Call for Application for the training on "Data Analysis using STATA"

When: **Fri** 24th February 2023 | Time: 3 PM-7 PM

Sat 25th February 2023 | Time: 9 AM-4 PM

Sun 26th February 2023 | Time: 9 AM-4 PM

Venue: CDP Office at Kimironko, Avenue KG216, House N° 5

Course Facilitator: KARANGWA Mathias, PhD Candidate

1. ABOUT CDP

The Center for Development Policy (CDP) is a Pan-African non-profit and non-partisan think tank that exists to contribute to the development of African countries through policy analysis and capacity building. CDP prioritizes endogenous development solutions and promotes local and empirically tested innovations that have contributed to development in Africa. CDP works with local partners to study, document and share lessons and best practices. Our uniqueness is that we not only offer policy advice and analysis to organizations but also build their capacities through training and technical support in order to undertake evidence-based development interventions. At CDP, we offer different short-term trainings and other tailor-made trainings requested by organizations. CDP courses are offered by CDP experts and associates from within the country or abroad. It is against this background, CDP is organizing a training workshop on " **Data Analysis using STATA**"

2. COURSE DESCRIPTION

The dissemination of research and policy analysis skills is part of the mandate of the Center for Development Policy (CDP). Providing practical data analysis skills is a first step to creating a critical mass of competent policy analysts, researchers and data analysts. The goal of this course in data analysis using STATA is to equip the participants with the practical skills necessary to manage and analyze quantitative data using STATA, one of the modern data analysis software programs. Quantitative data analysis is a prerequisite to building a critical mass of experts who are capable of conducting research and policy-relevant analysis to inform evidence-based policy interventions. This course on data analysis using Stata will focus on the following:

1. Stata basics: starting and exiting Stata, checking/creating/changing to the working directory, the Stata window, accessing data within Stata (i.e. used in Stata manuals), manually inputting data, import data of different formats into Stata and export data to other platforms;
2. The grammar/language of Stata: functions, operators, qualifiers (e.g. in and if qualifiers), do files, log files, Stata routines (loops: an introduction to programming);

3. Creating and changing variables: generate, egenerate, replace, recode, handling missing values, handling strings, labeling of data sets, variables and data values as well as handling date functions;
4. Appending, joining and merging data sets;
5. Reshaping data: Wide Vs Long;
6. Downloading Data into Stata from online sources using wbopendata, sdmxuse and freduse platforms;
7. Data Visualization: creating and changing graphs (bar charts, scatter plots, hbar, stem and leaf plot and others);
8. Data cleaning: detecting outliers and other influential data points and how to remedy such issues;
9. Data transformations e.g. log-linearization, creation of dummy variables, sub-sample extraction using qualifiers, etc.
10. Describing and comparing distributions: frequency tables, kernel Vs normal density plots, and summary statistics;
11. Introduction to simple and multiple regression: specification, estimation and diagnostics;
12. Specify, estimate and interpret models with categorical predictors and their possible interactions;
13. Exporting Stata output (tables and graphs) to other Microsoft word and formats. These outputs are what we normally see in highly reputable journals.

3. EXPECTED OUTCOMES

By the end of the training, the participants are expected to have learned how to handle raw data from quantitative surveys, prepare the data in a usable form that suits their research agenda and conduct simple descriptive and inferential statistics. Participants will also learn how to tabulate and visualize quantitative data and present outputs in policy reports in formats easily understandable to non-technical audiences like policy makers.

4. PREREQUISITES

This course will start from scratch and will be a blend of theory and practice. Participants are expected to have some basics on statistics and Econometrics, though this is not mandatory. Each Participant is expected to have a laptop and Stata software installed on it. If you do not have Stata software, do not worry it will be provided in the training. Where possible and if deemed necessary we shall be using Excel to complement our analysis. It will be useful if each participant has an ongoing research project that can be discussed during and after the training sessions.

5. TARGET GROUP

This course is suitable to professionals dealing with research and economic analysis. Specifically, the course targets the following groups:

- Policy analysts
- Data scientists
- Consultants

- Researchers
- University students, both undergraduate and graduate students who intend to use Stata during their dissertation writing;

- PhD students who intend to use quantitative analysis using STATA;

Due to emphasis on imparting practical skills, this course is also intends to serve as an introduction to more advanced data analysis courses that emphasize independent thinking and coding skills. It intends to build a foundation of other courses that use analytical tools that will follow.

6. TRAINING FEES:

Professionals and private individuals: **118,000 RWF per person (VAT 18% inclusive)**

University students: **59,000 Rwf Per person(VAT 18% inclusive)50% discount** (upon provision of student ID)

Register for this course through: https://cdpafrica.org/courses/data-analysis-using-stata/

7. CERTIFICATE

CDP will issue certificates of completion to participants who will successfully attend the course and pass the course test.

NB: At the end of the course, the trainer will deliver a test, and ONLY participants who will get at least 60% will get the certificates. Others will be advised to wait until another training opportunity for the same course becomes available.

8. PAYMENT

- Bank of Kigali (BK): Center for Development Policy (CDP) Account: **00095-06987695-41**
- MTN Mobile Money: ***182*8*1*016720# (Center for Development Policy)**

The BK bank slip can be delivered to CDP or sent the scanned bank slip at info1@cdpafrica.org

Other upcoming courses of CDP can be found at: www.cdpafrica.org

For any inquiry, please contact: +250788685969

MUNEZERO KALISA Raissa

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