
Subject: Geospatially-derived sampling to include nomadic pastoralists

Posted by [christopherlindahl](#) on Fri, 15 Mar 2019 13:14:53 GMT

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This request is being submitted by Save the Children and Hannah Wild, Michele Barry, and Stace Maples on behalf of the Stanford Center for Innovation in Global Health and the Stanford Geospatial Center

Rationale:

Nomadic pastoralists are systematically underrepresented in population data. Sampling frames derived from census listings used by most large-scale household surveys including the DHS are not suited to capture mobility and introduce bias by contributing to the exclusion of mobile groups. Pastoralists are under-enumerated in censuses, an issue which is magnified through the use of census enumerations as the basis for survey sampling frames. Nomadic households are highly unlikely to be present in the same location at the future time point of a subsequent survey event. A study in Chad estimated that 70% of pastoralist households were no longer present in the same location in a one-year time frame. To highlight this problem, the sampling frame for the 2016 Ethiopian DHS was based off of the 2007 census, likely capturing few of the nomadic households enumerated nearly a decade prior. The data on which policy and programming decisions are made omit nomadic groups by design, raising unacceptable implications for equity in global health. Sampling methods capable of generating data on the demographic parameters and baseline health status of mobile pastoralists are a precondition for staging health services capable of reaching these neglected populations.

Proposed Change:

We propose the use of geospatially-derived sampling frames using satellite imagery as an alternative to census-based sampling frames in pastoralist regions. This approach is capable of accounting for population mobility such as that practiced by nomadic pastoralists, providing a logistically and economically feasible solution for minimizing bias in DHS data.

File Attachments

1) [DHS-8-geospatially derived samples for nomadic pastoralists-FOR SUBMISSION.docx](#), downloaded 251 times
