Economic Clustering Summary Report: Congo Democratic 2013-14

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# Summary of Data

**Country Code-year:** CD1314

**Number of observations:** 18115

**Number of clusters:** 5

**Number of variables used:** 34

**Distance used:** Hamming

**Variables used in the algorithm:** hv206, hv207, hv208, hv210, hv227, hv243a, hv243b, hv244, hv246, hv246h, hv252, sh110h, sh110i, sh110j, sh110l, sh136aa, sh136ab, sh136ae, sh136ax, sh136ba, sh136bb, sh136bc, sh136bf, sh136bg, sh136bx, sh136ca, sh136ce, sh136cg, water, toilet, floor, roof, cookfuel, wall

# Top Variable Groupings (Sorted by ASW)

| Group | ASW | Var. 1 | Var. 2 | Var. 3 | Var. 4 |
| --- | --- | --- | --- | --- | --- |
| 1 | 0.9058 | has electricity | has television | has mobile telephone | has chair |
| 2 | 0.9052 | has electricity | has television | how can contract malaria : mosquito bite | how can contract malaria : bites other insects |
| 3 | 0.9032 | has electricity | has television | has mobile telephone | how can contract malaria : bites other insects |
| 4 | 0.9022 | has electricity | has television | how can contract malaria : mosquito bite | principal symptom of malaria : convulsions |
| 5 | 0.8975 | has electricity | has television | has mobile telephone | how can contract malaria : mosquito bite |
| 6 | 0.8943 | has electricity | has television | has mobile telephone | best way to prevent malaria : nothing |
| 7 | 0.8942 | has electricity | has television | has mobile telephone | principal symptom of malaria : convulsions |
| 8 | 0.8924 | has electricity | how can contract malaria : mosquito bite | floor | roof |
| 9 | 0.8923 | has electricity | has television | how can contract malaria : mosquito bite | roof |
| 10 | 0.8897 | has electricity | has television | has chair | how can contract malaria : bites other insects |

# Marginal Distributions

| Variable | Description | % Time in Top Clusters | Distribution |
| --- | --- | --- | --- |
| hv206 | has electricity | 100% | Binary, 10.8% 1s (or yes) |
| hv208 | has television | 90% | Binary, 12.1% 1s (or yes) |
| sh136aa | how can contract malaria : mosquito bite | 50% | Binary, 84.3% 1s (or yes) |
| hv243a | has mobile telephone | 50% | Binary, 34.4% 1s (or yes) |
| floor | floor | 10% | Categorical, 0 (finished) = 14.3%,   1 (natural) = 85.1%,   2 (other) = 0.2%,   3 (rudimentary) = 0.4% |
| sh110h | has chair | 20% | Binary, 73.1% 1s (or yes) |
| sh136ab | how can contract malaria : bites other insects | 30% | Binary, 16.4% 1s (or yes) |
| sh136bg | principal symptom of malaria : convulsions | 20% | Binary, 13.1% 1s (or yes) |
| sh136ca | best way to prevent malaria : nothing | 10% | Binary, 22.9% 1s (or yes) |
| roof | roof | 20% | Categorical, 0 (finished) = 29.9%,   1 (natural) = 69.4%,   2 (other) = 0.1%,   3 (rudimentary) = 0.5% |

# Cluster #1 Configuration

| Cluster Group | has electricity | has television | has mobile telephone | has chair | Proportion (%) |
| --- | --- | --- | --- | --- | --- |
| 1 | 0 | 0 | 0 | 1 | 42.23 |
| 1 | 0 | 1 | 0 | 1 |  |
| 1 | 1 | 0 | 0 | 1 |  |
| 1 | 1 | 1 | 0 | 1 |  |
| 2 | 0 | 0 | 1 | 0 | 3.26 |
| 2 | 1 | 0 | 1 | 0 |  |
| 3 | 0 | 0 | 0 | 0 | 23.39 |
| 3 | 0 | 1 | 0 | 0 |  |
| 3 | 1 | 0 | 0 | 0 |  |
| 3 | 1 | 1 | 0 | 0 |  |
| 4 | 0 | 1 | 1 | 0 | 11.28 |
| 4 | 0 | 1 | 1 | 1 |  |
| 4 | 1 | 1 | 1 | 0 |  |
| 4 | 1 | 1 | 1 | 1 |  |
| 5 | 0 | 0 | 1 | 1 | 19.83 |
| 5 | 1 | 0 | 1 | 1 |  |

# Validation Tables

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

| Cluster ID/Children Deceased | 0% | 1-33% | 34-66% | 67+% |
| --- | --- | --- | --- | --- |
| 3\* | 2,172 (87.4%) | 233 (9.4%) | 57 (2.3%) | 24 (1.0%) |
| 2 | 539 (82.0%) | 83 (12.6%) | 26 (4.0%) | 9 (1.4%) |
| 1 | 3,574 (75.3%) | 813 (17.1%) | 290 (6.1%) | 72 (1.5%) |
| 5 | 5,358 (72.0%) | 1,379 (18.5%) | 554 (7.4%) | 148 (2.0%) |
| 4 | 2,503 (71.6%) | 612 (17.5%) | 298 (8.5%) | 83 (2.4%) |
| Total | 14,146 (75.1%) | 3,120 (16.6%) | 1,225 (6.5%) | 336 (1.8%) |
| \*The chi-squared p-value is 0 | | | | |

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

| Cluster ID/Children Deceased | 0% | >0% |
| --- | --- | --- |
| 3\* | 2,172 (87.4%) | 314 (12.6%) |
| 2 | 539 (82.0%) | 118 (18.0%) |
| 1 | 3,574 (75.3%) | 1,175 (24.7%) |
| 5 | 5,358 (72.0%) | 2,081 (28.0%) |
| 4 | 2,503 (71.6%) | 993 (28.4%) |
| Total | 14,146 (75.1%) | 4,681 (24.9%) |
| \*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. |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 3\*a | 20 (0.8%) | 137 (5.5%) | 89 (3.6%) | 1,222 (49.2%) | 622 (25.0%) | 396 (15.9%) | 3.40 |
| 2 | 22 (3.3%) | 89 (13.5%) | 45 (6.8%) | 362 (55.1%) | 100 (15.2%) | 39 (5.9%) | 2.83 |
| 1 | 477 (10.0%) | 1,244 (26.2%) | 461 (9.7%) | 2,048 (43.1%) | 404 (8.5%) | 115 (2.4%) | 2.21 |
| 5 | 1,648 (22.2%) | 2,808 (37.7%) | 779 (10.5%) | 1,986 (26.7%) | 208 (2.8%) | 10 (0.1%) | 1.51 |
| 4 | 1,190 (34.0%) | 1,380 (39.5%) | 288 (8.2%) | 593 (17.0%) | 44 (1.3%) | 1 (0.0%) | 1.12 |
| Total | 3,357 (17.8%) | 5,658 (30.1%) | 1,662 (8.8%) | 6,211 (33.0%) | 1,378 (7.3%) | 561 (3.0%) | 1.91 |
| \*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 |
| --- | --- | --- | --- |
| 3\*a | 73 (20.4%) | 241 (67.3%) | 44 (12.3%) |
| 1 | 145 (35.6%) | 225 (55.3%) | 37 (9.1%) |
| 2 | 26 (37.1%) | 38 (54.3%) | 6 (8.6%) |
| 5 | 107 (37.8%) | 134 (47.3%) | 42 (14.8%) |
| 4 | 39 (37.9%) | 48 (46.6%) | 16 (15.5%) |
| Total | 390 (31.9%) | 686 (56.2%) | 145 (11.9%) |
| \*The chi-squared p-value is 0 | | | |
| a0=public/government, 1=private, 2=other | | | |