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Subject: Re: Deriving district population size from DHS weights?

Posted by [Bridgette-DHS](#) on Fri, 20 Dec 2019 14:27:06 GMT

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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

It is not recommended that you infer population sizes using the sample, but if you don't have any better information, then yes, you can get a rough estimate. I would first try to anchor the subnational estimates on the best estimates you can find of the national population on the date of the survey, e.g. from the UN Population Division website. You may even be able to find a source for subnational counts. If you can only find the national total, then you could estimate the total for region R by multiplying the national total by the fraction of the weighted cases in the PR file that are in region R. Similarly for other areas. Note that the DHS samples are restricted to the population living in households. Population estimates from other sources will generally include the population not in households, e.g. people in the military or in institutions. The weights in DHS surveys are usually based on the most recent census in a country, possibly updated.

A related option is to rescale the weights with a single multiplier such that the total weight in the PR file is equal to the total population of the country. You can then run tables treating this modified weight as an "fweight" or "inflation weight" in Stata to get estimated population counts in the cells.

Many researchers would advise against doing this, but if you really need estimates of population counts, you can do this--at your own risk!