Economic Clustering Summary Report: Madagascar 2021

# Data Summary

**Country Code-year:** MD21

**Number of observations:** 20494

**Number of variables used:** 22

**Variable set used:** 1

**Variables used in the algorithm:** hv201a, hv206, hv207, hv208, hv210, hv227, hv237, hv243a, hv243b, hv244, hv246, sh121g, sh121h, sh121i, sh121j, sh121m, water, toilet, floor, roof, cookfuel, wall

# Top 10 Variable Sets (Sorted by ASW)

| Set | ASW | Var.1 | Var.2 | Var.3 | Var.4 |
| --- | --- | --- | --- | --- | --- |
| 1 | 0.9118 | has electricity | has television | has a bed | has a dvd / divx player |
| 2 | 0.9111 | has television | has a bed | has a chair | has a dvd / divx player |
| 3 | 0.8864 | has electricity | has television | has a table | has a dvd / divx player |
| 4 | 0.8863 | has television | has a bed | has a table | has a dvd / divx player |
| 5 | 0.8818 | has television | has a table | has a chair | has a dvd / divx player |
| 6 | 0.8797 | has electricity | has television | has a bed | has a chair |
| 7 | 0.8783 | has electricity | has a bed | has a chair | has a dvd / divx player |
| 8 | 0.8756 | has a bed | has a table | has a chair | has a dvd / divx player |
| 9 | 0.8734 | has electricity | has television | has a chair | has a dvd / divx player |
| 10 | 0.8727 | has a bed | has a table | has a chair | has a sofa |

# Marginal Distributions

| Variable | Description | % in Top Sets | Distribution |
| --- | --- | --- | --- |
| hv206 | has electricity | 50% | Binary, 33.2% (1/yes) |
| hv208 | has television | 70% | Binary, 21.4% (1/yes) |
| sh121g | has a bed | 70% | Binary, 77% (1/yes) |
| sh121h | has a table | 50% | Binary, 65% (1/yes) |
| sh121i | has a chair | 70% | Binary, 55.4% (1/yes) |
| sh121m | has a dvd / divx player | 80% | Binary, 14.7% (1/yes) |
| sh121j | has a sofa | 10% | Binary, 18.9% (1/yes) |

# Cluster Configuration (Set #1)

| Cluster Group | has electricity | has television | has a bed | has a dvd / divx player | Proportion (%) |
| --- | --- | --- | --- | --- | --- |
| 1 | 1 | 1 | 0 | 0 | 7.88 |
| 1 | 1 | 1 | 1 | 0 |  |
| 2 | 0 | 0 | 0 | 0 | 22.84 |
| 2 | 0 | 0 | 0 | 1 |  |
| 2 | 0 | 1 | 0 | 0 |  |
| 2 | 1 | 0 | 0 | 0 |  |
| 3 | 0 | 1 | 1 | 1 | 13.77 |
| 3 | 1 | 0 | 0 | 1 |  |
| 3 | 1 | 0 | 1 | 1 |  |
| 3 | 1 | 1 | 0 | 1 |  |
| 3 | 1 | 1 | 1 | 1 |  |
| 4 | 1 | 0 | 1 | 0 | 11.43 |
| 5 | 0 | 0 | 1 | 0 | 44.09 |
| 5 | 0 | 0 | 1 | 1 |  |
| 5 | 0 | 1 | 1 | 0 |  |

# Validation Tables

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

| Cluster ID/Children Deceased | 0% | 1-33% | 34-66% | 67+% |
| --- | --- | --- | --- | --- |
| 1\* | 1,492 (90.8%) | 109 (6.6%) | 33 (2.0%) | 9 (0.5%) |
| 3 | 2,807 (90.7%) | 207 (6.7%) | 63 (2.0%) | 17 (0.5%) |
| 4 | 1,836 (87.7%) | 187 (8.9%) | 53 (2.5%) | 17 (0.8%) |
| 5 | 6,875 (84.0%) | 916 (11.2%) | 315 (3.8%) | 76 (0.9%) |
| 2 | 2,994 (77.8%) | 624 (16.2%) | 178 (4.6%) | 50 (1.3%) |
| Total | 16,004 (84.9%) | 2,043 (10.8%) | 642 (3.4%) | 169 (0.9%) |
| \*The chi-squared p-value is 0 | | | | |

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

| Cluster ID/Children Deceased | 0% | >0% |
| --- | --- | --- |
| 1\* | 1,492 (90.8%) | 151 (9.2%) |
| 3 | 2,807 (90.7%) | 287 (9.3%) |
| 4 | 1,836 (87.7%) | 257 (12.3%) |
| 5 | 6,875 (84.0%) | 1,307 (16.0%) |
| 2 | 2,994 (77.8%) | 852 (22.2%) |
| Total | 16,004 (84.9%) | 2,854 (15.1%) |
| \*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. |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1\*a | 45 (2.7%) | 232 (14.1%) | 125 (7.6%) | 836 (50.9%) | 168 (10.2%) | 237 (14.4%) | 2.95 |
| 3 | 119 (3.8%) | 487 (15.7%) | 201 (6.5%) | 1,587 (51.3%) | 330 (10.7%) | 370 (12.0%) | 2.85 |
| 4 | 197 (9.4%) | 619 (29.6%) | 195 (9.3%) | 880 (42.0%) | 105 (5.0%) | 97 (4.6%) | 2.18 |
| 5 | 1,585 (19.4%) | 3,344 (40.9%) | 777 (9.5%) | 2,291 (28.0%) | 137 (1.7%) | 48 (0.6%) | 1.53 |
| 2 | 1,483 (38.6%) | 1,678 (43.6%) | 212 (5.5%) | 446 (11.6%) | 17 (0.4%) | 10 (0.3%) | 0.93 |
| Total | 3,429 (18.2%) | 6,360 (33.7%) | 1,510 (8.0%) | 6,040 (32.0%) | 757 (4.0%) | 762 (4.0%) | 1.82 |
| \*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 | 577 (61.3%) | 347 (36.8%) | 18 (1.9%) |
| 1 | 321 (64.7%) | 170 (34.3%) | 5 (1.0%) |
| 4 | 569 (76.8%) | 164 (22.1%) | 8 (1.1%) |
| 5 | 2,508 (85.9%) | 392 (13.4%) | 18 (0.6%) |
| 2 | 988 (89.6%) | 114 (10.3%) | 1 (0.1%) |
| Total | 4,963 (80.0%) | 1,187 (19.1%) | 50 (0.8%) |
| \*The chi-squared p-value is 0 | | | |
| a0=public/government, 1=private, 2=other | | | |