



Statistical Capacity Building (StatCaB) Programme Training Course on 'Basic Statistics for Diplomats'

# POPULATION AND HOUSING CENSUS OF MALAYSIA 2020 (MyCensus 2020)

### BY:

SUHAILY BINTI SAFIE

PRINCIPAL ASSISTANT DIRECTOR

POPULATION AND DEMOGRAPHIC STATISTICS DIVISION,

DEPARTMENT OF STATISTICS MALAYSIA

22 MARCH 2023 (WENDESDAY)

















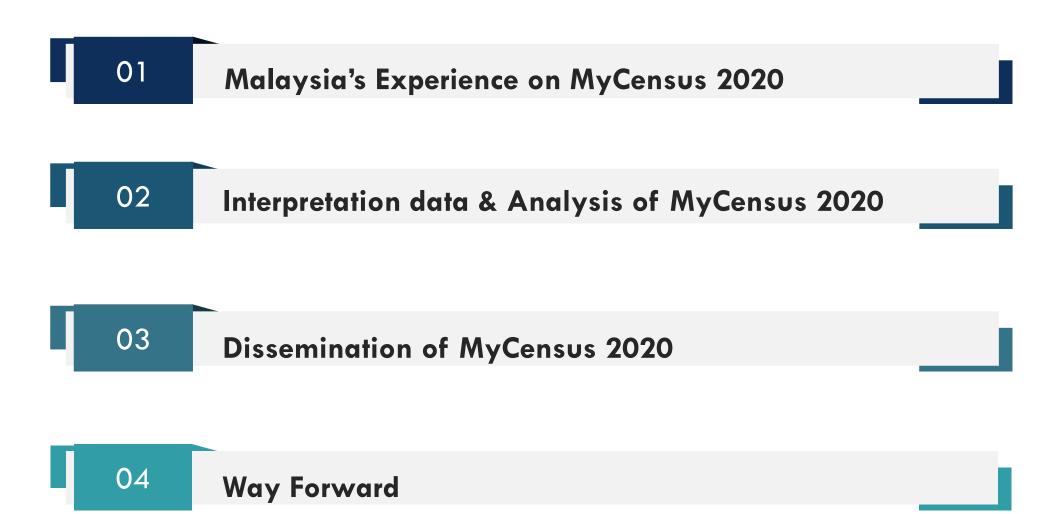


### **CONTENT**









# 1. Malaysia's Experience on Population and Housing Census 2020 (MyCensus 2020)









# BACKGROUND OF DEPARTMENT OF STATISTICS MALAYSIA (DOSM)







In 1965, the
Bureau of Statistics
changed its name
to the Department
of Statistics
Malaysia (under
Prime Minister's
Department

1965

On 10 March 2020, the Department of Statistics Malaysia is under the purview of Prime Minister's Department (Economy)

2018 2020 2022

Established in 1949 under the Statistics Act 1949 known as the Bureau of

**Statistics** 

1949

Department Of
Statistics Malaysia
under the Ministry
of Economic
Affairs

In December 2022,
Department Of Statistics
Malaysia under the Ministry of Economy

### **LEGISLATION**



LAWS OF MALAYSIA

Act 415

STATISTICS ACT1965

(REVISED-1989)

Under the **Statistics Act1965** (Revised – 1989), the functions of DOSM [**Section 2**] are:

To collect and interpret statistics for the purpose of formulation or implementation of government policies....



LAWS OF MALAYSIA

REPRINT

Act 16

CENSUS ACT1960

Incorporating all amendments up to 1
January 2006

Under Census Act 1960:

The Yang di-Pertuan Agong may, by notification in the Gazette, from time to time direct that a census to be taken throughout Malaysia of the Population, Agriculture, Trade, Labor, Industry, Commerce....

Statistics Act 1965 (Revised-1989) Census Act 1960 (Revised-1969)



## THE EVOLUTION OF MYCENSUS ...



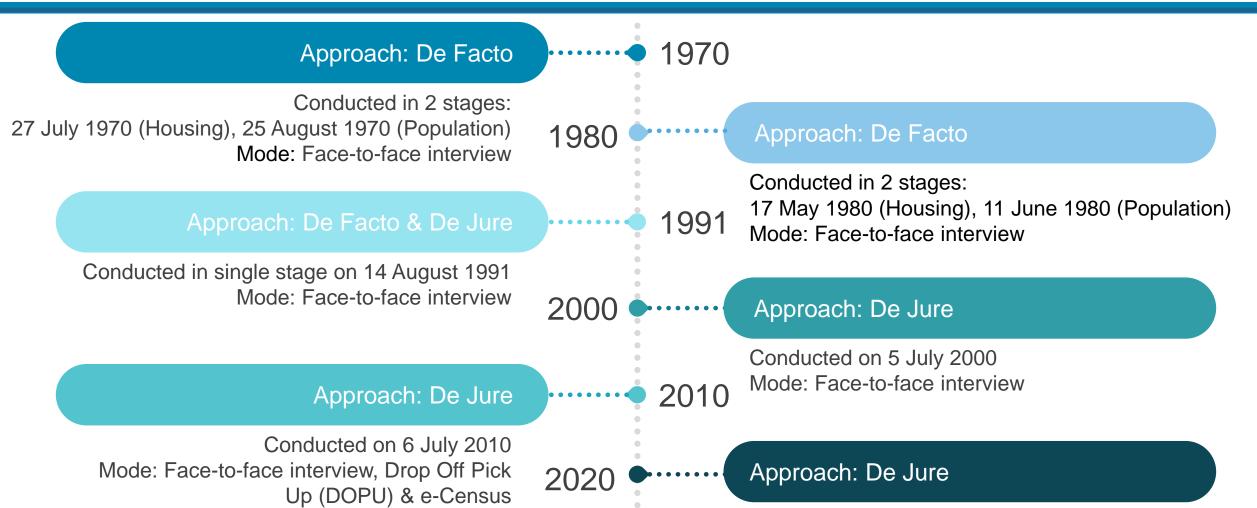
Conducted on 7 July 2020 until 31 October 2021 Mode: Online and Face-to-face interview using

e-Census, CAPI, PAPI, CATI and DOPU

(+ Administrative data)







5



# **MAIN OUTCOME OF MYCENSUS 2020**







### **NATIONAL AGENDA**

# INPUT FOR EVIDENCE-BASED DECISION-MAKING

- Population Policy
  - **National Older Persons Policy**
- Housing Policy
  - **National Housing Policy**
- Education Policy
  - **National Education Policy**
- Security Policy
  - **National Social Policy**
- Health Policy
  - National Adolescent Health Policy
- Financial Policy
- Fiscal Policy
- Budget Policy

### **INPUT**

- Determination of Per Capita Grant
- Fundamentals for the Constitutional Democracy Process
- Balance & Sustainability of Urban and Rural Development

### **BENCHMARK**

# **Measurement of Sustainable Development Goals (SDGs)**

- i. 11 from 17 goals
- ii. 110 from 169 targets

# Latest Benchmark & Achievement Assessment

- i. National Level
- ii. International Level

#### **Key Statistical Benchmark**

- i. Poverty rate
- ii. Enrolment rate
- iii. Labour force participation rate
- iv. Unemployment rate
- v. GDP per capita rate
- vi. Demographic indicators

#### **NATIONAL STATISTICAL SYSTEM**

**Malaysia Statistical Address Register**Scientific and efficient household sampling method

**Malaysia Statistical Population Register**Census of population through updating of population information from time to time

# Strengthening Information Technology Infrastructure and Computing

Investment on Infrastructure and system modernisation to enhance the production of national statistics

As a database for implementation of the Agricultural Census

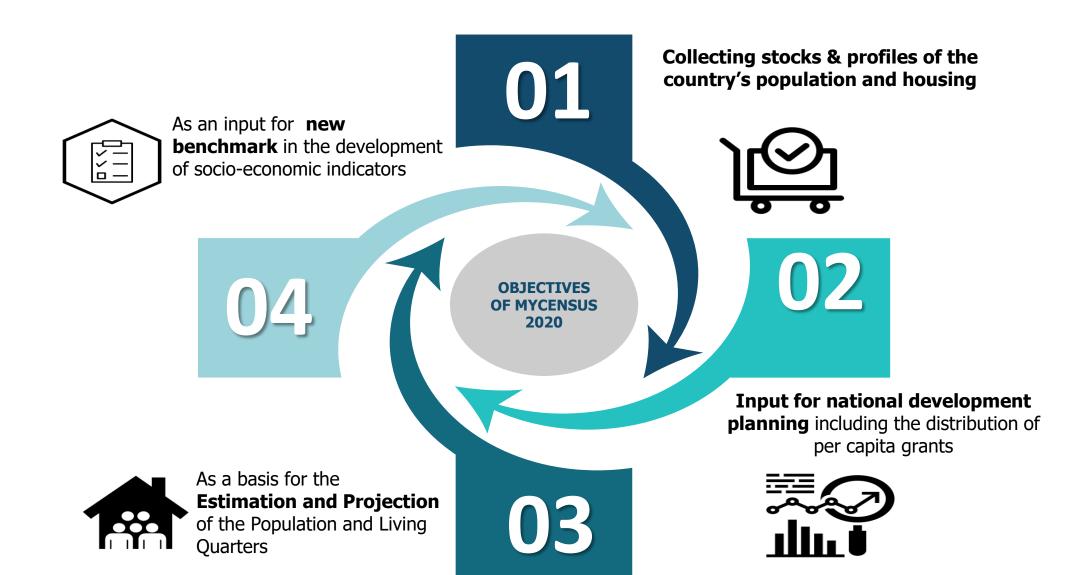


## **OBJECTIVES OF MYCENSUS 2020**











### **COVERAGE OF CENSUS**







# "The goal is to count everyone once and in the right place"



Households and institutional living quarters

Citizens or non-citizens of Malaysia that have stayed or intended to stay in Malaysia for more than 6 months



**New born Babies** 

Babies born ON
OR BEFORE
Census Day and
STILL LIVING on
Census Day
(7 July 2020)



**Passed Away** 

Those who passed away ON OR AFTER Census Day (7 July 2020)



**Others** 

Lodgers, boarders, visitors, housemaid, elderly persons and relatives who usually live together with the Household



### **MYCENSUS 2020 DAY**







The MyCensus 2020 Day takes into account that the date is **free from major events** that may lead to **the occurrence of mobility or active population movement** as follows:

CENSUS DAY - 2020



7 JULY 2020 (TUESDAY)

# SCHOOL HOLIDAYS

HAJJ SEASON

**MID-WEEK DAY** 

MONSOON/ RAINY SEASON ACCORDING TO THE MID-YEAR BUDGET ESTIMATED PERIOD

HARVEST SEASON

FESTIVE SEASON



### **REINVENT THE CURRENT CENSUS**







Be a key & important the source implementation of the Census 2020.

**Information** gateway.

Centralized & Condition of the Condition Reinvent **The Current** Census Census System (MyIPCS) **Key Features** 

**Covering the process of complex** data collection, analysis dissemination

> **MyIPCS** The latest innovation to ensure that the census data can be generated more quickly for planning & development purposes









5 modes enumeration



**System** notifications



**Smart search** 



**Dual language** 









### **MODE OF CENSUS AND MAIN PARAMETERS**







### **MODE OF CENSUS**



**SELF RESPONSE VIA ONLINE** 

Online Self Listing



COMPUTER ASSISTED TELEPHONE INTERVIEW

Telephone interview



COMPUTER ASSISTED PERSONAL INTERVIEW

Interview using tablet



PAPER AND PEN INTERVIEW

Face-to-face interview



DROP OFF AND PICK UP

Self-completion by the respondent



Administrative records from 18 agencies

### MAIN PARAMETERS FROM CENSUS QUESTIONS



Type of Living Quarters, Occupied/ Vacant LQ, Locality and Utility

LIVING QUARTERS

**HOUSEHOLDS** 

Type of households, Ownership, Agriculture and Rental information



03

Sex, ethnic, religion, marital status, citizenship, education, occupation & industry and migration

PERSON PARTICULARS

SPECIAL MODULE

Health and Fitness, Social Relation, Housing and Senior Citizen





# **QUESTIONS OF CENSUS 2020**







# 108 Number of Questions

☐ Number of questions that are required to be answered by respondents according to age category:

Category		Below than 3 Years old		3 - 9 Years old		10 – 14 Years Old		15 – 20 Years Old		21 – 59 Years Old		More than 60 Year Old	
	M	F	М	F	М	F	М	F	M	F	М	F	
Attend school		12	15	15	23	24							
Does not attend school			13	13	21	22							
Schooling & Working							34	35	37	38	41	42	
Attend school & Not Working	12						33	34	36	37	40	41	
Does not attend school & Not Working							30	31	33	34	37	38	
Does not attend school Not working							29	30	32	33	36	37	

☐ Example of questions that require some time to answer are:

Question E23 (a) and (b) on Occupation

Question E24 (a) and (b) on Industry



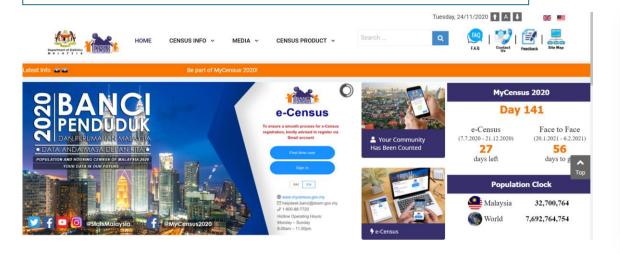
# **MODERNISATION OF MYCENSUS 2020**







### **CENSUS & GEOSPATIAL PORTAL**

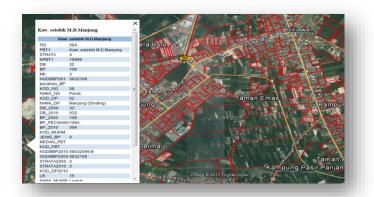




### **USAGE OF IMAGE SATELLITE IN FRAME UPDATING AND MAPPING**









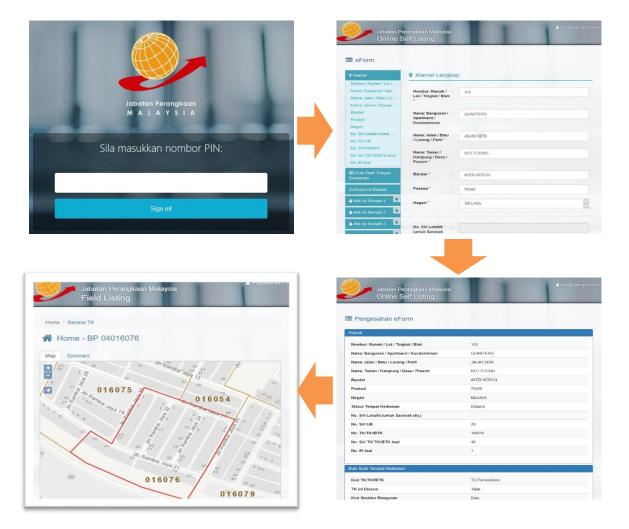
# **MODERNISATION OF MYCENSUS 2020**





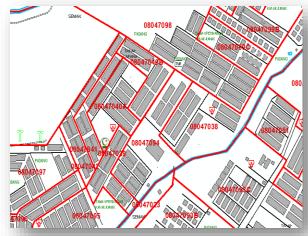


### 3. ONLINE SELF LISTING (OSL)



### 4. DOSM SMART LISTING/MAP (DSL/DSM)









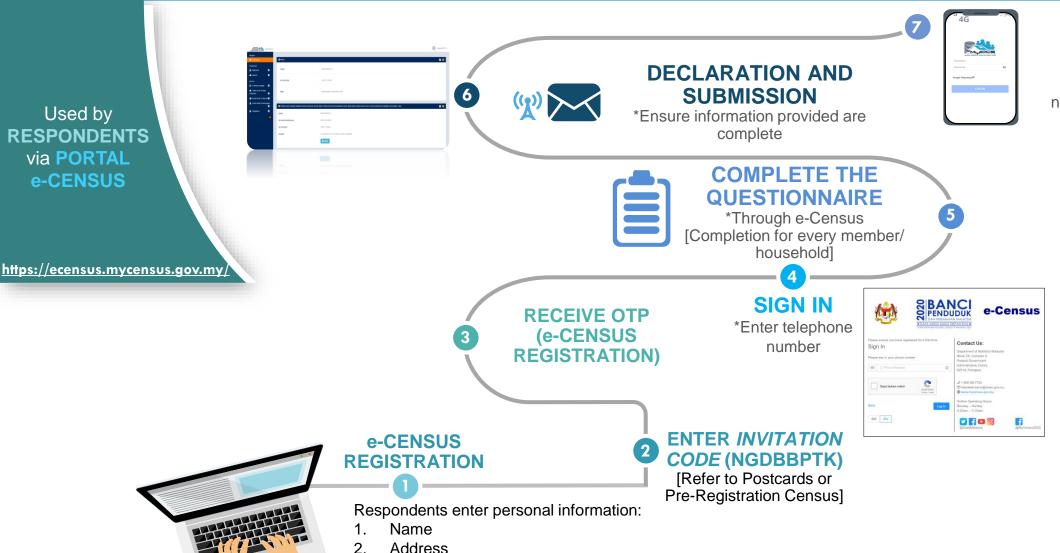
**START** 

# e-CENSUS FLOW RECEIVE INVITATION CODE BY POSTCARDS AND PRE-REGISTRATION









**Email** 

Telephone number

# e-CENSUS COMPLETION

\*Enumerator receive notification via Smart CE



# ADJUSTMENTS IN MYCENSUS 2020 SCHEDULE







#### 12 July 2017

Census Day 7 July 2020

e-Census 20 June - 9 July 2020

Face-to-face 7 – 24 July 2020

### 4 June 2020

Adjustment of MyCensus 2020 in two phases:

First Phase (e-Census)
7 July – 30 Sept. 2020

Second Phase (Face-to-face) 7 – 24 October 2020

#### **5 October 2020**

Rescheduling of the MyCensus 2020:

First Phase (e-Census)
7 July – 21 Dec. 2020

Second Phase (Face-to-face) 20 Jan. – 6 Feb. 2021

#### 11 January 2021

Rescheduling of the MyCensus 2020:

First Phase (e-Census)
7 July 2020 – May
2021

Second Phase (Face-to-face)

Subject to an approval from the Government of Malaysia

#### 4 August 2021

MyCensus 2020 continues

First Phase e-Census & CATI
Proceed

Second Phase (Face-to-face) Proceed until October 2021 31 October 2021

MyCensus 2020 operation officially ends

01

**COVID-19 Pandemic** 

Movement Control Order (MCO) effective on 18 March - 12 May 2020 02

Upsurge of COVID-19 cases

Conditional MCO was implemented in selected states from 27 October until 6 December 2020 03

**COVID-19 Pandemic** 

Movement Control
Order (MCO) 2.0
effective on
13 Jan. – 18 Feb 2021

04

**COVID-19 Pandemic** 

Movement Control Order (MCO) from 12 May – 1 June 2021 05

**COVID-19 Pandemic** 

Movement Control Order (MCO) 3.0

1 – 14 June 2021 15 – 28 June 2021 (Total lock down)



## WHY MALAYSIA PROCEEDS WITH **MYCENSUS 2020?**







Operation

Field

 Streamlining the strategy for field operation in line with the timeline adjustment.

# Questionnaire Census

 Census questionnaire has been approved and being used during trial census.

Questionnaire has been distributed to DOSM state offices.

3

2020

**MyCensus** 

for

System

 Malaysia Integrated Population Census System (MyIPCS) is a centralised and comprehensive census system that provide a uniform and integrated framework has been developed and in operation.

4

# -ogistics

 Storage arrangement in nationwide for keeping census questionnaire and other census materials has been finalised.

5

 Engagement and Collaboration with Stakeholders at State already established.

Collaboration Ö Engagement



### **MYCENSUS 2020 CHALLENGES**









### Re-adjustment of Census schedule



## **COVID-19** pandemic



### **Adjustment in Enumeration Mode**

Optimising the usage of e-Census and telephone interview (CATI) as the main mode of response



# Challenges in recruitment of census enumerators

Possible COVID-19 infection among census enumerators



# **Community reluctance & fear**

Non-cooperation of the public due to fear of COVID-19



Assuring the safety of the staff and public as top priority

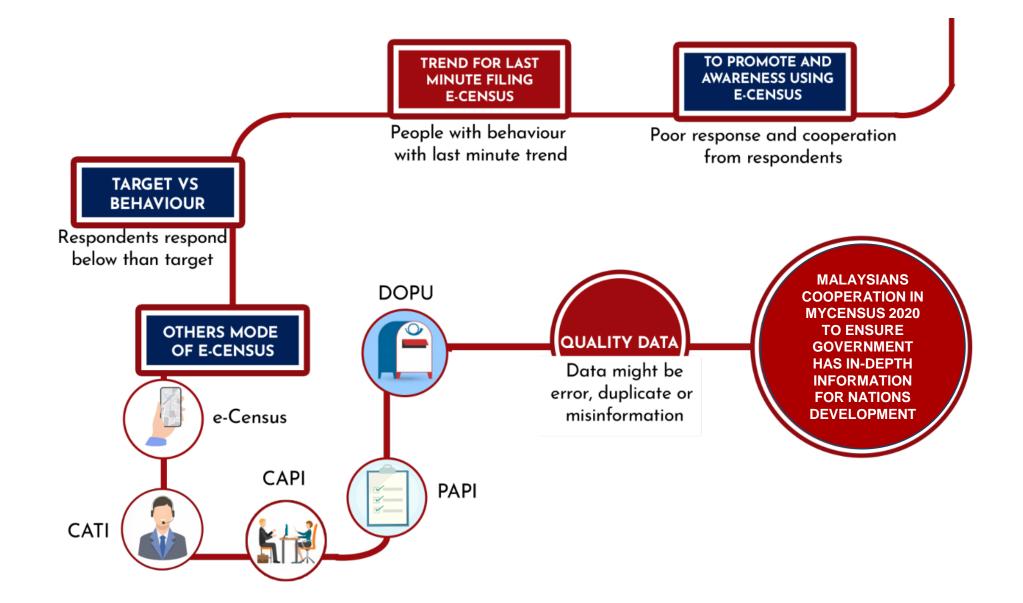


## **CHALLENGES**











# MITIGATING MEASURES AMIDST COVID-19 PANDEMIC







- Coordination among various agencies at the national and state levels:
  - ✓ Federal Government
  - ✓ State Government
  - ✓ Local Authorities
  - ✓ Government Link Corporations
  - ✓ Private corporations
- Realignment of census budget for COVID-19 emergency procurement such as face masks and hand sanitiser
- Extend and adjust the recruitment process and timeline in most affected areas
- Leveraging technology for training and Post Enumeration Survey (PES) by using online, system (MySUL) and telephone
- Work closely with National Security Council and Ministry of Health in relating to updates and necessary actions to be taken
- Produce special Standard Operating Procedure on conducting field operations



### **OPPORTUNITIES**







- Staggered workflow with multiple phases and hybrid approach in census operations
- e-Census and CATI reduced the impact of scaled down field operations
- Use of Administrative data
  - > Basic data on population compiled from administrative records
  - > Data Quality control: Consistency checks with available information
- Use of Analytics Technology
  - > Google Maps: Data tapping to complement existing data collection
  - > Train model for machine learning
- Multi-platform publicity on MyCensus2020 with digital platforms and conventional methods
- Enhancing co-operation with public and private agencies in ensuring the success of MyCensus2020



# **COMMUNICATION STRATEGY**







1

# **ENGAGEMENT** AT ADMINISTRATIVE LEVEL

- Cabinet Memorandum
- Special Paper to the Cabinet on the Census questionnaire and decision on extension of MyCensus 2020 schedule

3

### **ROLE MODEL**

- Mobilising civil servants as catalysts
- Task force of MyCensus 2020 will move by selected area (mobile)
- E-census filling out gimmick by prominent figures

2

# ENGAGEMENT AT GOVERNMENT LEVEL

- State Secretary
- Secretary General of the Ministry
- Statutory Agencies and Bodies
- Local authority

4

### **AMPLIFIERS**

- Instructions by Chief Secretary to the Government for Civil Servants to fill up e-Census
- The role of labour and employers' associations in supporting the implementation of the e-Census.

# 2. Interpretation data & Analysis of MyCensus 2020







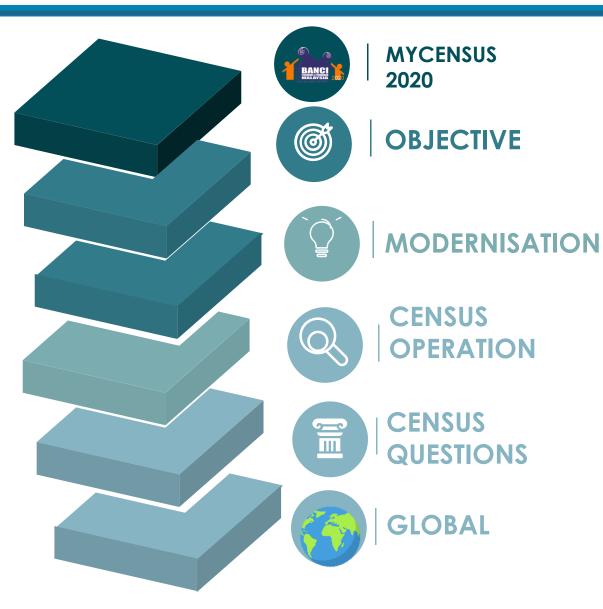


### **MYCENSUS 2020 AT A GLANCE**









Sixth Census since the establishment of Malaysia in 1963.

Collecting stocks & profiles of the country's population and housing

- 91.9% electronic based (e-Census, CATI & CAPI)
- 8.1% paper-based
- 482 days (7 July 2020 31 October 2021)
- Involvement of 43,400 Census officers/ enumerators

108 questions include demographic profile, environment, special module on Health & Fitness, Social Relations, Housing and Senior Citizens

Malaysia is among 39 from 110 countries that conducted Census in the period of 2020 – 2021



# **KEY FINDINGS OF MYCENSUS 2020**



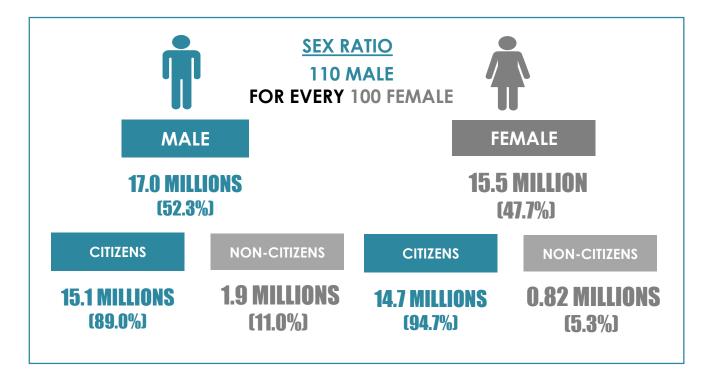






POPULATION 2020

32,447,385







AVERAGE HOUSEHOLD



LIVING VACANT LIVING QUARTERS



**CITIZENS** 

ANNUAL GROWTH

HOUSEHOLDS

3.9

SIZE

9.6 MIL.

1.9 M

**29.8 MIL.** (91.7%)

**NON-CITIZENS** 

**2.7 MIL.** (8.3%)

1.7%

**8.2 MIL.** 

(19.4%)

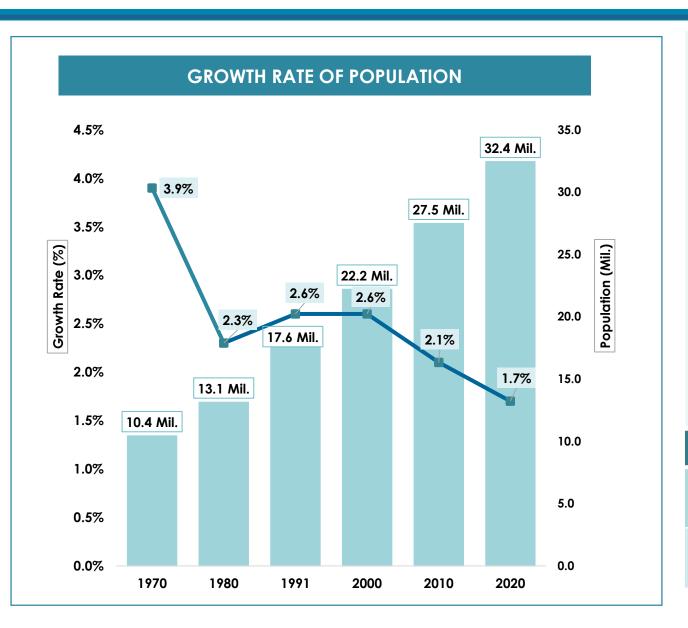


## **GROWTH RATE OF POPULATION**









- Population increased to 32.4 mil. in 2020 (2010: 27.5 mil.)
- Population grew at a slower rate of 1.7% (2010: 2.1%)
- This is in line with:
  - Decline in Crude Birth Rate:
     14.4 (2020) from 17.2 (2010) birth per 1,000 population
  - Decline Total Fertility Rate:
     1.7 (2020) as compared to 2.1 (2010) child for every female aged 15-49 years

	1970	1980	1991	2000	2010	2020
Crude Birth Rate	32.4	30.6	27.6	22.9	17.2	14.4
Total Fertility Rate	-	4.0	3.4	2.9	2.1	1.7

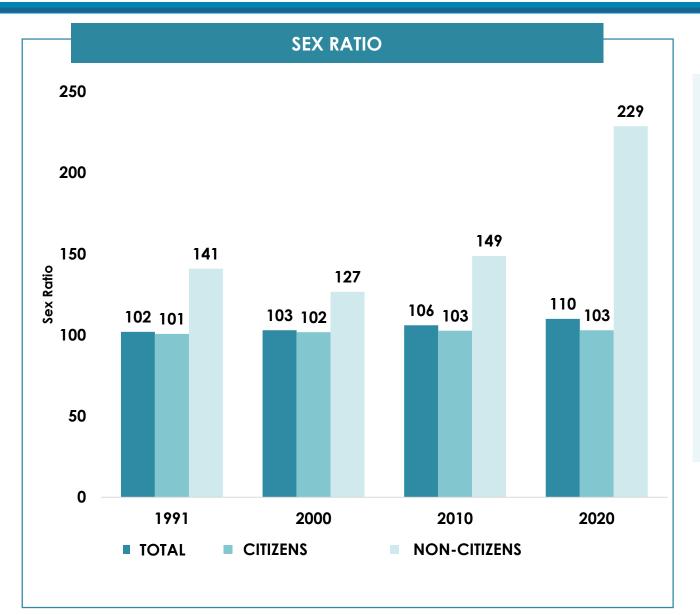


## **SEX RATIO**









- Sex Ratio increased to 110 males for every 100 females
- The highest sex ratio recorded in di Johor and Kuala Lumpur 115, followed by Pahang and Selangor (113) and Melaka (111)
- The lowest sex ratio recorded in W.P. Putrajaya (96).
- Sex ratio in 2020 is influenced by the increase of sex ratio Non-Citizens

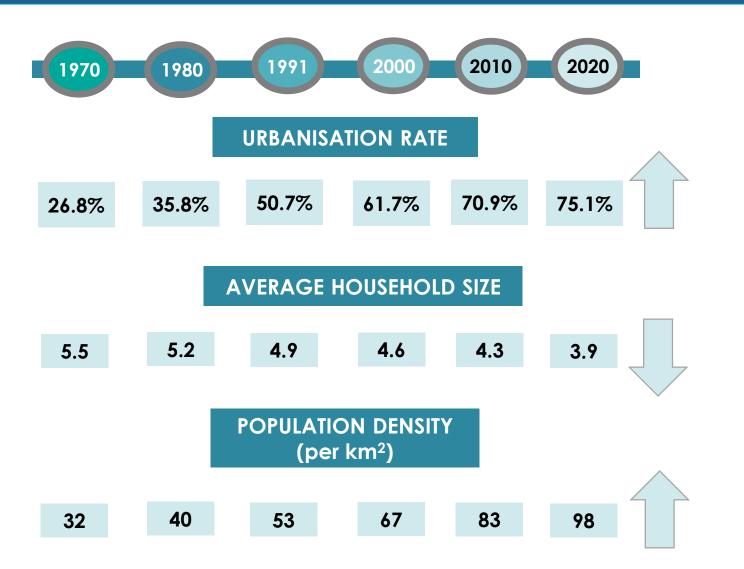


# URBANISATION RATE AND AVERAGE HOUSEHOLD SIZE









- Urbanisation rate continued to increase to 75.1% (2010: 70.9%)
- Average Household Size continued to decline to 3.9 person (2010: 4.3 person).
- Population density increase to
   98 person for every per km² (2010:
   83 person km²)

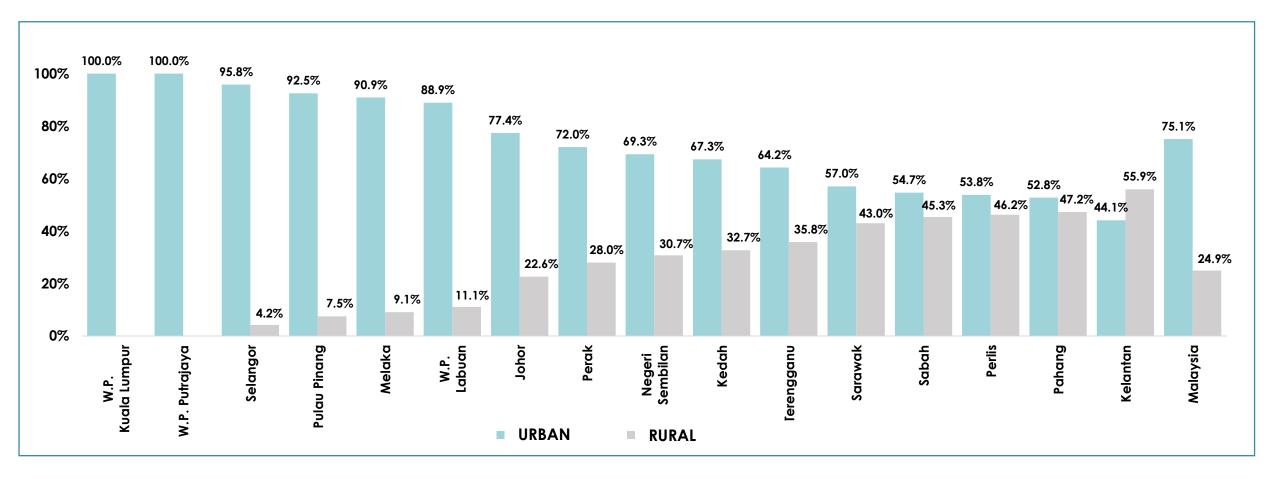


# **URBANISATION RATE BY STATES**









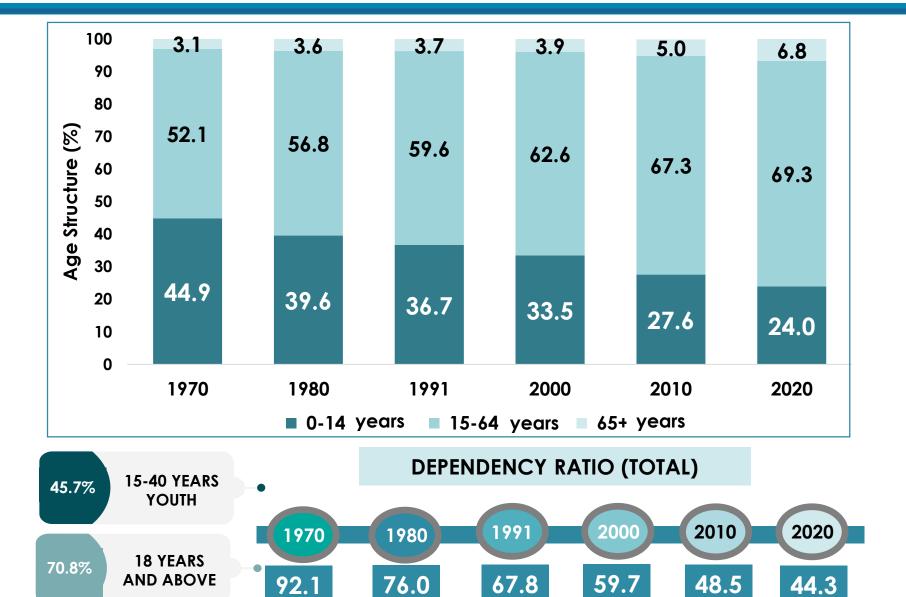


# **MALAYSIA TOWARDS AGEING NATION**









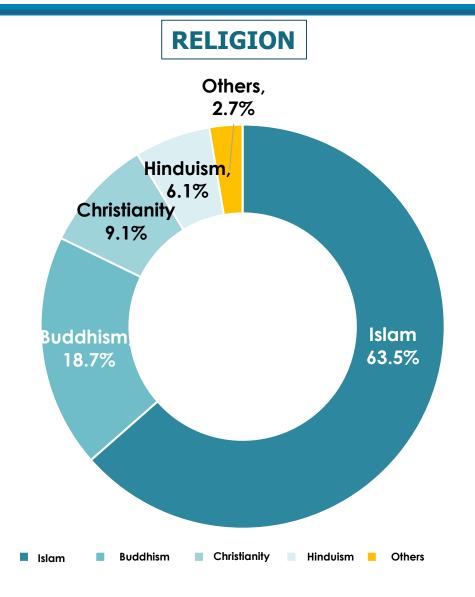


# **RELIGION & MARITAL STATUS**



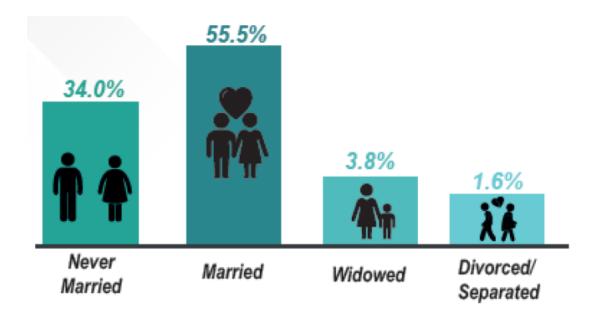






### **MARITAL STATUS**

\* Aged 15 years and above



# 3. Dissemination of MyCensus 2020









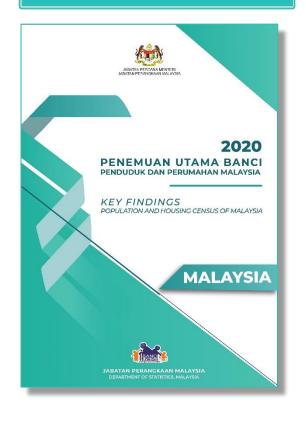
### NATIONAL, STATES AND ADMINISTRATIVE **DISTRICT**







# 173 Publications





Malaysia: 1 States: 16





# NATIONAL, STATES AND ADMINISTRATIVE DISTRICT (CONTINUED)









173 Findings of Census Publication

MalaysiaAdministrative DistrictState

### 1. Statistics on Population and Housing

- Population Census, Malaysia
- Population Census, State
- Census Population, Administrative District
- Sex Ratio
- Age Group, Ethnicity & Gender
- Marital Status
- Religion and Gender
- Number of Living Quarters (LQ),
- Households by Mukim / Subdistrict
- LQ, Household & Average Household Size by Local Authority
- Vacant Living Quarters

### 2. Selected Demographic Indicators

2

Demographic Indicators

**Statistics** 

- Selected Demographics by Gender
- Five principal causes of death

### 3. Socio-Economic Indicators

18

Socio-economic Indicators

- Basic information
- Housing
- Labour force
- Household, Income and Expenditure
- Education
- Health
- Public Safety
- Internet and Social Media
- Basic facilities
- Welfare Services

### 4. Number of Tables

30

- Population and Housing
- Demography
- Statistics Tables Socio-economy

### 5. Number of Article

3

**Article** 

- Malaysia's Population Growth is Slowing Down
- Malaysian Population Ageing
- Demographic Transition: Where are the Young?

34



# STATE LEGISLATIVE ASSEMBLY (SLAs)







600

# **PUBLICATIONS**

STATISTICS OF SUBNATIONAL STATE LEGISLATIVE ASSEMBLY (SLAS)







# STATE LEGISLATIVE ASSEMBLY (SLAs)







### **PUBLICATIONS - STATISTICS OF SUBNATIONAL STATE LEGISLATIVE ASSEMBLY (SLAs)**



- Background
- Socioeconomics at a Glance
- Selected Socioeconomic Statistics



### 1. Indicator at SLAs Level

- **Basic information**
- **Populations**
- Housing
- **Labour Force**
- Household income
- Education
- Health
- Poverty
- **Public Safety**
- Internet and Social Media
- **Basic facilities**

**Economic Indicators** (3 tables)

Social

**Indicators** 

(19 tables)

Establishments/ **Business Company** 

### 2. Indicators at the Malaysian & **Administrative District Levels**

Malaysia

State & Administrative District

Sustainable Development Goals (SDGs)

**Human Development** Index (HDI)

### **Selected** Socio-economic •

**Indicators** 

### 3. Number of Tables

**Statistics Tables** 

- State Legislative Assembly (SLAs)
- Malaysia
- State & Administrative **District**

### 4. Basic Information

- Main National Policy
- State Structure Plan
- Strengthening the **National Statistics** System
- **Fundamental** Principles of Official **Statistics**
- Reference/Manual
- List of International Statistical

**Organizations** 

Information \_ Code List/ Classification

Basic

- List of DOSM **Publications**
- List of DOSM Blogs
- DOSM newsletter



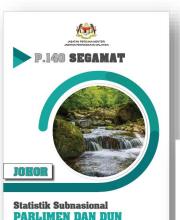
# PARLIAMENT PUBLICATION





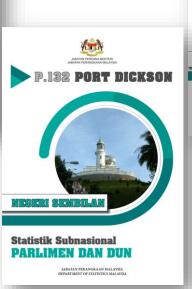


# PUBLICATIONS STATISTICS OF SUBNATIONAL PARLIAMENTS

















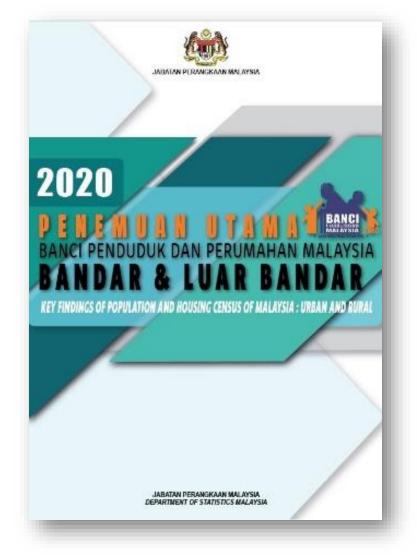
# **OTHER PUBLICATIONS**







### **Urban & Rural**



### **Local Authority Area**





## **UPCOMING RELEASES**







### **April 2023**

- Key Findings Population and Housing Census of Malaysia 2020: Mukim
- MyCensus 2020: Well Being (Health, Well Being, Social Relations and Housing)

### May 2023

MyCensus 2020: Education

### **June 2023**

MyCensus 2020: Living Quarters

### **July 2023**

MyCensus 2020: Households

### August 2023

- MyCensus 2020: Migration and Population Distribution
- MyCensus 2020: Economic Development Region
- MyCensus 2020: Urbanisation

### September 2023

- MyCensus 2020: Economic Population
- MyCensus 2020: Women
- MyCensus 2020: Senior Citizen

### October 2023

- MyCensus 2020: Civil Servants
- MyCensus 2020: Youth
- MyCensus 2020: Children

#### **November 2023**

MyCensus 2020: Orang Asli



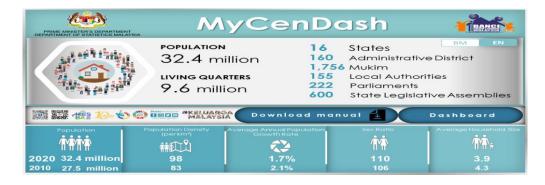
# **Dissemination of Census data... (cont'd)**







# MyCenDash MYCENSUS 2020 DASHBOARD





https://www.dosm.gov.my/mycendash/

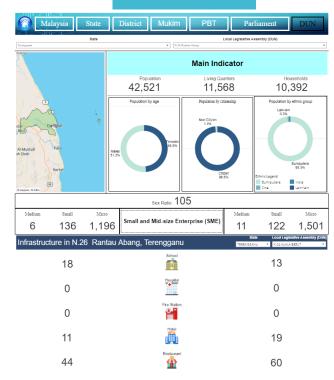
### **STATES**



# ADMINISTRATIVE DISTRICT



#### SLAs





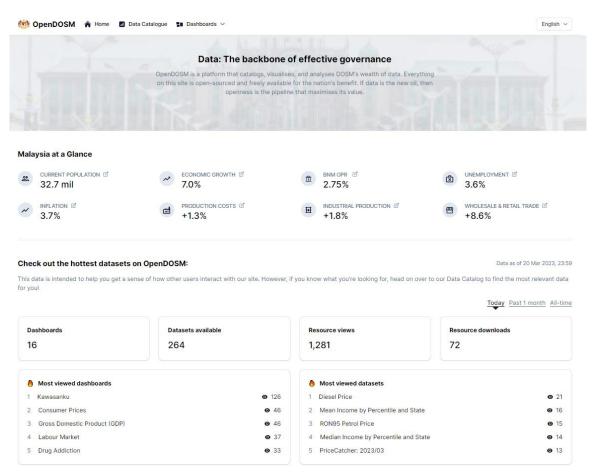
# Dissemination of Census data... (cont'd)

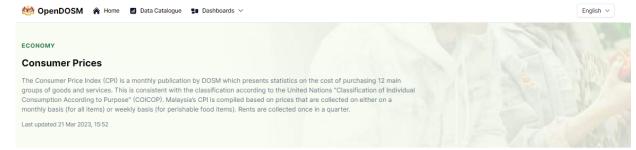






# OPEN DOSM DASHBOARD <a href="https://open.dosm.gov.my/">https://open.dosm.gov.my/</a>

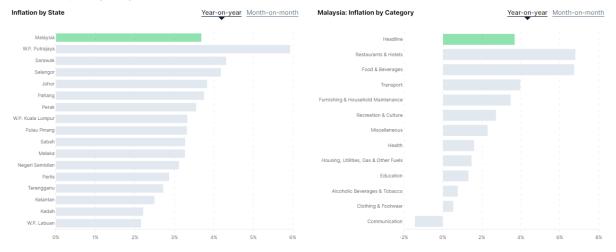




#### A snapshot of inflation in Malaysia

Data as of 31 Jan 2023, 23:59

The time series charts below this section show trends; these bar charts summarise the latest inflation data at a glance. Click the bar for any state to get more granular inflation data for that state!



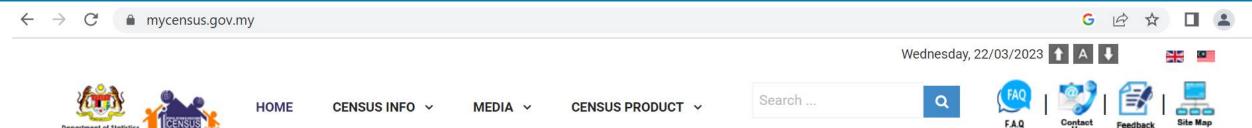


# Dissemination of Census data... (cont'd)









atest Info 🚾 🚥

Who will be counted in MyCensus 2020?















### MyCensus 2020

Congratulations to all Malaysians, you have been counted!

# THANK YOU

Department of Statistics Malaysia would like to thank all Malaysians and residents of Malaysia who have worked together to make Malaysia Population Census 2020 a success; all respondents, enumerators, media and federal and state government agencies who have assisted in facilitating the Census 2020 implementation

Your cooperation is highly appreciated

YOUR DATA IS OUR FUTURE

### **Population Clock**



World

7,797,748,516



Malaysia

32,698,997



State

More ...

# 4. Way Forward 'Malaysia Statistical Population Profile (MSPP)'









### **MSPP: THE CATALYST FOR HOLISTIC INPUT**





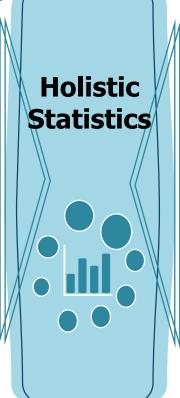


Holistic statistics to the smallest geographical area can be implemented by integrating MyCensus 2020 data and administrative data from various agencies.

#### PRIMARY DATA

### **MyCENSUS 2020 DATA**

- ▶ Implemented on a large scale and covers the entire population. It is usually the basis for the development of holistic statistics.
- Longer operation/ data collection time.
- Collecting all the information of each individual in the census area based on concepts and standards that are used internationally.
- Involves a higher budget and human resources.



#### SECONDARY DATA-

#### **ADMINISTRATIVE DATA**

- In the form of registration/ reference records either periodically or cumulatively.
- Information is collected and stored in the agency according to the objective and purpose of the information obtained.
- Require coordination from the aspects of concept, classification and frequency before being integrated with primary data.
- Information can be updated, transferred, processed, stored and analysed more easily ar effectively.

MSPP one of the MyCensus 2020 outcome The target of regularly updating the MSPP and the implementation of future Censuses on a smaller scale



MSPP depend on the continuous sharing of administrative data During the MyCensus 2020, 28 administrative data sets use as data enrichment



MANAGEMENT

CHANGE

# **DATA INTEGRATION FRAMEWORK**







VISUALISATION

TOPIC/ VARIABLE STATISTICS PROFILE AT THE SUBNATIONAL LEVEL

POPULATION	BASIC DEMOGRAPHY	MIGRATION	EDUCATION	OCCUPATION	INCOME	FERTILITY	HOUGEHOLD
HOUSING	BASIC	SECURITY	DISABILITY	HEALTH	SOCIAL	SENIOR	HOUSEHOLD

INTEGRATED DATA HUB

# **MSPP**

DIGITAL SOLUTIONS

### **APPLICATION**

- District Application System
- Local Authority Application System
- State Application System

### **COMMUNICATION**

- Portals and Publications
- Table Builder
- · Open Data
- Social media
- Various communication channels

### **SERVICES**

Integration between MyCensus 2020 data, Intercensal data and administrative data



ARTIFICIAL INTELLIGENCE/ MACHINE LEARNING

GEOSPATIAL/ GEOCODING APPLICATION
PROGRAMMING
INTERFACE (API),
WEB SERVICES

BIG DATA ANALYTICS GOVERNMENT
SHARED
SERVICES/ PUBLIC
CLOUD

E TEC

OTHER EMERGING TECHNOLOGIES

### "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

Mustering our courage while Embracing our disparities We'll achieve our victory

One dream with unity One love with harmony



STATISTICS BLOOM IN HARMONY"

https://bit.ly/StatisticsBloomInHarmony

# THANK YOU

















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