

## "Sampling for Phase 2"

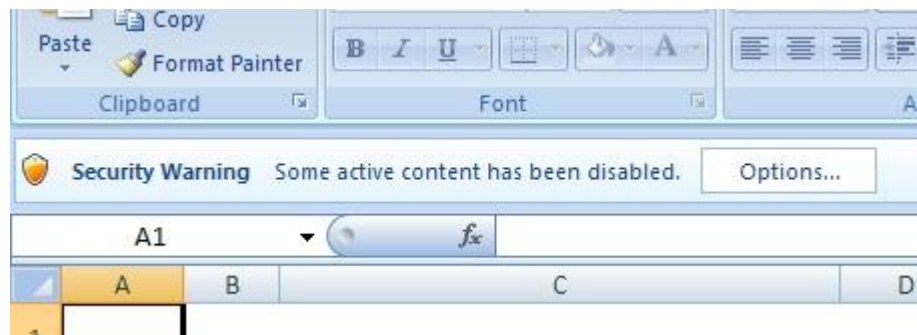
A step-by-step guide to accompany the computer application

### **Step 1a) *If you are running a MS Office 2000 or 2003:***

- a. Before launching the application, open **Microsoft Office Excel**
- b. On the **Tools** menu, click **Options**.
- c. Click the **Security** tab.
- d. Under **Macro Security**, click **Macro Security**.
- e. Click the **Security Level** tab, and select the **Medium** security option.
- f. Launch the application "SurveySampleBuilder.xls"
  - i. Upon launching the program, if a message box appears choose the "enable macros" option.

### **Step 1b) *If you are running MS Office 2007***

- a. Launch the application "SurveySampleBuilder.xls"
- b. You should see the following message at the top of the spreadsheet:



- c. Click the **Options** button and then in the following pop-up menu click the "Enable Macro" button

## Step 2. EU Information Form

- a. After you have completed Step 1, you should see a pop-up menu asking if you would like to start a new file. If this is your first time using the program – **OR**- you would like to create a new file, click "Yes" (by clicking "No" you will revert back to the previous version of the file that you last saved).
- b. The following EU Information form should pop-up:

EU Information

Country Name:  Define Terms

EU Name:

1. What is the primary vector in the Evaluation Unit (EU)?

Aedes

Anopheles or Culex

2. What is the net primary enrolment rate? (please enter the number as a percent)

%

Next

- c. Fill out this form using the information from your Evaluation Unit. *Note: it is important that each question be filled out in order for the program to proceed correctly.*
- d. If the net primary enrolment rate is >75% a pop-up box will appear and you will be asked if you are doing a school survey. If you are surveying adults or conducting a child survey in the households, click "no". *Note: When the enrolment rate is <75% you must conduct a household survey.*

### Step 3. *School/Household Form*

- a. After clicking "Next" in the EU Information form, if you are conducting a school survey you should see a form appear entitled "School Survey". If you are conducting a household survey you should see a form entitled "Household Survey" (example below). Fill out all the questions in the order they appear.

Household Survey

**Define Terms**

**3. What is the total projected population of 6-7 year olds in the evaluation unit (EU) for the year of the survey?**

**4. How many census enumeration areas (EAs) are in the EU?**

**5. What is the expected proportion of absenteeism for 6-7 year olds in a household (enter number as a percent)?**  
(Includes children unavailable on day of survey and/or refusing to participate; if unknown 10-15% is the average rate)

Yes       No  
 Not sure, help me calculate

**Finish and Return to Workbook**

### Step 4 (OPTIONAL) *Cluster vs. LQAS calculations*

- a. When you get to question 6, if you don't know whether or not an LQAS or Cluster survey will be better for your team, click "Not sure, help me calculate" for question 5 and the following screen will appear:

X

Cluster vs LQAS

1 a. *If you are doing a school survey:*  
**What is the approximate cost of visiting one school?**

1 b. *If you are doing a community survey:*  
**What is the approximate cost of visiting one census enumeration area?**

Note: Be sure to include the time and communication costs required to plan for a visit to one EA/school, transportation costs, costs of driver's salary and per diem, and survey team salaries and per diems for travelling time and time for introductory meetings

**2. What is the cost of testing one child once you are at the school/EA?**

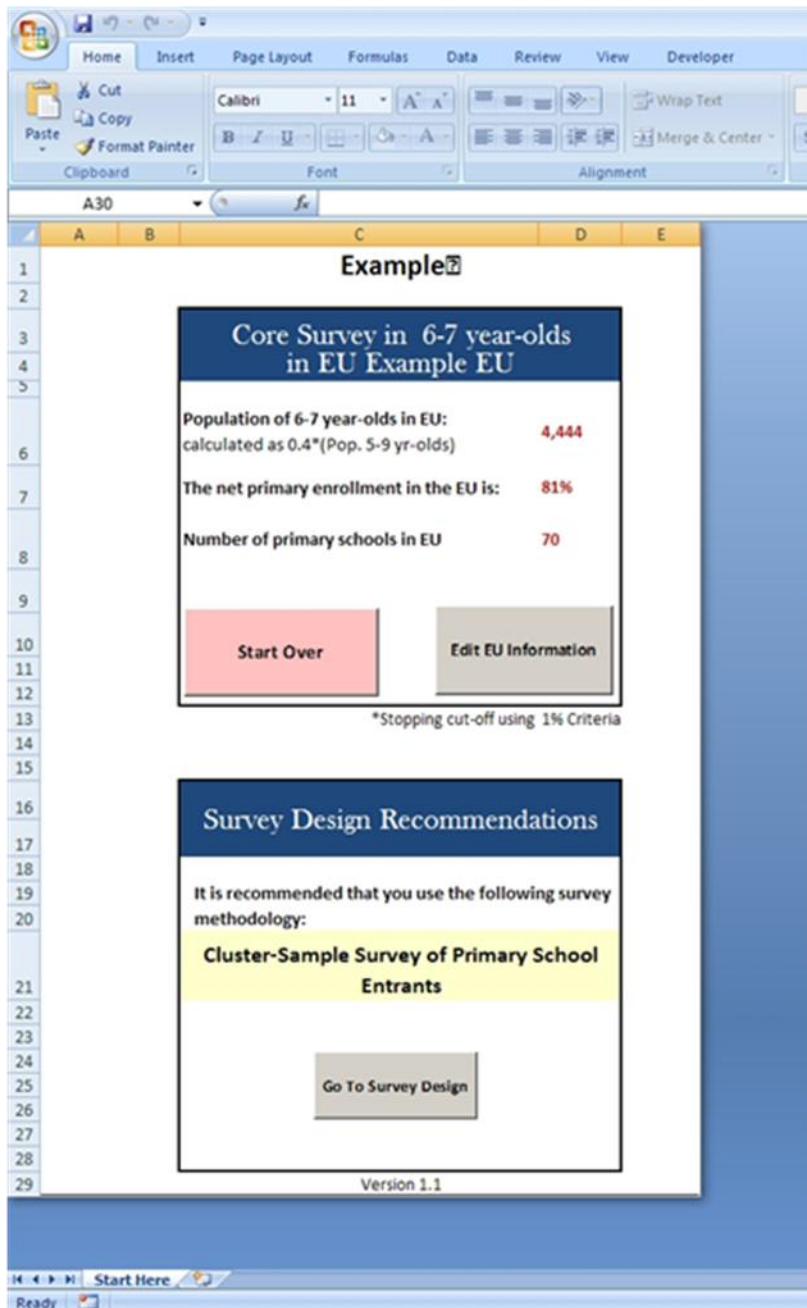
Note: Be sure to include the cost of supplies for sampling a child, as well as the survey team salaries and per diems needed to test the child and record the result

Compare Costs

Return to Form

### Step 5: *Core Survey Design*

- a. When you have filled out the EU Information form click "Finish and Return to Workbook."
- b. The EU Information form should disappear and the "Start Here" worksheet should be displayed. The first box, titled *Core Survey in 6-7 year-olds* should contain a summary of the information you just entered. Review this information for correctness and click "Edit EU Information." If you would like to correct any information on the form.

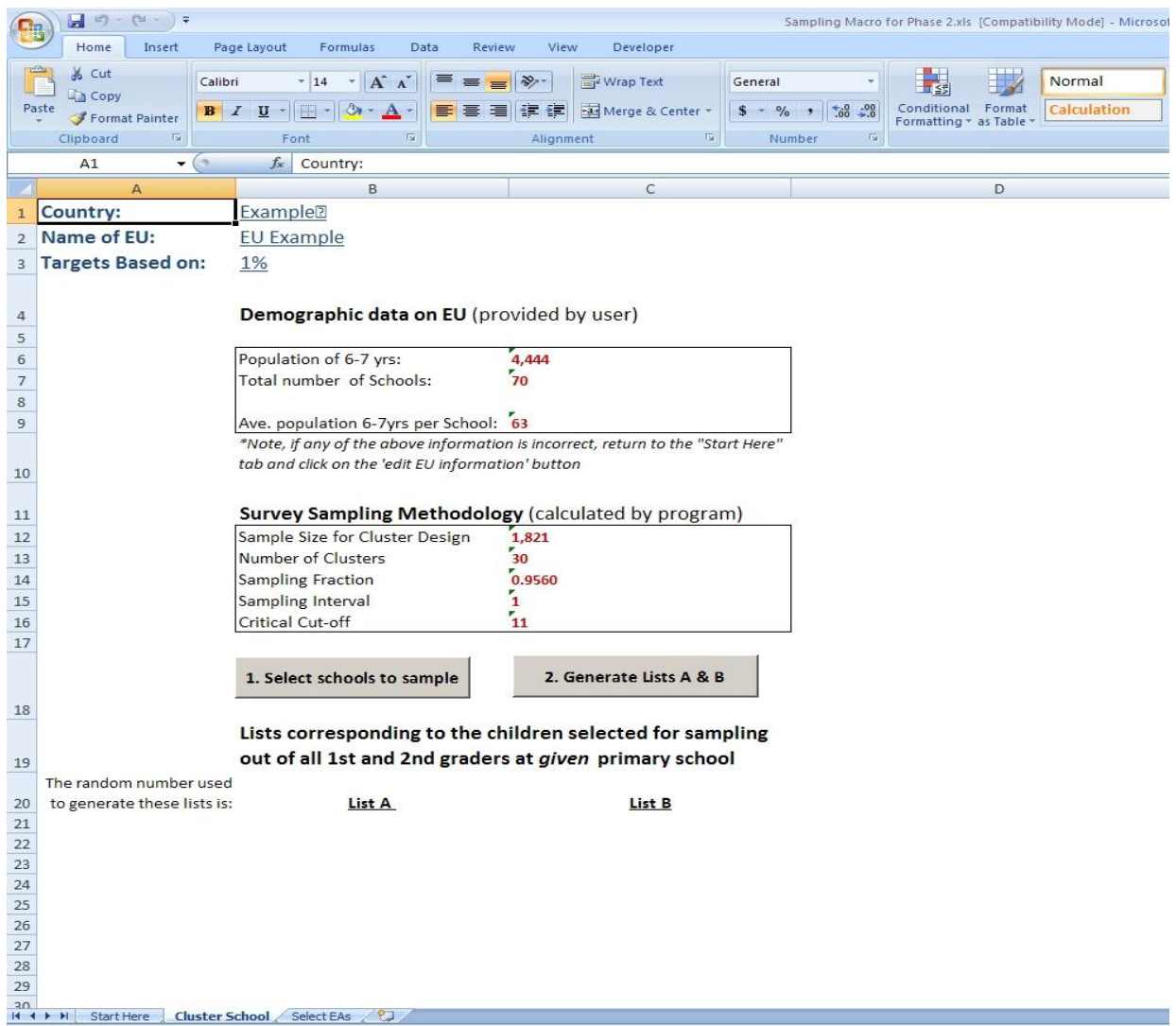


## Step 6: Go to Survey Design

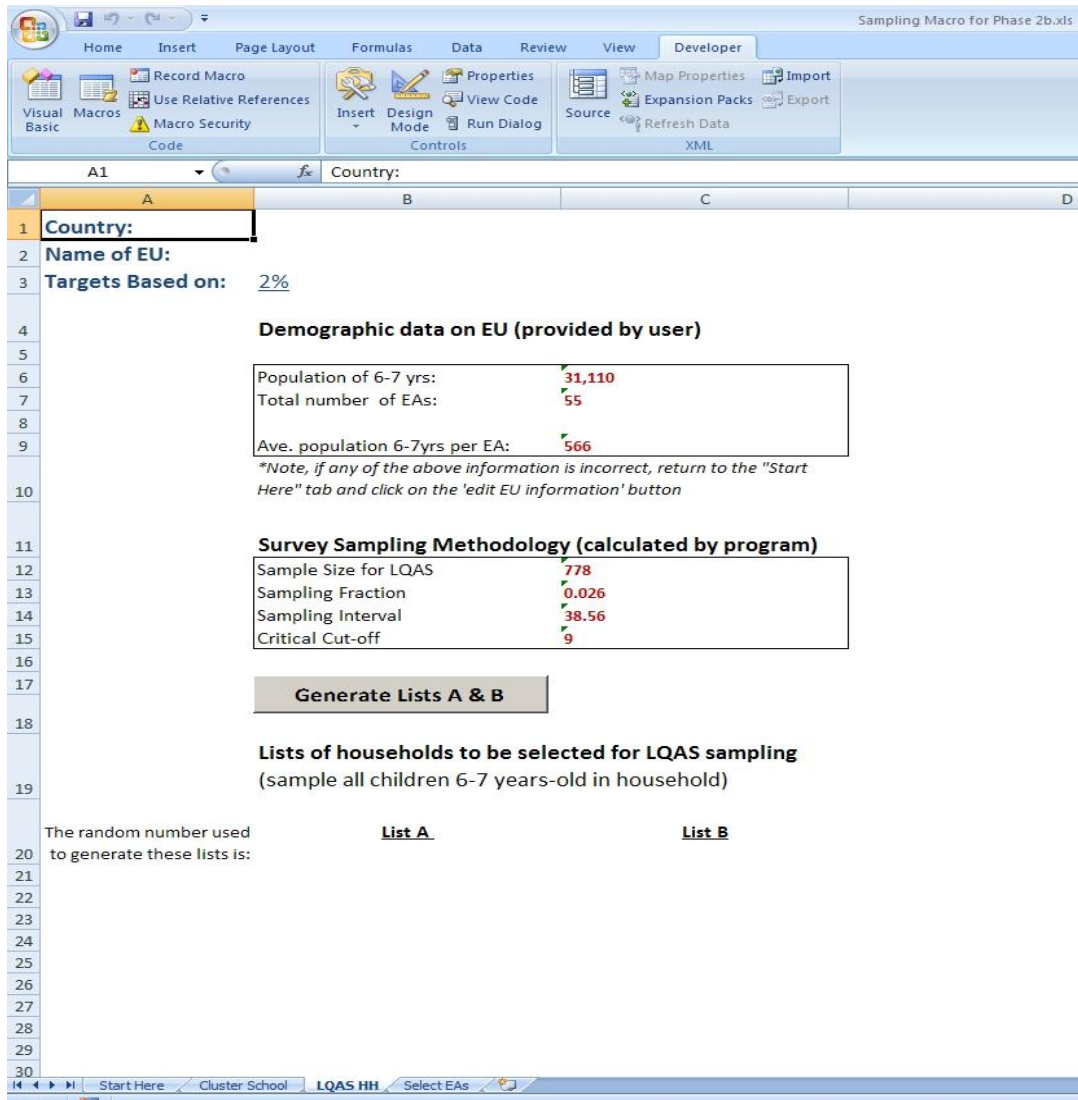
- a. The second box, entitled *Survey Design Recommendations*, displays the type of survey design that corresponds to the EU-specific data you have just entered. Take note of the type of survey design recommended for your Phase 2 study.
- b. When you are ready to start planning your survey click "Go To Survey Design" and the subsequent screens will walk you through site and sample selection.

## Step 7: Survey Design

- a. If you will be conducting a School Cluster survey or Household Cluster survey, you should see a worksheet similar to the one below.



- b. If you are conducting an LQAS school or household survey then you should see a worksheet similar to the one below.



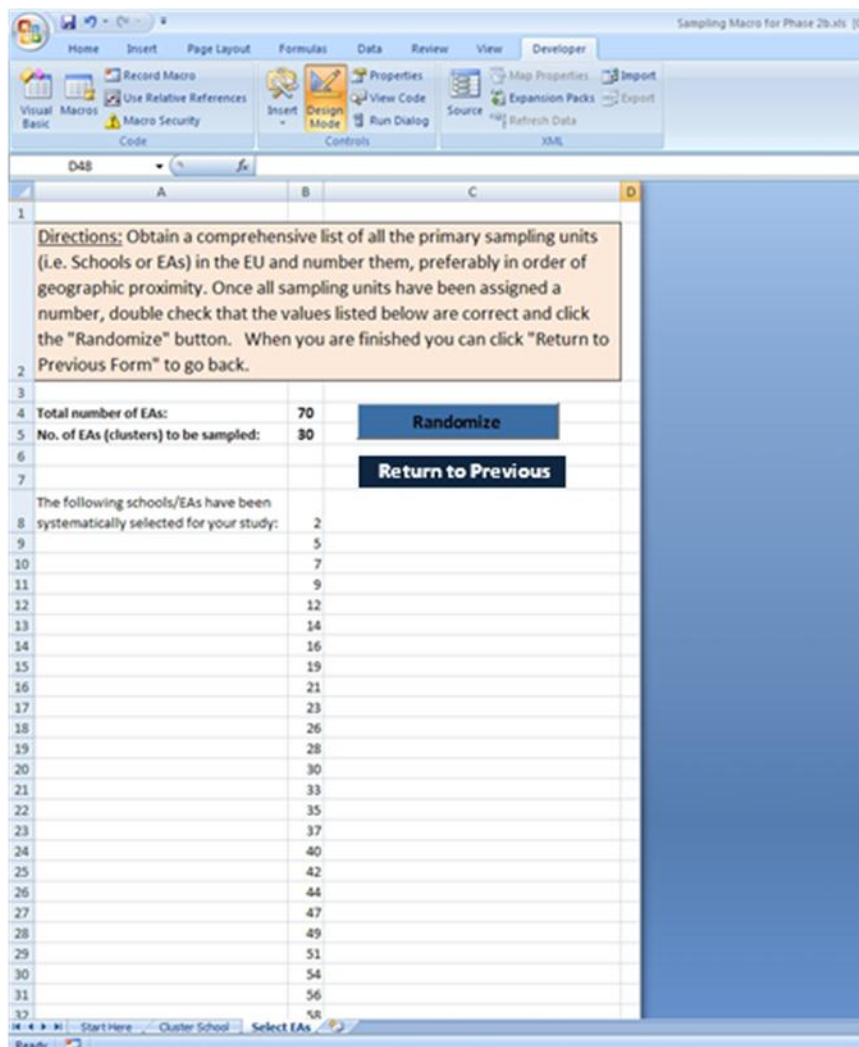
- c. The Country and Demographic data information at the top of the page should be a summary of the information you entered. Once more, double check to make sure that the information in the upper left-hand corner and the *Demographic data* box are correct. If the data are not correct **do not** enter data directly into the cells. Instead return to the “Start Here” sheet (by clicking on the “Start Here” tab at the bottom of the screen) and select “Edit EU Information.” After you have corrected the EU Information, clicking “Go To Survey Design” should update the information on the worksheet.

- d. The second box, entitled *Survey Sampling Methodology*, contains the survey design calculations that are specific to your study. Write down or print the values listed in this box.

### Step 8: for Cluster Designs only (for LQAS designs see step 9)

*Note: Step 8 assists you in the selection of schools or EAs to sample. If you are conducting an LQAS survey you will need to sample from every school or EA and therefore should skip this step and proceed to Step 9.*

- a. Click "1. Select Schools to Sample" (if you are doing a community survey this button will say "1. Select EAs to Sample") and the following worksheet should be displayed:



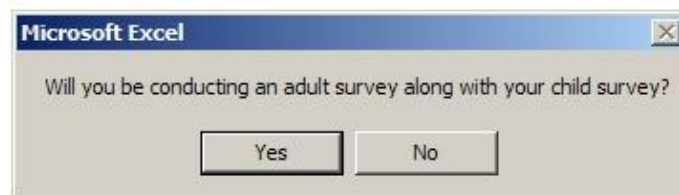
- b. Follow the directions highlighted in the pink box. Once you have all of your schools or EAs enumerated in order of geographic proximity click the "Randomize" button and you should see a list of numbers appear in column "B."
- c. Each number on this list corresponds to the school or EA with the same number that has been selected as one of the clusters in your survey. The amount of items in this list should correspond to the number of clusters needed to be sampled according to your survey design (cell "B5").
- d. Copy down or print this list of numbers to keep a record of the clusters you will be visiting. *Alternatively, you could type in the name of the school or EA corresponding to each selected number in column "C" and then print out this list so that you have a list of the clusters to be sampled.*
- e. Once you have completed these steps, click on the "Return to Previous" bottom of the screen (or "Cluster HH" tab if you are doing a community survey) to return to the previous screen.

## Step 9: Generate Lists (both Cluster and LQAS survey designs)

- a. Now it is time to generate the two lists that will be used to select the school children (for school surveys) or households (for community surveys) to be sampled. Click the "Generate Lists A & B" button.



- b. If you are conducting a household survey you will see a pop-up box (below) that asks if you will be conducting an adult survey in addition to your 6-7 year old survey. If this is the case click "Yes," otherwise click "No" to proceed.



- c. Two lists should be automatically generated in columns "B" and "C." These two lists correspond to the school children (1<sup>st</sup> and 2<sup>nd</sup> graders) or households that should sampled in each selected school or EA. If an adult survey is being

conducted, the households in which adults should also be sampled will be designated with an asterisk.

- d. It is recommended that you print out or copy down these lists. Each survey team will need a copy of both lists in the field.

### **Step 10a: Field Implementation of Sampling Design (for LQAS or Cluster surveys conducted at the households)**

- a. The survey team will arrive at a designated EA (for LQAS surveys you will need to visit each EA in the EU, whereas cluster surveys should only visit the EAs that were selected in Step 8). A designated member of the survey team (preferably not one of the team members who will be doing the sampling) and a village leader from the EA will comprise of the mapping team. The village leader could be a chief, council member, community health worker etc.
- b. The mapping team should use a pre-existing map of the EA (or create a map) to draw out a walking route that will take them by every single household.
- c. Once the route through the EA has been decided, the team leader should flip a coin to decide if List A or List B will be used.
- d. The mapping team will then walk the chosen route and enumerate each household. Using the list selected by the coin toss (either A or B), they will mark each household that has been selected for the survey. Marking should be done in the most culturally appropriate manner (e.g. sticker, chalk, ribbon, etc.). If an adult survey is being conducted, the team should agree on a way to designate the households in which adults should also be sampled. The mapping team will continue to mark the houses corresponding with the numbers on the list until the next number on the list is higher than the total number of households in the EA. At this point the mapping exercise is done.
- e. Once the mapping team has started marking the selected households, the sampling team can follow behind along the same route and begin sampling at the marked households. At each household the sampling team should sample all 6-7 year-olds who live in the household. If there are no children of that age, the team should proceed to the next marked house. If an adult survey is being conducted, the team should sample both 6-7 year-olds *and* 16-45 year-olds in the houses specially marked for the adult survey (those on the List with an asterisk by the number).

### **Step 10b: Field Implementation of Sampling Design (for LQAS or Cluster surveys conducted in the schools)**

- a. The survey team will arrive at a designated school (for LQAS surveys you will need to visit each school in the EU, whereas cluster surveys should only visit the schools that were selected in Step 8). Upon arrival the team should work with school officials to get all first and second graders in an order or sequence in which they can be counted.
- b. The team leader should flip a coin to decide if List A or List B will be used.
- c. Children are selected according to the numbers on the List. Selection of children should continue until the next number on the List is higher than the total number of first and second graders at the school.
- d. The team should proceed to collect data and specimens from the selected children.