



# The Journey Towards Application Of Combined Methods For The PC2020: Experience from Indonesia .....

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# OUTLINE

1

OVERVIEW OF INDONESIA'S PC2020

2

DATABASE PREPARATION ON  
PC2020 COMBINE METHOD

3

WHAT'S THE NEXT STEP?





# ***OVERVIEW OF INDONESIA'S PC2020***



Sensus  
Penduduk  
2020

#MencatatIndonesia

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# PC2020 CHALLENGES



- **COVID-19 Pandemic**
  - ✓ Government recommendations for physical distancing
  - ✓ It is still not known when pandemic will end
- **PC2020 Budget Constrain (Pres. Decree No. 54, 2020)**

To respond Covid-19, the government decided to implement budget efficiency.

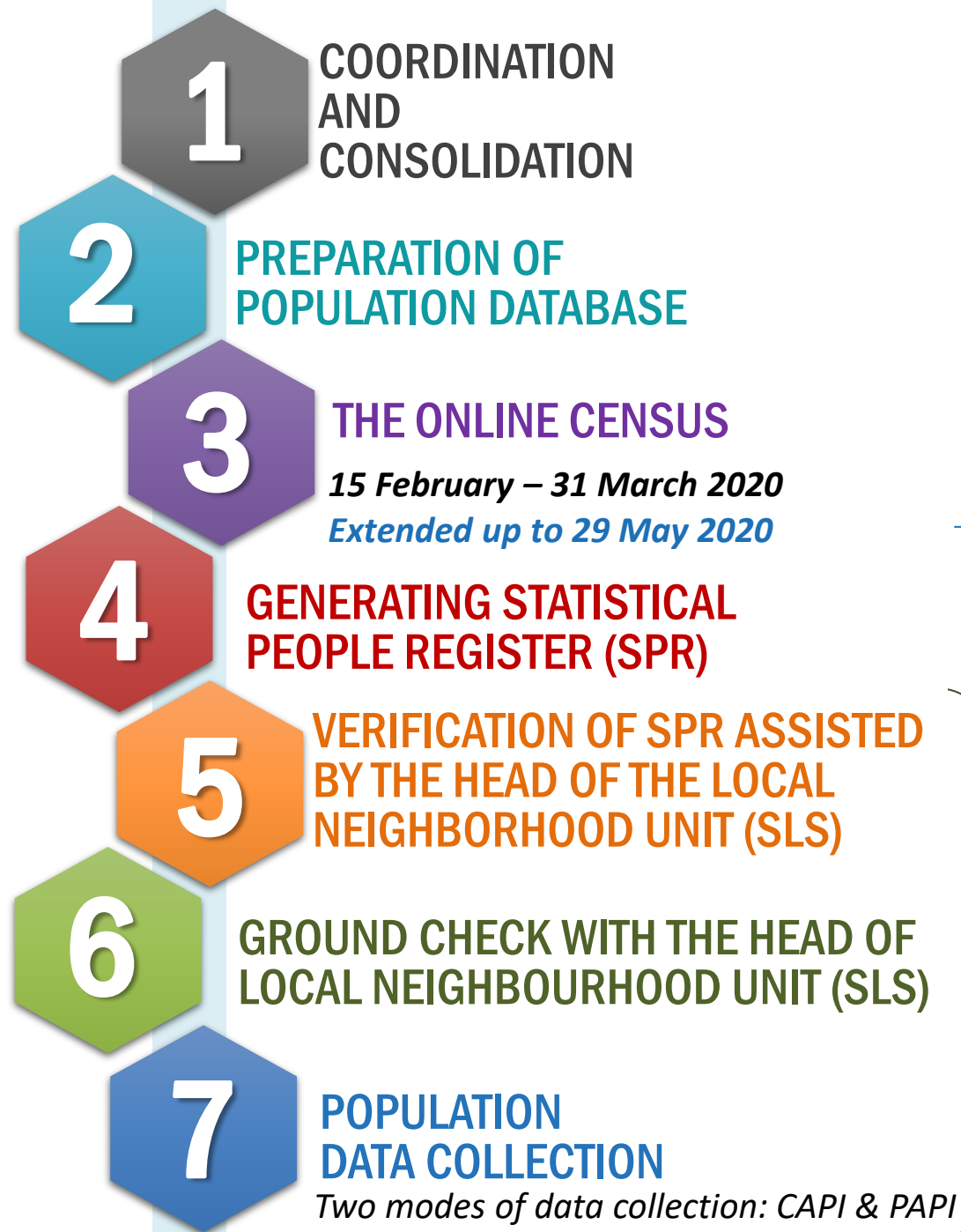
✓ Appr\*. USD 278 Million → **USD 69 Million**

✓ USD 1.03/capita → **USD 0.26/capita**

\* USD 1 = IDR 14.500.-



# PC2020 BUSINESS PROCESSES



FIELD  
ACTIVITIES  
JULY 2020



PC2020  
SEPTEMBER



# BPS STRATEGY

- Schedule changes → *Extend up online census; shift field activities from July 2020 to September 2020*
- Simplify field operation → *Recruiting less census takers*
- Adjustment of activity methods and instruments → *softcopy modules*
- Adjustment of learning modes → *distance learning*
- Implementation of strict health protocols → *wearing mask, hand sanitizer*
- Business process customization on phase:
  5. *Verification of SPR assisted by the head of local neighborhood unit (SLS)*
  6. *Ground check with the head of the local neighborhood unit (SLS)*
  7. *Population data collection*



# New Plan of Indonesia's PC2020



## WHO

**All population** living or will be living in Indonesia **for at least 1 year**



## WHERE

**All Indonesia's territory**  
(Including Indonesian representatives or missions who are living abroad)



## WHEN

### ✓ Phase 1: Full enumeration

a. Online census  
(15 February – ~~31 March 2020~~)

**29 May 2020**

b. Ground check and Self Filling  
Questionnaire

**1 – 30 September 2020**

### ✓ Phase 2: Indepth Survey (2021)



## METHOD

### **“Combined Census”**

Using administrative data as pre-list data  
for Population Census



## DATA COLL. MODE

### THREE MODES OF COLLECTION:



**CAWI** (*Computer Aided Web Interviewing*)



**CAPI** (*Computer Assisted Personal Interviewing*)



**PAPI** (*Pencil and Paper Interviewing*)



**DOPU** (*Drop Off-Pick up*)

# ***DATABASE PREPARATION ON PC2020 COMBINE METHOD***



Sensus  
Penduduk  
2020

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## TWO PHASES IN ESTABLISHING THE PC2020 POPULATION DATABASE:

2

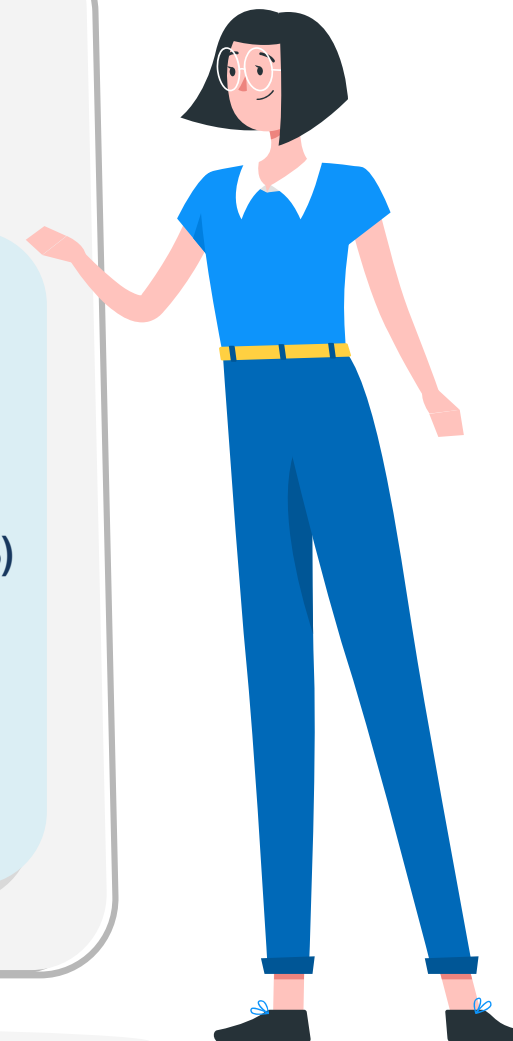
### PREPARATION OF POPULATION DATABASE

- Preparation of population database from MOHA for online census purposes
- SLS data matching and cleansing
- Output: population database by Local Neighborhood Unit (SLS)

4

### GENERATING STATISTICAL PEOPLE REGISTER (SPR)

- Compiled from the result of the online census and those who are not online census but their data is registered in MOHA

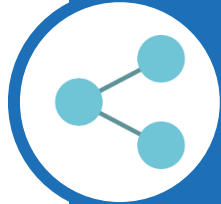




## **PREPARATION OF POPULATION DATABASE**



*Coordination with MOHA*



*Population data replication from MOHA*



*Checking data structures (matching & cleansing)*



*Confirming errors in data*

## ABOUT PC2020 MATCHING PROCESS

What do needs to be matched?



- ✓ *Master of the region*
- ✓ *SLS*
- ✓ *Individual*

Why do we need region matching?



***The region encoding of BPS Statistics and MOHA are different.***

What's the focus problems of data matching?



- ✓ *The name of the SLS of MOHA and BPS are different*
- ✓ *Inconsistent code and area names (from province to the village)*
- ✓ *No standard in writing answers for the same purpose (education, type of work, and relationship with the head of the family) >> **BPS need to make standardization.** For example PC2020 can't use ISIC category of work but MOHA's*



## STEP BY STEP IN DATA MATCHING



### Matching area code

*(province, district, sub-district, village)*

01

### Matching SLS (Local Neighbourhood Unit below the village)

- *SLS from BPS is the 2019 mapping results 2019*
- *SLS from MOHA is taken from the address in the registered family card (KK)*

02

03

*Enter the information from registered family card (KK) from MOHA into the BPS' SLS*

04

*BPS regional will held a **ground check** for the unmatched registered family card (KK)*

05

*In November 2019, **MOHA** submits **individual data to BPS** that used as a database in the Online Census*

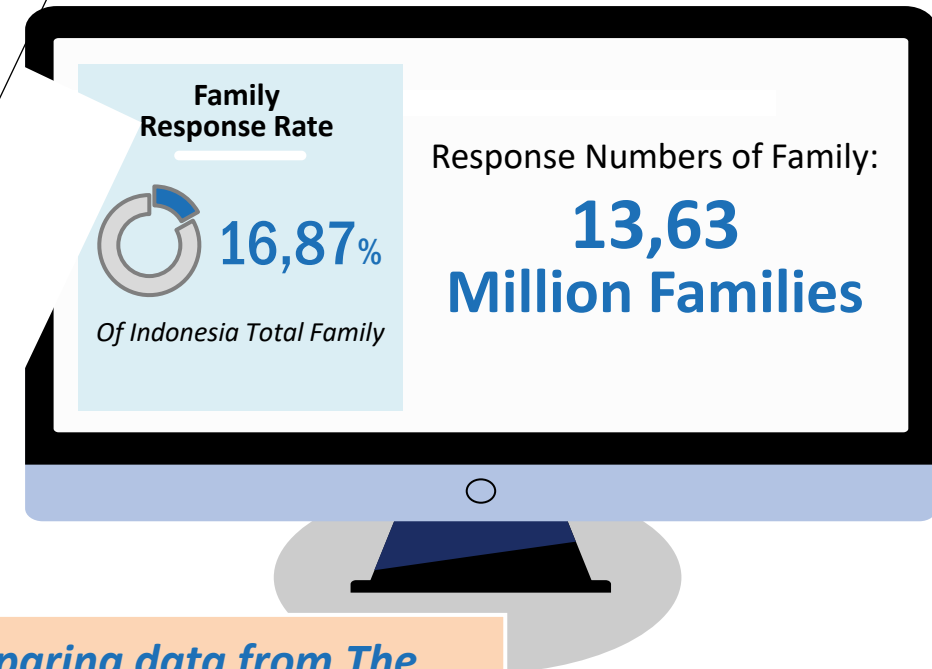
# PC2020 ONLINE CENSUS

*periode 15 Februari s.d. 29 Mei 2020*

**51,36**

*Million Resident*

**51,36 Million Residents** or about **13,63 Million Families** of Indonesia have been participated in the PC2020 Online Census



*Error data is obtained by comparing data from The Online Census with MOHA data, such as different religions, etc.*



## GENERATING STATISTICAL PEOPLE REGISTER (SPR)



## *Preparation of data from the result of the Online Census*

- Compiled from the result of the online census and those who are not online census but their data is registered in MOHA
- Several Online Census status will state in SPR, such as:
  - ✓ Not Online Census yet
  - ✓ Already, but needs to be re-entered
  - ✓ Already, move out
  - ✓ Already, live in this SLS
  - ✓ Already, declared dead
  - ✓ Already, need confirmation (date of birth, sex, or ID number)

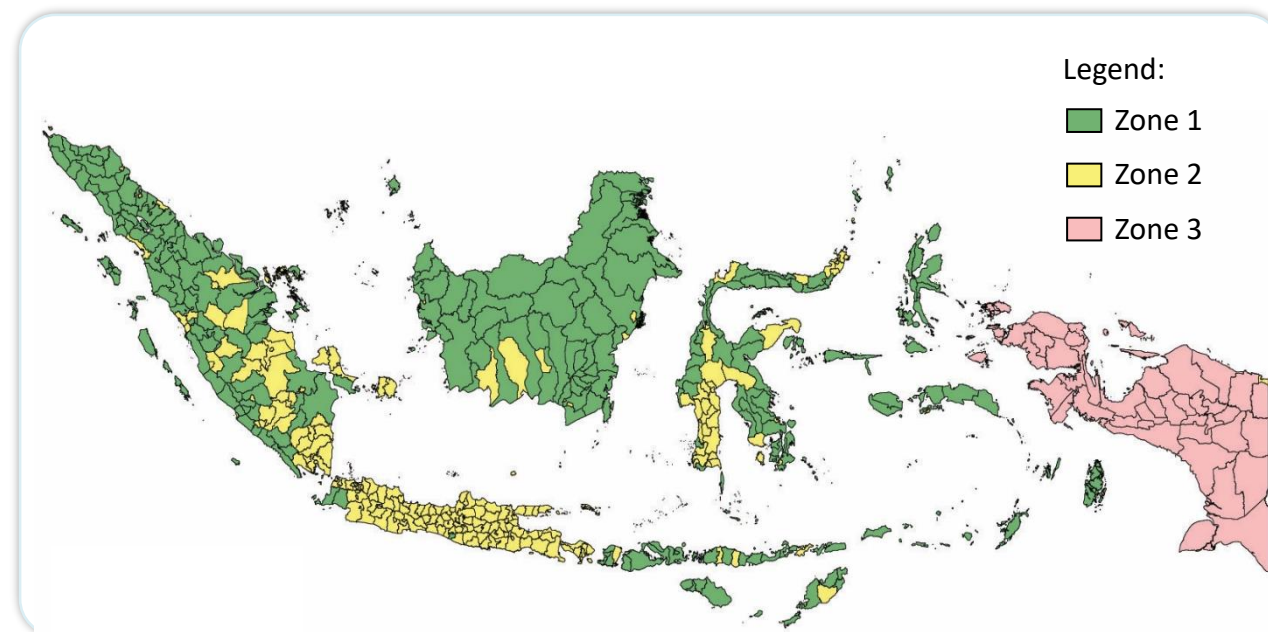


## *SPR Printing*

- SPR made on SLS level
- We also made village level of SPR as the list of names of residents who live in the Village area but whose SLS area is not known
- Digital SPR was built to facilitate census enumerator in searching resident's name/address



# ADJUSTMENT ON THE PC2020 DATA COLLECTION METHOD



## Zone 1

*PAPI/DOPU Area:*

- *Phase 5, 6, & 7 with DOPU SP2020-C1 Quest*

## Zone 2

*CAPI/Non-DOPU Area:*

- *Phase 5 & 6 door-to-door, without phase 7*

## Zone 3

*Interview Area:*

- *Phase 5, 6, & 7 with interview using SP2020-C1 Quest*

### 5

### VERIFICATION OF SPR

### 6

### GROUND CHECK

### 7

### POPULATION DATA COLLECTION

Confirm the existance of residents

Mapping residents **address**: by  
**domicile** and by **ID Card**

Adding **new residents**  
(not in the pre-list yet)

Knowing the **dead residents**

Updates the **population  
characteristics**

# ***WHAT'S THE NEXT STEP?***



Sensus  
Penduduk  
2020

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After the field activities are completed, it is expected there will be available quantity, composition, distribution, and characteristics data of the population towards **ONE DATA INDONESIA.**



*The PC2020  
provides input for  
population data*

*Example Case: ID card  
address vs domicile  
address*

*MOHA's  
responsibility  
for updates*



*BADAN PUSAT STATISTIK*

# THANK YOU



**Sensus  
Penduduk  
2020**

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# THE COMBINED CENSUS METHOD IN INDONESIA

Integration of population data in PC2020 by using the Directorate General of Civil Registration Ministry of Home Affairs' (MOHA) data.



DATA COLLECTED IN SP2020:  
12 SAME VARIABLES WITH MOHA DATA



- ☐ *Name*
- ☐ *Personal ID Number*
- ☐ *Family Serial Number*
- ☐ *Address*
- ☐ *Sex*
- ☐ *Place and Date of Birth*

- ☐ *Nationality*
- ☐ *Religion*
- ☐ *Relationship Status on Family*
- ☐ *Marital Status*
- ☐ *Education*
- ☐ *Job*



# Indonesia's Population Census 2020 (PC2020)

## Is the 7<sup>th</sup> Population Census

### LEGAL BASE



**Law No. 16 Year 1997**  
*Statistics*

**Govt. Reg. No. 51 Year 1999**  
*Statistical Governance*



**UN Recommendation 2017**  
*World Population and Housing Programme*



**ONE Data Indonesia**  
**Pres. Decree No. 39, 2019**



**National Strategy for the Acceleration of  
Population Administration for the  
Development of Vital Statistics**  
**Presidential Decree No. 62, 2019**



# UN Recommendations On Census Method



## TRADITIONAL METHOD

*Full field enumeration without any pre-list*



PC2020

## COMBINED METHOD

*Using administrative data as the basis of population census*



## REGISTER-BASED METHOD

*No field canvassing, use existing administrative data for counting population.*

# Several Adjustments Due to Combine Method

## 01 LEGAL BASE



- ✓ A strong legal base is needed so that MOHA can provide data access to BPS-Statistics.
- ✓ Legal base: Presidential Decree number 62 of 2019 concerning the National Acceleration Strategy Population Administration for Development of Biological Statistics

## 02 The time reference in Population Concept

- ✓ Law no. 24 of 2013 Article 14: the resident is someone who has been domiciled for more than one year or based on the needs of the person concerned for less than 1 (one) year.
- ✓ United Nations Statistics Division recommends that countries apply a threshold of 12 months when considering the place of usual residence.
- ✓ For those reasons, the time reference in the PC2020 in Indonesia is being adjusted a threshold of 12 months (The previous PC used the 6 month threshold)



## 03 Statistical Working Area (WILKERSTAT)



Census block replaced with Local Neighborhood Unit (SLS)

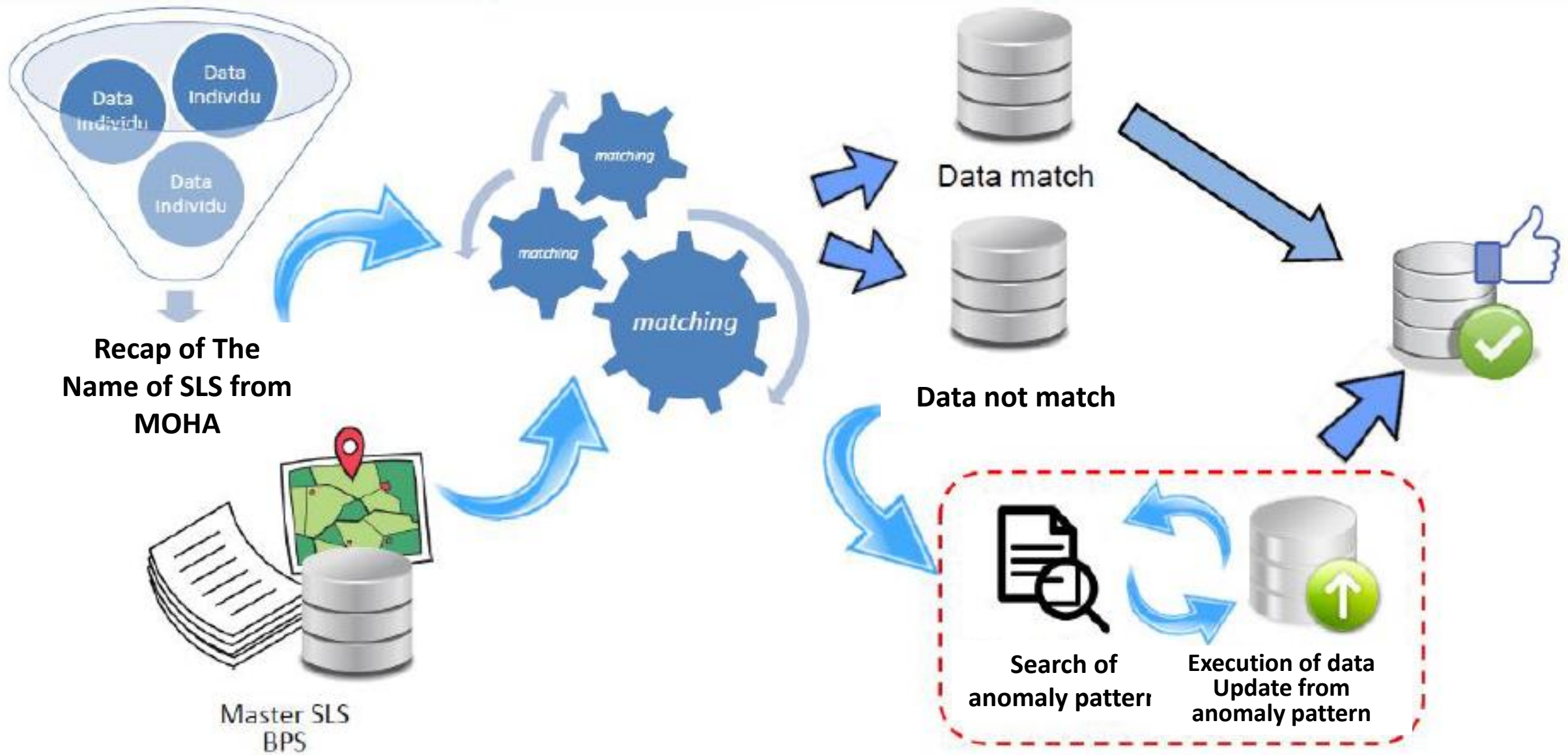
## 04 Household and Family Concepts



- ✓ In the previous population censuses, the enumeration unit used to calculate the population was using the household approach.
- ✓ PC2020 will utilize administrative data, so the enumeration unit will need to be adjusted using a family approach based on population documents, Registered Family Card (KK).



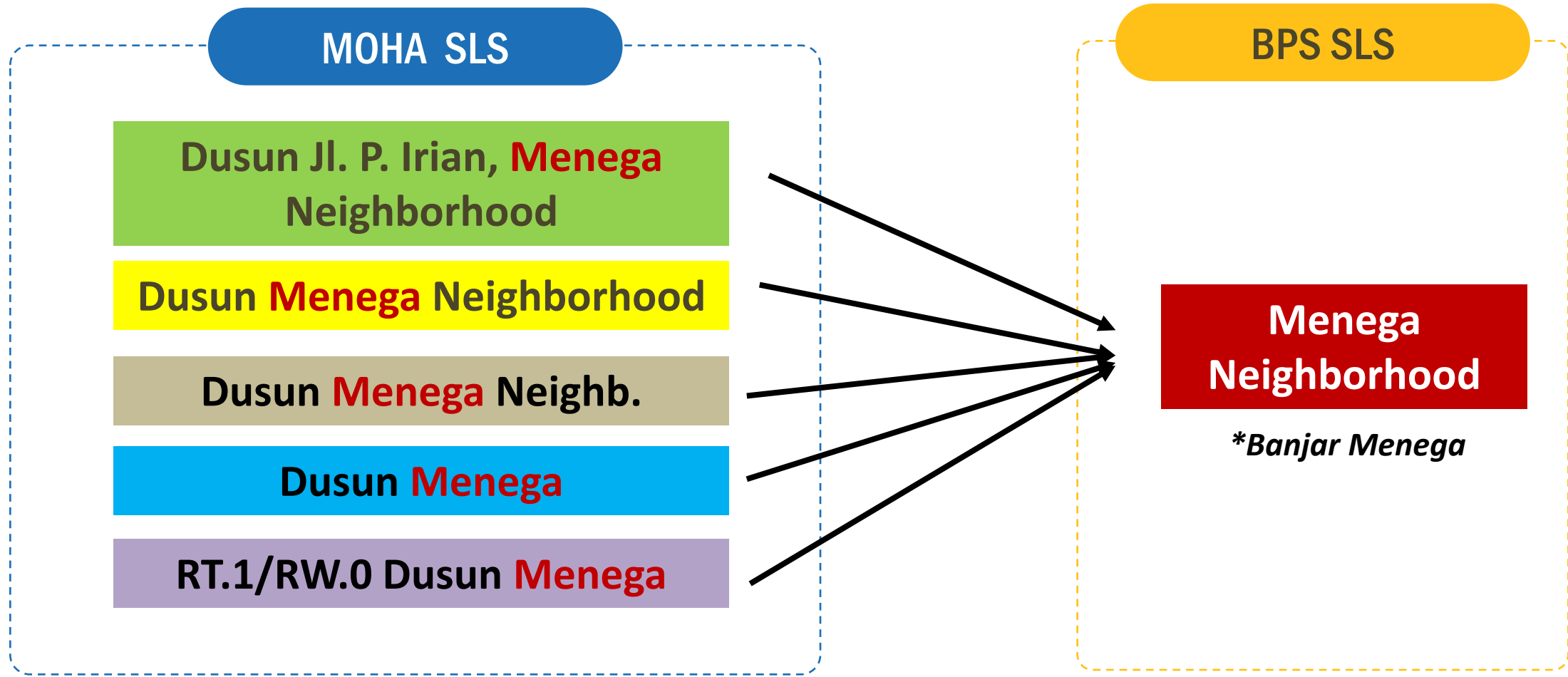
# MATCHING SLS (LOCAL NEIGHBOURHOOD UNIT BELOW THE VILLAGE)





# EXAMPLE OF THE SLS NAME DIFFERENCES OF MOHA AND BPS

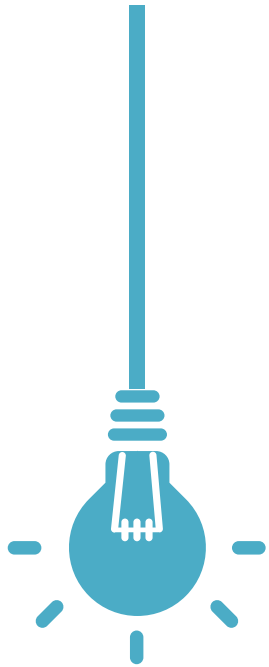
*Example from Jembrana Municipality, Province of Bali*



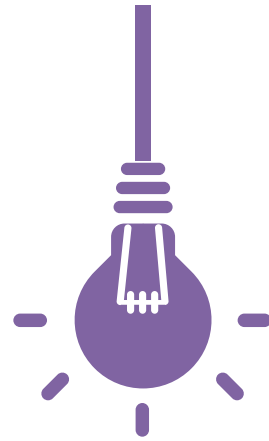


# SEVERAL IT SUPPORTS ON PC2020

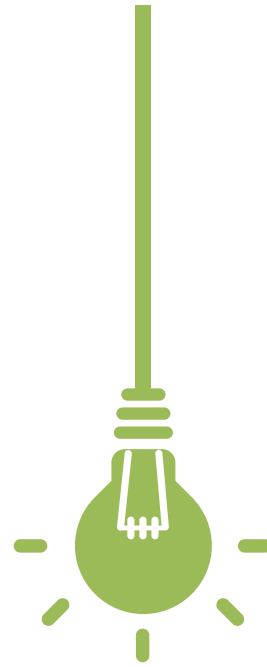
*BPS builds its own system, does not require IT companies*



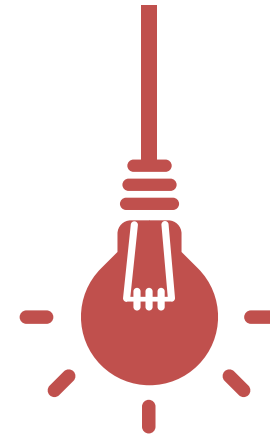
**BPS-MOHA Data  
Matching Application**



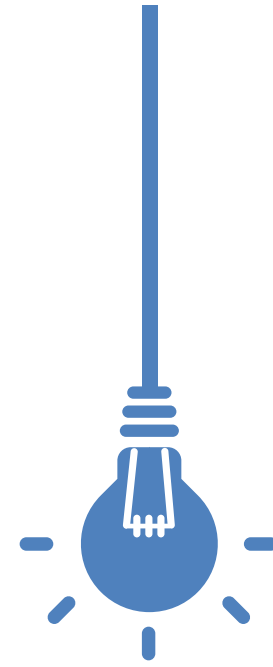
**CAWI / Online  
Census**



**Digital SPR**



**Quality Assurance  
(PK) Application**



**Online Learning  
Website / Moodle**

# IMPACT OF THE ADJUSTMENT ON PC2020 OUTPUTS

## INITIAL OUTPUTS

### Outputs from **Population Register (2020)**

#### Population of Indonesia by:

- ✓ Sex
- ✓ Residence status
- ✓ Ownership of Person ID



## ADJUSTED OUTPUTS

### Outputs from **Population Register (2020)**

#### Population of Indonesia by:

- ✓ Sex
- ✓ Residence status
- ✓ Ownership of Person ID



(no changes)

### Outputs from **Short Form Quest (2020)**

- ✓ Housing characteristics: **5 questions**
- ✓ Individual characteristics all ages: **13 questions**
- ✓ Individual characteristics 5+: **17 questions**



### Outputs from **Short Form Quest (2020)**

- ~~✓ Housing characteristics: 5 questions~~
- ✓ Individual characteristics all ages: ~~13 questions~~ → **10 questions**
- ✓ Individual characteristics 5+: ~~17 questions~~ → **11 questions**

# TIMELINE OF INDONESIA PC2020

