



Dr. Nihal Elghawas

Senior Statistician | Policy & Data Analysis Expert

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SUMMARY

Senior Statistician with over 20 years of experience at the Institute of National Planning, specializing in large-scale surveys, econometric modeling, forecasting, and evidence-based policy analysis. Extensive expertise in translating complex statistical findings into actionable recommendations adopted in national development strategies. Strong background in quality assurance, microsimulation, and institutional capacity building.

EXPERIENCE

Doctor of Statistics – Institute of National Planning, Cairo

April 2004 – Present

- Led national-level statistical research supporting socio-economic development planning.
- Designed and managed large-scale household and administrative surveys (sampling, weighting, questionnaire design, data cleaning, QA).
- Developed econometric and forecasting models (time-series, panel data, microsimulation).
- Prepared evidence-based policy briefs adopted in national and five-year development plans.
- Mentored analysts, implemented data governance, and QA frameworks.

EDUCATION

PhD in Statistics – Faculty of Economics & Political Science, Cairo University (Excellent Degree) 2017

Dissertation: "A Mathematical Programming Approach for Samples Overlap in Stratified Random Sampling"

Master's Degree in Statistics – Faculty of Economics & Political Science, Cairo University (Excellent Degree) 2008

Dissertation: "Monitoring cardiac surgical performance using control charts"

BSc in Statistics, Faculty of Economics and Political Science, Cairo University (Very Good with Honors), May 2003

Professional Training

- Professional Trainer, IBCT – TOT for Professional Trainer (2019).
- Certified Trainer, IBCT – TOT for Associate Trainer (2018).
- Contributor to the scientific material 'Fundamentals of Statistical Analysis' for the Professional Master's program, National Institute of Planning (2018-2019).
- Lecturer of 'Fundamentals of Statistical Analysis' in Master's program at INP (2018-2026).
- Teaching applied statistics using SPSS within the community service program - Institute of National Planning (2018-2025).
- Training course on "Advanced Statistical Analysis using STATA", Academic of Scientific Research and teaching and Institute of National Planning (2024).
- Training course on "Applied Statistics Using the GAMs Program" – Institute of National Planning.

PUBLICATIONS

- Refugees in Egypt: Impacts and Policy Recommendations, Planning and Development Issues Series, No. 355, April 2024, INP.
- UNFPA and INP. (2023). Investment Case Towards Ending Unmet Need for Family Planning Egypt 2023.
- Nehal Abdel Aaty et al. (2018). 'Small and Medium Enterprises Report' Arab Institute, Kuwait in collaboration with the National Institute of Planning.
- Abd El-Aty, N., Rashwan, M., & Hamed, R. (2017). A Goal Programming Approach for Samples Overlap in Stratified Random Sampling. Journal of Advances and Applications in Statistics, 51(1), 39–57.
- Nehal Abdel Aaty et al. (2016). 'Towards an Integrated Framework for Measuring and Studying the Impact of Sustainable Development Goals Post-2015 on Development Conditions in Egypt (2016–2030).' Planning and Development Issues Series, No. 268, National Institute of Planning, Cairo.

TECHNICAL SKILLS

- SPSS (Advanced)
- GAMS (Advanced)
- Econometric Modeling
- Survey Design & Sampling
- Data Cleaning & Quality Assurance
- Forecasting & Microsimulation

Areas of Interest

Applied Statistics, Data analysis and Operations Research.