Economic Clustering Summary Report: Sierra Leone 2019

# Data Summary

**Country Code-year:** SL19

**Number of observations:** 13141

**Number of variables used:** 18

**Variable set used:** 1

**Variables used in the algorithm:** hv206, hv207, hv208, hv209, hv211, hv227, hv237, hv243a, hv243b, hv244, hv246, hv247, water, toilet, floor, roof, cookfuel, wall

# Top 10 Variable Sets (Sorted by ASW)

| Set | ASW | Var.1 | Var.2 | Var.3 | Var.4 |
| --- | --- | --- | --- | --- | --- |
| 1 | 0.9363 | has electricity | has television | has refrigerator | has mobile telephone |
| 2 | 0.9315 | has electricity | has television | has refrigerator | floor |
| 3 | 0.9303 | has electricity | has refrigerator | has motorcycle/scooter | has mobile telephone |
| 4 | 0.9238 | has television | has refrigerator | has motorcycle/scooter | has mobile telephone |
| 5 | 0.9115 | has electricity | has television | has refrigerator | has motorcycle/scooter |
| 6 | 0.9101 | has electricity | has television | has motorcycle/scooter | has mobile telephone |
| 7 | 0.907 | has electricity | has refrigerator | floor | roof |
| 8 | 0.9069 | has television | has refrigerator | floor | roof |
| 9 | 0.9062 | has electricity | has television | has refrigerator | owns land usable for agriculture |
| 10 | 0.8964 | has electricity | has refrigerator | has mobile telephone | cookfuel |

# Marginal Distributions

| Variable | Description | % in Top Sets | Distribution |
| --- | --- | --- | --- |
| hv206 | has electricity | 80% | Binary, 17.8% (1/yes) |
| hv208 | has television | 70% | Binary, 16.1% (1/yes) |
| hv209 | has refrigerator | 90% | Binary, 9.3% (1/yes) |
| hv211 | has motorcycle/scooter | 40% | Binary, 10.6% (1/yes) |
| floor | floor | 30% | Categorical, 0 (finished) = 50.9%,   1 (natural) = 48.9%,   2 (other) = 0.1%,   3 (rudimentary) = 0.1% |
| hv243a | has mobile telephone | 50% | Binary, 70.4% (1/yes) |
| roof | roof | 20% | Categorical, 0 (finished) = 87.6%,   1 (natural) = 8.9%,   2 (other) = 0%,   3 (rudimentary) = 3.4% |
| hv244 | owns land usable for agriculture | 10% | Binary, 58.7% (1/yes) |
| cookfuel | cookfuel | 10% | Binary, Mode: wood |

# Cluster Configuration (Set #1)

| Cluster Group | has electricity | has television | has refrigerator | has mobile telephone | Proportion (%) |
| --- | --- | --- | --- | --- | --- |
| 1 | 1 | 0 | 0 | 1 | 2.98 |
| 2 | 1 | 1 | 0 | 0 | 6.16 |
| 2 | 1 | 1 | 0 | 1 |  |
| 3 | 0 | 1 | 1 | 0 | 8.99 |
| 3 | 0 | 1 | 1 | 1 |  |
| 3 | 1 | 0 | 1 | 0 |  |
| 3 | 1 | 0 | 1 | 1 |  |
| 3 | 1 | 1 | 1 | 0 |  |
| 3 | 1 | 1 | 1 | 1 |  |
| 4 | 0 | 0 | 0 | 0 | 29.38 |
| 4 | 0 | 0 | 1 | 0 |  |
| 4 | 0 | 1 | 0 | 0 |  |
| 4 | 1 | 0 | 0 | 0 |  |
| 5 | 0 | 0 | 0 | 1 | 52.49 |
| 5 | 0 | 0 | 1 | 1 |  |
| 5 | 0 | 1 | 0 | 1 |  |

# Validation Tables

## a.1) Using Children Deceased (Sorted by proportion of 0%)

| Cluster ID/Children Deceased | 0% | 1-33% | 34-66% | 67+% |
| --- | --- | --- | --- | --- |
| 3\* | 1,578 (89.2%) | 117 (6.6%) | 55 (3.1%) | 20 (1.1%) |
| 2 | 854 (88.6%) | 58 (6.0%) | 38 (3.9%) | 14 (1.5%) |
| 1 | 347 (83.2%) | 46 (11.0%) | 19 (4.6%) | 5 (1.2%) |
| 5 | 6,571 (75.6%) | 1,294 (14.9%) | 649 (7.5%) | 175 (2.0%) |
| 4 | 2,364 (69.2%) | 650 (19.0%) | 320 (9.4%) | 83 (2.4%) |
| Total | 11,714 (76.8%) | 2,165 (14.2%) | 1,081 (7.1%) | 297 (1.9%) |
| \*The chi-squared p-value is 0 | | | | |

## a.2) Aggregating proportions greater than 0%

| Cluster ID/Children Deceased | 0% | >0% |
| --- | --- | --- |
| 3\* | 1,578 (89.2%) | 192 (10.8%) |
| 2 | 854 (88.6%) | 110 (11.4%) |
| 1 | 347 (83.2%) | 70 (16.8%) |
| 5 | 6,571 (75.6%) | 2,118 (24.4%) |
| 4 | 2,364 (69.2%) | 1,053 (30.8%) |
| Total | 11,714 (76.8%) | 3,543 (23.2%) |
| \*The chi-squared p-value is 0 | | |

## b) Using Individual Education Level Attained (Sorted by weighted average by row)

| Cluster ID/Education | 0 | 1 | 2 | 3 | 4 | 5 | W. Avg. |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 3\*a | 314 (17.7%) | 88 (5.0%) | 37 (2.1%) | 818 (46.2%) | 219 (12.4%) | 294 (16.6%) | 2.80 |
| 2 | 251 (26.0%) | 66 (6.8%) | 35 (3.6%) | 420 (43.6%) | 104 (10.8%) | 88 (9.1%) | 2.34 |
| 1 | 142 (34.1%) | 31 (7.4%) | 14 (3.4%) | 170 (40.8%) | 40 (9.6%) | 20 (4.8%) | 1.99 |
| 5 | 4,363 (50.2%) | 896 (10.3%) | 312 (3.6%) | 2,610 (30.0%) | 358 (4.1%) | 150 (1.7%) | 1.33 |
| 4 | 2,368 (69.3%) | 395 (11.6%) | 132 (3.9%) | 492 (14.4%) | 24 (0.7%) | 6 (0.2%) | 0.66 |
| Total | 7,438 (48.8%) | 1,476 (9.7%) | 530 (3.5%) | 4,510 (29.6%) | 745 (4.9%) | 558 (3.7%) | 1.43 |
| \*The chi-squared p-value is 0 | | | | | | | |
| a0=none, 1=incomplete primary, 2=primary, 3=incomplete secondary, 4=secondary, 5=higher | | | | | | | |

## c) Using Primary Healthcare Source (Sorted by % enrolled in public healthcare [ascending order])

| Cluster ID/Primary Healthcare Source | 0 | 1 | 2 |
| --- | --- | --- | --- |
| 3\*a | 300 (67.0%) | 146 (32.6%) | 2 (0.4%) |
| 2 | 183 (68.3%) | 85 (31.7%) | 0 (0.0%) |
| 1 | 87 (75.0%) | 29 (25.0%) | 0 (0.0%) |
| 5 | 1,779 (83.6%) | 345 (16.2%) | 5 (0.2%) |
| 4 | 532 (91.6%) | 45 (7.7%) | 4 (0.7%) |
| Total | 2,881 (81.3%) | 650 (18.4%) | 11 (0.3%) |
| \*The chi-squared p-value is 0 | | | |
| a0=public/government, 1=private, 2=other | | | |