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Subject: Kenya SPA 2010 - how to apply weights  
Posted by [catherine3h](#) on Tue, 15 Dec 2015 18:36:50 GMT  
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To Whom It May Concern:

I am conducting an analysis using the Kenya SPA 2010, and I am wondering how to properly weight the data using Stata. In this dataset, the variable v005 is the sample weight. What variables should I use for the cluster/psu and strata information? I have found many descriptions of how the data was sampled in the reports and I know that the facilities were sampled based on a master list of facilities in the country (therefor a cluster wouldn't be relevant...), but I am wondering how to actually operationalize/execute this in Stata. What commands should I use?

Thank you.

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Subject: Re: Kenya SPA 2010 - how to apply weights  
Posted by [Liz-DHS](#) on Mon, 04 Jan 2016 19:32:41 GMT  
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Dear User,

Here is a response from one of our sampling experts, Dr. Mahmoud Elkasabi:

Quote:The 2010 Kenya SPA survey is based on a stratified sample, where the country regions (v001) and the facility types (v007) were the stratification variables. Regarding the sample clusters, the facilities (v004) should be identified as sampling clusters/PSUs, especially for providers or clients based indicators, where more than one provider/client were interviewed within each facility. Therefore, the following Stata command can be used to identify the complex design and calculate the survey indicators, such as "indic".

Please note that the "strata" variable should be modified to avoid the single PSU strata. You should recode the stratification variable "strata" into a new stratification variable "strata2", in which the single PSU strata are combined with other strata.

```
gen fcwgt=v005/1000000  
egen strata=group(v001 v007)
```

```
gen strata2 = strata  
replace strata2 = ..... if .....  
etc
```

```
*complex survey paramteres  
svyset[pw=fcwgt], psu(v004) strata(strata2)
```

```
svy: mean indic  
estat size  
estat effects
```

Best,

Mahmoud

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Subject: Re: Kenya SPA 2010 - how to apply weights  
Posted by [catherine3h](#) on Sat, 09 Apr 2016 18:35:05 GMT  
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Thank you for this information. It is very helpful. Can you please elaborate more on the line of code that states: "replace strata2 = ..... if ....."? I understand that I need to recode the stratification variable into strata2, but how exactly can I do this in the case of the Kenya SPA 2010 dataset?

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Subject: Re: Kenya SPA 2010 - how to apply weights  
Posted by [Liz-DHS](#) on Fri, 22 Apr 2016 22:28:21 GMT  
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Dr. Elkasabi responded:

Quote:

You should combine the adjacent strata to avoid any single unit stratum. Different approaches can be used. For example you can do the following

```
gen strata2 = strata
replace strata2 = 4 if inrange(strata,1,3)
replace strata2 = 10 if strata == 11
replace strata2 = 19 if strata == 18
replace strata2 = 21 if strata == 20
replace strata2 = 28 if strata == 27
replace strata2 = 37 if strata == 36
replace strata2 = 45 if strata == 44
replace strata2 = 55 if inrange(strata,52,54)
replace strata2 = 64 if strata == 63
replace strata2 = 70 if strata == 71
```

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