
Subject: Re: problem in recomputing the factor score for BDHS6 2011 data
Posted by [Liz-DHS](#) on Tue, 22 Jul 2014 17:42:39 GMT

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Dear User,

Thank you for your post. Our expert in this area is currently out for an extended period of time. Someone from the forum may reply before that. In the meantime, Comparative Report 6 may offer some guidance.<http://dhsprogram.com/pubs/pdf/CR6/CR6.pdf>

The following is taken directly from our website:

What is the methodology for wealth indexing?

Information on the wealth index is based on data collected in the Household Questionnaire. This questionnaire includes questions concerning the household's ownership of a number of consumer items such as a television and car; dwelling characteristics such as flooring material; type of drinking water source; toilet facilities; and other characteristics that are related to wealth status.

Each household asset for which information is collected is assigned a weight or factor score generated through principal components analysis. The resulting asset scores are standardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one. These standardized scores are then used to create the break points that define wealth quintiles as: Lowest, Second, Middle, Fourth, and Highest.

Each household is assigned a standardized score for each asset, where the score differs depending on whether or not the household owned that asset (or, in the case of sleeping arrangements, the number of people per room). These scores are summed by household, and individuals are ranked according to the total score of the household in which they reside. The sample is then divided into population quintiles -- five groups with the same number of individuals in each.

A single asset index is developed on the basis of data from the entire country sample and used in all the tabulations presented. Separate asset indices are not prepared for rural and urban population groups on the basis of rural or urban data, respectively.

Wealth quintiles are expressed in terms of quintiles of individuals in the population, rather than quintiles of individuals at risk for any one health or population indicator. This approach to defining wealth quintiles has the advantage of producing information directly relevant to the principal question of interest, for example, the health status or access to services for the poor in the population as a whole. This choice also facilitates comparisons across indicators for the same quintile, since the quintile denominators remain unchanged across indicators. However, some types of analysis may require data for quintiles of individuals at risk.

All health, nutrition and population indicators are calculated after applying the sampling weights so that the resulting numbers are generalizable to the total population. For each indicator in these tables, the total or population average presented is the weighted sum of the quintile values for that indicator, where the weight assigned to each quintile value is the proportion of the total number of individuals at risk in that quintile. The total value for indicators produced by this weighting scheme are representative of the total population, as they take into account the fact that the numbers of individuals at risk may vary across wealth quintiles. Similarly, each quintile value itself can be reproduced as a weighted average of urban/rural rates (weighted by proportions urban/rural) or

the male/female rates (weighted by the proportion male/female). As a result of this weighting scheme, the population average for a given indicator presented in the tables will usually differ from a simple mean of the population subgroups.

Thank you!
