AGENDA

Problem of undercounting
Which groups are missing from household surveys
Counting those who are missing
Access to Water
Benefits of citizen-led assessments
Complementarity between citizen-led & household surveys
Conclusions / Recommendations
How Undercounting has grown

Buettner & Garland (2008) *UN Pop. Division*, said children are systematically under-counted

- Most low & middle income countries now have well organised censuses of population but lack infrastructure for inter-censal updating
- This is mainly because birth registration is at a low level in many countries
  - e.g., estimated at 14% in Zambia.
  - The International Institute for Vital Statistics & Registration, founded in 1976 to rectify that situation, reduced its activities substantially in the 1990s & closed down altogether in 2006 for lack of donor funding.

But the populations have not stopped growing.

Save the Children
How Undercounting has grown

- Rangeland pastoralists estimated by Thornton et al (2003) to continue to increase (although compare Randall, 2015)
- Urban population of developing regions doubled from 1900 to 2014 (from 1.49 to 2.97 billion) & although estimated proportion living in slums dropped from 46.2% to 29.7%, numbers increased from 689 to 881 million (WCR, 2016)
- Donors preferred to expand large scale (10,000-15,000) household surveys & UNDP to base estimates of deprivation for the MDGs (& now SDGs) on them
  - DHS started 1984, has carried out 275 standard surveys by 2016; UNICEF started MICS in 1997 carried out an average of 60 surveys in each of 5 waves
- BUT, household surveys do not include people who are not in (registered) households!
Population Groups Missing from Sampling Frames of Household Surveys

- The issue is NOT that household surveys under-represent those who are not in households BUT that household surveys, with rare exceptions, typically omit by design:
  1. those not in households because they are homeless (whatever the definition);
  2. those who are in institutions, including hospitals, military, prisons & refugee camps;
  3. mobile, nomadic, pastoralist & traveller populations.

- ALL these groups – except official military are poor
• In addition, *in practice*, because they are difficult to reach, household surveys typically under-represent:

1. those in fragile, disjointed, or multiple occupancy households (because of difficulties of identifying them)
2. those in urban slums (because of the difficulties of identifying & interviewing);
3. may omit certain insecure areas of a country;
4. older women in Sahelian countries;
5. servants (slaves) in rich households.

• Except for older women all these groups include children; taken together the 7 groups, excluding military, constitute a very good ostensive definition of the poorest of the poor
Counting the Institutional Countable Groups Missing from Sampling Frames

- Hospitals: about 20 million worldwide based on reports to WHO, of which about 9 million in developing countries, most of them poor & none of them included in household surveys; possibly one third (3 million) <18yo
- Military: about 10 million worldwide, most will be in developed countries & in official forces of developing countries, none (or very few) will be <18 yrs; & none (or very few) would be poor
- Prisons: again about 10 million, with about half in US, Russia & China; & only a few under 18
UNHCR compiles data on refugees & Internally Displaced Persons. But after relative stability from the end of WWII, illegal refugees have grown rapidly in last 10-15 years; so a rough guesstimate is double their figures! On this basis:

- Refugees: 20.8 million; IDPs & Stateless 21.2m
- According to UNHCR reports, about half of refugees are less than 18yrs: so 10.4; IDPs & Stateless 10.6m less than 18yrs
- 6-14 yrs refugees 5.2m; IDPs & Stateless 5.3m.

(Note 6-14yrs taken as typical age range of primary school)
No consistent source of direct data on nomads / pastoralists. The only possible indirect source is the count & projected estimates of rangeland animals by Thornton et al (2003) converted into numbers of people, based on nutritional estimates of animals needed. On this basis:

- All (Adults & Children): 290 million; about 1/3 <18yrs: 96 million
- Estimated proportion of missing from household sampling frames of 25% based on a large-scale (6,500 ‘families’) survey of pastoralists in Somalia
  - All (adults & children) 72.5m; <18yrs: 24m
  - 6-14 yrs: 36.2m
Counting the Main Groups Missing in Millions: Urban Slums

- UN Habitat estimates numbers in urban slums defined as not having one or more of: access to improved water & sanitation, durable & not overcrowded dwelling, security of tenure.

- In low & middle income countries, population (Adults & Children) in urban areas 2,634 million; <18yrs: 878m; & 6-14 yrs 439m.

- Estimated proportion missing from sampling frames in urban areas based on a comparison of UWEZO citizen-led surveys (in Nairobi, Kampala & Dar-es-Salaam) with contemporaneous Demographic & Household Surveys is 20%.

- 20% All, 527m; <18yrs,176m; 6-14 yrs, 88m
Estimates of Access to Piped Water

DHS          UWEZO

Nairobi
Dar-es-Salaam
Kampala
## Estimates of Access to Piped Water

<table>
<thead>
<tr>
<th>City</th>
<th>DHS</th>
<th>UWEZO</th>
<th>DIFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nairobi</td>
<td>86.5</td>
<td>70.2</td>
<td>16.3</td>
</tr>
<tr>
<td>National Kenya</td>
<td>56.3</td>
<td>24.7</td>
<td>41.6</td>
</tr>
<tr>
<td>Dar-es-Salaam</td>
<td>66.9</td>
<td>30.2</td>
<td>36.7</td>
</tr>
<tr>
<td>National Total</td>
<td>35.1</td>
<td>28.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Kampala</td>
<td>79.2</td>
<td>68.3</td>
<td>8.9</td>
</tr>
<tr>
<td>National Total</td>
<td>25.0</td>
<td>14.4</td>
<td>10.6</td>
</tr>
</tbody>
</table>

We take a low average of 40% in urban areas that gives 1,054 million without water in urban areas.

As a rough approximation, we take 75% of all the other areas in Low and Middle Income countries (population, 6,248-2,634 million = 3,614 million) as being without water, then there are 2,711 million without access to piped water outside urban areas.

UNICEF estimates that 2,100 million or 28% of the world’s population are without safe drinking water.

A total of 3,765 million or 50% of the world population
How do UWEZO surveys ‘Resolve’ the Difficulty of Finding ‘Missing People’?

- UWEZO & other Citizen-Led Assessment (C-L-A) surveys are, of course household surveys; so why do they find more (not all!) poverty, as measured by access to water?

- Possible Answers are:
  - C-L-A enumerators are local: this means they know their area including where the current water-holes of pastoralist groups are;
  - C-L-A surveys generally have two person citizen teams, whilst DHS, LSMS, MICS have only one; so easier for local C-L teams to work in slums
Complementarity not Competition between Citizen-led & Household Surveys

• There is not really a competition between citizen-led surveys & international (or national) standardised household surveys, more complementarity.

• Given their limited training & 'volunteer' status, citizen enumerators could never be expected to administer a DHS/MICS style comprehensive survey.

• Instead, preferable for reporting on headline poverty SDG-type goals to move progressively towards citizen-led surveys where they can use two locally knowledgeable enumerators; this is particularly important for including out-of-household children.

• But exploration of the causal factors leading to deprivation & details of, for example, health care, living conditions, malnutrition, etc. should be examined through traditional household surveys.

• This combined complementary approach would have the advantage of cutting survey costs.
Conclusions & Recommendations

• Conclusions
  – 700 million missing from sampling frames of household surveys; 74 million 6-11 yrs
  – NER is 80 not 90
  – Numbers people without access to safe drinking water is 3,765 million not 2,100 million

• Recommendations
  – Urgent that UN review population figures, with implications for all quantitative poverty related indicators in SDGs
  – C-L-A could measure not only SDG4 indicators but also access aspects of SDG 2 (hunger), 3 (health), 6 (access to water) & 11 (shelter)
  – UWEZO figures should be accepted for headline indicators; detailed surveys for examination of causality, service use etc.
  – ALWAYS question who has been excluded from data you’re collecting or using

• Reference

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