Training Report

1. Training programme details:

Title:	Using Namibian microdata for socio-economic analysis
Presented to:	Namibian National Planning Commission (NPC)
Presented by:	Research on Socio-Economic Policy (ReSEP), Department of Economics, Stellenbosch University
Venue:	National Planning Commission, Windhoek, Namibia
Date(s):	24 – 28 April 2017
Instructors:	Dr. Hendrik van Broekhuizen; Dr. Cobus Burger
Facilitators:	Ms. Heleen Hofmeyr; Mr. Joel Gondwe

2. Training participants

A total of 13 participants attended the program.

- 6 participants were from the National Development Advisors branch.
- 7 participants were from the Statistics branch

3. Training handouts and resources

All training participants received the following handouts:

- A hard-copy of the training programme outline (please see below)
- A USB memory drive containing:
    - Various cleaned Namibian microdatasets (including Census, NHIES, and NLFS data) in Stata 13 *.dta* format along with their associated Stata *.do* files and original documentation and metadata
    - Stata *.ado* routines required for socio-economic analysis illustrations, exercises, and tasks
    - The StatPlanet chloropleth mapping software (pre-configured to work with Namibian shapefiles at a regional level)
    - A curated list of ReSEP policy briefs in *.pdf* format to serve as exemplars

In addition to the above, physical copies of selected ReSEP policy briefs were distributed among the participants. Participants were also given access to a Dropbox folder where they could download electronic copies of all presentations and additional resources used by the presenters during the course of the training programme.

4. Training goals

The training programme was designed to assist participants in producing empirically sound and policy-relevant socio-economic research based on available Namibian data. Two broad goals were pursued: (1) get participants to understand and practically apply appropriate techniques for analysing socio-economic issues using Namibian microdata in Stata and (2) enable participants to communicate their empirical findings effectively through the medium of policy briefs.

5. Training duration and activities

This was a 5-day training programme that incorporated theoretical presentations, structured group discussions and planning, practical illustrations, practical exercises, facilitated policy brief writing sessions. The following table provides an estimated breakdown of the amount of time spent on each activity type during the programme:

Activity type	Main group responsible	Hours (est.)
Theoretical presentations	Presenters	4
Structured group discussion and planning	All	3
Practical illustrations	Presenters	4
Practical exercises	All	16
Facilitated policy brief writing	All	6
Participant feedback and presentations	Participants	3
		Total Hours: 36

6. Training content and topics covered

All training participants

- Participated in structured discussions on Namibian socio-economic issues and Namibian microdata
- Identified policy-relevant research themes, proposed feasible research questions, and formulated potential policy brief topics
- Selected policy brief topics to work on
    - Four topics were chosen (*Youth unemployment*, *Income inequality*, *Early Childhood Development*, and *Earnings Inequality by Gender*)
    - Each of the four policy brief teams included three participants (based on self-selection into a particular topic)
- Participated in practical exercises in Excel, StatPlanet, and Stata
- Completed assignments given during practical sessions
- Conducted analysis and research during the policy brief writing sessions

- Presented key findings from their research to the rest of the group

Participants were exposed to a wide range of data sources and analytical techniques. A non-exhaustive list of the topics covered during the training includes:

- A review of the available Namibian microdata, including a schematic typology of the types of research questions that each dataset could potentially be used for
- The rationale behind, and appropriate methodologies for, writing policy briefs
- Using Pivot Tables in Microsoft Excel to collapse data and obtain aggregated (and grouped) summary measures and using Pivot Charts to present such summary measures in an understandable way
- Navigating the Stata interface, including executing commands through the command-line, dialogue boxes, and/or via *do-files* (as well as understanding the integration between all three methods).
- Creating systematic do-files for project-oriented socio-economic analysis in Stata
- Using regionally disaggregated summary measures in Stata in conjunction with choropleth maps in StatPlanet to visually illustrate inter-regional differences
- Estimating money-metric poverty, including the creation of adult-equivalent expenditure variables, poverty line indicator variables, FGT measures, and the drawing of poverty dominance curves
- Investigating earnings inequalities through disaggregated inter-group analysis in Stata, including the visual illustration (and interpretation) of inequality using grouped, stacked, and overlaid bar graphs and/or cumulative distribution functions
- Understanding the importance of and the difficulties inherent in sound programme evaluation and impact analysis

6. Training feedback

The knowledge and skills that participants acquired during the course of the training programme were tested in two ways:

First, participants were not only expected to follow along with all practical illustrations and exercises, but also to complete specific assignments during practical sessions without assistance from the course instructors or facilitators. Participants subsequently had their work examined by the instructor/facilitators before being shown how the exercise(s) should have been completed.

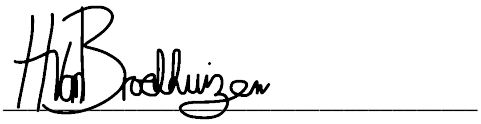
Second, participants were expected to work independently and produce specific types of analytical outputs during the facilitated policy brief writing sessions. They were then required to present those outputs along with their key findings to the rest of the group for further discussion, feedback, and critique.

8. Final comments and next step(s)

This week-long training programme forms part of a two-week training programme in socio-economic analysis using Namibian microdata. The first week's programme focused on helping participants to identify relevant research foci that can be investigated using available Namibian microdata, exposing participants to a broad array of analytical techniques that are required to conduct and present socio-economic research, and equipping participants with the necessary technical skills to commence with their own analysis of socio-economic issues in Stata and the subsequent communication of their findings to a non-technical audience through the medium of policy briefs.

The second week of training is scheduled to take place at the end of May 2017 and is meant to solidify, deepen, and extend the skills acquired during the first week of training. In the interim, participants are expected to continue work on their respective policy briefs. They are expected to have completed full first drafts of their policy briefs before the second week of training commences and will be required to present their draft policy briefs to the rest of the group on the first day of the second week of training.

Signed:



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Using Namibian microdata for socio-economic analysis

Training programme for the National Planning Commission, Windhoek, Namibia

Presented by ReSEP, Department of Economics, University of Stellenbosch

24 – 28 April 2017

TRAINING DESCRIPTION

One of the foremost purposes of collecting microdata is to inform policy and enrich our understanding of socio-economic issues. This two-week programme is designed to assist NPC officials in producing empirically sound and policy-relevant socio-economic research based on Namibian data. The programme comprises two broad components: (1) the understanding and practical implementation of appropriate techniques for analysing socio-economic issues using Namibian microdata in software packages like Stata and (2) the effective communication of empirical findings through the medium of policy briefs.

The programme is intended to provide participants with both a conceptual and practical understanding of socio-economic data analysis, the interpretation of empirical results, the integration of quantitative and qualitative information, and the communication of key empirical findings to policy makers. Participants will be exposed to a wide range of data and analytical techniques in Stata and Microsoft Excel. Throughout the course they will be expected to perform data analysis on various datasets for Namibia as well as interpret, contextualize, and communicate their key findings through policy briefs.

TRAINING REQUIREMENTS

Lab Exercises: The training programme consists of a combination of goal-oriented theoretical presentations, practical demonstrations, and practical work where the skills are acquired by 'doing'. Participants will complete a series of hands-on exercises that cover many of the important concepts and processes of socio-economic data analysis. Basic computer skills as well as an understanding of elementary statistics, Namibian microdata, and Namibian socio-economic issues and active participation in practical exercises, writing sessions, and group discussions are required to extract maximum value from the training.

Practical Requirements:

Participants wishing to work on their own personal laptops must ensure that they have the following software installed:

- Stata SE/MP 13 or higher
- Microsoft Excel 2010 or higher
- Microsoft Word 2010 or higher
- A physical mouse (no trackpads)

TRAINING PRESENTERS AND FACILITATORS

- Dr. Cobus Burger
- Dr. Hendrik van Broekhuizen
- Ms. Heleen Hofmeyr
- Mr. Joel Gondwe

PLEASE NOTE:

- No course manual
- Course framework expected to make notes
- Presentations form part of the course material and will be made available to participants
- Namibia datasets relevant to the training will be provided

DATE	SESSION	TOPICS	PRESENTER
Mon 24 April	1	Introduction and programme overview: *Training objectives and administrative matters*	*All*
	2	Review of Namibian Microdata: *What do we have and what can we do with it?*	Hendrik
	3	Writing policy briefs: *What, why, and how?*	Hendrik
	4	Policy brief planning: • Identifying a) broad policy brief themes b) policy brief teams • Policy brief team planning and preliminary outline a) approach b) relevant data c) relevant literature d) key (team member) tasks	All
	5	Functional project workflow in Stata Practical session on project-oriented workflows in Stata	Hendrik
	6	Structured feedback and group input: Each policy brief team will give feedback and receive input on: • Proposed policy brief topic • Proposed approach and data to be used • Tasks that each team member will be responsible for • Writing/analysis plan for the following day	All
Tue 25 April	1	Namibian education data analysis: • Pivot tables and graphical analysis in Excel • Analysis in Stata	Hendrik & Heleen
	2	Spatial analysis using maps Intro to thematic maps using StatPlantet	Cobus
	3	Facilitated policy brief analysis and writing	All
	4	Practical exercises in Stata Education data	Cobus
	5	Structured feedback and group input: Each policy brief team will give feedback and receive input on: • Progress made today • Major challenges encountered • Component(s) they will be working on tomorrow	All
Wed 26 April	1	Measuring money-metric poverty and inequality: • Poverty lines, FGT measures, and measures of inequality	Hendrik

	2	Analysing money-metric poverty, income and earnings inequality in Stata	Hendrik
	3	Facilitated policy brief analysis and writing	All
	4	Practical exercises in Stata NHIES/NLFS data	Hendrik
	5	Structured feedback and group input: Each policy brief team will give feedback and receive input on: • Progress made today • Major challenges encountered • Component(s) they will be working on tomorrow	All
Thur 27 April	1	Programme evaluation and impact analysis • Theoretical considerations	Cobus
	2	Analysing Namibian health data	Cobus
	3	Facilitated policy brief analysis and writing	All
	4	Practical exercises in Stata DHS data	Cobus
	5	Structured feedback and group input: Each policy brief team will give feedback and receive input on: • Progress made today • Major challenges encountered • Component(s) they will be working on tomorrow	All
Fri 28 April	1	Spatial analysis	Cobus
	2	Understanding migration in Namibia • Analysis of census data	Cobus
	3	Practical exercises in Stata Census data	Cobus
	4	Final week 1 feedback and policy brief roadmap: Each policy brief team will give feedback and receive input on: • Progress made this week • Progress still to be made before the next week of training	All