Economic Clustering Summary Report: Benin 2017

# Data Summary

**Country Code-year:** BJ17

**Number of observations:** 14028

**Number of variables used:** 18

**Variable set used:** 1

**Variables used in the algorithm:** hv206, hv207, hv208, hv210, hv211, hv243a, hv243b, hv244, hv246, hv247, sh121j, sh123a, water, toilet, floor, roof, cookfuel, wall

# Top 10 Variable Sets (Sorted by ASW)

| Set | ASW | Var.1 | Var.2 | Var.3 | Var.4 |
| --- | --- | --- | --- | --- | --- |
| 1 | 0.8996 | has television | has mobile telephone | vcd/dvd player | roof |
| 2 | 0.8922 | has television | has mobile telephone | has bank account | vcd/dvd player |
| 3 | 0.8882 | has mobile telephone | has bank account | vcd/dvd player | roof |
| 4 | 0.8857 | has television | has mobile telephone | vcd/dvd player | credit union |
| 5 | 0.8841 | has mobile telephone | has bank account | credit union | roof |
| 6 | 0.8829 | has mobile telephone | vcd/dvd player | credit union | roof |
| 7 | 0.8806 | has mobile telephone | has watch | has bank account | roof |
| 8 | 0.8797 | has mobile telephone | has watch | vcd/dvd player | roof |
| 9 | 0.8795 | has television | has mobile telephone | credit union | roof |
| 10 | 0.8787 | has television | vcd/dvd player | floor | roof |

# Marginal Distributions

| Variable | Description | % in Top Sets | Distribution |
| --- | --- | --- | --- |
| hv208 | has television | 50% | Binary, 29.4% (1/yes) |
| hv243a | has mobile telephone | 90% | Binary, 83.9% (1/yes) |
| hv247 | has bank account | 40% | Binary, 14.3% (1/yes) |
| sh121j | vcd/dvd player | 70% | Binary, 21.9% (1/yes) |
| hv243b | has watch | 20% | Binary, 29.4% (1/yes) |
| sh123a | credit union | 40% | Binary, 12.1% (1/yes) |
| floor | floor | 10% | Categorical, 0 (finished) = 68.4%,   1 (natural) = 30.3%,   2 (other) = 0.2%,   3 (rudimentary) = 1.1% |
| roof | roof | 80% | Categorical, 0 (finished) = 91.6%,   1 (natural) = 5.9%,   2 (other) = 1.1%,   3 (rudimentary) = 1.4% |

# Cluster Configuration (Set #1)

| Cluster Group | has television | has mobile telephone | vcd/dvd player | roof | Proportion (%) |
| --- | --- | --- | --- | --- | --- |
| 1 | 0 | 1 | 0 | natural | 3.71 |
| 1 | 0 | 1 | 1 | natural |  |
| 2 | 0 | 1 | 0 | finished | 51.42 |
| 2 | 0 | 1 | 0 | other |  |
| 2 | 0 | 1 | 0 | rudimentary |  |
| 2 | 0 | 1 | 1 | finished |  |
| 2 | 0 | 1 | 1 | rudimentary |  |
| 3 | 1 | 1 | 0 | finished | 8.25 |
| 3 | 1 | 1 | 0 | natural |  |
| 3 | 1 | 1 | 0 | other |  |
| 3 | 1 | 1 | 0 | rudimentary |  |
| 4 | 0 | 0 | 0 | finished | 15.76 |
| 4 | 0 | 0 | 0 | natural |  |
| 4 | 0 | 0 | 0 | other |  |
| 4 | 0 | 0 | 0 | rudimentary |  |
| 4 | 0 | 0 | 1 | finished |  |
| 4 | 1 | 0 | 0 | finished |  |
| 5 | 1 | 0 | 1 | finished | 20.85 |
| 5 | 1 | 0 | 1 | other |  |
| 5 | 1 | 1 | 1 | finished |  |
| 5 | 1 | 1 | 1 | natural |  |
| 5 | 1 | 1 | 1 | other |  |
| 5 | 1 | 1 | 1 | rudimentary |  |

# Validation Tables

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

| Cluster ID/Children Deceased | 0% | 1-33% | 34-66% | 67+% |
| --- | --- | --- | --- | --- |
| 3\* | 1,249 (86.3%) | 148 (10.2%) | 43 (3.0%) | 8 (0.6%) |
| 5 | 3,149 (85.9%) | 348 (9.5%) | 139 (3.8%) | 30 (0.8%) |
| 2 | 6,411 (76.4%) | 1,460 (17.4%) | 457 (5.4%) | 64 (0.8%) |
| 1 | 397 (72.2%) | 101 (18.4%) | 47 (8.5%) | 5 (0.9%) |
| 4 | 1,248 (70.8%) | 368 (20.9%) | 125 (7.1%) | 22 (1.2%) |
| Total | 12,454 (78.7%) | 2,425 (15.3%) | 811 (5.1%) | 129 (0.8%) |
| \*The chi-squared p-value is 0 | | | | |

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

| Cluster ID/Children Deceased | 0% | >0% |
| --- | --- | --- |
| 3\* | 1,249 (86.3%) | 199 (13.7%) |
| 5 | 3,149 (85.9%) | 517 (14.1%) |
| 2 | 6,411 (76.4%) | 1,981 (23.6%) |
| 1 | 397 (72.2%) | 153 (27.8%) |
| 4 | 1,248 (70.8%) | 515 (29.2%) |
| Total | 12,454 (78.7%) | 3,365 (21.3%) |
| \*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. |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 5\*a | 1,195 (32.6%) | 731 (19.9%) | 90 (2.5%) | 1,351 (36.9%) | 66 (1.8%) | 233 (6.4%) | 1.74 |
| 3 | 575 (39.7%) | 299 (20.6%) | 28 (1.9%) | 463 (32.0%) | 15 (1.0%) | 68 (4.7%) | 1.48 |
| 2 | 5,178 (61.7%) | 1,494 (17.8%) | 115 (1.4%) | 1,522 (18.1%) | 25 (0.3%) | 58 (0.7%) | 0.80 |
| 4 | 1,306 (74.1%) | 264 (15.0%) | 10 (0.6%) | 180 (10.2%) | 3 (0.2%) | 0 (0.0%) | 0.47 |
| 1 | 447 (81.3%) | 56 (10.2%) | 8 (1.5%) | 39 (7.1%) | 0 (0.0%) | 0 (0.0%) | 0.34 |
| Total | 8,701 (55.0%) | 2,844 (18.0%) | 251 (1.6%) | 3,555 (22.5%) | 109 (0.7%) | 359 (2.3%) | 1.03 |
| \*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 | 99 (50.5%) | 77 (39.3%) | 20 (10.2%) |
| 5 | 272 (51.1%) | 217 (40.8%) | 43 (8.1%) |
| 2 | 612 (66.5%) | 207 (22.5%) | 101 (11.0%) |
| 1 | 41 (82.0%) | 7 (14.0%) | 2 (4.0%) |
| 4 | 122 (83.6%) | 16 (11.0%) | 8 (5.5%) |
| Total | 1,146 (62.1%) | 524 (28.4%) | 174 (9.4%) |
| \*The chi-squared p-value is 0 | | | |
| a0=public/government, 1=private, 2=other | | | |