
Subject: Multilevel weighting issue in Bangladesh DHS data

Posted by [toukir86](#) on Sun, 15 Dec 2024 03:08:49 GMT

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Dear Concern,

I am working with multilevel analysis for the most recent Bangladesh DHS but BDHS 2022 does not provide Table A.2 as the guideline for the multilevel analysis described and given in many countries like Nepal (attached below).

There are 16 clusters in BDHS 2022 but can you provide me with the values of the total number of census clusters by strata (A_h) and the average number of households per cluster by strata (M_h)?

I am giving the code below can you kindly provide me with the correct values?

* A_h total number of census clusters by strata

```
gen A_h = 0
```

```
replace A_h = 122 if v022 == 1
```

```
replace A_h = 87 if v022 == 2
```

```
replace A_h = 134 if v022 == 3
```

```
replace A_h = 182 if v022 == 4
```

```
replace A_h = 167 if v022 == 5
```

```
replace A_h = 206 if v022 == 6
```

```
replace A_h = 124 if v022 == 7
```

```
replace A_h = 131 if v022 == 8
```

```
replace A_h = 17 if v022 == 9
```

```
replace A_h = 86 if v022 == 10
```

```
replace A_h = 127 if v022 == 11
```

```
replace A_h = 156 if v022 == 12
```

```
replace A_h = 122 if v022 == 13
```

```
replace A_h = 138 if v022 == 14
```

```
replace A_h = 122 if v022 == 15
```

```
replace A_h = 91 if v022 == 16
```

* M_h average number of households per cluster by strata

```
gen M_h = 0
```

```
replace M_h = 24 if v022 == 1
```

```
replace M_h = 47 if v022 == 2
```

```
replace M_h = 39 if v022 == 3
```

```
replace M_h = 56 if v022 == 4
```

```
replace M_h = 52 if v022 == 5
```

```
replace M_h = 53 if v022 == 6
```

```
replace M_h = 28 if v022 == 7
```

```
replace M_h = 58 if v022 == 8
```

```
replace M_h = 17 if v022 == 9
```

```
replace M_h = 58 if v022 == 10
```

```
replace M_h = 31 if v022 == 11
```

```
replace M_h = 58 if v022 == 12
```

```
replace M_h = 23 if v022 == 13
```

replace M_h = 61 if v022 == 14
replace M_h = 23 if v022 == 15
replace M_h = 47 if v022 == 16

File Attachments

1) [Nepal Table A.2.png](#), downloaded 30 times

Subject: Re: Multilevel weighting issue in Bangladesh DHS data

Posted by [Bridgette-DHS](#) on Mon, 16 Dec 2024 14:57:04 GMT

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Following is a response from Senior DHS staff member, Tom Pullum:

DHS normally provides this population-level information in appendix A of the final report, but Bangladesh is an exception. DHS never has access to the sampling frame for the DHS surveys conducted in Bangladesh. The Bangladesh statistical office draws the sample and provides DHS with the percentage distribution of the regions. You can contact the Bangladesh statistical office and request the information, but you are unlikely to obtain it.

Subject: Re: Multilevel weighting issue in Bangladesh DHS data

Posted by [toukir86](#) on Tue, 17 Dec 2024 10:59:21 GMT

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Thanks for your prompt reply. Also, I am facing a problem while doing a multilevel analysis for Jordan. As the strata v022 is not given in recoded way so I assumed the serial of A.2 as the serial and recoded the values of A_h and M_h

* A_h total number of census clusters by strata (Table A.2 of the DHS report)

gen A_h = 0

```
replace A_h = 6634 if v022 == 1 // Amman  
replace A_h = 213 if v022 == 2 // Amman  
replace A_h = 784 if v022 == 3 // Balqa  
replace A_h = 221 if v022 == 4 // Balqa  
replace A_h = 2727 if v022 == 5 // Zarqa  
replace A_h = 47 if v022 == 6 // Zarqa refuge camp  
replace A_h = 149 if v022 == 7 // Zarqa  
replace A_h = 334 if v022 == 8 // Madaba  
replace A_h = 123 if v022 == 9 // Madaba
```

```

replace A_h = 2997 if v022 == 10 // Irbid
replace A_h = 311 if v022 == 11 // Irbid
replace A_h = 584 if v022 == 12 // Mafrq
replace A_h = 114 if v022 == 13 // Mafrq refuge camp
replace A_h = 468 if v022 == 14 // Mafrq
replace A_h = 320 if v022 == 15 // Jarash
replace A_h = 134 if v022 == 16 // Jarash
replace A_h = 364 if v022 == 17 // Ajloun
replace A_h = 88 if v022 == 18 // Ajloun
replace A_h = 347 if v022 == 19 // Karak
replace A_h = 301 if v022 == 20 // Karak
replace A_h = 192 if v022 == 21 // Tafiela
replace A_h = 58 if v022 == 22 // Tafiela
replace A_h = 178 if v022 == 23 // Ma'an
replace A_h = 134 if v022 == 24 // Ma'an
replace A_h = 381 if v022 == 25 // Aqaba
replace A_h = 86 if v022 == 26 // Aqaba

```

*****STEP 3*****

* M_h average number of households per cluster by strata (Table A.2 of the DHS report)
gen M_h = 0

```

replace M_h = 126 if v022 == 1 // Amman
replace M_h = 101 if v022 == 2 // Amman
replace M_h = 105 if v022 == 3 // Balqa
replace M_h = 79 if v022 == 4 // Balqa
replace M_h = 95 if v022 == 5 // Zarqa
replace M_h = 235 if v022 == 6 // Zarqa refuge camp
replace M_h = 67 if v022 == 7 // Zarqa
replace M_h = 89 if v022 == 8 // Madaba
replace M_h = 68 if v022 == 9 // Madaba
replace M_h = 109 if v022 == 10 // Irbid
replace M_h = 90 if v022 == 11 // Irbid
replace M_h = 88 if v022 == 12 // Mafrq
replace M_h = 203 if v022 == 13 // Mafrq refuge camp
replace M_h = 68 if v022 == 14 // Mafrq
replace M_h = 111 if v022 == 15 // Jarash
replace M_h = 83 if v022 == 16 // Jarash
replace M_h = 80 if v022 == 17 // Ajloun
replace M_h = 65 if v022 == 18 // Ajloun
replace M_h = 107 if v022 == 19 // Karak
replace M_h = 87 if v022 == 20 // Karak
replace M_h = 79 if v022 == 21 // Tafiela
replace M_h = 69 if v022 == 22 // Tafiela
replace M_h = 89 if v022 == 23 // Ma'an
replace M_h = 94 if v022 == 24 // Ma'an
replace M_h = 86 if v022 == 25 // Aqaba
replace M_h = 61 if v022 == 26 // Aqaba

```

But I am getting an error in STATA: "Weights in variable wt2_1 not constant within groups defined by: v001." The weights do not seem to be constant for the unique cluster. I think my strata assigning is not going correctly.

Subject: Re: Multilevel weighting issue in Bangladesh DHS data
Posted by [Bridgette-DHS](#) on Tue, 17 Dec 2024 12:26:39 GMT
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Following is a response from Senior DHS staff member, Tom Pullum:

I worked with the PR file to see how hv022 is related to hv024 and hv025 (you could do it with the IR file too). I opened the PR file and reduced it to one record per household ("keep if hvidx==1"). Then I entered "tab hv024 hv025, summarize(hv022)". This shows that, as you expected, the strata are combinations of region (or governorate) and urban/rural, but there are two exceptions. The means for urban Zarqa (hv024=13) and urban Mafraq (hv024=22) are not integers. I then entered "tab hv022 if hv024==13 & hv025==1" and "tab hv022 if hv024==22 & hv025==1". These show that urban Zarqa is actually two strata (two values of hv022), 5 and 7. Urban Mafraq is also two strata, 12 and 14.

If you do "tab hv001 hv022 if hv022==5 | hv022==7" you will find that stratum 5 is clusters 199 through 266 and stratum 7 is clusters 272 through 292. You can count up how many clusters are in stratum 5 and stratum 7, and similarly for stratum 12 and stratum 14. I think that in this way you can adjust the procedure and avoid that Stata error message.
