BADAN PUSAT STATISTIK

Transforming Administrative Registers for Statistical Data Production

BPS-Statistics Indonesia

https://www.freepik.com/photo/aerial-view-jakarta-indonesia_10069119/

BPS-Statistics Indonesia

Jakarta, 14 February 2023

OUTLINE

Photo by Adeolu Eletu on Unsplash

1. THE USE OF POPULATION REGISTERS IN 2020 POPULATION CENSUS
2. THE USE OF ADMINISTRATIVE DATA FOR SBR
3. THE SOCIO-ECONOMIC REGISTRATION TO SUPPORT INDONESIA'S SOCIAL PROTECTION SYSTEM

1

THE USE OF POPULATION REGISTERS IN

2020 INDONESIA POPULATION CENSUS

Foto oleh Tri Dimas Irsal
BPS Kabupaten Boven Digoel

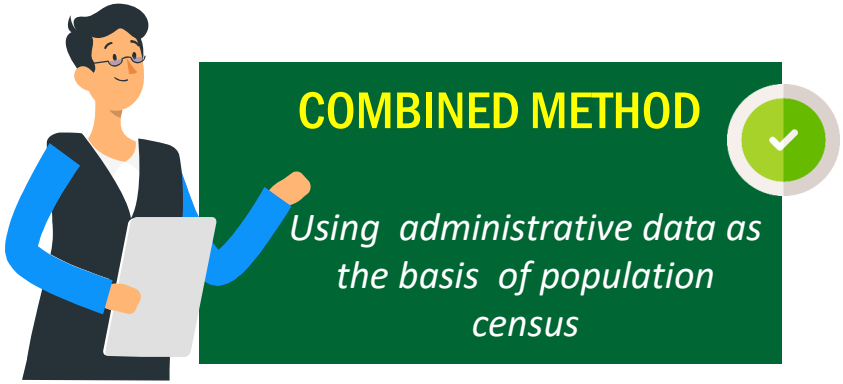
Diah Ikawati
Associate Statistician
BPS-Statistics Indonesia

Indonesia's Population Census 2020 (PC2020)

Is the 7th Population Census

Data Source Condition

- ✓ The UN recommends that the census method shift from traditional methods (full canvassing) to the register-based census.
- ✓ Registration data in Indonesia is not fully cover the whole population.
- ✓ Therefore, considering the data source condition in Indonesia, it is recommended to use combined method, which using the registration data as a basis for the population census implementation.
- ✓ It could be the best opportunity for MOHA together with BPS to improve the quality of registration data in Indonesia.



Legal Base

Law No. 16 Year 1997
Statistics

Govt. Reg. No. 51 Year 1999
Statistical Governance

UN Recommendation 2017
World Population and Housing Programme

"It is recommended that a national census be taken at least every 10 years"
(Principles and Recommendations for Population and Housing Censuses, Revision 3)

Presidential Decree No. 39 of 2019
ONE Data Indonesia

National Acceleration Strategy Population Administration for Development of Vital Statistics
Presidential Decree number 62 of 2019

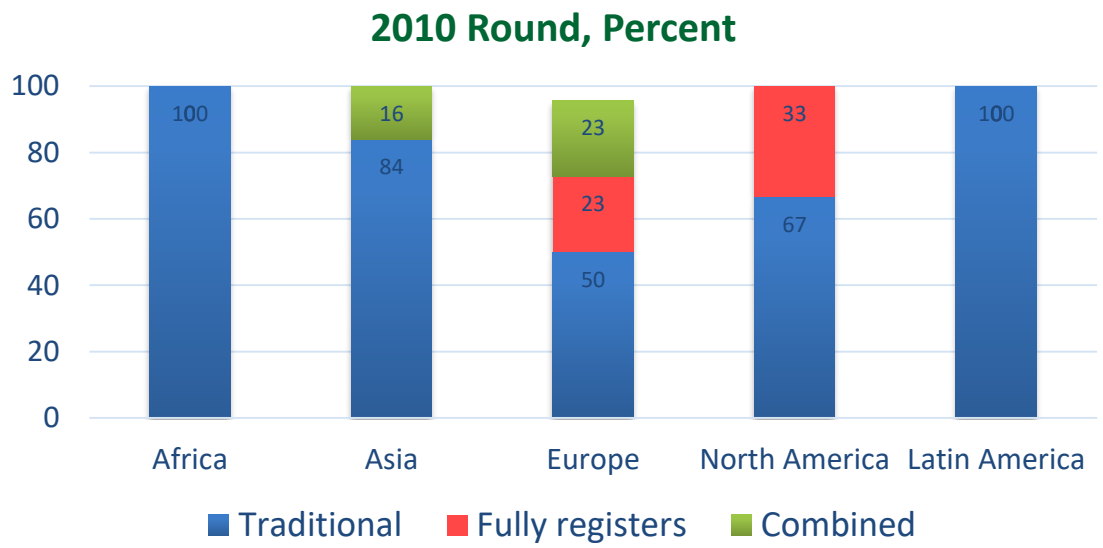
Source: UN (2017). Principles and Recommendations for Population and Housing Censuses Revision 3.

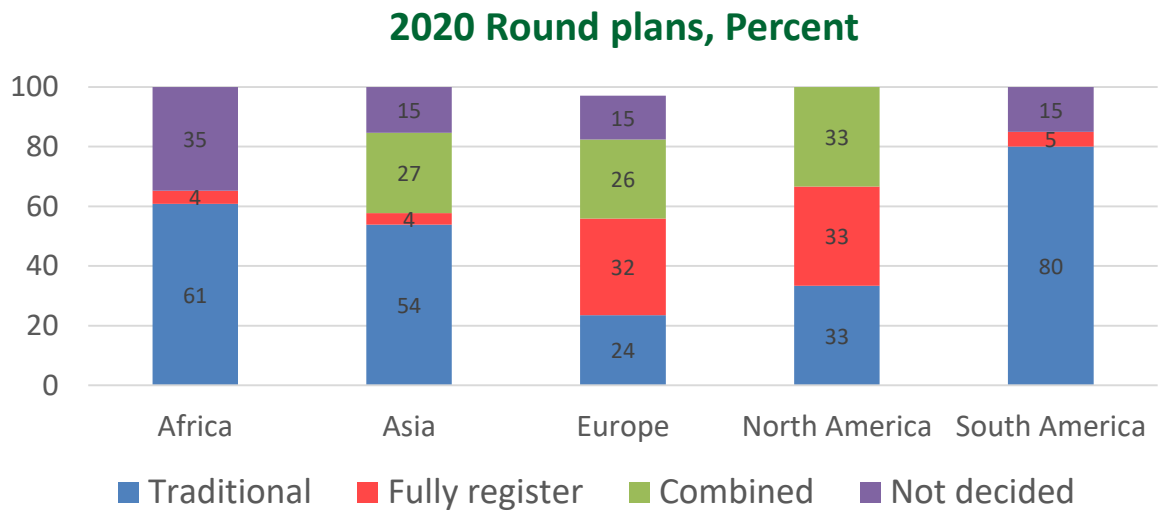
Why Combined Method?

Some facts

- An initial effort for making ONE POPULATION DATA in Indonesia
- The population register is available for the basis of population census
- A comprehensive legal basis
- Collaboration among government institution
- Faster compared to traditional method

Census Method Around The Globe





Source: UNFPA (2018)

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 Vital 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 was adjusted to family approach** based on population documents, Registered Family Card (KK).

The Adjusted Business Processes of PC2020

1. COORDINATION AND CONSOLIDATION
2. PREPARATION OF POPULATION DATABASE
3. ONLINE POPULATION CENSUS
   15 Feb – 29 May 2020
4. GENERATE STATISTICAL POPULATION REGISTER (SPR)
5. VERIFICATION OF SPR
6. FIELD VERIFICATION
7. FIELD ENUMERATION

FIELD ACTIVITIES
SEPT 2020

PREPARATION OF POPULATION DATABASE

- *Coordination with MOHA*
- *Population data replication from MOHA*
- *Checking data structures (matching & cleansing)*
- *Confirming errors in data*

TWO PHASES IN ESTABLISHING THE PC2020 POPULATION DATABASE:

2

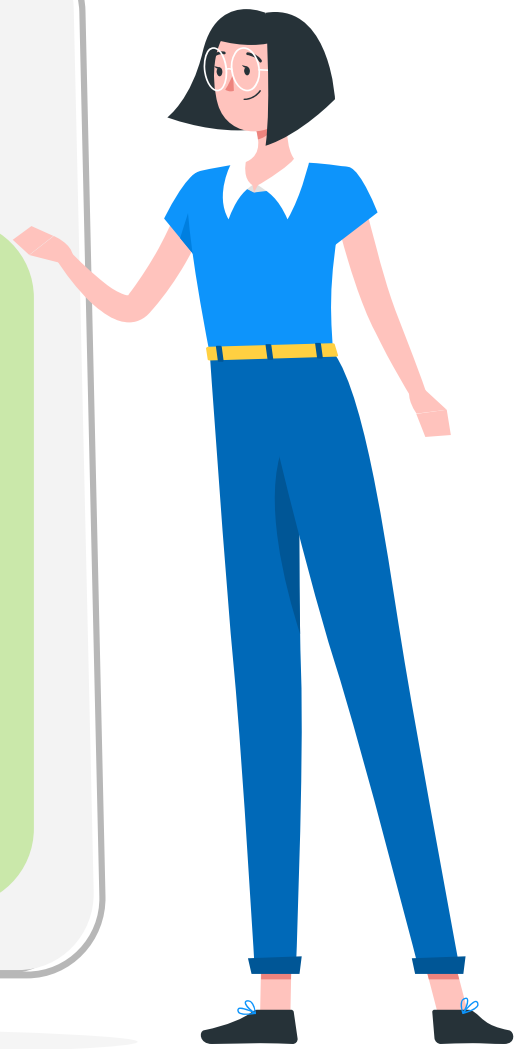
PREPARATION OF POPULATION DATABASE

- 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 were not participated in online census but their data is registered in MOHA



ABOUT PC2020 MATCHING PROCESS

What should be matched?

- ✓ *Master of the region*
- ✓ *Local Neighbourhood Unit (SLS)*
- ✓ *Individual*

Why do we need region matching?

The region encoding of BPS Statistics and MOHA are different.

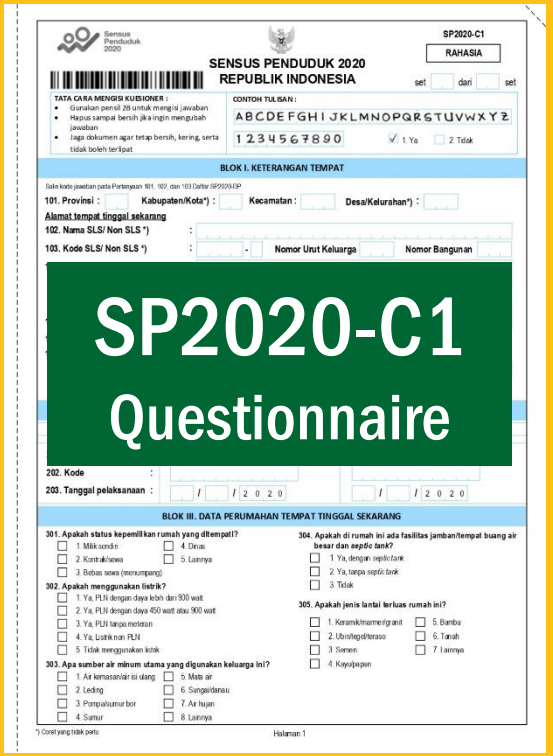
What's the main issues of data matching?

- ✓ *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) >> For example PC2020 use ISIC category of work but MOHA's have their own classification*

FIELD ACTIVITIES

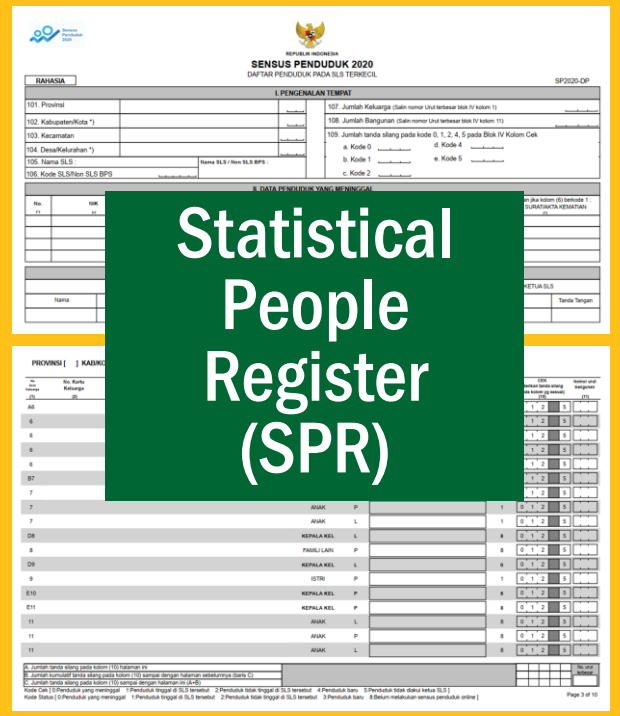
September 2020

5 VERIFICATION OF SPR → 6 GROUND CHECK → 7 POPULATION DATA COLLECTION



SP2020-C1
Questionnaire

- **Confirm the existence** of residents to the Head of SLS
- 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**



Statistical People Register (SPR)

TOWARDS INDONESIA ONE POPULATION DATA

After the field activities are completed, PC2020 could provide population database that could be maintained in the realization of **ONE DATA INDONESIA.**

The PC2020 provides input for population data

Example Case: population database by ID card vs usual residence

MOHA's responsibility for updates

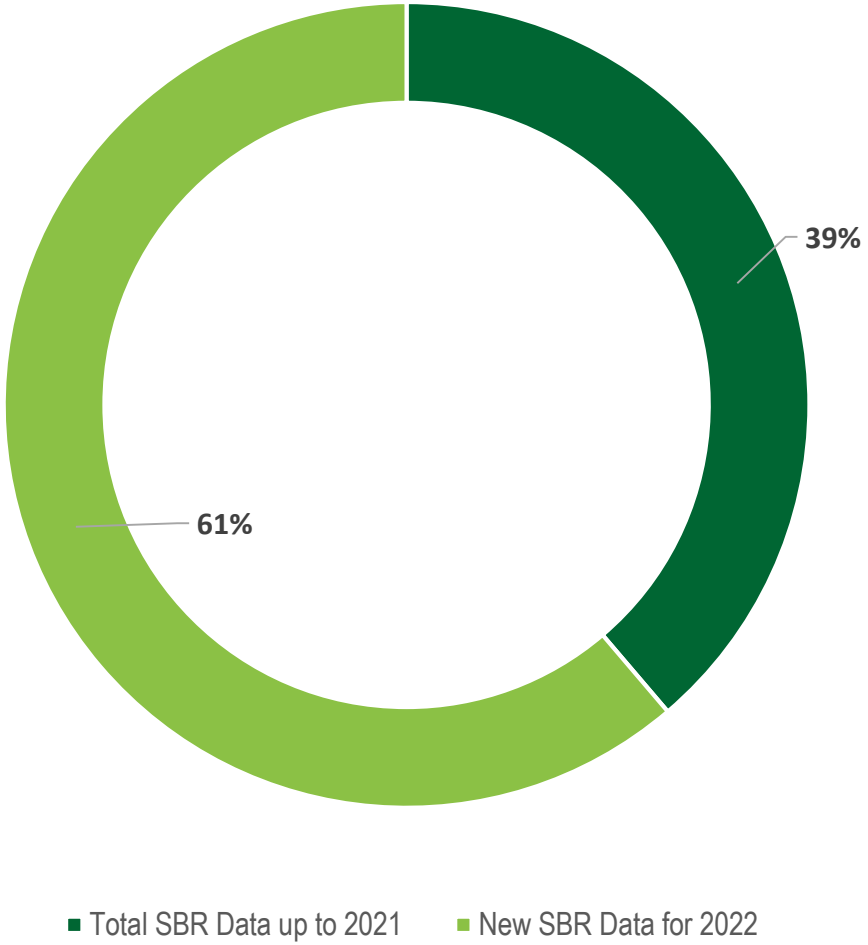
2

The Use of Administrative Data for SBR

Foto oleh Tri Dimas Irsal
BPS Kabupaten Boven Digoel

Ratih Nirahana Sari
Statistician
BPS-Statistics Indonesia

SBR Data for 2022



SBR Data for 2022

Total Data

In 2022 there are 6,364,991 SBR data, 67% of the data came from the Economic Census 2016

Total SBR Data up to 2021

There is 2,467,720 SBR data up to year 2021

New SBR Data for 2022

There is 3,897,271 new SBR data during the year 2022

Tax Data

by Directorate General of Tax, Ministry of Finance

Tax Data

Total Data

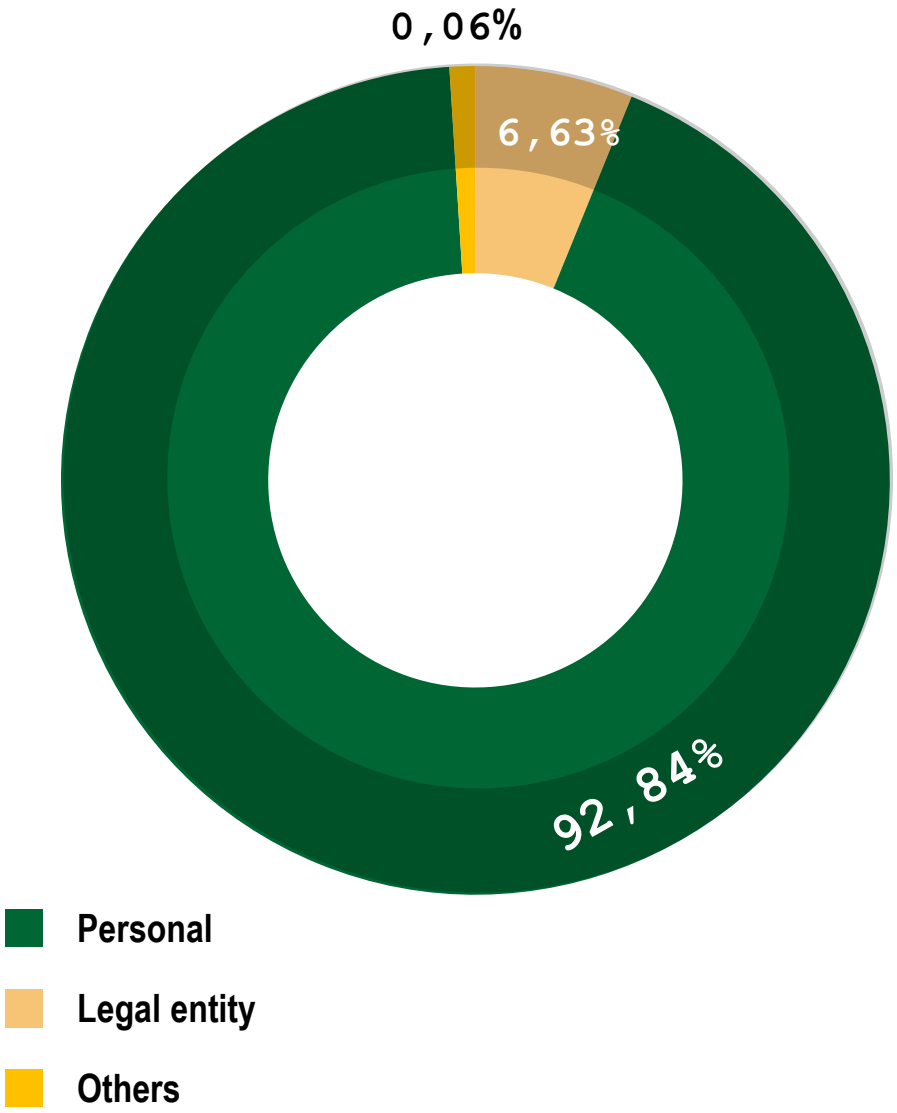
Total on Tax data of 64,916,352

Legal Entity

As much 3,996,350 is a Taxpayer with Entity status Legal and 2,128,671 of them already entered into SBR data.

Personal

As much 60,269,404 or around 92.84 of it is an Employee Individual Taxpayer & Non Employees



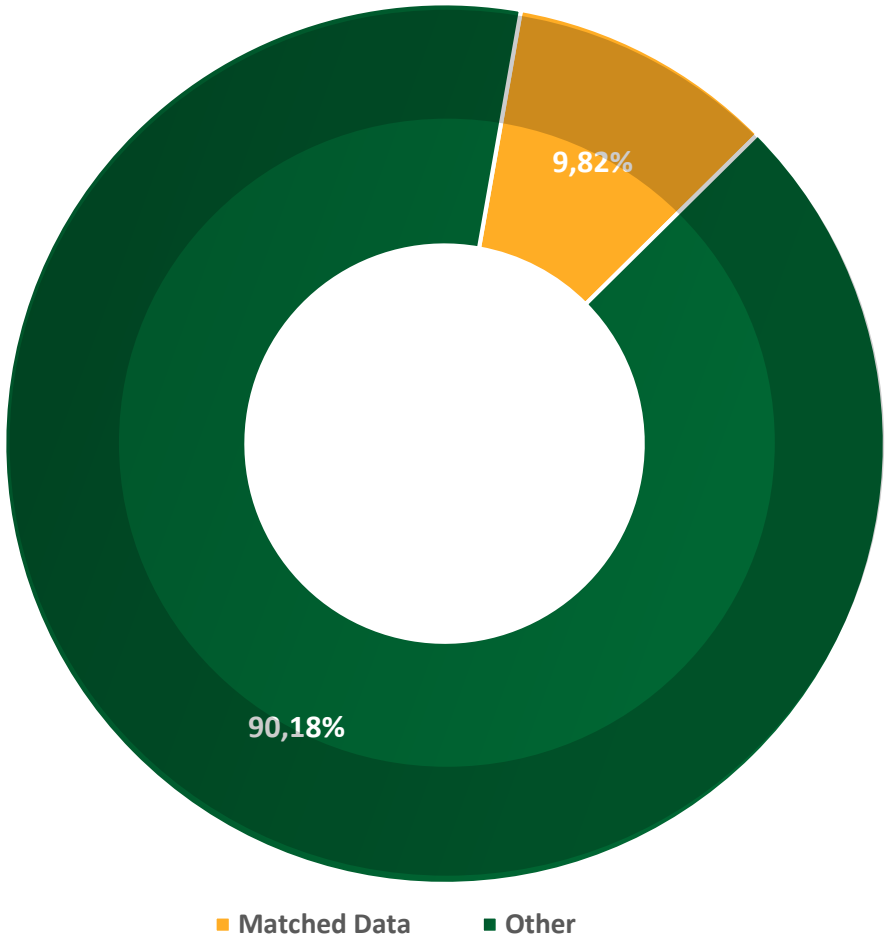
SIUPMSE
(Trade Business Licenses thru Electronic) System Data
by Minister of Trade

SIUPMSE Data

Total Data
Total on SIUPMSE data of 163

Matched data
As much 16 data already entered into SBR data.

Other
As much 147 is resource to update SBR data



Potential Data Resource

A

Administrative Data

Future: OSS (One Single Submission)-BKPM and SIINAS-Kemenperin

B

Survey Feedback

Survey data and updating directory data from subject matter

C

Profiling

Desk Study estabilishment profile, search *Annual Report* and news sites

D

SBR *Quality Improvement Survey (QIS)*

Survey to improve SBR data that is not selected as sample subject matter routined survey

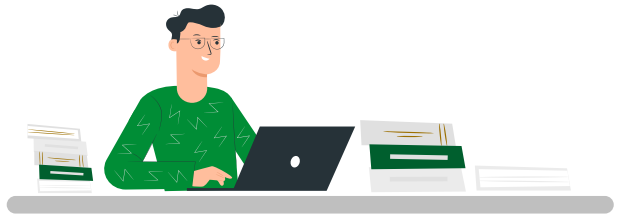
SBR Data Integration and Updating (SBR Input)

Data Integration

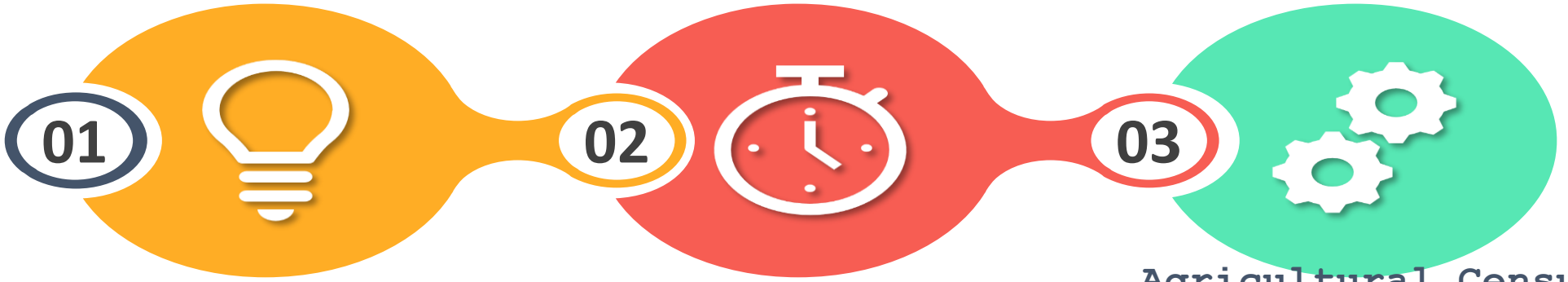
SBR has received administrative data and also the directory of establishment from Subject Matter on BPS. Three steps to integrating data such as **variable identification**, **matching**, and **assessment**. We **integrate** and **update** the directory at once. The matching process takes 2 methods; automatic (by processing ETL at SSIS software) and manual (by application web called Matcha).

Profiling Trials

The purpose of profiling is to get the profile of medium and large establishments. This profiling has been implemented on June 2022 with a target of 286 establishments by using an application web called FRS.



Utilization of SBR (SBR Output)



EWS Pilots

The EWS 2022 pilot is a business/company-based survey pilot that is integrated with the implementation of business processes referring to the SBFA so that the sampling frame data source is taken from the SBR.

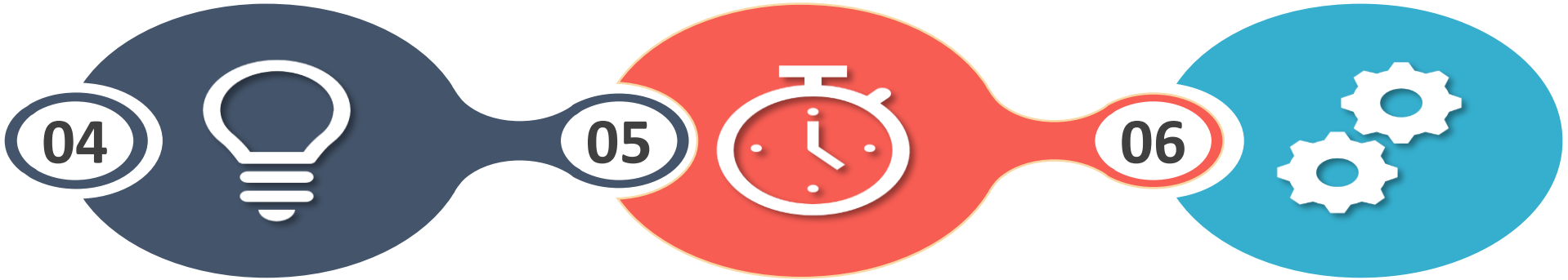
Tourism Survey

The directory of active establishments from SBR is taken as the sampling frame for the tourism survey

Agricultural Census 2023

Integration has been implemented between the results of updating the DPP UPB-UTL with the SBR data as a preparation for the list of businesses/companies in the agricultural sector as a prelist for the Agricultural Census 2023

Utilization of SBR (SBR Output)



Creative Economy

SBR is used as one of the data source for studying the formation of Creative Economy GDP and preparing the list of establishments with certain standard classifications of the Indonesian business field

Maritime GDP

SBR is used as one of data sources for studying the formation of Maritim and non-Maritim GDP and preparing the list of establishment with certain standard classifications of Indonesian business field

Foreign Affiliates Statistics (FATS)

FATS uses SBR to identify the establishment which has foreign affiliation or foreign establishment owned by an Indonesian citizen.

Conclusions

1. SBR goes **beyond** an updated database of businesses.
2. SBR involves data integration, business process transformation, and coordination with **internal and external** stakeholders
3. SBR development requires **strategic level commitment and technical competence** to tackle challenges and to grasp opportunities.
4. SBR governance, policy, business process transformation, and IT systems are **the key factors in an NSO** to improve the SBR as part of the **modernized statistical production**
5. In association with external stakeholders, the national governance and policy in administrative data acquisition can accelerate the SBR maturity and quality statistical production.
6. **Transition to SBR**: can't be avoided the discomfort in long term

Data quality is not good yet (the integration process gradually so data is not updated according to field conditions; incomplete filling; and duplicates)

Inefficient data maintenance SOP (There is the redundancy of work)

The system has not fully accommodated and fulfilled the user's expectations (a manual process is often needed).

3

The Socio-economic Registration to Support Indonesia's Social Protection System

Foto oleh Tri Dimas Irsal
BPS Kabupaten Boven Digoel

Lutfi Alfia
Statistician
BPS-Statistics Indonesia

SOCIO-ECONOMIC REGISTRATION (REGSOSEK)

Government efforts to reform social protection system

Background

- Limited availability of socio-economic data covering all residents for determining the target of development programs.
- The lack of quality standard control and timeliness in updating.
- The data used for target programs are sectoral data

Establish One Data for Social Protection and Community Empowerment Programs

Purposes

- Capture the dynamics of changes in community welfare
- Improve the public services
- As data reference for the integration of social protection and economic empowerment program

REGSOSEK is a system and a database of the entire population consisting of profiles, social and economic conditions, and welfare level linked to the master population data as well as other village level databases.

REGSOSEK INITIAL DATA COLLECTION

Data Collection

Oct 15 – Nov 14, 2022

Data Processing

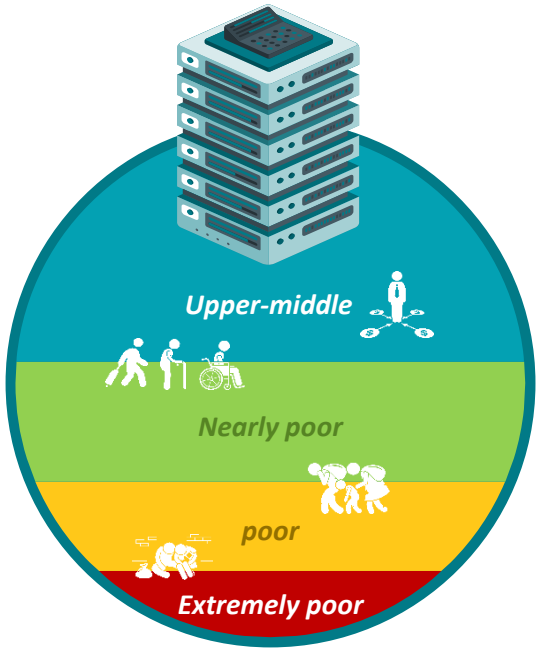
2023

The Regsosek Initial Data Collection covers **all residents/families** in 514 regencies/cities using family approach
(targeting 82,5 million family)

Equipped with Geotags and Photos
(for poor families)

Collected Information:

- Population and employment
- Social Protection
- Housing area
- Education
- Health and Disability
- Economic Empowerment



Output:

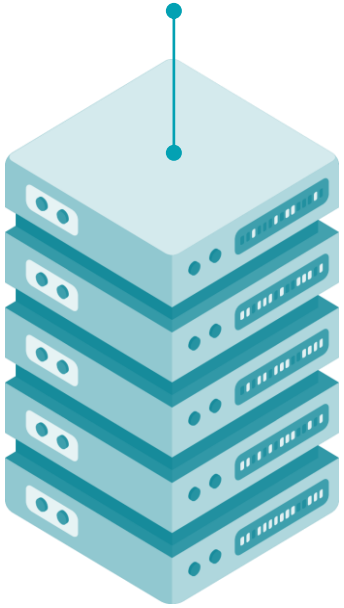
Socio-economic database of the entire population with ranked based on welfare level

LONG-TERM REGSOSEK DATA UTILIZATION

The Ministry of National Development Planning (Bappenas) has mapped out the data necessity of relevant ministries/agencies

- The necessity of *Stakeholder* A
- The necessity of *Stakeholder* B
- The necessity of *Stakeholders* …

Regsosek Data



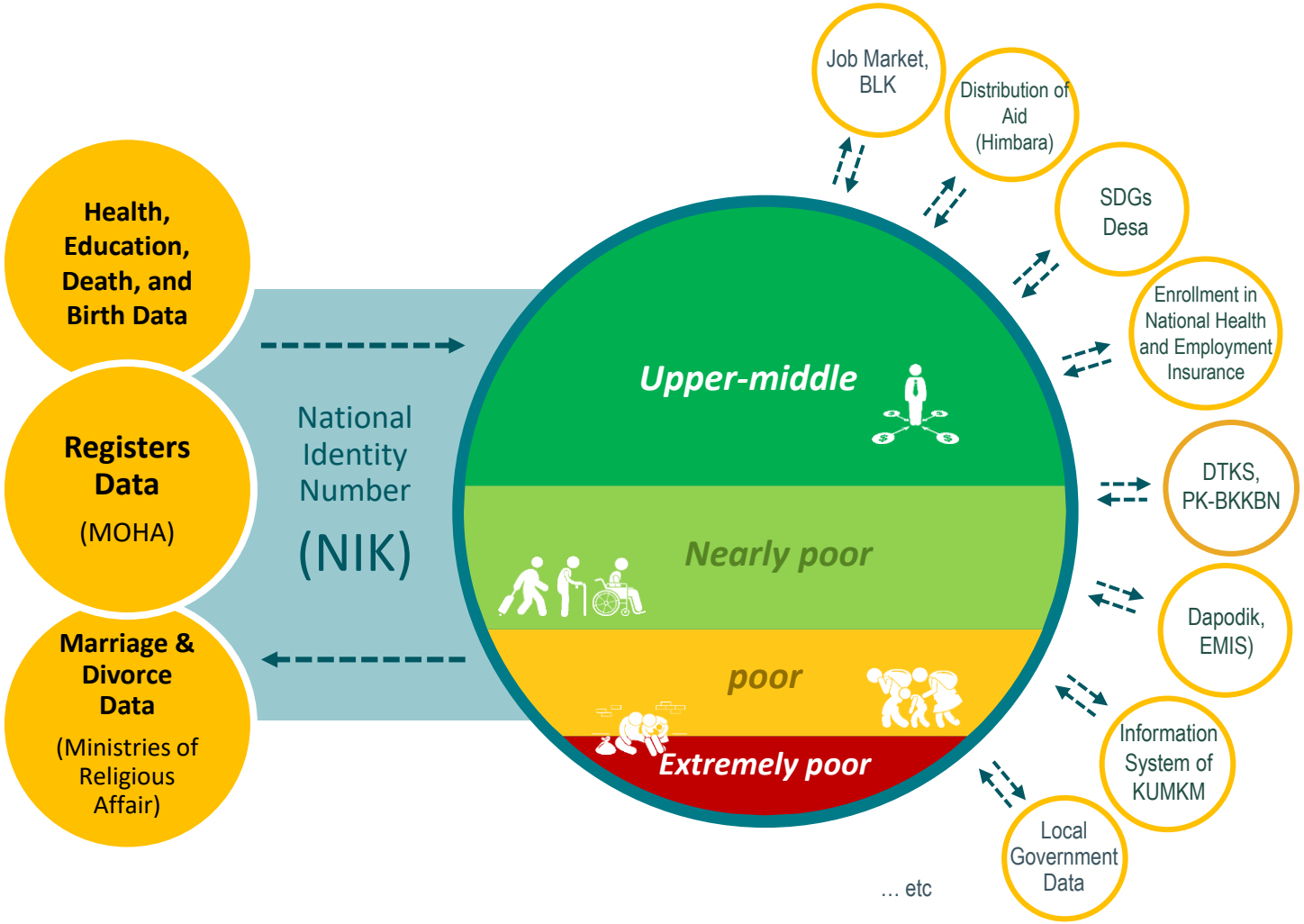
One Data for social protection and community empowerment programs

- Program 1
- Program 2
- Program 3
- Program …

- Development of social security program
- Determination the beneficiary of social protection
- Development of employment and economic empowerment program
- Supplying of adequate housing, water, and sanitation
- Programs for vulnerable group (disable, elderly, children)
- Financial inclusion
- Telecommunication and information

INTEGRATED SOCIAL AND ECONOMIC DATA

Government target 2024: The implementation of One Data of Social and Economic Protection Program



Integrated Data Updating, centralized the beneficiary mapping out

1. Socio-economic Registration is integrated with various types of data and can be updated by various parties to achieve **One Data Indonesia**

2. **Integrating information system** with existing program to provide comprehensive overview of beneficiaries (*integrated beneficiaries registries*).

3. **Centralized mapping** to build a reference center for social protection and community empowerment programs.

Source: The Ministry of National Development Planning (2022)

SUSTAINABILITY OF REGSOSEK DATA

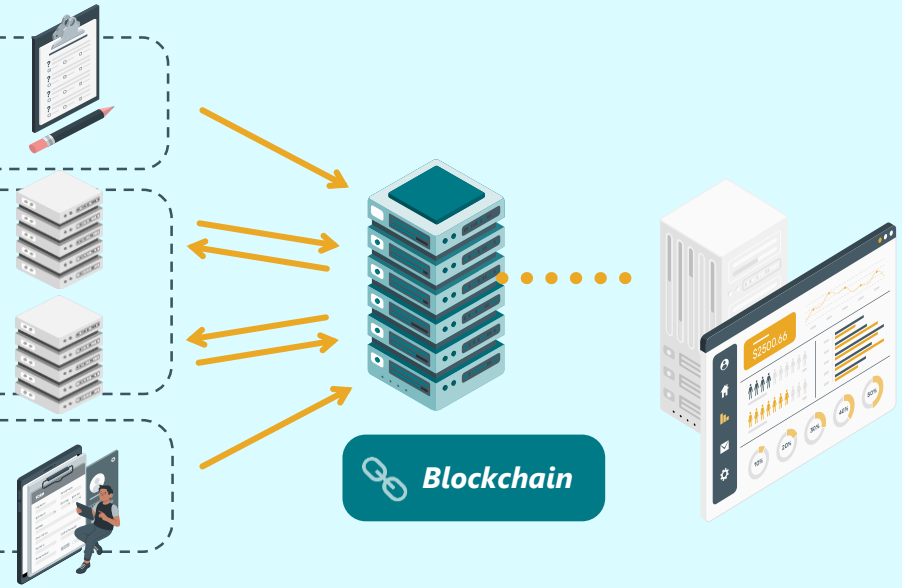
Data updating from village level

Mechanism for updating data

Direct Approach

Automation
(Data sharing)

Self report
(on-demand)



Access in data utilization

- MInistries/Agencies
- Government at province level
- Government at regency level
- Government at village level

BADAN PUSAT STATISTIK

THANK YOU

Sumber gambar: https://www.pexels.com/photo/asian-children-bridge-children-clouds-2132062/

STEP BY STEP IN DATA MATCHING

01

Matching area code

(province, district, sub-district, village)

02

Matching SLS (Local Neighbourhood Unit below the village)

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

03 *Input 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*

SYNCHRONIZATION AND SENDING RETURN DATA

External Data Source

Population Data From Other MINISTRY

VITAL STATISTICS SYSTEM

Population Data Change Update:
- Birth
- Death
- Migrant
- dll

Internal Data Source

- **Census**
- **Population Survey**
- **Population data repair**

Data Sharing/Access

Transdata

API Management

Service Orchestration

MOHA

SENDING SP2020 RETURN DATA

Stage 1:
Resident flag "death"

Stage 2:
Census data for synchronization (74 million)

Stage 3:
Full dataset SP2020