Breaking through the 60+ ceiling

Assessment of disaggregation of SDG indicators on older people using household surveys

Key messages

- **Granular disaggregation of SDG indicators on older people by sex, age groups, disability and location using household survey data is not possible due to a combination of factors:**
  - **Small numbers of older people in sample sizes: the number of cases fall within each age cohort, making the 'oldest-old' group nearly invisible;**
  - **Key data about older women and men, as well as related information about their experiences, is missing from a proportion of survey samples;**
  - **Existing gender and rural-urban inequalities within the older population may result in insufficient numbers of cases in a survey sample, preventing a more nuanced analysis of inequalities.**
- **Global reporting of SDGs 3.8.2 (household health expenditure), 4.4.3 (educational attainment) and 6.1.1 (household access to drinking water) can be more age inclusive.**

- **National Statistical Offices and their partners need to examine how national household surveys, individually and as a system, include older people and marginalised groups, and develop practical solutions to strengthen disaggregation across age, sex, disability and location, focusing on:**
  - **Approaches to minimise missing data on older population groups during collection and analysis;**
  - **Analytical and cost-benefit assessment of different approaches to improve or increase coverage of older people in household surveys, e.g. 'booster' samples, age-specific modules, and other methodologies;**
  - **Evidence on both the potential and limitations of new methodologies to produce more granular assessments of intersecting inequalities within the older population, e.g. small area estimation.**

Background

Household surveys collect important information on the state of the population, including older women and men, their families and communities. Statistics generated from these surveys inform policy, programmes and one-third (80) of all (232) indicators across 13 of 17 Sustainable Development Goals (SDGs).[1]

However, limitations of the household surveys (e.g. age caps, gaps in coverage, limited information on intrahousehold dynamics) and the subsequent production of statistics (e.g. highly aggregated analysis, unavailable micro-data) mean that experiences of older people, at-risk and marginalised groups are almost invisible in data.

When statistics on older women and men are presented, they typically focus on binary categories like 'woman/man', 'disabled/able', 'young/old', etc. Such disaggregation fails to consider the multiple and intersecting identities many individuals may hold and how identities can interplay with norms and structures to create a complex web of disadvantages.

Presenting information on older people in a non-granular and generalised way, such as "60+", reinforces an oversimplified picture of inequalities. It yields inadequate data and becomes a barrier to the inclusion of at-risk and marginalised groups in policy and programme responses, as well as in monitoring progress towards SDGs.

In 2021, in partnership with Statistics Without Borders, HelpAge International conducted a technical assessment to build an understanding of the 'best possible' level of disaggregation of SDG indicators relevant to older people. Together, we reviewed eight surveys from The Gambia, India, Sudan, Tanzania, and Ukraine, including surveys of the labour force, household income and expenditure, and the Demographic and Health Survey (DHS).

The findings from these surveys aim to contribute to the processes already underway to improve production of socio-economic statistics:

- The Titchfield City Group on Ageing and Age-disaggregated data is working to develop tools and guidance to strengthen data on older people;
- The UN Intersecretariat Working Group on Household Surveys is exploring how the household survey and the enabling environment need to evolve to become more policy-relevant in the next decade;
- The Comprehensive Review of SDG indicators in 2025;

- The UN Decade of Healthy Ageing 2021-2030 aims to foster healthy ageing and improve the wellbeing of older people including by strengthening research and data on older women and men.

Study objectives

The overarching aim of this assessment was to build greater evidence of disaggregation of household survey data by age in intersection with sex, disability and other characteristics, and to answer specific questions including:

- What is the most granular and statistically robust level of disaggregation of age, sex, and disability for older people?
- What are the most appropriate age bands and upper age cohorts?
- What is the most granular level of age, sex, and disability when geographic location (e.g. urban/rural) is included?

Methodology

Surveys and country selection

The assessment focused on three types of household surveys – labour force survey (LFS), household income and expenditure survey (HIES), and the Demographic and Health (DHS) survey, and a census – carried out in five countries: The Gambia, India, Sudan, Tanzania, and Ukraine. For country-specific information see Annex A.

The five countries are classified as low- and middle-income countries and were selected to represent different demographic contexts where the share of older people is less than 5 per cent of the population (e.g. The Gambia and Tanzania), 5 to 9 per cent (e.g. India and Sudan), and greater than 9 per cent (Ukraine).[2]

While the aspiration was to use the latest datasets across a broad group of countries, the lack of open access to microdata and/or the availability of survey documentation in English meant that some of analysed surveys are more than 5 years old and it was not possible to include a Latin American country.

Indicators and analytical approach

The assessment analysed four SDG indicators – two at an individual level (SDG 8.5.1 on hourly earnings and SDG 4.4.3 on educational attainment), and two at a household level (SDG 6.1.1 on access to drinking water and SDG 3.8.2 on health expenditure).[3] The indicators were selected based on the relevance to older people and comparability across surveys.

Table 1 demonstrates the level of disaggregation that was tested for each of the indicators. For individual level indicators, the minimum level of disaggregation was the combination of different age cohorts, sex and disability (SADDD).[4] The secondary level of disaggregation included an additional dimension – location – to SADDD. The household level indicators tested disaggregation by different types of households, e.g. one-person household with a person aged 60 and over, two-person household with at least one individual aged 60 and over, etc.

Table 1: Indicators and level of analysis

	Household level indicators	Individual level indicators
	• Proportion of population using safely managed drinking water services (SDG 6.1.1) • Proportion of population with large household expenditure on health as a share of total household expenditure or income (SDG 3.8.2)	• Average hourly earnings of employees, by sex, age, occupation, and persons with disabilities (SDG 8.5.1) • Educational attainment rates by age group and level of education (SDG 4.4.3)
Level of disaggregation	1. NONE - household with no person aged 60+ 2. Single (SNGL) - one-person household aged 60+ 3. Partnered (PRTN) - two-person spouse/partner household with at least one-person aged 60+ 4. Adults (ADLT) - household with a person(s) aged 60+ and person(s) aged 20 and over 5. Minors (MINR) - household with a person(s) aged 60+ and person(s) aged 19 or younger 6. Multigenerational (MLTG) - household with a person(s) aged 60+ living with adults and minors 7. Other (OTHR) - any other type of living arrangement of person aged 60+ (e.g. institutional setting, informal settlement, homeless, etc.)	1. Age: 5-yr band: 60-64, 65-69, etc. 10-yr band: 60-69, etc. Broad bands: 60+, 70+, etc. 2. Sex (male/female) 3. Disability (as defined by a specific survey) 4. Location (urban/rural)

While the researchers aimed to construct the SDGs indicators in accordance with official methodologies, and to produce estimates following the best statistical practices, compromises had to be made.

The estimates presented are therefore for illustrative purposes only and should not be used to inform policy or programmes in the five countries. This does not negate the overall objective of the exercise: to understand the best possible level of data disaggregation in relation to older people.

Data processing and statistical analysis

The process was split into two stages. Stage one included data cleaning and generation of 'bins'. Each bin was aggregated according to the disaggregation specification in the Table 1 with a minimum size of 150 samples. The minimum sample criteria enabled the bin to be considered as statistically significant for extracting inference during stage two. If the bin could not include enough samples, it was collapsed with another bin.

Once the bins were created, the second stage tested statistical robustness of each group to identify meaningful differences between the groups. See individual survey findings reports and statistical tables for the results of the significance tests in the Research documentation section below.

Research documentation

For consistency and clarity purposes, the following technical brief focuses on the analysis of SDG indicators from the household surveys. Findings from the analysis of non-SDG indicators and the census are available along with other project documentation in links below:

Terms of reference

Findings reports

Statistical tables

Findings

Disaggregation of SDGs 4.4.3 and 8.5.1

Older people are included in household surveys. Like other population groups they participate in society, including in the labour market. The analysis of labour force surveys demonstrates that older women and men with and without disability, continue working into their 70s and 80s. Yet, the "working-age population" continues to be defined as 15-64.[5] This ageist definition reinforces the stereotype that people aged 65 and over are economically inactive, dependent and frail, rather than active and healthy as per the population aged 15-64.

Table 2 presents general findings across the analysed surveys for SDG 8.5.1 (hourly earnings) and SDG 4.4.3 (educational attainment). The survey specific results are presented in Annexes B and C.

Disaggregation of average hourly earnings by sex, disability, age, and occupation/industry (or by age alone) was not possible for three of the four analysed surveys, primarily due to insufficient data. Earnings data for older people is available for 81 individuals in The Gambia's LFS, 2018, 49 in Tanzania's National Panel Survey (NPS), 2014, and 11 in Tanzania's Survey of Household Welfare and Labour (SHWALITA), 2007.

On the other hand, information on educational attainment is better reported and could be disaggregated by sex and 10-yr cohorts up to age 80+ for the two analysed surveys.

Disaggregation by an additional variable, location, was only possible for the educational attainment indicator. For the two analysed surveys, data was disaggregated by 10-yr cohorts, 60-69 and 70-79, and location.

For three of four surveys, the earnings indicator could not be assessed by intersection of location, sex, age and disability due to insufficient data.

It is important to explicitly mention findings on disability data. The information on the disability status is either not collected (Tanzania's DHS, 2015, and SHWALITA, 2007), or when collected, it is incomplete. For example, The Gambia's LFS, 2018, is missing disability information for 28% of the sample,

while Tanzania's NPS 2014 is missing 16% of data. One survey (India's NSS, 2011) only asked about disability status as a reason for not working.

Table 2: Generalised results for SDGs 4.4.3 and 8.5.1

	SDG 4.4.3 educational attainment	SDG 8.5.1 hourly earnings
The most granular level of disaggregation by sex, age and disability	Possible to disaggregate by sex and 10-yr bands (60-69, 70-79, 80+/80-89) for all (2) surveys	Not possible to disaggregate by age, sex, and disability for 3 of 4 surveys.
The most granular level of disaggregation by sex, age, disability and location	Possible to disaggregate by location and 10-yr bands (60-69, 70-79) for all (2) surveys	Not possible to disaggregate by age, sex, disability and location for 3 of 4 surveys.
Other findings	Disability data not collected for one survey (Tanzania's DHS, 2015), and collected but missing for the second survey (Sudan's HHHS, 2010)	Insufficient data as earnings were reported by few people aged 60+ Disability information not collected by 2 surveys (NSS 2011, SHWALITA 2007) and incomplete for the other 2 surveys that collected this data (The Gambia, 2018, and Tanzania NPS, 2014)

Disaggregation of SDGs 3.8.2 and 6.1.1

Table 3 presents general findings for SDG 3.8.2 and SDG 6.1.1. Survey specific results are presented in Annexes D and E.

It was possible to disaggregate household health expenditure (SDG 3.8.2) by at least two types of living arrangements (i.e. households without older persons and households with three or more members including an older person) for all four analysed surveys.

Data on household access to drinking water (SDG 6.1.1) was disaggregated by location and at least four household types (e.g. single older person household, two-person household including an older person, household with no older persons, and households with three or more members including an older person) for three of four surveys.

Generally, the majority of analysed households did not have older members. Survey samples for countries with a share of older population below 5% (The Gambia's HIS, 2015, and Tanzania's NPS, 2014) had 10 or fewer single older person-households and two-person households making it statistically unviable to disaggregate.

Surveys with available geographic location information uncovered statistically significant urban-rural differences including in the context of ageing. Urban residents were more likely to have access to clean water than rural households. However, single older person households were consistently less likely to have access to clean water in urban and rural settings (Sudan's HHHS, 2010 and Ukraine's DHS, 2007). This highlights the importance of geography as an additional factor to understand inequality between population groups.

Missing data is an issue for the estimation of household-level indicators just as it is for individual-level indicators. It is especially evident in relation to health expenditure data. The Gambia's HS, 2015, has data for 9% for individuals aged 60+, while India's NSS, 2011, is missing 44% of data on inpatient expenditure for a single-person household and 34% for a two-person household. The Gambia's IHS, 2015, is missing 87% of data for the drinking water indicator.

Table 3: Generalised results for SDGs 3.8.2 and 6.1.1

	SDG 3.8.2 household health expenditure	SDG 6.1.1 household access to drinking water
The most granular level of disaggregation by type of household	Possible to disaggregate by at least two different types of household (hh without older persons and hh with 3+ members incl. older person) for all four surveys	Possible to disaggregate by location and at least four different types of household (single person hh, two-person hh, hh without older persons, and hh with 3+ members incl. older person) for three of four surveys

Other findings

The research has re-confirmed other broadly known insights. First, gender dynamics are closely linked with the granularity of disaggregation.

Older women continue to work into their 70s and 80s, albeit at a lower rate than men of the same age. Table 4 demonstrates how this gender difference 'translates' in the disaggregation of statistics on wages from India's NSS, 2011.

It is possible to disaggregate average hourly earnings for men aged 60-64 across four different industries (farming, forestry or fishing; manufacturing; construction; and other). However, for women aged 60-64, the industry categories must be 'collapsed' into three types to enable statistically robust analysis. Additionally, the disaggregation by industry for women stops at 75+, but at 80+ for men. This makes participation of the oldest-old group of women across different sector invisible.

Table 4: Disaggregation of average reported weekly earnings by sex, age and types of industry, analysis of India's NSS, 2011

	Men	Women
60-64	4 industries	3 industries
65-69	4 industries	2 industries
70-74	2 industries	1 industry
75-79	2 industries	no disaggregation by industry
Upper age bracket	80+, no disaggregation by industry	75+, no disaggregation by industry

Secondly, population estimates based on a household survey data differ from the census. Table 5 presents estimated population size of older women and men with disabilities based on the analysis of the Tanzania Census 2012 data and the NPS in 2014. Recognising minor differences between data sources, the difference in estimates is stark, raising questions about accuracy of household surveys to estimate at-risk population groups.

Table 5: Comparison of the Tanzania Census 2012 and Tanzania's NPS 2014 results

	Women with disabilities, by age					Men with disabilities, by age				
	60-64	65-69	70-74	75-79	80+	60-64	65-69	70-74	75-79	80+
NPS 2014	33,287	17,536	82,062	72,162	68,184	8,824	16,815	9,182	18,685	40,385
Census 2012	15,932	14,801	20,239	14,899	48,881	11,603	10,000	14,300	12,384	32,551

Source: NPS and Census 2012 analysed by SWB. Both NPS and Census included the Washington Short Set of Questions on Disability that consist of six questions assessing difficulties with vision, hearing, mobility, cognition, self-care, and communication. However, the Census did not ask a question on the communication and instead replaced it with a question on "any other difficulty". Therefore, the two numbers are not entirely comparable. Apart from this, both analyses used 'a lot of difficulty' or 'cannot perform' as a threshold for disability.

Third, access to the most recent microdata remains restricted. Three surveys analysed as part of this research are at least 10 years old. The demographic shift, changes in survey design, and the switch from paper-based to computer-assisted collection over the past decade, could potentially make the findings for these countries look different. However, the most recent data is not always available. Table 6 shows that all three analysed datasets had more recent alternative datasets that were not open to civil society at the time of this study.

Table 6: Comparison of latest surveys available in closed and open domains

	Latest survey without open access listed in ILO microdata catalogue	Latest openly available surveys analysed for the brief
Sudan	Labour Force Survey, 2011	Harmonised household health survey, 2010
Ukraine	Sample survey of the population on economic activity, 2019	DHS, 2007
Tanzania	Employment and Earnings Survey 2014, and Integrated Labour Force Survey, 2014	Survey of Household Welfare and Labour in Tanzania, 2007

Source: ILO microdata catalogue, accessed August 2021.

Discussion and recommendations

Table 7 presents the disaggregation levels of SDGs 3.8.2, 4.4.3, 6.1.1 and 8.5.1 in the Global SDG Indicator Database and the UNESCO Institute for Statistics. None of the indicators examined in the report are disaggregated by age or disability. SDGs 4.4.3 and 8.5.1 are reported by sex and SDG 6.1.1 is disaggregated by location.

The cells highlighted in green represent levels of disaggregation produced by the research that are different from the global reporting. In comparison, the overlap between the research findings and the global reporting in areas where the granular disaggregation is not feasible (cells without highlight) is considerably greater.

This study has clearly identified several issues that individually, but more often in combination with each other, limit statistically robust production of more granular disaggregation of data on older people:

- A small number of older people are included in the survey samples. Generally, the survey samples are representative of the older population, yet this is not sufficient for a more detailed disaggregation by age, sex, disability and location. The number of cases fall with each age cohort, making the 'oldest-old' group nearly invisible. For example, Tanzania's NPS, 2014, included 56 people aged 70-74, 48 individuals aged 75-79, and 45 aged 80+.
- Key data about older women and men, as well as information relating to their experiences, is incomplete. When the information on disability, age, earnings, occupation, health expenditure, and access to water is collected, it is missing for a proportion of the sample. For example, disability information is missing for all older adults in Sudan's HHHS, 2010, while The Gambia's LFS, 2018, is missing occupation information for 89% of the sample.
- Social dynamics, such as gender and urban-rural inequalities are not fully reflected in data. In some instances, disaggregation of data for the oldest-old group of women and older people living in urban areas is not possible due to the small number of cases reflecting a specific social dynamic (e.g. gender differences in employment rates, majority of older adults living in rural areas, etc.).

However, Table 7 also points to a few areas where better disaggregation could be achieved (cells with green highlights). Educational attainment should be reported in 10-year bands up to 80+/80-89. Data on households' access to clean water can be disaggregated by location and at least four types of household, including those with and without older persons. The household health expenditure can be reported for households with and without older persons.

Table 7: Comparison of global reporting of SDG indicators with study results

	Age	Sex	Disability	Location
SDG 3.8.2	NO	NO	NO	NO
SDG 4.4.3	NO	YES	NO	NO
SDG 6.1.1	NO	NO	NO	YES
SDG 8.5.1	NO	YES	NO	NO

Source: UNDESA Statistical Division, The Global SDG Indicators Database, and UNESCO Institute for Statistics, accessed 17 August 2021.

The findings highlight the challenges of using household surveys to understand the situation of diverse population groups, and a broader issue regarding the extent to which national population-based surveys, individually and collectively as a system, include older people and marginalised groups. Practical solutions are needed to break through 60+ ceilings. These should focus on:

- Approaches to minimise missing data during collection, and guidance on imputation of missing information on older population groups;
- Analytical and cost-benefit assessment of different approaches to improve or increase coverage of older people in household surveys. This could include 'booster' samples, ageing-specific modules, and other methodologies;
- The potential and limitations of new methodologies, e.g. small area estimation, to produce more granular assessments of intersecting inequalities within the older population.

Annexures

Annex A: List of analysed household surveys and indicators

Country	Survey	Data source	Indicator
Gambia	Labour Force Survey, 2018	The World Bank (link)	• SDG 8.5.1 Average hourly earnings of employees, by sex, age, occupation and persons with disabilities
	Integrated Household Survey, 2015	The World Bank (link)	• SDG 6.1.1 Proportion of population using safely managed drinking water services • SDG 3.8.2 Proportion of population with large household expenditure on health as a share of total household expenditure or income
India	National Sample Survey Employment and Unemployment NSS 68 round, July 2011 – June 2012	Ministry of Statistics and Programme Implementation (link)	• SDG 8.5.1 Average hourly earnings of employees, by sex, age, occupation and persons with disabilities • SDG 3.8.2 Proportion of population with large household expenditure on health as a share of total household expenditure or income • Personal economic independence (variable b10_q5)
Sudan	Harmonized Household Health Survey, 2010	Economic Research Forum (link)	• SDG 6.1.1 Proportion of population using safely managed drinking water services • SDG 4.4.3 Educational attainment rates by age group and level of education
Tanzania	Demographic and Health Survey, 2015-16	The DHS program (link)	• SDG 6.1.1 Proportion of population using safely managed drinking water services • SDG 4.4.3 Educational attainment rates by age group and level of education
	Survey of Household Welfare and Labour in Tanzania, 2007-2008	The World Bank (link)	• SDG 3.8.2 Proportion of population with large household expenditure on health as a share of total household expenditure or income • SDG 8.5.1 Average hourly earnings of employees, by sex,

			age, occupation and persons with disabilities
	National Panel Survey, 2014-2015, wave 4 – extended panel	The World Bank (link)	• SDG 3.8.2 Proportion of population with large household expenditure on health as a share of total household expenditure or income • SDG 8.5.1 Average hourly earnings of employees, by sex, age, occupation and persons with disabilities
	Census, 2012	IPUMS	• SDG 6.1.1 Proportion of population using safely managed drinking water services (variable TZ2012A_WATSUPIMP) • Employment status (variable TZ2012A_EMPSTAT)
Ukraine	Demographic and Health Survey, 2007	The DHS program (link)	• SDG 6.1.1 Proportion of population using safely managed drinking water services

Annex B: Detailed results for SDG 8.5.1 – Average hourly earnings of employees, by sex, age, occupation, and persons with disabilities

	Gambia	India	Tanzania	
	LFS 2018 N (hh roster cases)=57,773, n (hh roster cases age 60+) = 3,060, n(respondents 60+)=976	**NSS 2011** N(household roster)=456,999, n(60+)=38,028	**SHWALITA 2007** N(household roster cases with age information) =21,264, n(60+)=1,334	**NPS 2014** N=4,722, n(60+)=293
Cross-sectional disaggregation by sex, age and disability				
5-year age cohorts, sex and disability	Insufficient data. Partial disaggregation by sex and disability for 60-64	Not analysed due to lack of disability data	Not analysed due to lack of disability data	Not analysed due to low response rate
10-year age cohorts, sex and disability	Insufficient data. Partial disaggregation by sex and disability for 60-64	Not analysed due to lack of disability data	Not analysed due to lack of disability data	Not analysed due to low response rate
5-year age cohorts and disability	Insufficient data	Not analysed due to lack of disability data	Not analysed due to lack of disability data	Not analysed due to low response rate
10-year age cohorts and disability	Insufficient data	Not analysed due to lack of disability data	Not analysed due to lack of disability data	Not analysed due to low response rate
5-year age cohorts and sex	Insufficient data	Possible to disaggregate Men: 60-64, 65-69, 70-74, 75-79, 80+ Women: 60-64, 65-69, 70-74, 75+	Not possible to produce a statistically robust disaggregation due to a partial data availability	Not analysed due to low response rate
10-year age cohorts and sex	Insufficient data	Possible to disaggregate Men: 60-69, 70-79, 80+ Women: 60-69, 70-79, 75+	Not possible to produce a statistically robust disaggregation due to a partial data availability	Not analysed due to low response rate
5-year age cohorts	Insufficient data	Not analysed	Not possible to produce a statistically robust disaggregation due to a partial data availability	Not analysed due to low response rate
10-year age cohorts	Insufficient data	Not analysed	Not possible to produce a statistically robust disaggregation due to a partial data availability	Not analysed due to low response rate

Single cohort 60+, sex and/or disability	Not analysed	Not analysed due to lack of disability data	Not possible to produce a statistically robust disaggregation due to a partial data availability	Not possible to produce statistically robust disaggregation due to low response rate
Single cohort 60+	Not analysed	Not analysed	Not possible to produce statically robust disaggregation	Not possible to produce statically robust disaggregation
Cross-sectional disaggregation by sex, age, disability, and location				
5-year age cohorts, sex, disability and location	Insufficient data. Partial disaggregation by sex, disability and location for 60-64	Not analysed due to lack of disability data	Not analysed due to lack of disability data	Not analysed due to lack of location variable in the dataset
10-year age cohorts, sex, disability and location	Insufficient data. Partial disaggregation by sex, disability and location for 60-69	Not analysed due to lack of disability data	Not analysed due to lack of disability data	Not analysed due to lack of location variable in the dataset
5-year age cohorts, sex and location	Insufficient data	Partial disaggregation: Men: 60-64 Women: 60-64	Not possible to produce statistically robust disaggregation due to partial data availability	Not analysed due to lack of location variable in the dataset
10-year age cohorts, sex and location	Insufficient data	Partial disaggregation: Men: 60-69 Women: 60-69	Not possible to produce statistically robust disaggregation due to partial data availability	Not analysed due to lack of location variable in the dataset
5-year age cohorts and location	Insufficient data	Not analysed	Not possible to produce statistically robust disaggregation due to partial data availability	Not analysed due to lack of location variable in the dataset
10-year age cohorts and location	Insufficient data	Not analysed	Not possible to produce statistically robust disaggregation due to partial data availability	Not analysed due to lack of location variable in the dataset

Annex C: Detailed results for SDG 4.4.3 – Educational attainment rates by age group and level of education

	Sudan	Tanzania
	HHHS 2010 N(60+)=5,124	**DHS 2015-16** n(60+)= 4,018
Cross-sectional disaggregation by sex, age and disability		
5-year age cohorts, sex and disability	Not analysed due to missing disability data	Not analysed due to lack of disability data
10-year age cohorts, sex and disability	Not analysed due to missing disability data	Not analysed due to lack of disability data
5-year age cohorts and disability	Not analysed due to missing disability data	Not analysed due to lack of disability data
10-year age cohorts and disability	Not analysed due to missing disability data	Not analysed due to lack of disability data
5-year age cohorts and sex	Not enough data	Possible to disaggregate by 60-64, 65-69, 70+
10-year age cohorts and sex	Possible to disaggregate by sex and age cohorts 60-69, 70-79 and 80-89	Possible to disaggregate by 60-69, 70-79, 80+
5-year age cohorts	Not analysed	Possible to disaggregate by 60-64, 65-69, with upper band 70+
10-year age cohorts	Possible to disaggregate	Possible to disaggregate by 60-69, 70-79, with upper band 80+
Single cohort 60+, sex and/or disability	Not analysed due to missing disability data	Not analysed due to lack of disability data
Single cohort 60+	Possible to disaggregate	Possible to disaggregate
Cross-sectional disaggregation by sex, age, disability, and location		
5-year age cohorts, sex, disability and location	Not analysed due to missing disability data	Not analysed due to lack of disability data
10-year age cohorts, sex, disability and location	Not analysed due to missing disability data	Not analysed due to lack of disability data
5-year age cohorts, sex and location	Not analysed	Partial data availability. Possible to disaggregate by gender and rural location for cohorts 60-64 and 60-69. Not possible to disaggregate for urban residents due to small sample size
10-year age cohorts, sex and location	Partial data availability	Partial data availability. Possible to disaggregate by gender and urban and rural location for 60-69; by gender and rural location for 70-79

5-year age cohorts and location	Not analysed	Partial data availability. Possible to disaggregate by location for cohorts, 60-64 and 65-69, with upper band 70+
10-year age cohorts and location	Possible to disaggregate by location and age cohorts 60-69, 70-79, and 80-89	Possible to disaggregate by location for cohorts 60-69 and 70-79

Annex D: Detailed results for SDG 6.1.1 - Proportion of population using safely managed drinking water services

	Gambia	Sudan	Tanzania	Ukraine
	IHS 2015 N(hh)=13,281	**HHHS 2010** N(hh)=14,778	**DHS 2015-16** N(hh)=12,563	**DHS 2007** N(hh)=13,379
The most granular level of disaggregation by the type of household	• Not analysed. 87% of data on drinking water is missing	• Possible to disaggregate across 7 different types of households. • Possible to disaggregate by location but only across 4 types of hh: (i) single-person, (ii) two-person, (iii) hh without an older person, and (iv) hh with 3+ members including older person	• Possible to disaggregate across 7 different types of households, including by urban and rural location	• Possible to disaggregate by five types of hhs and urban and rural location: (i) hh without older members (n=7229); (ii) single older person hh (n=2199); (iii) a married couple hh where at least one person is aged 60+ (n=1425); (iv) hh with an older person and persons aged 19-59 (n=1396); (v) other hh (n=1017)

Annex E: Detailed results for SDG 3.8.2 – Proportion of population with large household expenditure on health as a share of total household expenditure or income

	Gambia	India	Tanzania	
	IHS 2015 N(hh)=13,281	**NSS 2011** N (hh)=70,741	**SHWALITA 2007** N(hh)=4,032	**NPS 2014**
The most granular level of disaggregation by type of household	• Possible to disaggregate by two types of households: (i) hh with no older persons, and (ii) hh with 3+ members including older person • Possible to disaggregate by location and two types of hh: (i) hh with no older person, and (ii) hh with 3+ members including older person.	• Possible to disaggregate across three types of hh: (i) hh with no older members; (ii) hh consisting of a single older person; and (iii) hh with 3+ members including older person • Possible to disaggregate by type of expenditure (inpatient or outpatient), three types of hh (hh with no older persons; hh consisting of a single older person; and hh with 3+ members including older person and location	• Possible to disaggregate by 4 types of households: (i) hh with no older person; (ii) single person hh; (iii) two-person hh; and (iv) hh with 3+ members including older person • Analysis by location was not possible due to lack of clarity regarding this information	• Possible to disaggregation by 2 largest types of households: (i) households with no older members (n=753), and (ii) households consisting of an older person, an adult and child (n=160) • Not possible to disaggregate across the rest 5 household types in a statistically robust way due to the small sample sizes

Endnotes

[1] Inter-Secretariate Working Group on Household Survey, Positioning Household Surveys for the Next Decade, Annotated Outline, February 2021, https://unstats.un.org/unsd/statcom/52nd-session/documents/BG-3l-Positioning_household_surveys-E.pdf

[2] The year of the population estimates corresponds to the respective survey's year or two years prior to or after the survey.

[3] In some cases, data for the relevant SDG indicators was not collected by a survey or census, and a replacement indicator was identified. Replacement indicators include: 'state of economic independence' for the India National Sample Survey 71 round; and employment status for the Tanzania Census. More information is available in Annex A.

[4] Sex-, Age- and Disability-Disaggregated Data (SADDD) refers to the analysis and reporting of population statistics at the intersection of sex, age cohorts, and disability status. More information can be found in HelpAge SADDD minimum standards and guidance, https://www.helpage.org/silo/files/sex-age-and-disability-disaggregated-data.pdf

[5] OECD defines working-age as 15-64, https://www.oecd-ilibrary.org/social-issues-migration-health/working-age-population/indicator/english_d339918b-en#:~:text=The%20working%20age%20population%20is%20defined%20as%20those%20aged%2015%20to%2064, Accessed 22 March 22, 2021

HelpAge International is a global network of organisations promoting the right of all older people to lead dignified, healthy and secure lives.

Published by HelpAge International

www.helpage.org

Registered charity no. 288180

The technical brief was written by consultant, Alex Mihnovits. The brief may not reflect the views of HelpAge International and any errors are attributed to the consultant. The consultant and HelpAge International are grateful to:

Volunteers at Statistics Without Borders for conducting the analysis and producing the technical reports that informed this brief:

Keri Wheatley, Lead Project and Client Manager
Alexander Newton, Backup Project and Client Manager
Preetam Debasish Saha Roy, Statistical Consultant
Richard Arthur Griffin, Statistical Consultant

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Data providers: the DHS Program; Economic Research Forum; India Ministry of Statistics and Programme Implementation; Minnesota Population Center, Integrated Public Use Microdata Series, International; the World Bank.

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