



APES WEEK 2019

ASIA-PACIFIC ECONOMIC STATISTICS WEEK

Integrating economic statistics in monitoring the 2030 Agenda

Small Area Estimation for Monitoring SDGs at the Sub-national Level

**Parallel session 2.
Integrating data to leave no one behind**

**Yuniarti
BPS-Statistics Indonesia**

Key research questions

How to monitor SDGs in sub-national level when data gaps are inevitable?

Mainstreaming SDGs In Sub-national Level



Statistics
Data



Survey/
census



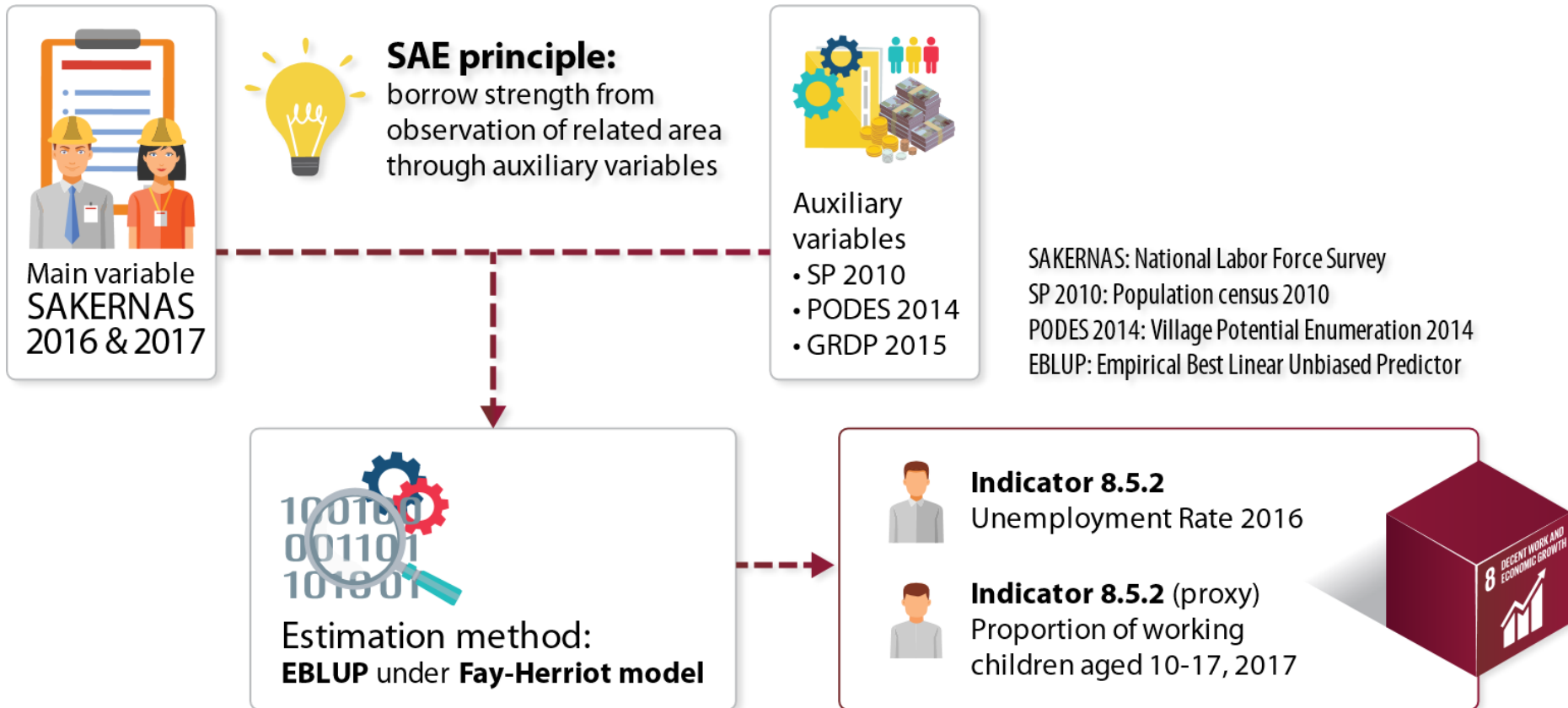
Imperfect
sampling design

data gaps



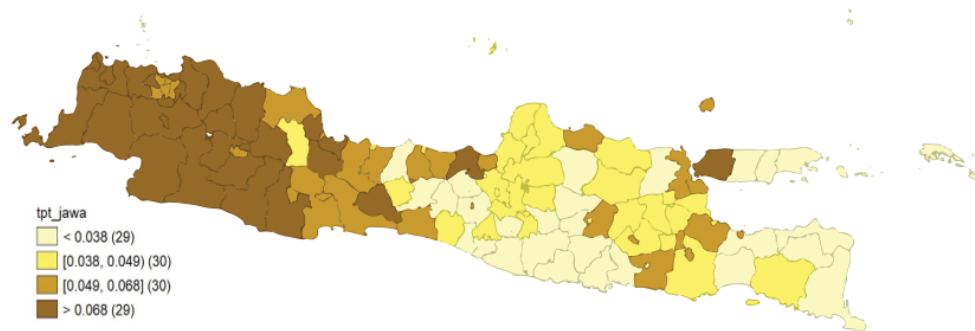
Budget Cut

Data integration techniques



Main findings

Unemployment Rate in Java Island by District, 2016



Average Proportion of Working Children in Java Island, 2017



SAE helps closing data gaps



SAE provides more comprehensive data matrix for monitoring SDGs



Challenges and way forward

- Generating reliable small area statistics is intricate and time consuming.
- Should be careful with rare characteristics, less than 10% of the population.
- Consider recent survey as data source of auxiliary variables -> to constrict time lag between estimated indicator and its auxiliary variables.
- Adopt Bayesian approach to estimate non-normal distributed indicators.