

Economic Clustering Summary Report: Ethiopia 2019

Data Summary

Country Code-year: ET19

Number of observations: 8663

Number of variables used: 21

Variable set used: 1

Variables used in the algorithm: hv206, hv207, hv208, hv209, hv243a, hv243b, hv244, hv246, hv247, sh121g, sh121h, sh121i, sh121j, sh124, sh125, water, toilet, floor, roof, cookfuel, wall

Top 10 Variable Sets (Sorted by ASW)

| Set | ASW | Var.1 | Var.2 | Var.3 | Var.4 |
|-----|--------|------------------|---------------------------------------|---------------------------------------|--|
| 1 | 0.9556 | has television | has refrigerator | has mobile telephone | electric mitad |
| 2 | 0.9513 | has television | has refrigerator | electric mitad | receiving cash of food from the safety net program |
| 3 | 0.9503 | has electricity | has television | has refrigerator | electric mitad |
| 4 | 0.942 | has television | has refrigerator | bed with cotton/spring mattress | electric mitad |
| 5 | 0.9321 | has electricity | has television | has refrigerator | receiving cash of food from the safety net program |
| 6 | 0.9315 | has television | has refrigerator | table | electric mitad |
| 7 | 0.9313 | has television | has refrigerator | owns livestock, herds or farm animals | electric mitad |
| 8 | 0.931 | has television | has refrigerator | owns land usable for agriculture | electric mitad |
| 9 | 0.9306 | has television | has refrigerator | electric mitad | enrolling in a community based health insurance scheme |
| 10 | 0.9285 | has refrigerator | owns livestock, herds or farm animals | bed with cotton/spring mattress | electric mitad |

Marginal Distributions

| Variable | Description | % in Top Sets | Distribution |
|----------|--|---------------|-----------------------|
| hv208 | has television | 90% | Binary, 22.9% (1/yes) |
| hv206 | has electricity | 20% | Binary, 38% (1/yes) |
| hv209 | has refrigerator | 100% | Binary, 12.3% (1/yes) |
| hv246 | owns livestock, herds or farm animals | 20% | Binary, 60.2% (1/yes) |
| hv243a | has mobile telephone | 10% | Binary, 68.8% (1/yes) |
| sh121j | electric mitad | 90% | Binary, 11% (1/yes) |
| sh121i | bed with cotton/spring mattress | 20% | Binary, 38.4% (1/yes) |
| sh121g | table | 10% | Binary, 38.1% (1/yes) |
| hv244 | owns land usable for agriculture | 10% | Binary, 51.4% (1/yes) |
| sh124 | receiving cash of food from the safety net program | 20% | Binary, 16.9% (1/yes) |
| sh125 | enrolling in a community based health insurance scheme | 10% | Binary, 20.2% (1/yes) |

Cluster Configuration (Set #1)

| Cluster Group | has television | has refrigerator | has mobile telephone | electric mitad | Proportion (%) |
|---------------|----------------|------------------|----------------------|----------------|----------------|
| 1 | 0 | 1 | 1 | 1 | 10.16 |
| 1 | 1 | 0 | 1 | 1 | |
| 1 | 1 | 1 | 0 | 1 | |
| 1 | 1 | 1 | 1 | 1 | |
| 2 | 1 | 1 | 0 | 0 | 3.83 |
| 2 | 1 | 1 | 1 | 0 | |
| 3 | 1 | 0 | 1 | 0 | 8.55 |
| 4 | 0 | 0 | 0 | 0 | 30.99 |
| 4 | 0 | 0 | 0 | 1 | |
| 4 | 0 | 1 | 0 | 0 | |
| 4 | 1 | 0 | 0 | 0 | |
| 4 | 1 | 0 | 0 | 1 | |
| 5 | 0 | 0 | 1 | 0 | 46.46 |
| 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* | 1,156 (95.6%) | 36 (3.0%) | 7 (0.6%) | 10 (0.8%) |
| 2 | 349 (89.0%) | 29 (7.4%) | 10 (2.6%) | 4 (1.0%) |
| 3 | 709 (88.7%) | 66 (8.3%) | 18 (2.3%) | 6 (0.8%) |
| 5 | 3,337 (81.2%) | 565 (13.7%) | 164 (4.0%) | 44 (1.1%) |
| 4 | 1,848 (77.8%) | 385 (16.2%) | 121 (5.1%) | 21 (0.9%) |
| Total | 7,399 (83.3%) | 1,081 (12.2%) | 320 (3.6%) | 85 (1.0%) |

*The chi-squared p-value is 0

a.2) Aggregating proportions greater than 0%

| Cluster ID/Children Deceased | 0% | >0% |
|------------------------------|---------------|---------------|
| 1* | 1,156 (95.6%) | 53 (4.4%) |
| 2 | 349 (89.0%) | 43 (11.0%) |
| 3 | 709 (88.7%) | 90 (11.3%) |
| 5 | 3,337 (81.2%) | 773 (18.8%) |
| 4 | 1,848 (77.8%) | 527 (22.2%) |
| Total | 7,399 (83.3%) | 1,486 (16.7%) |

*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 | 128 (10.6%) | 265 (21.9%) | 97 (8.0%) | 256 (21.2%) | 77 (6.4%) | 386 (31.9%) | 2.87 |
| 2 | 70 (17.9%) | 130 (33.2%) | 31 (7.9%) | 88 (22.4%) | 15 (3.8%) | 58 (14.8%) | 2.06 |
| 3 | 181 (22.7%) | 274 (34.3%) | 74 (9.3%) | 146 (18.3%) | 18 (2.3%) | 106 (13.3%) | 1.83 |
| 5 | 1,778 (43.3%) | 1,464 (35.6%) | 235 (5.7%) | 430 (10.5%) | 19 (0.5%) | 184 (4.5%) | 1.03 |
| 4 | 1,483 (62.4%) | 705 (29.7%) | 70 (2.9%) | 99 (4.2%) | 1 (0.0%) | 17 (0.7%) | 0.52 |
| Total | 3,640 (41.0%) | 2,838 (31.9%) | 507 (5.7%) | 1,019 (11.5%) | 130 (1.5%) | 751 (8.5%) | 1.26 |

*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 |
|--------------------------------------|---------------|-------------|-----------|
| 1 ^a | 193 (67.5%) | 75 (26.2%) | 18 (6.3%) |
| 3 | 180 (70.0%) | 68 (26.5%) | 9 (3.5%) |
| 2 | 69 (71.1%) | 26 (26.8%) | 2 (2.1%) |
| 5 | 852 (84.9%) | 129 (12.8%) | 23 (2.3%) |
| 4 | 420 (91.1%) | 25 (5.4%) | 16 (3.5%) |
| Total | 1,714 (81.4%) | 323 (15.3%) | 68 (3.2%) |

*The chi-squared p-value is 0

^a0=public/government, 1=private, 2=other