# Global Subnational Atlas of Poverty - Documentation June 2021

#### **About**

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 Global Monitoring Database (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 the GMD, with several countries from different regions (EAP, ECA, MNA, and North America) using Luxembourg Income Study (LIS) data. There are a total of 166 countries with data (Figure 1).

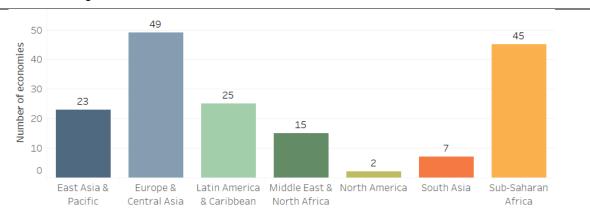


Figure 1. The 2<sup>nd</sup> edition of the GSAP includes data on 166 economies

Source: GSAP, 2nd edition

Subnational poverty can be computed for the majority of countries; only 33 countries only have poverty shown at the national level. Poverty is shown for about 1,800 subnational areas based on survey representativeness and availability of matched spatial boundaries. The median number of subnational areas represented is 7.5 areas per country (Figure 2).

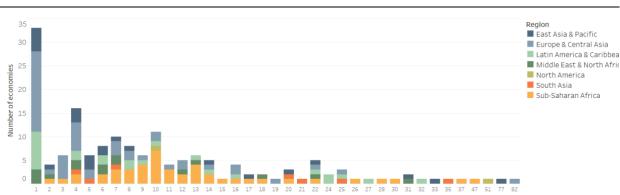


Figure 2. The frequency of the number of subregions

Source: GSAP, 2nd edition

# **Data Dictionary**

Table 1. GSAP 2<sup>nd</sup> edition variable list

Variable	Description	Note
region	Geographical region	
code	Country code	
baseyear	Year of survey data	First year of survey fieldwork
welfaretype	Welfare type	Income or Consumption
lineupyear	Lineup year	Lineup from survey years to a common year
survname	Survey name	
level	Level of disaggregation	
geo_code2	Geographic ID to link with the global shapefile	
poor190_ln	Poverty rate at \$1.9 (not in pct) in the area (2011 ICP)	Lineup to 2018 for all, and 2015 for India
poor320_ln	Poverty rate at \$3.2 (not in pct) in the area (2011 ICP)	Lineup to 2018 for all, and 2015 for India
poor550_ln	Poverty rate at \$5.5 (not in pct) in the area (2011 ICP)	Lineup to 2018 for all, and 2015 for India
npoor190_ln	Number of poor at \$1.9 in the area	Lineup to 2018 for all, and 2015 for India
npoor320_ln	Number of poor at \$3.2 in the area	Lineup to 2018 for all, and 2015 for India
npoor550_ln	Number of poor at \$5.5 in the area	Lineup to 2018 for all, and 2015 for India
median_In	Median of welfare (income/consumption) by area	Daily Per capita in 2011 ICP US\$
mean_ln	Mean of welfare (income/consumption) by area	Daily Per capita in 2011 ICP US\$

#### Notes:

- (1) Green= survey level identification information; Blue= subnational level identification information; Yellow = subnational level indicators
- (2) For China, poverty estimates shown are the 2018 official provincial rural poverty rates published by the National Bureau of Statistics. For India, the numbers based on its 2015 line-up.
- (3) Country (national) line-up poverty number is as of September 2020 from PovcalNet.

### Data sources to create the GSAP

The GSAP relies on two primary sources of data: 1) subnational poverty rates calculated from official household surveys, 2) and geographic boundary files.

## **Geospatial files**

Geographic boundaries must match the subnational regions in these surveys. In many cases, there is a one-to-one association between the regions in a household survey and the areas defined at an administrative level in the country.

In cases, where there is not a one-to-one association, geographic boundaries are altered to fit the representativeness of the surveys. In some cases, the geographic representation is at the level of "urban", or "rural". In these cases, subnational areas in the household survey are aggregated to levels that can be appropriately represented by boundaries. Several sources of geospatial files were leveraged to construct the GSAP: GADM, GAUL, NUTS, and customized spatial files. The choice of spatial files is based on mores disaggregated availability and geographic alignment with household surveys. For example, NUTs spatial files are used prominently for the European countries in GSAP, since these files are developed and regulated by the EU.

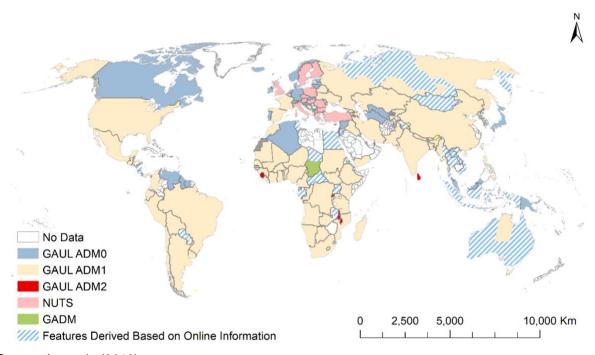


Figure 3. The administrative units of the global poverty map

Source: Azevedo (2019)

The most common spatial data source used for the GSAP is the Database of Global Administrative Areas (GADM). Only 13 economies do not use GADM files in some form for the creation of the GSAP (Figure 4).

GADM GADM mix GAUL GAUL ADM GAUL ADM1 GAUL ADM2 GAUL-NUTS Mix mix

Figure 4. The frequency of the types of geospatial layers used

Source: GSAP, 2<sup>nd</sup> edition

#### **GADM**

GADM, the Database of Global Administrative Areas<sup>1</sup>, is a high-resolution database of country administrative areas, with a goal of "all countries, at all levels, at any time period. The database is available in a few export formats, including shapefiles that are used in most common GIS applications. The GADM project created the spatial data for many countries from spatial databases provided by national governments, NGO, and/or from maps and lists of names available on the Internet.

#### **GAUL**

The Global Administrative Unit Layers (GAUL)<sup>2</sup> compiles and disseminates the best available information on administrative units for all the countries in the world, providing a contribution to the standardization of the spatial dataset representing administrative units. The GAUL always maintains global layers with a unified coding system at country, first (e.g. departments), and second administrative levels (e.g. districts). Where data is available, it provides layers on a country by country basis down to third, fourth, and lowers levels. The overall methodology consists in a) collecting the best available data from most reliable sources, b) establishing validation periods of the geographic features (when possible), c) adding selected data to the global layer based on the last country boundaries map provided by the UN Cartographic Unit (UNCS), d) generating codes using GAUL Coding System, and e) distribute data to the users (see <u>Technical Aspects of the GAUL Distribution Set</u>. Note that some administrative units are multipolygon features.

#### **NUTS**

Nomenclature of Territorial Units for Statistics or NUTS (French: Nomenclature des unités territoriales statistiques) is a geocode standard for referencing the subdivisions of countries for statistical purposes. The standard, adopted in 2003, is developed and regulated by the European Union, and thus only covers the member states of the EU in detail. The Nomenclature of Territorial Units for Statistics is instrumental in the European Union's Structural Funds and Cohesion Fund delivery mechanisms and for locating the area where goods and services subject to European public procurement legislation are to be delivered.

For each EU member country, a hierarchy of three NUTS levels is established by Eurostat in agreement with each member state; the subdivisions in some levels do not necessarily correspond to administrative divisions within the country. A NUTS code begins with a two-letter code referencing the country, as abbreviated in the European Union's Interinstitutional Style Guide. The subdivision of the country is then referred to with one number. A second or third subdivision level is referred to with another number each. Each numbering starts with 1, as 0 is used for the upper level. Where the subdivision has more than nine entities, capital letters are used to continue the numbering. Below the three NUTS levels are local administrative units (LAUs). A similar statistical system is defined for the

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<sup>&</sup>lt;sup>1</sup> Database of Global Administrative Areas - https://gadm.org/index.html

<sup>&</sup>lt;sup>2</sup> The Global Administrative Unit Layers (GAUL) is an initiative implemented by FAO within the Bill & Melinda Gates Foundation, Agricultural Market Information System (AMIS) and AfricaFertilizer.org projects. http://www.fao.org/geonetwork/srv/en/metadata.show?id=12691

candidate countries and members of the European Free Trade Association, but they are not part of NUTS governed by the regulations.

The current NUTS classification, dated 21 November 2016 and effective from 1 January 2018 (now updated to current members as of 2020), lists 92 regions at NUTS 1, 244 regions at NUTS 2, 1215 regions at NUTS 3 level, and 99,387 local administrative units (LAUs).

#### **Customized boundaries**

In some cases, geospatial files had to be intensely customized based on the survey information. The customization depends on each country cases either (i) by dissolving different boundaries from GAUL and GADM or (ii) by altering area specifics. Those areas are often classified as ADMx or GADMx in the table A.1 below. For more detailed discussion and method, please see Azevedo (2018).

### **Household surveys**

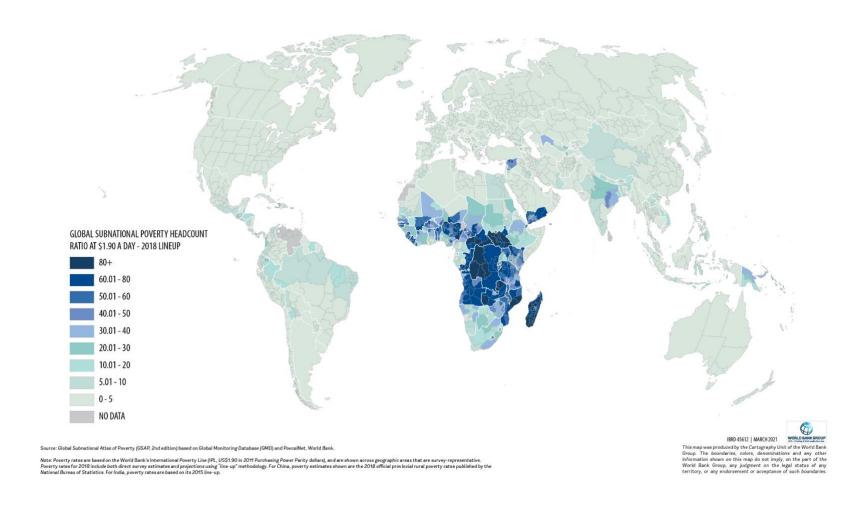
Subnational poverty rates are calculated using official household or income surveys for the purpose of poverty monitoring. Poverty rates are provided at the subnational level that is representative for the associated household or income survey used. In rare cases, household micro data is not available. 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. There are 166 economies with poverty numbers reported in this edition, among them 33 countries the data is reported at the national level.

# **Line-Up of Poverty**

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. The poverty estimates at the subnational level are consistent in methodology with the national estimates and the global poverty numbers, thus the subnational numbers aggregate up to the national lineup estimates in each country. The national lineup estimates for this subnational work are based on the lineup estimates from PovcalNet on September 2020.

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).

Figure 5. Global Subnational Poverty Headcount Ratio at US\$ 1.90 a day (2018 lineup).



#### **Team**

**Minh Cong Nguyen** is a senior data scientist in the Poverty and Equity Global Practice of the World Bank. His research interests include poverty, inequality, welfare measurement, small area estimations and imputation methods, and data systems. He currently leads the Middle East and North Africa Team for Statistical Development and also co-leads the Data for Goals Team. Previously, he worked for the Europe and Central Asia Team for Statistical Development, the Sub-Saharan Africa Region, the South Asia Region, the Human Development Network, and the Private Sector Development Network. Minh holds a PhD in economics (applied micro-econometrics) from American University.

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**Miyoko Asai** is a Data Analyst consultant in the Poverty and Equity GP's global team. She supports global reporting on poverty and shared prosperity, including by improving estimates of poverty rates using the SWIFT machine learning model, and contributes to the organization of the Data for Goals program. Prior to joining the World Bank, Miyoko worked for the Australian Government, including at the Australian Bureau of Statistics. She holds a Bachelor's in Economics from Hitotsubashi University and a Graduate Diploma in Economics from the Australian National University.

#### **Contributors**

The work will not be completed without contributions from the D4G, regional and country teams, and PovcalNet team. Regional teams: Ani Rudra Silwal, Aziz Atamanov, Carolina Diaz-Bonilla, David Newhouse; Jose Montes, Laura Liliana Moreno Herrera, Reno Dewina, Rose Mungai. D4G team: Nobuo Yoshida, Silvia Malgioglio, Haoyu Wu. PovcalNet team: Christoph Lakner, R. Andres Castaneda Aguilar, Daniel Gerszon Mahler.

# **Suggested Citation**

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

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# **Annex. Subnational Information**

Table A.2. List of country survey data and geospatial level in the GSAP

Region	Economy	Country	Survey year	Lineup year	Survey name	Welfare type	Geospatial level	Number of areas
East Asia & Pacific	Australia	AUS	2014	2018	LIS	INC	ADM1	7
East Asia & Pacific	China	CHN	2018	2018	NHBS	CONS	ADM1	31
East Asia & Pacific	Fiji	FJI	2013	2018	HIES	CONS	ADM1	4
East Asia & Pacific	Indonesia	IDN	2018	2018	SUSENAS	CONS	ADM1	33
East Asia & Pacific	Japan	JPN	2013	2018	LIS	INC	ADM1/ADMx	8
East Asia & Pacific	Kiribati	KIR	2006	2018	HIES	CONS	ADM0	1
East Asia & Pacific	Korea, Rep.	KOR	2012	2018	LIS	INC	ADM0	1
East Asia & Pacific	Lao PDR	LAO	2012	2018	LECS	CONS	ADMx	4
East Asia & Pacific	Malaysia	MYS	2015	2018	HIS	INC	ADM1	14
East Asia & Pacific	Micronesia, Fed. Sts.	FSM	2013	2018	HIES	CONS	GADM1	4
East Asia & Pacific	Mongolia	MNG	2016	2018	HSES	CONS	ADM1/ADMx	22
East Asia & Pacific	Myanmar	MMR	2015	2018	MPLCS	CONS	ADM1/ADMx	5
East Asia & Pacific	Papua New Guinea	PNG	2009	2018	HIES	CONS	ADM1/ADMx	5
East Asia & Pacific	Philippines	PHL	2015	2018	FIES	INC	ADM1	17
East Asia & Pacific	Samoa	WSM	2008	2018	HIES	CONS	GADMx	2
East Asia & Pacific	Solomon Islands	SLB	2013	2018	HIES	CONS	ADM0	1
East Asia & Pacific	Taiwan, China	TWN	2016	2018	LIS	INC	GADM2	20
East Asia & Pacific	Thailand	THA	2018	2018	SES	CONS	ADM1/ADMx	77
East Asia & Pacific	Timor-Leste	TLS	2014	2018	TLSLS	CONS	ADM1/ADMx	5
East Asia & Pacific	Tonga	TON	2015	2018	HIES	CONS	ADM0	1
East Asia & Pacific	Tuvalu	TUV	2010	2018	HIES	CONS	ADM0	1
East Asia & Pacific	Vanuatu	VUT	2010	2018	HIES	CONS	ADM1	6
East Asia & Pacific	Vietnam	VNM	2016	2018	VHLSS	CONS	ADMx	6
Europe & Central Asia	Albania	ALB	2017	2018	HBS	CONS	ADMx	12
Europe & Central Asia	Armenia	ARM	2018	2018	ILCS	CONS	ADM1	11

Region	Economy	Country code	Survey year	Lineup year	Survey name	Welfare type	Geospatial level	Number of areas
Europe & Central Asia	Austria	AUT	2017	2018	EU-SILC	INC	ADMx/NUTS	3
Europe & Central Asia	Azerbaijan	AZE	2005	2018	HBS	CONS	ADM1/ADM2	10
Europe & Central Asia	Belarus	BLR	2018	2018	HHS	CONS	ADM1	7
Europe & Central Asia	Belgium	BEL	2017	2018	EU-SILC	INC	ADM1	3
Europe & Central Asia	Bosnia and Herzegovina	BIH	2011	2018	HBS	CONS	ADM1/ADM2	3
Europe & Central Asia	Bulgaria	BGR	2017	2018	EU-SILC	INC	ADMx/NUTS	2
Europe & Central Asia	Croatia	HRV	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Cyprus	CYP	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Czech Republic	CZE	2017	2018	EU-SILC	INC	ADMx/NUTS	8
Europe & Central Asia	Denmark	DNK	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Estonia	EST	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Finland	FIN	2017	2018	EU-SILC	INC	ADMx/NUTS	4
Europe & Central Asia	France	FRA	2017	2018	EU-SILC	INC	ADM1	22
Europe & Central Asia	Georgia	GEO	2018	2018	HIS	CONS	ADM1/ADMx	10
Europe & Central Asia	Germany	DEU	2016	2018	LIS	INC	ADM1	16
Europe & Central Asia	Greece	GRC	2017	2018	EU-SILC	INC	ADMx/NUTS	4
Europe & Central Asia	Hungary	HUN	2017	2018	EU-SILC	INC	ADMx/NUTS	3
Europe & Central Asia	Iceland	ISL	2015	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Ireland	IRL	2016	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Italy	ITA	2017	2018	EU-SILC	INC	ADMx/NUTS	5
Europe & Central Asia	Kazakhstan	KAZ	2017	2018	HBS	CONS	ADM1/DK	16
Europe & Central Asia	Kosovo	XKX	2017	2018	HBS	CONS	GADM1	7
Europe & Central Asia	Kyrgyz Republic	KGZ	2018	2018	KIHS	CONS	ADM1/GADM1	9
Europe & Central Asia	Latvia	LVA	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Lithuania	LTU	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Luxembourg	LUX	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Moldova	MDA	2018	2018	HBS	CONS	GADMx	4
Europe & Central Asia	Montenegro	MNE	2015	2018	SILC-C	INC	ADM1/ADMx	4
Europe & Central Asia	Netherlands	NLD	2017	2018	EU-SILC	INC	ADM0	1

Region	Economy	Country	Survey year	Lineup year	Survey name	Welfare type	Geospatial level	Number of areas
Europe & Central Asia	North Macedonia	MKD	2017	2018	SILC-C	INC	ADM1/ADMx	8
Europe & Central Asia	Norway	NOR	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Poland	POL	2017	2018	EU-SILC	INC	ADMx/NUTS	7
Europe & Central Asia	Portugal	PRT	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Romania	ROU	2017	2018	EU-SILC	INC	ADMx/NUTS	4
Europe & Central Asia	Russian Federation	RUS	2015	2018	HBS	CONS	ADM1/ADMx/GADM1	82
Europe & Central Asia	Serbia	SRB	2018	2018	HBS	CONS	ADMx	4
Europe & Central Asia	Slovak Republic	SVK	2016	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Slovenia	SVN	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Spain	ESP	2017	2018	EU-SILC	INC	ADM1	19
Europe & Central Asia	Sweden	SWE	2017	2018	EU-SILC	INC	ADMx/NUTS	3
Europe & Central Asia	Switzerland	CHE	2017	2018	EU-SILC	INC	ADM0	1
Europe & Central Asia	Tajikistan	TJK	2015	2018	HSITAFIEN	CONS	ADM1/GADM1	5
Europe & Central Asia	Turkey	TUR	2018	2018	HICES	CONS	ADM0	1
Europe & Central Asia	Turkmenistan	TKM	1998	2018	LSMS	CONS	ADM0	1
Europe & Central Asia	Ukraine	UKR	2014	2018	HLCS	CONS	ADM1/GADM1	25
Europe & Central Asia	United Kingdom	GBR	2016	2018	EU-SILC	INC	ADMx/NUTS	12
Europe & Central Asia	Uzbekistan	UZB	2003	2018	HBS	CONS	ADM1	14
Latin America & Caribbean	Argentina	ARG	2018	2018	EPHC-S2	INC	ADM0	1
Latin America & Caribbean	Belize	BLZ	1999	2018	LFS	INC	ADM1	6
Latin America & Caribbean	Bolivia	BOL	2018	2018	EH	INC	ADM1	8
Latin America & Caribbean	Brazil	BRA	2018	2018	PNADC-E1	INC	ADM1	27
Latin America & Caribbean	Chile	CHL	2017	2018	CASEN	INC	ADM1/ADM2/ADMx	16
Latin America & Caribbean	Colombia	COL	2018	2018	GEIH	INC	ADM1/GADM2	24
Latin America & Caribbean	Costa Rica	CRI	2018	2018	ENAHO	INC	DKx	6
Latin America & Caribbean	Dominican Republic	DOM	2018	2018	ECNFT-Q03	INC	ADMx	4
Latin America & Caribbean	Ecuador	ECU	2018	2018	ENEMDU	INC	ADM1	24
Latin America & Caribbean	El Salvador	SLV	2018	2018	EHPM	INC	ADM1	14
Latin America & Caribbean	Guatemala	GTM	2014	2018	ENCOVI	INC	ADM1	22

Region	Economy	Country code	Survey year	Lineup year	Survey name	Welfare type	Geospatial level	Number of areas
Latin America & Caribbean	Guyana	GUY	1998	2018	GLSMS	INC	ADM0	1
Latin America & Caribbean	Haiti	HTI	2012	2018	ECVMAS	CONS	ADM1	10
Latin America & Caribbean	Honduras	HND	2018	2018	EPHPM	INC	ADM0	1
Latin America & Caribbean	Jamaica	JAM	2004	2018	SLC	CONS	ADM0	1
Latin America & Caribbean	Mexico	MEX	2018	2018	ENIGHNS	INC	ADM1	32
Latin America & Caribbean	Nicaragua	NIC	2014	2018	EMNV	INC	ADMx	4
Latin America & Caribbean	Panama	PAN	2018	2018	EH	INC	ADM1/GADM1	13
Latin America & Caribbean	Paraguay	PRY	2018	2018	EPH	INC	ADM1/ADM2/ADMx	8
Latin America & Caribbean	Peru	PER	2018	2018	ENAHO	INC	ADM1	25
Latin America & Caribbean	St. Lucia	LCA	2016	2018	SLC-HBS	INC	ADM0	1
Latin America & Caribbean	Suriname	SUR	1999	2018	EHS	INC	ADM0	1
Latin America & Caribbean	Trinidad and Tobago	TTO	1992	2018	SLC	INC	ADM0	1
Latin America & Caribbean	Uruguay	URY	2018	2018	ECH	INC	ADM0	1
Latin America & Caribbean	Venezuela, RB	VEN	2006	2018	HIES	INC	ADM1/ADMx	9
Middle East & North Africa	Algeria	DZA	2011	2018	ENCNVM	CONS	ADM0	1
Middle East & North Africa	Djibouti	DJI	2017	2018	EDAM	CONS	DKx	6
Middle East & North Africa	Egypt, Arab Rep.	EGY	2017	2018	HIECS	CONS	ADMx	4
Middle East & North Africa	Iran, Islamic Rep.	IRN	2017	2018	HEIS	CONS	ADM1/ADMx	31
Middle East & North Africa	Iraq	IRQ	2012	2018	IHSES	CONS	ADM1	18
Middle East & North Africa	Israel	ISR	2016	2018	LIS	INC	ADM1	7
Middle East & North Africa	Jordan	JOR	2010	2018	HEIS	CONS	ADMx	4
Middle East & North Africa	Lebanon	LBN	2011	2018	HBS	CONS	ADM1	6
Middle East & North Africa	Malta	MLT	2017	2018	EU-SILC	INC	ADM0	1
Middle East & North Africa	Morocco	MAR	2013	2018	ENCDM	CONS	DKx	12
Middle East & North Africa	Syrian Arab Republic	SYR	2004	2018	HIES	CONS	ADM1/ADMx	13
Middle East & North Africa	Tunisia	TUN	2015	2018	NSHBCSL	CONS	ADMx	7
Middle East & North Africa	United Arab Emirates	ARE	2014	2018	HIES	INC	ADM0	1
Middle East & North Africa	West Bank and Gaza	PSE	2016	2018	PECS	CONS	ADMx	2
Middle East & North Africa	Yemen, Rep.	YEM	2014	2018	HBS	CONS	ADM1/ADM2/ADMx	22

Region	Economy	Country code	Survey year	Lineup year	Survey name	Welfare type	Geospatial level	Number of areas
North America	Canada	CAN	2013	2018	LIS	INC	ADM1	10
North America	United States	USA	2016	2018	LIS	INC	ADM1	51
South Asia	Bangladesh	BGD	2016	2018	HIES	EXP	ADM1	7
South Asia	Bhutan	BTN	2017	2018	BLSS	CONS	ADM1	20
South Asia	India	IND	2011	2015	NSS-SCH1	CONS	ADM1/ADMx	35
South Asia	Maldives	MDV	2016	2018	HIES	EXP	ADM1	21
South Asia	Nepal	NPL	2010	2018	LSS-III	EXP	ADM1	5
South Asia	Pakistan	PAK	2015	2018	PSLM	EXP	ADM1	4
South Asia	Sri Lanka	LKA	2016	2018	HIES	CONS	ADM2	25
Sub-Saharan Africa	Angola	AGO	2018	2018	IDREA	CONS	ADM1	18
Sub-Saharan Africa	Benin	BEN	2015	2018	EMICOV	CONS	ADM1	12
Sub-Saharan Africa	Botswana	BWA	2015	2018	BMTHS	CONS	GADM2/GADMx	7
Sub-Saharan Africa	Burkina Faso	BFA	2014	2018	EMC	CONS	ADM1	13
Sub-Saharan Africa	Burundi	BDI	2013	2018	ECVMB	CONS	ADM1	17
Sub-Saharan Africa	Cabo Verde	CPV	2015	2018	IDRF	CONS	ADM1	9
Sub-Saharan Africa	Cameroon	CMR	2014	2018	ECAM-IV	CONS-EXP	ADM1	10
Sub-Saharan Africa	Central African Republic	CAF	2008	2018	ECASEB	EXP	ADMx	7
Sub-Saharan Africa	Chad	TCD	2011	2018	ECOSIT-III	CONS	GADM1/GADMx	20
Sub-Saharan Africa	Comoros	СОМ	2013	2018	EESIC	CONS-EXP	ADM1	3
Sub-Saharan Africa	Congo, Dem. Rep.	COD	2012	2018	E123	CONS	ADM1	11
Sub-Saharan Africa	Congo, Rep.	COG	2011	2018	ECOM	CONS	ADM1	12
Sub-Saharan Africa	Côte d'Ivoire	CIV	2015	2018	ENV	CONS-EXP	ADM1	14
Sub-Saharan Africa	Eswatini	SWZ	2016	2018	HIES	CONS	ADM1	4
Sub-Saharan Africa	Ethiopia	ETH	2015	2018	HICES	CONS	ADM1	11
Sub-Saharan Africa	Gabon	GAB	2017	2018	EGEP	CONS	ADM2/ADMx	7
Sub-Saharan Africa	Gambia, The	GMB	2015	2018	IHS	CONS	GADM1/GADM2/GADMx	8
Sub-Saharan Africa	Ghana	GHA	2016	2018	GLSS-VII	CONS	ADM1	10
Sub-Saharan Africa	Guinea	GIN	2012	2018	ELEP	CONS	ADM1	8
Sub-Saharan Africa	Guinea-Bissau	GNB	2010	2018	ILAP-II	CONS	ADM1	9

Region E	conomy	Country	Survey year	Lineup year	Survey name	Welfare type	Geospatial level	Number of areas
Sub-Saharan Africa K	(enya	KEN	2015	2018	IHBS	CONS-EXP	ADM1/GADM1	47
Sub-Saharan Africa Le	esotho	LSO	2017	2018	CMSHBS	CONS	ADM1	10
Sub-Saharan Africa Li	iberia	LBR	2016	2018	HIES	CONS	ADM1/ADM2	16
Sub-Saharan Africa M	/ladagascar	MDG	2012	2018	ENSOMD	CONS	ADM1	22
Sub-Saharan Africa M	/lalawi	MWI	2016	2018	IHS-IV	CONS	GADM1/ADM2	28
Sub-Saharan Africa M	⁄lali	MLI	2009	2018	ELIM	CONS-EXP	ADM1	9
Sub-Saharan Africa M	<i>l</i> auritania	MRT	2014	2018	EPCV	CONS	ADM1	13
Sub-Saharan Africa M	/lauritius	MUS	2017	2018	HBS	CONS	ADM1	10
Sub-Saharan Africa M	/lozambique	MOZ	2014	2018	IOF	CONS-EXP	ADM1/ADM2	11
Sub-Saharan Africa N	lamibia	NAM	2015	2018	NHIES	CONS	ADM1	13
Sub-Saharan Africa N	liger	NER	2014	2018	ECVMA	CONS-EXP	ADM1	8
Sub-Saharan Africa N	ligeria	NGA	2018	2018	LSS	CONS	ADM1	37
Sub-Saharan Africa R	Rwanda	RWA	2016	2018	EICV-V	CONS	ADM2	30
Sub-Saharan Africa S	São Tomé and Principe	STP	2017	2018	IOF	CONS	ADM1	2
Sub-Saharan Africa S	Senegal	SEN	2011	2018	ESPS-II	CONS-EXP	ADM1	14
Sub-Saharan Africa S	Seychelles	SYC	2013	2018	HBS	INC	GADMx	6
Sub-Saharan Africa Si	Sierra Leone	SLE	2018	2018	SLIHS	CONS	ADM2/ADMx	13
Sub-Saharan Africa S	South Africa	ZAF	2014	2018	LCS	CONS	ADM1	9
Sub-Saharan Africa S	South Sudan	SSD	2009	2018	NBHS	CONS-EXP	ADM1	10
Sub-Saharan Africa S	Sudan	SDN	2009	2018	NBHS	CONS	ADM1	15
Sub-Saharan Africa Ta	anzania	TZA	2018	2018	HBS	CONS	ADM1/GADMx	26
Sub-Saharan Africa To	ogo	TGO	2015	2018	QUIBB	CONS-EXP	ADM1/ADM2/ADMx	6
Sub-Saharan Africa U	Jganda	UGA	2016	2018	UNHS	CONS	ADMx	4
Sub-Saharan Africa Za	Zambia	ZMB	2015	2018	LCMS-VII	CONS-EXP	ADM1/ADMx	10
Sub-Saharan Africa Zi	imbabwe	ZWE	2017	2018	PICES	CONS	ADM1	10