Economic Clustering Summary Report: Burundi 2016-17

# Data Summary

**Country Code-year:** BU16

**Number of observations:** 15977

**Number of variables used:** 23

**Variable set used:** 1

**Variables used in the algorithm:** hv206, hv207, hv210, hv225, hv227, hv230b, hv243a, hv243b, hv244, hv246, hv247, sh121g, sh121h, sh121i, sh121j, sh121k, sh121l, water, toilet, floor, roof, cookfuel, wall

# Top 10 Variable Sets (Sorted by ASW)

| Set | ASW | Var.1 | Var.2 | Var.3 | Var.4 |
| --- | --- | --- | --- | --- | --- |
| 1 | 0.9289 | has electricity | has mattress | toilet | roof |
| 2 | 0.9134 | has cabinet | has mattress | toilet | roof |
| 3 | 0.9133 | has electricity | has cabinet | toilet | roof |
| 4 | 0.9124 | has electricity | has mobile telephone | has mattress | toilet |
| 5 | 0.912 | has bank account | has cabinet | toilet | roof |
| 6 | 0.9066 | has dinner table | has chairs | has cabinet | toilet |
| 7 | 0.9063 | has electricity | has hoe | toilet | roof |
| 8 | 0.9057 | has electricity | has chairs | has mattress | toilet |
| 9 | 0.9053 | has electricity | has mattress | floor | roof |
| 10 | 0.9047 | has electricity | has mobile telephone | has dinner table | toilet |

# Marginal Distributions

| Variable | Description | % in Top Sets | Distribution |
| --- | --- | --- | --- |
| hv206 | has electricity | 70% | Binary, 11.9% (1/yes) |
| sh121i | has cabinet | 40% | Binary, 11.3% (1/yes) |
| hv247 | has bank account | 10% | Binary, 14.9% (1/yes) |
| sh121g | has dinner table | 20% | Binary, 57.6% (1/yes) |
| sh121k | has mattress | 50% | Binary, 32.3% (1/yes) |
| hv243a | has mobile telephone | 20% | Binary, 50% (1/yes) |
| sh121h | has chairs | 20% | Binary, 52.8% (1/yes) |
| sh121l | has hoe | 10% | Binary, 87.1% (1/yes) |
| toilet | toilet | 90% | Categorical, 0 (flush) = 4.9%,   1 (none) = 2.6%,   2 (other) = 0.3%,   3 (pitlat) = 92.2% |
| floor | floor | 10% | Categorical, 0 (finished) = 19.5%,   1 (natural) = 79.4%,   2 (other) = 1.1%,   3 (rudimentary) = 0% |
| roof | roof | 60% | Categorical, 0 (finished) = 83.7%,   1 (natural) = 15.9%,   2 (other) = 0.2%,   3 (rudimentary) = 0.3% |

# Cluster Configuration (Set #1)

| Cluster Group | has electricity | has mattress | toilet | roof | Proportion (%) |
| --- | --- | --- | --- | --- | --- |
| 1 | 1 | 1 | none | finished | 6.74 |
| 1 | 1 | 1 | other | finished |  |
| 1 | 1 | 1 | pitlat | finished |  |
| 1 | 1 | 1 | pitlat | rudimentary |  |
| 2 | 1 | 0 | flush | finished | 4.44 |
| 2 | 1 | 1 | flush | finished |  |
| 2 | 1 | 1 | flush | rudimentary |  |
| 3 | 0 | 0 | none | natural | 15.10 |
| 3 | 0 | 0 | other | natural |  |
| 3 | 0 | 0 | pitlat | natural |  |
| 3 | 1 | 0 | pitlat | natural |  |
| 4 | 0 | 0 | flush | finished | 52.56 |
| 4 | 0 | 0 | none | finished |  |
| 4 | 0 | 0 | none | other |  |
| 4 | 0 | 0 | none | rudimentary |  |
| 4 | 0 | 0 | other | finished |  |
| 4 | 0 | 0 | pitlat | finished |  |
| 4 | 0 | 0 | pitlat | other |  |
| 4 | 0 | 0 | pitlat | rudimentary |  |
| 4 | 1 | 0 | pitlat | finished |  |
| 5 | 0 | 1 | flush | finished | 21.16 |
| 5 | 0 | 1 | none | finished |  |
| 5 | 0 | 1 | none | natural |  |
| 5 | 0 | 1 | other | finished |  |
| 5 | 0 | 1 | pitlat | finished |  |
| 5 | 0 | 1 | pitlat | natural |  |
| 5 | 0 | 1 | pitlat | other |  |
| 5 | 0 | 1 | pitlat | rudimentary |  |

# Validation Tables

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

| Cluster ID/Children Deceased | 0% | 1-33% | 34-66% | 67+% |
| --- | --- | --- | --- | --- |
| 2\* | 981 (95.0%) | 39 (3.8%) | 13 (1.3%) | 0 (0.0%) |
| 1 | 1,265 (92.2%) | 78 (5.7%) | 22 (1.6%) | 7 (0.5%) |
| 5 | 3,230 (84.3%) | 482 (12.6%) | 102 (2.7%) | 17 (0.4%) |
| 4 | 6,970 (78.6%) | 1,415 (16.0%) | 418 (4.7%) | 61 (0.7%) |
| 3 | 1,599 (73.7%) | 384 (17.7%) | 167 (7.7%) | 19 (0.9%) |
| Total | 14,045 (81.3%) | 2,398 (13.9%) | 722 (4.2%) | 104 (0.6%) |
| \*The chi-squared p-value is 0 | | | | |

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

| Cluster ID/Children Deceased | 0% | >0% |
| --- | --- | --- |
| 2\* | 981 (95.0%) | 52 (5.0%) |
| 1 | 1,265 (92.2%) | 107 (7.8%) |
| 5 | 3,230 (84.3%) | 601 (15.7%) |
| 4 | 6,970 (78.6%) | 1,894 (21.4%) |
| 3 | 1,599 (73.7%) | 570 (26.3%) |
| Total | 14,045 (81.3%) | 3,224 (18.7%) |
| \*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. |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 2\*a | 46 (4.5%) | 109 (10.6%) | 86 (8.3%) | 576 (55.8%) | 47 (4.5%) | 169 (16.4%) | 2.94 |
| 1 | 110 (8.0%) | 228 (16.6%) | 188 (13.7%) | 739 (53.9%) | 47 (3.4%) | 60 (4.4%) | 2.41 |
| 5 | 849 (22.2%) | 883 (23.0%) | 653 (17.0%) | 1,366 (35.7%) | 61 (1.6%) | 19 (0.5%) | 1.73 |
| 4 | 3,662 (41.3%) | 2,363 (26.7%) | 1,252 (14.1%) | 1,551 (17.5%) | 32 (0.4%) | 4 (0.0%) | 1.09 |
| 3 | 1,212 (55.9%) | 634 (29.2%) | 159 (7.3%) | 163 (7.5%) | 1 (0.0%) | 0 (0.0%) | 0.67 |
| Total | 5,879 (34.0%) | 4,217 (24.4%) | 2,338 (13.5%) | 4,395 (25.5%) | 188 (1.1%) | 252 (1.5%) | 1.39 |
| \*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 |
| --- | --- | --- | --- |
| 2\*a | 84 (56.0%) | 48 (32.0%) | 18 (12.0%) |
| 1 | 151 (59.2%) | 83 (32.5%) | 21 (8.2%) |
| 5 | 433 (76.0%) | 96 (16.8%) | 41 (7.2%) |
| 4 | 969 (83.6%) | 126 (10.9%) | 64 (5.5%) |
| 3 | 269 (91.5%) | 17 (5.8%) | 8 (2.7%) |
| Total | 1,906 (78.5%) | 370 (15.2%) | 152 (6.3%) |
| \*The chi-squared p-value is 0 | | | |
| a0=public/government, 1=private, 2=other | | | |