

# 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	

Cluster Group	has electricity	has mattress	toilet	roof	Proportion (%)
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 <sup>a</sup>	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

<sup>a</sup>0=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 <sup>a</sup>	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

<sup>a</sup>0=public/government, 1=private, 2=other