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 | 0 | finished | finished | 9.05 |
| 1 | 1 | 0 | finished | natural |  |
| 1 | 1 | 0 | finished | other |  |
| 1 | 1 | 0 | finished | rudimentary |  |
| 1 | 1 | 0 | other | finished |  |
| 1 | 1 | 0 | rudimentary | finished |  |
| 2 | 0 | 1 | finished | finished | 18.55 |
| 2 | 0 | 1 | finished | natural |  |
| 2 | 1 | 1 | finished | finished |  |
| 2 | 1 | 1 | finished | natural |  |
| 2 | 1 | 1 | finished | rudimentary |  |
| 2 | 1 | 1 | natural | finished |  |
| 2 | 1 | 1 | natural | rudimentary |  |
| 2 | 1 | 1 | other | finished |  |
| 2 | 1 | 1 | rudimentary | finished |  |
| 3 | 0 | 0 | finished | finished | 15.93 |
| 3 | 0 | 0 | finished | other |  |
| 3 | 0 | 0 | finished | rudimentary |  |
| 4 | 0 | 0 | natural | finished | 20.00 |
| 4 | 0 | 0 | natural | other |  |
| 4 | 0 | 0 | natural | rudimentary |  |
| 4 | 0 | 0 | other | finished |  |
| 4 | 0 | 0 | rudimentary | finished |  |
| 4 | 0 | 0 | rudimentary | other |  |
| 4 | 0 | 1 | natural | finished |  |
| 4 | 0 | 1 | other | other |  |
| 4 | 1 | 0 | natural | finished |  |
| 4 | 1 | 0 | natural | other |  |
| 4 | 1 | 0 | natural | rudimentary |  |
| 5 | 0 | 0 | finished | natural | 36.47 |
| 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\*a | 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 | | | | | | | |
| 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 | 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 | | | |
| a0=public/government, 1=private, 2=other | | | |