Economic Clustering Summary Report: Liberia 2019-20

Data Summary

Country Code-year: LB19

Number of observations: 9006

Number of variables used: 20

Variable set used: 1

Variables used in the algorithm: hv206, hv207, hv208, hv227, hv237, hv243a, hv243b, hv244, hv246, hv247, 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	0.8745	has television	cupboard	mattress	roof
2	0.8713	has television	has mobile telephone	mattress	roof
3	0.8709	has television	has bank account	mattress	roof
4	0.8708	has bank account	cupboard	mattress	roof
5	0.8706	has television	mattress	roof	cookfuel
6	0.8701	has electricity	has television	mattress	roof
7	0.8676	has electricity	cupboard	mattress	roof
8	0.8662	has electricity	has bank account	mattress	roof
9	0.8637	has television	mattress	floor	roof
10	0.863	table	cupboard	mattress	roof

Marginal Distributions

Variable	Description	% in Top Sets	Distribution
hv208	has television	60%	Binary, 10.5% (1/yes)
hv247	has bank account	30%	Binary, 14.3% (1/yes)
hv206	has electricity	30%	Binary, 12.6% (1/yes)
sh121i	table	10%	Binary, 76.5% (1/yes)
sh121k	cupboard	40%	Binary, 15.7% (1/yes)
hv243a	has mobile telephone	10%	Binary, 61.6% (1/yes)
sh121l	mattress	100%	Binary, 83.4% (1/yes)
roof	roof	100%	Categorical, 0 (finished) = 82.6%, 1 (natural) = 15.7%, 2 (rudimentary) = 1.6%
floor	floor	10%	Categorical, 0 (finished) = 44.8%, 1 (natural) = 55%, 2 (rudimentary) = 0.2%
cookfuel	cookfuel	10%	Categorical, 0 (electricity) = 0.4%, 1 (fire coal/charcoal) = 31.7%, 2 (gas cylinder) = 0.4%, 3 (kerosene stove) = 0.2%, 4 (no food cooked in house) = 1.6%, 5 (straw/shrubs/grass) = 0%, 6 (wood) = 65.8%

Cluster Configuration (Set #1)

Cluster Group	has television	cupboard	mattress	roof	Proportion (%)
1	1	0	1	finished	3.98
1	1	0	1	natural	
1	1	0	1	rudimentary	
2	1	1	0	finished	6.32
2	1	1	1	finished	
2	1	1	1	natural	
2	1	1	1	rudimentary	
3	0	0	0	finished	16.18
3	0	0	0	natural	
3	0	0	0	rudimentary	
3	1	0	0	finished	
4	0	1	0	finished	9.34
4	0	1	0	natural	
4	0	1	1	finished	
4	0	1	1	natural	
4	0	1	1	rudimentary	
5	0	0	1	finished	64.19
5	0	0	1	natural	
5	0	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*	616 (85.4%)	66 (9.2%)	32 (4.4%)	7 (1.0%)
1	277 (81.7%)	36 (10.6%)	17 (5.0%)	9 (2.7%)
4	681 (76.3%)	130 (14.6%)	66 (7.4%)	15 (1.7%)
5	3,552 (71.3%)	991 (19.9%)	347 (7.0%)	93 (1.9%)
3	715 (66.1%)	239 (22.1%)	110 (10.2%)	17 (1.6%)
Total	5,841 (72.9%)	1,462 (18.2%)	572 (7.1%)	141 (1.8%)

*The chi-squared p-value is 0

a.2) Aggregating proportions greater than 0%

Cluster ID/Children Deceased	0%	>0%
2*	616 (85.4%)	105 (14.6%)
1	277 (81.7%)	62 (18.3%)
4	681 (76.3%)	211 (23.7%)
5	3,552 (71.3%)	1,431 (28.7%)
3	715 (66.1%)	366 (33.9%)
Total	5,841 (72.9%)	2,175 (27.1%)

*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]	96 (13.3%)	89 (12.3%)	18 (2.5%)	234 (32.5%)	160 (22.2%)	124 (17.2%)	2.89
1	78 (23.0%)	57 (16.8%)	14 (4.1%)	111 (32.7%)	57 (16.8%)	22 (6.5%)	2.23
4	244 (27.4%)	188 (21.1%)	39 (4.4%)	288 (32.3%)	94 (10.5%)	39 (4.4%)	1.91
5	1,975 (39.6%)	1,438 (28.9%)	199 (4.0%)	1,079 (21.7%)	236 (4.7%)	56 (1.1%)	1.26
3	576 (53.3%)	294 (27.2%)	35 (3.2%)	154 (14.2%)	18 (1.7%)	4 (0.4%)	0.85
Total	2,969 (37.0%)	2,066 (25.8%)	305 (3.8%)	1,866 (23.3%)	565 (7.0%)	245 (3.1%)	1.47

*The chi-squared p-value is 0

[a]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*[a]	89 (45.4%)	105 (53.6%)	2 (1.0%)
1	56 (55.4%)	45 (44.6%)	0 (0.0%)
4	164 (65.3%)	87 (34.7%)	0 (0.0%)
3	195 (73.6%)	68 (25.7%)	2 (0.8%)
5	1,168 (74.7%)	388 (24.8%)	8 (0.5%)
Total	1,672 (70.3%)	693 (29.2%)	12 (0.5%)

*The chi-squared p-value is 0

[a]0=public/government, 1=private, 2=other