

# Economic Clustering Summary Report: Zambia 2018

## Data Summary

**Country Code-year:** ZM18

**Number of observations:** 12537

**Number of variables used:** 23

**Variable set used:** 1

**Variables used in the algorithm:** hv206, hv207, hv208, hv209, hv210, hv227, hv237, hv243a, hv243b, hv244, hv246, hv247, hv253, sh121g, sh121h, sh121i, 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	0.9287	has electricity	has refrigerator	floor	roof
2	0.9078	has electricity	has refrigerator	has mobile telephone	plough
3	0.9077	has electricity	has television	has refrigerator	has mobile telephone
4	0.9066	has electricity	has television	has refrigerator	bed
5	0.9065	has electricity	has television	has refrigerator	roof
6	0.901	has electricity	has refrigerator	has mobile telephone	floor
7	0.8953	has television	has refrigerator	floor	roof
8	0.8885	has electricity	has refrigerator	plough	roof
9	0.8875	has electricity	has refrigerator	bed	floor
10	0.8857	has electricity	has refrigerator	bed	plough

## Marginal Distributions

Variable	Description	% in Top Sets	Distribution
hv206	has electricity	90%	Binary, 28.2% (1/yes)
hv208	has television	40%	Binary, 31.5% (1/yes)
hv209	has refrigerator	100%	Binary, 18.6% (1/yes)
floor	floor	40%	Categorical, 0 (finished) = 44.8%, 1 (natural) = 54.9%, 2 (other) = 0.2%, 3 (rudimentary) = 0.2%
hv243a	has mobile telephone	30%	Binary, 70.2% (1/yes)
sh121p	plough	30%	Binary, 10.2% (1/yes)
sh121g	bed	30%	Binary, 67.6% (1/yes)
roof	roof	40%	Categorical, 0 (finished) = 63.1%, 1 (natural) = 36.6%, 2 (other) = 0.1%, 3 (rudimentary) = 0.2%

## Cluster Configuration (Set #1)

Cluster Group	has electricity	has refrigerator	floor	roof	Proportion (%)
1 1	1	0	finished	finished	9.05
1 1	1	0	finished	natural	
1 1	1	0	finished	other	
1 1	1	0	finished	rudimentary	
1 1	1	0	other	finished	
1 1	1	0	rudimentary	finished	
2 0	0	1	finished	finished	18.55
2 0	0	1	finished	natural	
2 1	1	1	finished	finished	
2 1	1	1	finished	natural	
2 1	1	1	finished	rudimentary	
2 1	1	1	natural	finished	
2 1	1	1	natural	rudimentary	
2 1	1	1	other	finished	
2 1	1	1	rudimentary	finished	
3 0	0	0	finished	finished	15.93
3 0	0	0	finished	other	
3 0	0	0	finished	rudimentary	
4 0	0	0	natural	finished	20.00
4 0	0	0	natural	other	
4 0	0	0	natural	rudimentary	
4 0	0	0	other	finished	
4 0	0	0	rudimentary	finished	
4 0	0	0	rudimentary	other	
4 0	0	1	natural	finished	

Cluster Group	has electricity	has refrigerator	floor	roof	Proportion (%)
4	0	1	other	other	36.47
4	1	0	natural	finished	
4	1	0	natural	other	
4	1	0	natural	rudimentary	
5	0	0	finished	natural	
5	0	0	natural	natural	
5	0	0	other	natural	
5	0	0	rudimentary	natural	
5	0	1	natural	natural	
5	1	0	natural	natural	

## Validation Tables

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

Cluster ID/Children Deceased	0%	1-33%	34-66%	67+%
2*	2,815 (90.3%)	198 (6.4%)	76 (2.4%)	27 (0.9%)
1	1,049 (86.4%)	123 (10.1%)	27 (2.2%)	15 (1.2%)
3	1,783 (83.8%)	254 (11.9%)	79 (3.7%)	12 (0.6%)
4	2,034 (81.8%)	359 (14.4%)	70 (2.8%)	23 (0.9%)
5	3,443 (77.9%)	722 (16.3%)	208 (4.7%)	47 (1.1%)
Total	11,124 (83.2%)	1,656 (12.4%)	460 (3.4%)	124 (0.9%)

\*The chi-squared p-value is 0

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

Cluster ID/Children Deceased	0%	>0%
2*	2,815 (90.3%)	301 (9.7%)
1	1,049 (86.4%)	165 (13.6%)
3	1,783 (83.8%)	345 (16.2%)
4	2,034 (81.8%)	452 (18.2%)
5	3,443 (77.9%)	977 (22.1%)
Total	11,124 (83.2%)	2,240 (16.8%)

\*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>	51 (1.6%)	231 (7.4%)	265 (8.5%)	1,184 (38.0%)	761 (24.4%)	624 (20.0%)	3.36
1	44 (3.6%)	197 (16.2%)	173 (14.3%)	568 (46.8%)	177 (14.6%)	55 (4.5%)	2.66
3	103 (4.8%)	602 (28.3%)	390 (18.3%)	811 (38.1%)	189 (8.9%)	33 (1.6%)	2.23
4	239 (9.6%)	1,003 (40.3%)	446 (17.9%)	696 (28.0%)	91 (3.7%)	11 (0.4%)	1.77
5	700 (15.8%)	2,145 (48.5%)	670 (15.2%)	835 (18.9%)	68 (1.5%)	2 (0.0%)	1.42
Total	1,137 (8.5%)	4,178 (31.3%)	1,944 (14.5%)	4,094 (30.6%)	1,286 (9.6%)	725 (5.4%)	2.18

\*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>	764 (78.9%)	201 (20.8%)	3 (0.3%)
1	404 (87.3%)	58 (12.5%)	1 (0.2%)
3	677 (92.0%)	59 (8.0%)	0 (0.0%)
4	840 (93.0%)	62 (6.9%)	1 (0.1%)
5	1,299 (93.4%)	86 (6.2%)	6 (0.4%)
Total	3,984 (89.3%)	466 (10.4%)	11 (0.2%)

\*The chi-squared p-value is 0

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