

Measuring SDGs Indicator 9.c.1 and 17.8.1 using Mobile Phone Data: Experience from Indonesia

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ABSTRACT

Indonesia has set a National Target for the SDGs 2030 Agenda, which will be monitored and reported annually for the Voluntary National Review (VNR).

Currently, the source of SDG indicator 9.c.1 is administrative data from the Ministry of Communication and Information Technology (MCI) of the Republic of Indonesia. The indicator is based on BTS location information collected by the Ministry from operators after an external audit has been conducted. In this way, the advantage is that we receive data from all operators in Indonesia, but problems in timeliness, there is a delay in information between the actual situation and the time the data was released.

Meanwhile, the SDGs Indicator 17.8.1 source is the Household Survey (SUSENAS) conducted by the Central Statistics Agency (BPS) -Statistics Indonesia. The advantage of SUSENAS is that it can be cross-checked between the resulting ICT Indicators and the demographics of the respondents (gender, age, income, etc.). However, SUSENAS has a limited number of sample households, only 330,000 households. This sample is considered still biased towards the lower middle-income group, due to the lack of response from the high-income group. In addition, the SUSENAS results are unreliable for a lower level of geographic disaggregation below the provincial level.

Therefore, currently VNR uses APJII (Indonesian Internet Service Providers Association) data through its survey results which show that the percentage of internet users is higher than the SUSENAS results. This significant difference requires other comparative data that can be used, including mobile phone data. This paper will describe the use of mobile phone data to measure SDGs Indicators 17.8.1 and 9.c.1.

Keywords: SDGs indicators, Mobile Positioning Data, ICT indicators, Information Society *JEL Classification:* Data Collection and Data Estimation Methodology