

## Job Opening

# Senior Researcher – Data Analysis and Quality Assurance

NEERMAN is a niche yet highly reputed research firm that conducts rigorous evaluations, provides M&E advisory services, helps set results-based-monitoring systems, and conducts field surveys in water-sanitation, nutrition, child safety, public health, agriculture, gender, education sectors. Majority of NEERMAN's research is based on high-quality primary data which we ourselves collect or get collected from small-scale survey agencies. Therefore, high-quality data (reliable, accurate, timely, useful, theory driven) is at heart of everything we do. We primarily work with leading international organizations such as the World Bank, the Asian Development Bank, UNICEF, and international universities but we are expanding our portfolio to India-based CSRs, NGOs, social enterprises also. More information is available on our website [www.neerman.org](http://www.neerman.org).

### How is working at NEERMAN?

After building a solid foundation for transparency, quality and rigor of research, NEERMAN has put in place an ambitious plan to drive growth of the organization in size and brand reputation in a time-bound manner. Staff with necessary hard and soft skills and more importantly with a growth mindset to take challenges and deliver will be an engine of this growth.

The new NEERMAN offers flexible work hours (including work at home) as reward for those who display a high sense of responsibility, accountability, and ability to perform without constant supervision. We maintain a welcoming and friendly work environment in office. We value work attitude and ethics highly (collaboration, humility, accountability, prompt and clear communication) and discourage sycophantic and do-as-told attitude. We encourage our colleagues to constantly upgrade their skills and find ways to do things better and faster with help of technology and upgrading skills with trainings. NEERMAN therefore invests and encourages you to invest in your continuous capacity development. We have performance driven incentive and growth plan for all staff. Your incentives depend on how well you achieve your core key-results-indicators, 360-degree assessment by your peers and performance of your team and ultimately the company. Professional growth at NEERMAN can be rapid if you demonstrate higher levels of skills, knowledge, ability to perform tasks and dependability beyond your position's expectations. The salary and benefits at NEERMAN are competitive and commensurate with industry standards. We believe in work-life balance and have 5-day work week. We encourage better planning and provide resources and training to help you in time management so that you are able to complete your assigned tasks within a normal work week.

### Qualifications and Skills

- **Language and Communication:** The candidate should at least high very high level of 'comprehension' of text, material and communication in English even if written and spoken abilities in English are modest. The candidate should be able to explain concepts, procedures, ideas clearly without confusing the listener. Ability to write in clear and concise manner in Word (we don't expect native proficiency in English, but basic grammar and spellings should be proper).
- **Education:** Masters or PhD degree in Economics or Statistics (or similar with high focus and intensive coursework in mathematics, statistics, econometrics, biostats etc).
- **Technical Capabilities:** The following skills are highly desirable (except those which are noted as optional). We understand that some candidates may be exceptionally strong in a subset of skills but not in others. As long as you have basic understanding and ability/commitment to learn these skills in first 6 months on the job, you are welcome to apply. The only skillset we cannot compromise is related to STATA.
  - Good knowledge of design of questionnaires in social sciences
  - Good knowledge and hands-on experience with Open Data Kit based CAPI systems (any one of ODK, SurveyCTO, ONA, Kobo etc)
  - High- or expert-level of skills in STATA for

*innovation and research to help you improve lives*

- Survey data processing and cleaning (removing duplicates, merging, outliers, reshaping, variable creation, labelling, etc)
- Data analysis (bivariate and multivariate statistical tests and customized tabulation of the results, tabulation of data as per the templates developed, use of matrix commands to generate customized tables, use of svy options for survey data analysis)
- Data visualization (various types of graphs)
- Ability to write DO files with loops, matrix commands, and exporting of analysis results to Excel/Word without copy-paste
- **Optional and a significant plus** - ability to develop customized STATA commands-programmes, ADO files, Python integration with STATA
- Strong Excel skills (pivot tables and charts with slicer, solvers, statistical functions, etc. **Optional and a significant plus** - VBA macro, Database Connections and Power Query)
- **Other optional and a significant plus skillsets**
  - Skills in statistical software other than STATA such as SPSS and R
  - Skills in programming languages used in data analytics (Python, Java, JavaScript)
  - Skills in setting and managing Amazon EC2 cloud-based servers and computers for data analytics
  - Skills in Power-BI, Google Studio, Tableau
- **Experience:** Prefer at least 5 years of relevant experience with large scale social survey research projects with role that looked after questionnaire development, review/testing of CAPI App, review/assess performance of enumerators (based on data but field visits can be a part of it), data QAQC during the field work, data analysis and visualization. We prefer candidates who have done analysis using large and complex sample such as NFHS.
- **Soft skills:** An analytical mind with great attention to details and process, high level of careful work and least error prone, good time manager who is task oriented, ability to learn-unlearn-relearn software packages esp those related to statistical analysis, must love data, passionate about smart work using technology tools, able to delegate work and mentor junior data analysts, mindset to accept feedback constructively and lead by example.

## Job and Responsibilities

Areas of Responsibility	Indicative Activities
<b>Questionnaire and CAPI review for Quality Assurance</b>	Critically review questionnaires from perspective of data quality issues and analysis - logic, ease-challenges in constructing indicators, relationship between different types of respondents/questionnaires datasets, questions that can result in illogical-ambiguous-unreliable data.
	Guide CAPI development team on special logic checks, creation of extra variables, variable naming etc aspects which will aid in data quality assurance during data collection and in data analysis
	Thorough checking of pilot / training data to ensure that there are no inadvertent skips, illogical questions being asked, outliers, incorrectly coding Other-Specify instead of pre-existing option in the MCQs, checking if variables created for Data QAQC have expected values, etc.
<b>Data Quality Assurance During Data Capture / Field Surveys</b>	Build SOPs/ guidelines on Data Quality checks and Data Cleaning & processing methods to be adhered to ensure quality standards of NEERMAN at met at all times by the Research, Data and Field Teams. Conduct session on SOPs for data quality assurance process for new hires and refresher sessions for older staff
	Develop a comprehensive data quality plan in discussion with Research manager, associates. This plan should be a mix of standard checks and study specific checks (high frequency checks versus periodic checks). Develop DO files, integration with Excel, Google Studio, Power BI etc so that most of the data QAQC work can be automated for a survey. Design the templates for reporting quality issues (field status gap, data quality tables etc) and share with field team for action. Ensure that data quality feedback and correction system kicks in within 2 days of field launch and stabilizes within 5 days of field work.
	Ensure high frequency checks on the data received as per the devised plans, review the data quality tables (reliability, enumerator performance, outliers, duplicates, merging issues, discrepancy between field status and actual data on server), communication between data and field team, debrief field team to ensure they are getting feedback in a proper format they find useful and can fix.

	Ensure periodic checks for missing data, outliers, illogical data by reviewing data collected and coming up with instructions / feedback for the field teams.
<b>Data processing and Delivery</b>	Ensure consistent updating and maintenance of repository of the final survey questionnaires, raw data, and cleaned/processed data AND maintain DO files so that everything is well documented and replicable
	Ensure that datasets for delivery which are internally consistent – no duplicates, no illogical answers, open ended responses are coded, multiple datasets merge with each other properly (if applicable), dataset include not just completed responses but also refusals so response rate can be estimated, survey weights (design weights) are included with the final files. Dataset, variables and values are labelled. Each dataset is accompanied by a short but useful data description to aid their future analysis/use.
<b>Data Analysis, Tabulation and Graphics</b>	Contribute to developing data analysis plan in collaboration with Senior researchers, consultant &/or clients including which bivariate or multivariate models/tests to be conducted, descriptive analysis and presentation of data, assumption to make, need to use secondary data, template for tables, charts, graphs in which results should be presented
	Conduct data analysis as per above plan in STATA and ensure all steps are documented as in DO file. We expect least amount of manual work so STATA code should be able to produce graphs and tables the way we expect to see in the Word/Excel report to the extent possible so that in Word only formatting and cosmetic job is left
	Develop Word/Excel templates or VBA Macros which will help in formatting results exported by STATA in most error-less and efficient manner.
	For simple and basic survey studies, set up Excel / Power-BI / Google Studio files for data visualization (cross tabs, graphs etc) or conduct analysis in Excel
<b>Mentoring and Capability Development of Data analysis and QAQC team</b>	Train and mentor associates and assistants on all above aspects so that they start working as your assistants and over time take on more responsibility.
	Develop a system for proper delegation, frequent checks or review of work done, assessment of skills and gaps and feedback to address those. Hold quarterly and annual performance review sessions to help juniors overcome their skills gaps. Recommend management the need for any HR action.
	Stay abreast with available software, their updates, new software for Data Analytics, Visualization, MIS, and all allied functionalities. Look for and critically evaluate alternatives for our usual systems because technology constantly evolves, and we cannot stay satisfied with only one technology for long
	Experiment and develop real-time integration between data collection and data visualization using tools such as google studio, power BI, python, power flow App, etc. Develop tools and processes so that the field can effectively monitor quality of the data they collect within minimal involvement of research and data staff. Your vision should be to use automation and technology for routine tasks instead of time-consuming and error-prone human involvement.
	Participate in strategic discussions on technology platforms, software to be used in NEERMAN's works, what type of data analysis services NEERMAN should give (e.g., should we get into Machine learning), making strategic and tactical plans to improve data quality, efficiency in data analysis, reducing errors etc. Participate in making hiring plans for the data analysis, QAQC related roles, developing their JD, interviewing candidates, onboarding candidates etc.

**CTC offered:** Depends on your academic records, experience, match with required qualifications and skillsets, and technical and behavioural assessment during hiring. Suggestive CTC range: Rs. 8,00,000 – Rs. 12,00,000. Highly promising candidates can expect rapid rise in CTC even before the annual increments.

Position is available in **Mumbai**, but it is possible to seek transfer to our New Delhi office after a period of 6-8 months

**How to Apply:** Please click on the link for application [Click Here](#)