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, 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