Economic Clustering Summary Report: Tanzania 2017

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# Summary of Data

**Country Code-year:** TZ17

**Number of observations:** 9330

**Number of clusters:** 5

**Number of variables used:** 21

**Distance used:** Hamming

**Variables used in the algorithm:** hv206, hv207, hv208, hv209, hv210, hv211, hv225, hv227, hv243a, hv243b, hv244, hv246, hv247, sh114g, sh114h, water, toilet, floor, roof, cookfuel, wall

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# Top Variable Groupings (Sorted by ASW)

| Group | ASW | Var. 1 | Var. 2 | Var. 3 | Var. 4 |
| --- | --- | --- | --- | --- | --- |
| 1 | 0.9504 | has electricity | has refrigerator | has mobile telephone | household has: battery |
| 2 | 0.921 | has electricity | has refrigerator | floor | roof |
| 3 | 0.921 | has electricity | has refrigerator | household has: battery | roof |
| 4 | 0.9182 | has television | has refrigerator | floor | roof |
| 5 | 0.9148 | has television | has refrigerator | has mobile telephone | household has: battery |
| 6 | 0.9134 | has electricity | has refrigerator | has mosquito bed net for sleeping | household has: battery |
| 7 | 0.9132 | has electricity | has refrigerator | has motorcycle/scooter | has mobile telephone |
| 8 | 0.9127 | has electricity | has refrigerator | has mobile telephone | floor |
| 9 | 0.9092 | has television | has refrigerator | has mobile telephone | floor |
| 10 | 0.9055 | has electricity | has television | has refrigerator | household has: battery |

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# Marginal Distributions

| Variable | Description | % Time in Top Clusters | Distribution |
| --- | --- | --- | --- |
| hv206 | has electricity | 70% | Binary, 23.1% 1s (or yes) |
| hv208 | has television | 40% | Binary, 20.7% 1s (or yes) |
| hv209 | has refrigerator | 100% | Binary, 7.4% 1s (or yes) |
| hv243a | has mobile telephone | 50% | Binary, 81.2% 1s (or yes) |
| floor | floor | 40% | Categorical, 0 (finished) = 42.4%,   1 (natural) = 57.4%,   2 (other) = 0%,   3 (rudimentary) = 0.2% |
| sh114g | household has: battery | 50% | Binary, 11.3% 1s (or yes) |
| hv227 | has mosquito bed net for sleeping | 10% | Binary, 81% 1s (or yes) |
| hv211 | has motorcycle/scooter | 10% | Binary, 12.2% 1s (or yes) |
| roof | roof | 30% | Categorical, 0 (finished) = 77.3%,   1 (natural) = 21.6%,   2 (other) = 0.1%,   3 (rudimentary) = 1% |

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# Cluster #1 Configuration

| Cluster Group | has electricity | has refrigerator | has mobile telephone | household has: battery | Proportion (%) |
| --- | --- | --- | --- | --- | --- |
| 1 | 0 | 0 | 1 | 0 | 49.13 |
| 2 | 0 | 0 | 0 | 0 | 18.81 |
| 2 | 0 | 0 | 0 | 1 |  |
| 2 | 0 | 1 | 0 | 0 |  |
| 2 | 1 | 0 | 0 | 0 |  |
| 2 | 1 | 0 | 0 | 1 |  |
| 2 | 1 | 1 | 0 | 0 |  |
| 2 | 1 | 1 | 0 | 1 |  |
| 3 | 0 | 0 | 1 | 1 | 10.43 |
| 3 | 0 | 1 | 1 | 1 |  |
| 3 | 1 | 0 | 1 | 1 |  |
| 3 | 1 | 1 | 1 | 1 |  |
| 4 | 0 | 1 | 1 | 0 | 6.69 |
| 4 | 1 | 1 | 1 | 0 |  |
| 5 | 1 | 0 | 1 | 0 | 14.94 |

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# Validation Tables

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

| Cluster ID/Children Deceased | 0% | 1-33% | 34-66% | 67+% |
| --- | --- | --- | --- | --- |
| 2\* | 882 (91.0%) | 60 (6.2%) | 17 (1.8%) | 10 (1.0%) |
| 5 | 1,366 (85.9%) | 149 (9.4%) | 56 (3.5%) | 20 (1.3%) |
| 4 | 952 (79.5%) | 166 (13.9%) | 57 (4.8%) | 22 (1.8%) |
| 3 | 3,973 (77.3%) | 848 (16.5%) | 258 (5.0%) | 60 (1.2%) |
| 1 | 792 (70.6%) | 241 (21.5%) | 75 (6.7%) | 14 (1.2%) |
| Total | 7,965 (79.5%) | 1,464 (14.6%) | 463 (4.6%) | 126 (1.3%) |
| \*The chi-squared p-value is 0 | | | | |

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

| Cluster ID/Children Deceased | 0% | >0% |
| --- | --- | --- |
| 2\* | 882 (91.0%) | 87 (9.0%) |
| 5 | 1,366 (85.9%) | 225 (14.1%) |
| 4 | 952 (79.5%) | 245 (20.5%) |
| 3 | 3,973 (77.3%) | 1,166 (22.7%) |
| 1 | 792 (70.6%) | 330 (29.4%) |
| Total | 7,965 (79.5%) | 2,053 (20.5%) |
| \*The chi-squared p-value is 0 | | |

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## 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 | 32 (3.3%) | 73 (7.5%) | 276 (28.5%) | 204 (21.1%) | 319 (32.9%) | 65 (6.7%) | 2.93 |
| 5 | 95 (6.0%) | 135 (8.5%) | 708 (44.5%) | 260 (16.3%) | 347 (21.8%) | 46 (2.9%) | 2.48 |
| 3 | 1,065 (20.7%) | 850 (16.5%) | 2,376 (46.2%) | 504 (9.8%) | 328 (6.4%) | 16 (0.3%) | 1.66 |
| 4 | 265 (22.1%) | 181 (15.1%) | 585 (48.9%) | 79 (6.6%) | 87 (7.3%) | 0 (0.0%) | 1.62 |
| 1 | 370 (33.0%) | 220 (19.6%) | 451 (40.2%) | 61 (5.4%) | 19 (1.7%) | 1 (0.1%) | 1.24 |
| Total | 1,827 (18.2%) | 1,459 (14.6%) | 4,396 (43.9%) | 1,108 (11.1%) | 1,100 (11.0%) | 128 (1.3%) | 1.86 |
| \*The chi-squared p-value is 0 | | | | | | | |
| a0=none,1=incomplete primary, 2=primary, 3=incomplete secondary, 4=secondary, 5=higher | | | | | | | |

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