Economic Clustering Summary Report: Rwanda 2019

# Data Summary

**Country Code-year:** RW19

**Number of observations:** 12948

**Number of variables used:** 26

**Variable set used:** 1

**Variables used in the algorithm:** hv206, hv207, hv208, hv210, hv225, hv227, hv237, hv243a, hv243b, hv244, hv246, hv247, sh121g, sh121h, sh121i, sh121j, sh121k, sh121l, sh121n, sh121p, water, toilet, floor, roof, cookfuel, wall

# Top 10 Variable Sets (Sorted by ASW)

| Set | ASW | Var.1 | Var.2 | Var.3 | Var.4 |
| --- | --- | --- | --- | --- | --- |
| 1 | 0.993 | has television | mattress | cupboard | roof |
| 2 | 0.9922 | has television | mattress | sofa | roof |
| 3 | 0.9922 | has television | mattress | iron machine | roof |
| 4 | 0.9915 | has television | has mobile telephone | mattress | roof |
| 5 | 0.9906 | has mobile telephone | mattress | cupboard | roof |
| 6 | 0.9904 | mattress | sofa | cupboard | roof |
| 7 | 0.9901 | has television | has mobile telephone | cupboard | roof |
| 8 | 0.9899 | mattress | cupboard | iron machine | roof |
| 9 | 0.9894 | mattress | table | cupboard | roof |
| 10 | 0.9892 | has television | mattress | table | roof |

# Marginal Distributions

| Variable | Description | % in Top Sets | Distribution |
| --- | --- | --- | --- |
| hv208 | has television | 60% | Binary, 13.7% (1/yes) |
| hv243a | has mobile telephone | 30% | Binary, 70.6% (1/yes) |
| sh121g | mattress | 90% | Binary, 69% (1/yes) |
| sh121k | sofa | 20% | Binary, 15.9% (1/yes) |
| sh121n | cupboard | 60% | Binary, 12.5% (1/yes) |
| sh121j | table | 20% | Binary, 66.4% (1/yes) |
| sh121p | iron machine | 20% | Binary, 16.4% (1/yes) |
| roof | roof | 100% | Categorical, 0 (finished) = 99.8%,   1 (natural) = 0.1%,   2 (other) = 0%,   3 (rudimentary) = 0.1% |

# Cluster Configuration (Set #1)

| Cluster Group | has television | mattress | cupboard | roof | Proportion (%) |
| --- | --- | --- | --- | --- | --- |
| 1 | 0 | 1 | 1 | finished | 4.53 |
| 1 | 0 | 1 | 1 | rudimentary |  |
| 2 | 0 | 0 | 0 | finished | 31.03 |
| 2 | 0 | 0 | 0 | natural |  |
| 2 | 0 | 0 | 0 | other |  |
| 2 | 0 | 0 | 0 | rudimentary |  |
| 2 | 0 | 0 | 1 | finished |  |
| 2 | 1 | 0 | 0 | finished |  |
| 3 | 1 | 1 | 0 | finished | 5.82 |
| 4 | 1 | 0 | 1 | finished | 7.81 |
| 4 | 1 | 1 | 1 | finished |  |
| 5 | 0 | 1 | 0 | finished | 50.82 |
| 5 | 0 | 1 | 0 | natural |  |
| 5 | 0 | 1 | 0 | rudimentary |  |

# Validation Tables

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

| Cluster ID/Children Deceased | 0% | 1-33% | 34-66% | 67+% |
| --- | --- | --- | --- | --- |
| 4\* | 1,558 (94.5%) | 68 (4.1%) | 16 (1.0%) | 7 (0.4%) |
| 3 | 918 (91.5%) | 63 (6.3%) | 19 (1.9%) | 3 (0.3%) |
| 1 | 658 (91.3%) | 48 (6.7%) | 13 (1.8%) | 2 (0.3%) |
| 5 | 6,267 (88.3%) | 638 (9.0%) | 152 (2.1%) | 44 (0.6%) |
| 2 | 3,411 (82.0%) | 541 (13.0%) | 181 (4.4%) | 25 (0.6%) |
| Total | 12,812 (87.6%) | 1,358 (9.3%) | 381 (2.6%) | 81 (0.6%) |
| \*The chi-squared p-value is 0 | | | | |

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

| Cluster ID/Children Deceased | 0% | >0% |
| --- | --- | --- |
| 4\* | 1,558 (94.5%) | 91 (5.5%) |
| 3 | 918 (91.5%) | 85 (8.5%) |
| 1 | 658 (91.3%) | 63 (8.7%) |
| 5 | 6,267 (88.3%) | 834 (11.7%) |
| 2 | 3,411 (82.0%) | 747 (18.0%) |
| Total | 12,812 (87.6%) | 1,820 (12.4%) |
| \*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. |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 4\*a | 32 (1.9%) | 197 (11.9%) | 277 (16.8%) | 431 (26.1%) | 305 (18.5%) | 407 (24.7%) | 3.21 |
| 3 | 29 (2.9%) | 203 (20.2%) | 254 (25.3%) | 283 (28.2%) | 147 (14.7%) | 87 (8.7%) | 2.58 |
| 1 | 22 (3.1%) | 164 (22.7%) | 165 (22.9%) | 195 (27.0%) | 106 (14.7%) | 69 (9.6%) | 2.56 |
| 5 | 524 (7.4%) | 2,572 (36.2%) | 1,744 (24.6%) | 1,667 (23.5%) | 487 (6.9%) | 107 (1.5%) | 1.91 |
| 2 | 745 (17.9%) | 2,127 (51.2%) | 795 (19.1%) | 450 (10.8%) | 39 (0.9%) | 2 (0.0%) | 1.26 |
| Total | 1,352 (9.2%) | 5,263 (36.0%) | 3,235 (22.1%) | 3,026 (20.7%) | 1,084 (7.4%) | 672 (4.6%) | 1.95 |
| \*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 |
| --- | --- | --- | --- |
| 4\*a | 248 (59.0%) | 168 (40.0%) | 4 (1.0%) |
| 3 | 225 (71.0%) | 92 (29.0%) | 0 (0.0%) |
| 1 | 154 (73.3%) | 56 (26.7%) | 0 (0.0%) |
| 5 | 2,032 (78.5%) | 555 (21.4%) | 3 (0.1%) |
| 2 | 1,250 (81.9%) | 276 (18.1%) | 1 (0.1%) |
| Total | 3,909 (77.2%) | 1,147 (22.7%) | 8 (0.2%) |
| \*The chi-squared p-value is 0 | | | |
| a0=public/government, 1=private, 2=other | | | |