

# Sierra Leone 2018

## 1 Survey Description

**Survey:** Sierra Leone Integrated Household Survey (SLIHS) 2018, carried out by Statistics Sierra Leone (Stats SL)

**Link to the document:** <https://www.statistics.sl/index.php/sierra-leone-integrated-household-survey-slihs.html>

**Sample:** The survey was conducted between January and December 2018. The SLIHS 2018 collects information from each district and is nationally representative. The sample considered is restricted to adult individuals aged 18 to 80 with information about consumption and circumstances., 20,695 individuals in the total sample and 10,947 individuals in the analysis sample. Section 3 of this document describes the prevalence and pattern of missing data.

**Weights:** Household weights are calculated as the inverse of the probability of selection within strata. If  $N$  households are in a stratum and  $n$  households have been sampled, the probability that each household is included in the sample is  $n/N$ , so the individual household weight equals the inverse probability  $N/n$ . There are 27 sampling strata, and they were identified by considering urban and rural districts. In the strata, 684 clusters were considered. The clusters are composed of households, and those with a larger number of households had a higher probability of being selected.

**Outcome:** The outcome is the total annual consumption per household adjusted for the CPI PPP value considering the US dollar value as of 2017.<sup>1</sup>

**Circumstances:**

- Sex (*sex*: male and female, described in Table 1)
- Region of birth 'Birthplace' ( 14 regions, described in Table 1)
- Religion (*religion*: 11 religions, described in Table 1)
- Mother's education (*mother\_edu*: 8 levels of education, described in Table 2)
- Father's education (*father\_edu*: 8 levels of education, described in Table 2)
- Mother's occupation (*mother\_occ*: 14 categories, described in Table 3)
- Father's occupation (*father\_occ*: 14 categories, described in Table 3).

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<sup>1</sup>consumption variable was equivalized using the square root scale.

## 2 Descriptive Statistics

Table 1: Respondant's socio-demographics - 2018

	Analysis sample	Total sample
	(N=10,947)	(N=20,695)
<b>Gender</b>		
1 Female	6,275 (57.3%)	11,156 (53.9%)
2 Male	4,672 (42.7%)	9,539 (46.1%)
<b>Region of birth</b>		
1 Bo	881 (8.0%)	1,649 (8.0%)
2 Bombali	1,778 (16.2%)	2,619 (12.7%)
3 Bonthe	611 (5.6%)	875 (4.2%)
4 Kailahun	669 (6.1%)	973 (4.7%)
5 Kambia	668 (6.1%)	937 (4.5%)
6 Kenema	882 (8.1%)	1,363 (6.6%)
7 Koinadugu	765 (7.0%)	1,105 (5.3%)
8 Kono	653 (6.0%)	971 (4.7%)
9 Moyamba	561 (5.1%)	829 (4.0%)
10 Port Loko	1,039 (9.5%)	1,471 (7.1%)
11 Pujehun	663 (6.1%)	1,328 (6.4%)
12 Tonkolili	761 (7.0%)	1,066 (5.2%)
13 Western Rural Area	34 (0.3%)	82 (0.4%)
14 Western Urban Area	982 (9.0%)	2,619 (12.7%)
Missing	0 (0%)	2,808 (13.6%)
<b>Religion</b>		
1 Ahmadis Muslim	1,068 (9.8%)	2,143 (10.4%)
2 Anglican	89 (0.8%)	204 (1.0%)
3 Bahai	30 (0.3%)	68 (0.3%)
4 Catholic	739 (6.8%)	1,230 (5.9%)
5 Methodist	264 (2.4%)	558 (2.7%)
6 No religion	8 (0.1%)	12 (0.1%)
7 Other Christian	773 (7.1%)	1,610 (7.8%)
8 Other Muslim	7,323 (66.9%)	13,693 (66.2%)
9 Pentacostal	582 (5.3%)	1,064 (5.1%)
10 SDA	51 (0.5%)	87 (0.4%)
11 Traditional	20 (0.2%)	26 (0.1%)

Table 2: Parental education - 2018

	Analysis sample	Total sample
	(N=10,947)	(N=20,695)
<b>Mother's education (levels)</b>		
1 No school	9,898 (90.4%)	14,395 (69.6%)
2 Primary incomplete	203 (1.9%)	334 (1.6%)
3 Primary complete	205 (1.9%)	494 (2.4%)
4 Secondary incomplete	305 (2.8%)	557 (2.7%)
5 Secondary complete	141 (1.3%)	294 (1.4%)
6 Post-secondary professional	121 (1.1%)	271 (1.3%)
7 Vocational	23 (0.2%)	61 (0.3%)
8 First degree or more	51 (0.5%)	115 (0.6%)
Missing	0 (0%)	4,174 (20.2%)
<b>Father's education (levels)</b>		
1 No school	9,050 (82.7%)	13,445 (65.0%)
2 Primary incomplete	219 (2.0%)	396 (1.9%)
3 Primary complete	208 (1.9%)	522 (2.5%)
4 Secondary incomplete	567 (5.2%)	1,007 (4.9%)
5 Secondary complete	359 (3.3%)	817 (3.9%)
6 Post-secondary professional	230 (2.1%)	508 (2.5%)
7 Vocational	41 (0.4%)	80 (0.4%)
8 First degree or more	273 (2.5%)	492 (2.4%)
Missing	0 (0%)	3,428 (16.6%)

Table 4: Respondant's consumption - 2018

	N	Mean	SD	Median	Min	Max	Missing
Analysis sample	10,947	75.02	58.86	60.69	12.09	1,410	0
Total sample	20,695	79.22	63.14	62.83	12.09	1,410	0

Table 3: Parental occupation - 2018

	Analysis sample	Total sample
	(N=10,947)	(N=20,695)
<b>Mother's occupation (categories)</b>		
1 Accomodation and food service activities	46 (0.4%)	127 (0.6%)
2 Administrative and support service activities	24 (0.2%)	31 (0.1%)
3 Agriculture, foresting, fishing	8,503 (77.7%)	11,417 (55.2%)
4 Construction	6 (0.1%)	6 (0.0%)
5 Education	179 (1.6%)	318 (1.5%)
6 Electricity and water supply	2 (0.0%)	2 (0.0%)
7 Financial activities	8 (0.1%)	10 (0.0%)
8 Manufacturing	128 (1.2%)	203 (1.0%)
9 Mining, quarrying	19 (0.2%)	42 (0.2%)
10 Professional	21 (0.2%)	33 (0.2%)
11 Public administration and defense	40 (0.4%)	59 (0.3%)
12 Social activities	14 (0.1%)	21 (0.1%)
13 Transportation and storage	4 (0.0%)	5 (0.0%)
14 Wholesale and retail trader, repair of motor vehicles and motorcycles	1,953 (17.8%)	3,539 (17.1%)
Missing	0 (0%)	4,882 (23.6%)
<b>Father's occupation (categories)</b>		
1 Accomodation and food service activities	16 (0.1%)	27 (0.1%)
2 Administrative and support service activities	113 (1.0%)	250 (1.2%)
3 Agriculture, foresting, fishing	8,597 (78.5%)	12,632 (61.0%)
4 Construction	281 (2.6%)	556 (2.7%)
5 Education	337 (3.1%)	585 (2.8%)
6 Electricity and water supply	39 (0.4%)	61 (0.3%)
7 Financial activities	49 (0.4%)	83 (0.4%)
8 Manufacturing	163 (1.5%)	346 (1.7%)
9 Mining, quarrying	226 (2.1%)	438 (2.1%)
10 Professional	46 (0.4%)	85 (0.4%)
11 Public administration and defense	237 (2.2%)	427 (2.1%)
12 Social activities	29 (0.3%)	50 (0.2%)
13 Transportation and storage	210 (1.9%)	418 (2.0%)
14 Wholesale and retail trader, repair of motor vehicles and motorcycles	604 (5.5%)	1,251 (6.0%)
Missing	0 (0%)	3,486 (16.8%)

## 2.1 Missing patterns

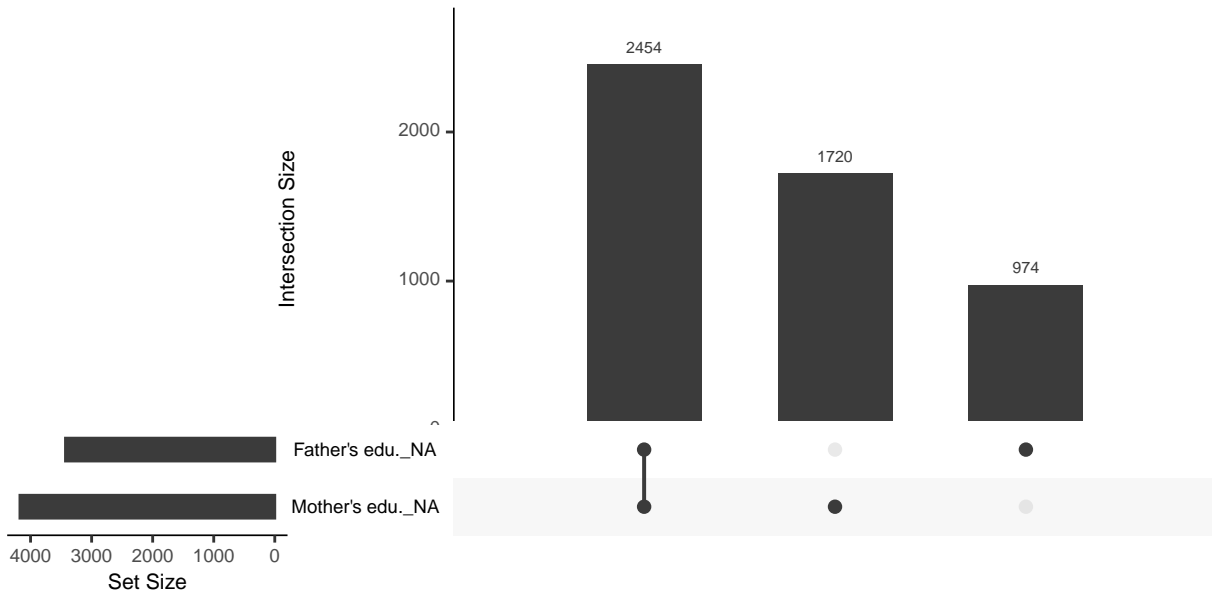


Figure 1: Missing patterns: *Left*: Marginal distribution of missing observations per variable. *Right*: Combination of missingness across cases

## 2.2 Differences in expected total equivalized household consumption between samples

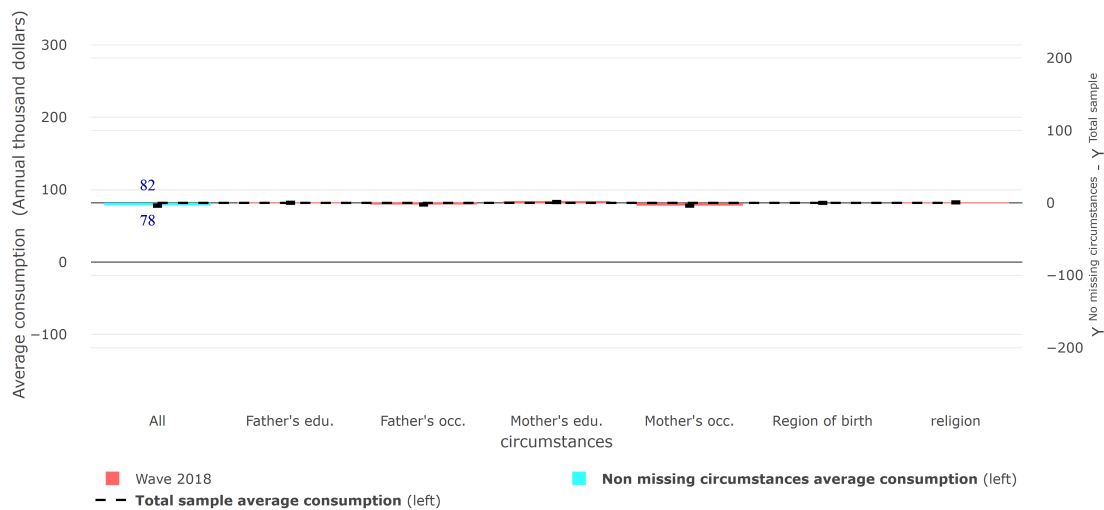


Figure 2: Differences in expected equivalized household consumption between the sample with non-missing circumstances and the total sample

## 2.3 Gini coefficient

Table 5: Gini coefficient in analysis sample and total sample

Wave	Sample	Gini	Lower bound	Upper bound	Average consumption
Wave 2018	Analysis sample	0.313	0.322	0.340	78.0
Wave 2018	Total sample	0.328	0.334	0.346	81.7

## 2.4 Differences in Gini coefficient between samples

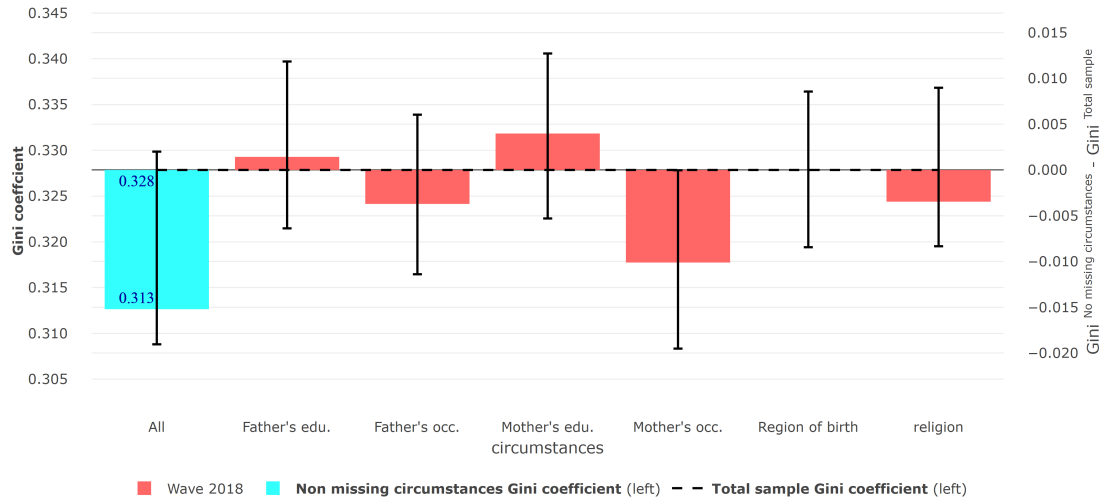


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample