**Citation**

Source: World Bank estimates based on data from the Global Subnational Atlas of Poverty, Global Monitoring Database.

**Appendix**

**Construction of the Global Subnational Atlas of Poverty, Second edition**

The Global Subnational Atlas of Poverty (GSAP) is produced by the World Bank’s Poverty and Equity Global Practice, coordinated by the Data for Goals (D4G) team, and supported by the six regional statistics teams in the Poverty and Equity Global Practice. The second edition of the GSAP includes lineup poverty estimates in 2018 for 166 economies based on the latest available survey data in GMD for each economy, with 95 percent of the data ranging from 2010 to 2018. The most recent household survey is used for each country in GMD, with some Europe and Central Asia region countries using Luxembourg Income Study data. Poverty is shown for more than 1,900 subnational areas based on survey representativeness and availability of matched spatial boundaries. Further technical details about the construction of the subnational poverty maps can be found in Azevedo et al. (2018) and Yang et al. (2021).

There are some exceptions. For China, because of the lack of microdata, the subnational map is based on the 2018 official estimates of poverty in rural areas, published by the National Bureau of Statistics. For India, the subnational estimates are based on the 2015 lineup estimates because there are no lineup data for India for 2018. Poverty can only be shown at the national level for 23 economies.

Because the household surveys necessary to measure poverty are conducted in different years and at varying frequencies across economies, producing global and regional poverty estimates entails bringing each of the economy-level poverty estimates to a common reference, or “lineup” year. For economies with surveys available in the reference year, the direct estimates of poverty from the surveys are used. For other cases, the poverty estimates are imputed for the reference year using the country’s recent household survey data and real growth rates from national accounts data. The procedures for this exercise depend on the survey years available for the country.

When a survey is available only before the reference year, the consumption (or income) vector from the latest survey is extrapolated forward to the reference year using real growth rates of per capita GDP (or household final consumption expenditure) obtained from national accounts. Each observation in the welfare distribution is multiplied by the growth rate in per capita GDP (or household final consumption expenditure) between the reference year and the time of the survey. Poverty measures can then be estimated for the reference year. This procedure assumes distribution-neutral growth—that is, no change in inequality—and that the growth in national accounts is fully transmitted to growth in household consumption or income. If the only available surveys are after the reference year, a similar approach is applied to extrapolate backward. More details can be found in Prydz et al. (2019).

Judy Yang, Minh Cong Nguyen, Natalie Kreitzer, Miyoko Asai, et al. (2021). “Global Subnational Poverty: An update.” World Bank, Washington, DC.

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Prydz, Espen Beer, Dean Jolliffe, Christoph Lakner, Daniel Gerszon Mahler, and Prem Sangraula. 2019. “National Accounts Data Used in Global Poverty Measurement.” World Bank, Washington, DC.