

## **Working Groups Session 2: Calculating the M0 Measure**

### **Objectives**

To be able to calculate the Multidimensional Headcount Ratio, Intensity of Poverty, and the Adjusted Headcount Ratio and interpret results

### **Exercise:**

Based on the dimensions, indicators, cutoffs and weights you have selected in the Working Group Session 1, you will now calculate the Headcount Ratio, Intensity of Poverty, and the Adjusted Headcount Ratio. To do so follow these steps:

1. Modify the basic do-file choosing your own variables. Generate the columns of the  $g^0$  matrix. (Note that in the do file, you create the columns of the  $g^0$  matrix directly using the indicators and the deprivation cut-offs that you have reported in the PowerPoint).
2. Define weights for the indicators you have selected.
3. Create deprivation count vector ( $c$ ) using the columns of the censored matrix and the indicator specific weights. Setting the poverty cut-off ( $k$ ), create a variable to identify the multidimensionally poor using the deprivation count vector. Do it for as many poverty cut-offs as you think desired.
4. Calculate the headcount ratio of each of the indicators that you have selected from the columns of the  $g^0$  matrix.
5. Calculate the censored headcount of each of the indicators you select.
6. Estimate Headcount Ratio ( $H$ ), Intensity of Deprivation ( $A$ ) and Adjusted Headcount Ratio ( $M_0$ ) for different  $k$  values.
7. Analysis of the results and preparation of a presentation: Once you have all your results, analyse the raw headcount, censored headcount and the multidimensional poverty measure for different  $k$ .
8. Plot the different multidimensional headcount ( $H$ ) values across different  $k$  using the PowerPoint and Excel. Also plot the different  $M_0$  values across different  $k$  using the PowerPoint.

*Ideas/ suggestions to identify the most interesting results:*

- Which  $k$  value would seem appropriate to work with? Why?
- What conclusion would you make comparing the raw headcount ratios and your multidimensional results?