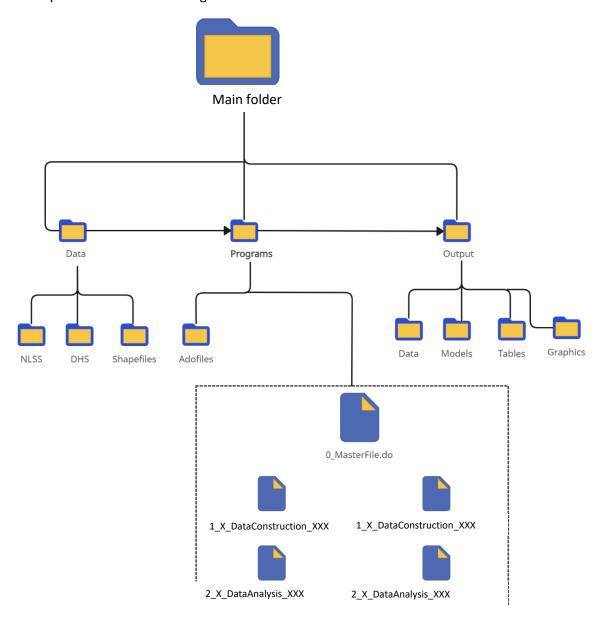# User guide on *'Improved multidimensional poverty measurement in Nigeria'* Project

> **General structure**

The code package presented in this study aims to analyze in the empirical framework of Nigeria, the design of an improved indicator of multidimensional poverty. The general structure of the analytical work is presented in the following flowchart.

➢ **Data source**

The results reported in this analysis are based on two main data sources:

- 2018-19 Nigeria Living Standards Survey (NLSS)
  This data can be downloaded on world bank microdata website at : https://microdata.worldbank.org/index.php/catalog/3827)

- 2018 Nigeria Demographic and Health Survey (DHS)

This data can be download at https://dhsprogram.com/data/

To do so first login/Register for datasets access. Note that you need to explain the project on which you need the datasets. Permission will be granted within few days. The DHS team will send you a notification. You can download data using filter on Country -Nigeria- and Year -2019-, Questionnaire type - All.

Additional data on Nigeria shapefiles available in the package have been used to produce maps. This data can be found on Humanitarian Data Exchange website at https://data.humdata.org/dataset/cod-ab-nga?

➢ **Task-specific programs content**

The sub-objectives, inputs and outputs of each script contained in the *Programs* folder is detailed in the table below.

File	Description	Main Input	Main Output
Adofolder	This is a folder containing all necessary packages to run the scripts. The user Stata section's is linked to that folder as the personal ado folder.		

0_MasterFile.do	This file is the main file, within which settings are standardized, needed packages are installed, global paths and constants are set up and finally all others tasks-specific do-file are launched. All final results may be obtained running this do file. Task-specific files are described below.		
1_1_DataConstructio n_DHS_NLSS	The objectives of this do-file are ▪ To build nutrition indicators from raw DHS data, and then model nutrition status based on selected covariates for each group of individuals. ▪ To apply previously built models using DHS to infer NLSS data with nutrition status of individuals	▪ Raw 2018 DHS data ▪ Raw 2019 NLSS Data	Data ▪ Keys nutrition status children stunting, adults' undernourishment and obesity in DHS data ▪ Nutrition status covariates in DHS data ▪ NLSS Data filled out with individual's inferred nutrition status Models ▪ Nutrition status behavioral models per individual's group (children, adult men, adult women)
1_2_DataConstructio n_Thresolds.do	The dofile prepares data relative to each poverty dimension' indicators as well as each dimension deprivation (extreme or moderate) variable as defined in the appendix XX.	▪ Raw NLSS Data ▪ NLSS Data filled out with individual's inferred nutrition status	NLSS data filled out with each poverty dimension indicators and deprivation variables
2_1_DataAnalysis_Pr eliminary.do	This dofile provides with first insights results related to missing data, deprivation per dimension data balance, life expectancy analysis	▪ NLSS data filled out with each poverty dimension indicators	Graphics related to missing and balanced data analysis, deprivation per dimension first insights (headcount, spatial difference, …) and life

		and deprivation variables • Life expectancy data	expectancy analysis (levels, spatial distribution)
2_2_DataAnalysis_Commands.do	This dofile contains some user-defined functions used alongside in 4_DataAnalysis_Final.do	• NLSS data filled out with each poverty dimension indicators and deprivation variables • Life expectancy data	User defined functions
2_3_DataAnalysis_Charts.do **/** **2_4_DataAnalysis_Tables.do**	These dofiles build the final multidimensional poverty index – PALE as defined in the methodology and output final results related to that index analysis	• NLSS data filled out with each poverty dimension indicators and deprivation variables Life expectancy data	Graphics and tables related to final insights results (Contribution of dimensions in multidimensional poverty, Correlation between improved multidimensional poverty index and monetary poverty and added value compared to traditional multidimensional poverty index)
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➢ **Running instruction**

In order to achieve without running issues this task, reviewers must follow the guidelines below:

- Load the package folder as sent (*MPM_ReproducibilityPackage* folder)
- Modify in the *0_MasterFile.do* dofile located in the *Programs* folder the following parameters:
    - Change global macro *user* to 2 (if not already set to 2)
    - In the following lines of code, fill within the quotation mark "'', the file path to the location of the project's folder sent.

        if $user == 2 {

          global projectfolder "" // Enter the file path to the project folder

        }

- Be aware that you need R software on your machine.
- Run the modified *0_MasterFile.do* dofile
- Outputs will appear in the Output folder.