Three Days

National Workshop

On

EXTRACTION AND ANALYSIS OF UNIT LEVEL NSS DATA USING STATA

Dates: 1-3 February, 2024



Organized

by

Department of Economics

Faculty of Social Sciences Jamia Millia Islamia New Delhi-110025

About Us JAMIA MILLIA ISLAMIA

Jamia Millia Islamia, an institution originally established at Aligarh in United Provinces, India in 1920 became a Central University by an act of the Indian Parliament in 1988. In Urdu language, Jamia means 'University', and Millia means 'National'.

The story of its growth from a small institution in the pre-independence India to a central university located in New Delhi—offering integrated education from nursery to research in specialized areas—is a saga of dedication, conviction and vision of a people who worked against all odds and saw it growing step by step. They "built up the Jamia Millia stone by stone and sacrifice by sacrifice," said Sarojini Naidu, the nightingale of India. Jamia is a NAAC A++ accredited university and it has been ranked among the top three universities in India in NIRF, 2022 and 2023.

DEPARTMENT OF ECONOMICS

The Department of Economics is one of the oldest Departments, established in 1971, under the Faculty of Social Sciences, JMI. The Department is highly reputed andwell- recognized in the country for its Programmes, viz., Ph.D., M.A. (Economics), M.Sc. (BFA) and B.A. (Hons.) Economics, as it has always maintained high standards of the teaching-learning process. It has state-of-the-art Infrastructural support, Smart Class Room, two other classrooms with AC facilities, and a Computer Laboratory well-equipped in terms of Hardware and Software, including application of Econometric Softwares like SPSS, E-views, Stata, R and Python etc. The Department has completed its 50 glorious years of existence and Golden Jubilee of the Department was celebrated with much zeal and enthusiasm in 2022.

ABOUT THE WORKSHOP

Social science researchers interested in Indian issues would inevitably stumble upon nationally representative survey-based data provided by National Sample Survey Office (henceforth NSS). NSS data are quite a rich source of information that any social scientist would dream for on social and economic issues. NSS conducts sample survey with large enough sample size so that it can generate reliable estimate at sub-national levels. NSS, at regular intervals, makes data available to researchers on various aspects of socio-economic situation in India in most disaggregated form. Researchers can use these household (more than 100,000) or individual (close to 600,000) level data sets to produce estimates by social groups, economic status,

regions (including at sub-region level within states). In addition they have freedom to conduct multivariate analysis with large sample size.

Unfortunately, very a limited number of researchers can exploit this data with its full flexibility that it provides to users. This has remained a domain of very few because NSS data is left out of formal curriculum of social science courses at masters level in India. While students through quantitative courses often learn advanced level of multivariate techniques such as time series and panel data analysis but they rarely get the opportunity to equip themselves with necessary skills that will enable them to deal with data management techniques and especially in handling large data sets like NSS.

NSS is not only too large a data set to manage manually but also has a complex sampling design which helps in maximizing the reliability of estimates with limited sample size. Even when some researchers are actually able to deal or manage NSS data, a few of them actually have good understanding of how sampling weights work when we produce aggregates estimates.

The proposed workshop is geared towards enhancing two complementary skills which are needed for fuller utilization of NSS data sets.

- 1) Use of Statistical software Stata and MS-excel for extracting and manipulating the data to bring in a format which can be used for conducting analysis. This involves
 - Gaining understanding of various tools available in Stata for handling or manipulating data. For example
 - Extracting data from Text files in tabular form as NSS data is distributed in text files.
 - Thinking about the difference between unit of analysis and unit in which data is available
 - o Combining or merging data files with same and different units
 - Transforming/collapsing data from lower to higher units i.e. HH to PSU level.
 - Generating visually appealing and easy to comprehend tables and graphs
 - Learning of Stata programming language including use of loops to do above activities in a professional manner to minimize human error and create the trail/log of activities.
- Gaining good understanding sampling design of NSS surveys so that participants can confidently derive estimates of their choice.

3) Increasing familiarity with documentations of NSS related to specific surveys.

The workshop will provide sufficient hands-on exercises for participants. Participant will be provided with hand-holding experience in replicating research paper(s) based NSS data for generating confidence.

TOPICS TO BE COVERED IN THE WORKSHOP

Introduction to Stata

- Reading data from other formats
- Data wrangling with Stata
- Combining datasets: Appending and Merging of data
- Developing summary statistics
- Generating analytical tables
- Exploring data through visual tools

First Principles of using NSS micro data

- o Insights into capturing variation through sample surveys
- Key ideas of sampling design of NSS surveys
- Concept of sampling weights in a stratified sample surveys
- Understanding standard errors of estimate
- Grammar of reading text data
- Extracting text data to a tabular data using Stata
- Merging the data files recorded at different units
- Understanding unit of data vis-a-vis unit of analysis
- Contextualizing the use of sampling weights during analysis
- Developing National, state and socio-economic group level estimates
- Assessing reliability of estimates: Operationalising Standard error
- Which standard error to use

RESOURCE PERSONS

Resources persons are eminent faculty members drawn from the reputed universities and Institutions.

SOFTWARE APPLICATIONS

This workshop will provide hands-on practice to extraction the unit level NSSO data with practical application in generating estimates from different rounds in Stata..

TARGET PARTICIPANTS

- Research Scholars in Economics and other related fields of Social Sciences
- Teachers in Colleges and Universities interested in researching on Indian socioeconomic issues
- Government and non-government officials of Economic department and other Institutions
- Corporate and Consultancy Firms
- Journalists interested in data journalism on Indian social and economic issues.

SELECTION OF PARTICIPANTS

The screening committee will be selecting the participants on the basis of their CV (Three pages maximum) The decision of the committee on the selection of the participants will be final and binding. The participants, attending the workshop will not be provided any TA/DA. The participants will be provided certificates on successful completion of the workshop. Participants are expected to have basic knowledge of basic statistics and working knowledge of computer. Total number of seats in the workshop is 40.

Interested participants may apply using the online Google form provided at

https://forms.gle/9UDYy4rjJmDnc8wi9 on or before 20th January, 2024.

Selected candidates will be intimated by 21st January, 2024.

For any queries, please contact on the following number +91-9441217640.

REGISTRATION DETAILS

Selected candidates should send their proof of the payment of the registration fee to <u>events.economics@jmi.ac.in</u> on or before 25th January, 2024. Applicants are advised to deposit the course fee to the account details mentioned below. Participants are advised to make their own arrangements of travel, food (breakfast and dinner) and boarding/lodging. Please

note that no request for fee reduction or fee waiver will be entertained. Participants will be provided with lunch and tea during the breaks for all three days of the workshop.

INTAKE CAPACITY: MAXIMUM 40

REGISTRATION FEE: Rs. 2799/-

BANK DETAILS FOR FEE SUBMISSION:

Institute Name- JAMIA MILIA ISLAMIA

Beneficiary Name- JMI- Seminar and Symposium

Name of Bank- Indian Bank

Branch- Jamia Millia Islamia

Branch Code- 01622

Account No.- 6767690486

IFSC Code- IDIB000J029

MICR Code- 110019041

Note: After making payment applicants are requested to send the fee receipt

to events.economics@jmi.ac.in

ACCOMMODATION

On request, we can explore the possibility to provide subsidized accommodation in the University guest house/SRK hostel depending on the availability.

Workshop Director Prof. Asheref Illiyan Head Department of Economics Jamia Millia Islamia, New Delhi **Organizing Secretary Dr. Md. Zakaria Siddiqui** Department of Economics Jamia Millia Islamia, New Delhi Workshop Co-ordinators Dr. Vasim Akram Dr. Mohammad Kashif Khan Department of Economics, Jamia Millia Islamia, New Delhi E-mail: <u>mkhan19@jmi.ac.in</u>