</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Source: Authors' calculation based on LFS, DOSM

• Based on recent data collection through LFS, it was estimated that the share of potential labour force whom express interest to be in employment made up 3.2 per cent in 2019 from total labour force during the year, comprising of 224.9 thousand persons.
• The share and number both went down to 2.9 per cent and 209.5 thousand persons respectively, albeit increase in the number of outside labour force during the period. [Table 1.C]

Conclusion

• a relatively high number of persons outside labour force have a vast potential of joining the labour force, specifically to be in employment. The collaboration of key parties such as the government, industries and academia are vital in realising this potential. Nevertheless, carefully thoughts and well-planned strategies should be set in place to ensure continuous efforts to empower both supply and demand sides i.e. high-quality labour supply coupled with high demand and absorptions of skilled labour.
Exploring the Relationship between Investment of Fixed Assets and the Labour Market: An Experimental Study

Objective

Thus, this article will assess the various points of economic growth and the corresponding growth in GFCF, employment and unemployment; and later investigate the relationship of domestic investment and Malaysia’s labour market based on annual statistics from 2001 to 2020.

Results

- Investment on machinery and equipment is seen to have a profound impact in the long-term growth of employment in Malaysia. It can also be seen that it remained as the important source of growing the economy even in time of crisis.
- On the contrary, the correlation between unemployment and three types of GFCF indicated significant association between GFCF and unemployment with a moderate negative relationship.
- This reflected on the important role of investment in creating demand for goods and services; and subsequently would require for employment creations to cater for the increasing demand [Table 1.1].

Conclusion

- The empirical results from this study showed a moderate positive relationship between GFCF and employment.
- Specifically, a strong positive relationship was present between employment and investment of fixed assets in the form of Machinery & equipment which among others comprised of Other machinery & equipment, ICT equipment and Computer software & database.
- In the meantime, a strong negative relationship was found between GFCF and unemployment; and this was true for all three types of asset encompassing Structure, Machinery & equipment and Other assets.

Table 1.1: Correlation between employment, unemployment and GFCF by type of assets

<table>
<thead>
<tr>
<th>Type of Assets</th>
<th>GFCF by type of assets</th>
<th>Correlation coefficient (r)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Structure</td>
<td>0.488</td>
<td>0.065</td>
</tr>
<tr>
<td></td>
<td>Machinery and equipment</td>
<td>0.711</td>
<td>0.003*</td>
</tr>
<tr>
<td></td>
<td>Other assets</td>
<td>0.471</td>
<td>0.076</td>
</tr>
<tr>
<td>Unemployment</td>
<td>Structure</td>
<td>-0.670</td>
<td>0.006*</td>
</tr>
<tr>
<td></td>
<td>Machinery and equipment</td>
<td>-0.556</td>
<td>0.031*</td>
</tr>
<tr>
<td></td>
<td>Other assets</td>
<td>-0.593</td>
<td>0.020*</td>
</tr>
</tbody>
</table>

Source: Authors’ calculation based on data from DOSM
Note: * p-value <0.05, significance correlation
Development work
New Development Work

1. Compilation of Employment Matrix

Covers labour market statistics that measure industry and employment details

2. Compilation of Labour Account

The labour market statistics framework includes four quadrants namely positions, employees, working hours and wages.

3. Refine the Dimensions of Youth, Citizens, SMEs, Gig Jobs and Informal.

In response to the current situation of the labor market and stakeholder needs.
Where to get further information?

https://www.dosm.gov.my

https://mbls.dosm.gov.my
"STATISTICS BLOOM IN HARMONY"

Doesn’t matter far or near
Strength in numbers
we don’t live in fear

Birds of feather flock together
Statistics our form of adour
We, will always live it up

So let us live in solidarity
And in the world arena we’ll succeed
It is statistics that will come to be
The reason we will bloom in harmony

Everybody undivided
Data’s where our hearts reside in
There will always be a bind

Just like fire that ignites
That’s how brightly lit our dreams are
We’ll reach higher than the stars

Sending love to one another
Leaving no one in a slumber
We will stand with unity

Muster an courage while
Embracing our disparities
We’ll achieve our victory

One dream with unity
One love with harmony


THANK YOU