

Data Analysis Using STATA

Application to MLE Manual



SPHI



Sweetpotato
to Profit and Health
Initiative

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How to use the Monitoring Key Indicators Manual



Read about each of the modules in the manual

Decide how you want to collect your data

Electronic data:
ODK files

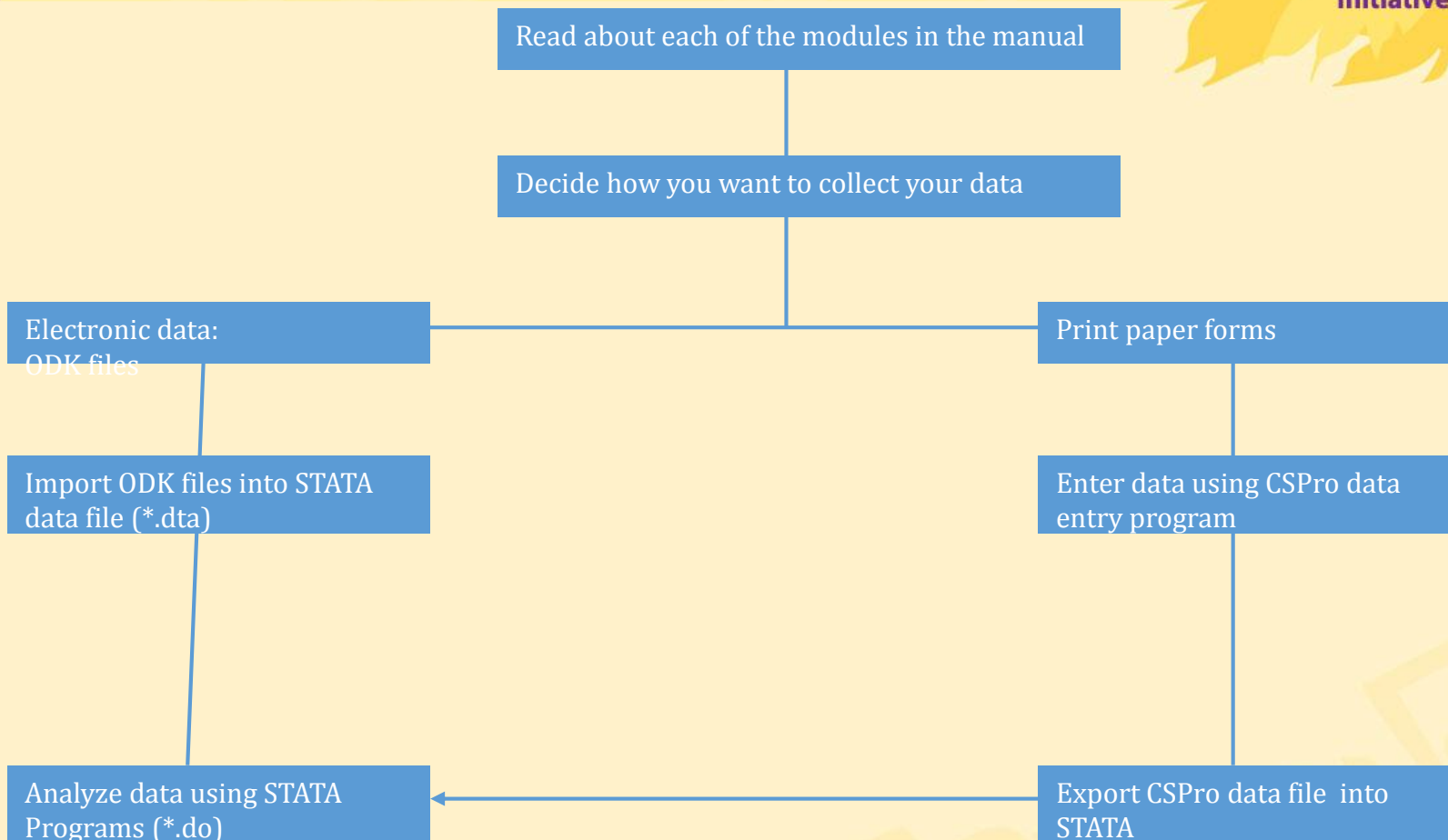
Print paper forms

Import ODK files into STATA
data file (*.dta)

Enter data using CSPro data
entry program

Analyze data using STATA
Programs (*.do)

Export CSPro data file into
STATA



Simple and standard program



- Easily adoptable program
- Standard variable names use it or rename it back to the files
- You can transfer data from ODK, Cspiro, SPSS, excel.
- Small command greater performance.
- More robust and dynamic way of analyzing data, that many of the software can't do.

Stata program in MLE Manual has two parts

- Cleaning and generating new variables
- Producing result analysis

Stata files



- **Dta** : The data file in stata format
- **Log** : log -- Echo copy of session to file
(Important file to share the programs and the executed and results)
- **Do** : do and run cause Stata to execute the commands stored in filename just as if they were entered from the keyboard.

Commonly used commands in STATA



- ❖ **Rename** : Rename changes the name of an existing variable to new name: `rename hh_id hh_num`
- ❖ **Replace**: Replace contents of existing variable or equivalent to generate

Replace `gender=0` if `gender==2`

- ❖ **Gen for generate** -- Create or change contents of variable
- ❖ **Lab var....**
- ❖ **Lab def....**
- ❖ **Lab value....** (exercise sessions ODK-STATA)

Getting started with STATA



1. Open your database in command window or do files.
2. Clear the data from memory
3. Increase your machine memory size
4. Put additional functions
 - *set more off*
 - *numlabel, add*
 - *Rename*, lower/upper*

Cont..



- egen -- Extensions to generate

Egen always followed by function that generate new variable from the list of variables

- rowtotal(varlist):

Example generate the total number of males in the house using age disaggregated data

```
egen m02_24a_1=rowtotal(m02_21a m02_22a m02_23a m02_24a),  
mi
```


Important tricks



Give attention for variable naming.

Your variable name should be precise and meaningful.

Best experience is use common “suffix” or “prefix”

,,, Dec_minor_hrvst,,, HDD, WDD, CDD

Cereals_hdd, biofortified_cdd,

Hmmm use “Wild cut”:

*sum *DD,*

*Sum *minor**

*Sum *_cdd*

foreach x *of varlist.. list of variables...* {

...your command to use...

}

Break

Conti...



```
for value  $i = 1/4$  {
```

```
    gen m02_15_`i'=1 if m02_15 == `i'
```

```
    replace m02_15_`i' = 0 if m02_15_`i' == .
```

```
    lab value m02_15_`i' m02_15_`i'
```

```
}
```

```
break
```

Examples



Example 1. i. Replace all binary variables into missing in Module 2 of MLE manual if the values were not equal to 0 or 1. ii. Do the summary of the same variables.

```
foreach x of varlist m02_10 m02_11 m02_26 m02_29 m02_31*  
m02_32a m02_33a m02_34a {
```

```
qui replace `x'=. if(`x'>1)
```