

Economic Clustering Summary Report: Senegal 2019

Data Summary

Country Code-year: SN19

Number of observations: 4538

Number of variables used: 24

Variable set used: 1

Variables used in the algorithm: hv206, hv207, hv208, hv209, hv210, hv211, hv227, hv237, hv243c, hv243e, hv244, hv246, hv247, sh121e, sh121k, sh122f, sh126a, sh126b, water, toilet, floor, roof, cookfuel, wall

Top 10 Variable Sets (Sorted by ASW)

Set	ASW	Var.1	Var.2	Var.3	Var.4
1	0.9219	has television	has refrigerator	has a computer	roof
2	0.9211	has electricity	has refrigerator	has a computer	roof
3	0.9131	has electricity	has television	canal	roof
4	0.9079	has electricity	has television	has a computer	roof
5	0.8971	has electricity	has television	has refrigerator	roof
6	0.8941	has television	has a computer	canal	roof
7	0.8827	has television	canal	floor	roof
8	0.8818	has electricity	has television	windows with grids to prevent mosquitoes	roof
9	0.8799	has electricity	has television	has refrigerator	has a computer
10	0.878	has television	has a computer	floor	roof

Marginal Distributions

Variable	Description	% in Top Sets	Distribution
hv208	has television	90%	Binary, 53.1% (1/yes)
hv206	has electricity	60%	Binary, 61.2% (1/yes)
hv209	has refrigerator	40%	Binary, 25.4% (1/yes)
hv243e	has a computer	60%	Binary, 10.6% (1/yes)
sh121e	canal	30%	Binary, 16.5% (1/yes)
floor	floor	20%	Categorical, 0 (finished) = 76.5%, 1 (natural) = 21%, 2 (other) = 2.4%, 3 (rudimentary) = 0.1%
sh126a	windows with grids to prevent mosquitoes	10%	Binary, 13.9% (1/yes)
roof	roof	90%	Categorical, 0 (finished) = 80%, 1 (natural) = 19.7%, 2 (rudimentary) = 0.2%

Cluster Configuration (Set #1)

Cluster Group	has television	has refrigerator	has a computer	roof	Proportion (%)
1	0	0	0	natural	18.60
1	0	0	1	natural	
2	0	1	1	finished	7.71
2	1	1	1	finished	
2	1	1	1	natural	
3	0	0	0	finished	28.21
3	0	0	0	rudimentary	
3	0	0	1	finished	
3	0	1	0	finished	
4	1	1	0	finished	16.75
4	1	1	0	natural	
4	1	1	0	rudimentary	
5	1	0	0	finished	28.74
5	1	0	0	natural	
5	1	0	0	rudimentary	
5	1	0	1	finished	
5	1	0	1	natural	
5	1	0	1	rudimentary	

Validation Tables

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

Cluster ID/Children Deceased	0%	1-33%	34-66%	67+%
2*	797 (93.4%)	42 (4.9%)	7 (0.8%)	7 (0.8%)
4	1,667 (90.3%)	140 (7.6%)	32 (1.7%)	8 (0.4%)
5	2,369 (88.0%)	258 (9.6%)	51 (1.9%)	13 (0.5%)
3	1,668 (81.8%)	286 (14.0%)	65 (3.2%)	19 (0.9%)
1	917 (75.2%)	242 (19.8%)	48 (3.9%)	13 (1.1%)
Total	7,418 (85.8%)	968 (11.2%)	203 (2.3%)	60 (0.7%)

*The chi-squared p-value is 0

a.2) Aggregating proportions greater than 0%

Cluster ID/Children Deceased	0%	>0%
2*	797 (93.4%)	56 (6.6%)
4	1,667 (90.3%)	180 (9.7%)
5	2,369 (88.0%)	322 (12.0%)
3	1,668 (81.8%)	370 (18.2%)
1	917 (75.2%)	303 (24.8%)
Total	7,418 (85.8%)	1,231 (14.2%)

*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.
2 ^a	187 (21.9%)	141 (16.5%)	25 (2.9%)	362 (42.4%)	25 (2.9%)	113 (13.2%)	2.28
4	710 (38.4%)	392 (21.2%)	56 (3.0%)	623 (33.7%)	23 (1.2%)	43 (2.3%)	1.45
5	1,330 (49.4%)	463 (17.2%)	110 (4.1%)	697 (25.9%)	36 (1.3%)	55 (2.0%)	1.19
3	1,263 (62.0%)	312 (15.3%)	61 (3.0%)	395 (19.4%)	1 (0.0%)	6 (0.3%)	0.81
1	925 (75.8%)	163 (13.4%)	22 (1.8%)	110 (9.0%)	0 (0.0%)	0 (0.0%)	0.44
Total	4,415 (51.0%)	1,471 (17.0%)	274 (3.2%)	2,187 (25.3%)	85 (1.0%)	217 (2.5%)	1.16

*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	128 (79.5%)	32 (19.9%)	1 (0.6%)
4	284 (87.4%)	40 (12.3%)	1 (0.3%)
5	489 (91.6%)	42 (7.9%)	3 (0.6%)
3	341 (95.3%)	17 (4.7%)	0 (0.0%)
1	145 (98.6%)	2 (1.4%)	0 (0.0%)
Total	1,387 (91.0%)	133 (8.7%)	5 (0.3%)

*The chi-squared p-value is 0

^a0=public/government, 1=private, 2=other