

ELLEN MATSEI

Data Scientist | Data Analyst | Economic Statistician

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PROFESSIONAL SUMMARY

Results-driven Data Scientist and Analyst with 20+ years of experience transforming complex agricultural, economic and financial datasets into actionable intelligence. Proven track record in statistical modelling, econometric forecasting, survey design, and Power BI dashboard development. Skilled in basic Python and Python-adjacent tools (SPSS, EViews, SQL), Excel Advanced analytics, and end-to-end data pipelines from collection through dissemination. Experienced collaborating with international bodies (UN, FAO, OECD, SADC) and senior stakeholders to deliver data-driven insights that shape national policy.

CORE COMPETENCIES

Data Analysis	Statistical analysis, econometric modelling, forecasting, time-series analysis, regression, trend analysis, graphics
Tools & Software	SQL(DataBricks, Snowflake and Google Big Query) AI empowered data transformation, AI empowered Python(Pandas), EViews (Econometric Modelling/Forecasting), Excel (Advanced/Dashboard/Forecasting), Power BI (Certified),Looker /Data Studio (Dashboards), Microsoft Office Suite Dashboards
Data Collection tools	Kaggle, Google Form/Survey/questionnaire design, field data collection, desktop/secondary sourcing, census methodology
Visualisation	Power BI, Data Studio dashboards (Farmer Register, Sales Data analysis projects, Viewership and Retail data), Dashboards, data storytelling, graphical reporting.
Research Methods	Qualitative & quantitative research, economic forecasting, environmental scanning, M&E reporting,
Data Governance	Data quality management, validation, dissemination of official statistics
Stakeholder Engagement and Management	Internal and International reporting (FAO, OECD, SADC, AFDB, IGC), executive briefing, workshop facilitation, government provincial offices and Industry associations
Management	Budget management, HR and Recruitment process management, team leadership, project management, PFMA & Public Service Act compliance

PROFESSIONAL EXPERIENCE

Director: Statistics & Economic Analysis — Data & Analytics Lead | Department of Agriculture, Land Reform and Rural Development | *Oct 2006 – Present*

Data Science & Analytics

- Designed and deployed Power BI dashboards to monitor the national Farmer Register Project, enabling real-time tracking of 1 000s of smallholder and subsistence farmer records across provinces.
- Built econometric and forecasting models (with EViews,) to project agricultural sector performance, informing quarterly ministerial briefings.
- Led end-to-end data pipelines: questionnaire design → field collection → data cleaning → analysis → publication for crops, horticulture, and livestock statistics.
- Performed time-series and trend analysis on grain, horticulture and animal-product value chains, producing annual publication series (Crops & Markets Estimates, Trends in the Agricultural Sector) using EViews/ Excel methods.
- Responded to and modelled data for FAO, OECD, SADC, AFDB and IGC quantitative questionnaires on food production and economic indicators.
- Developed and tracked SDG indicators and food-security metrics aligned with national M&E frameworks; contributed climate-change economic impact analysis.

Leadership & Governance

- Managed a multi-disciplinary statistics unit (budget, HR, deliverables) under PFMA and Public Service Act regulations.
- Oversee the publication of Agricultural Economic and Statistical Insights Publications
- Represented South Africa at OECD, FAO/AFCAS, SADC and AU discussion forums on food systems, water security and climate change economics.
- Served on Agricultural Economic Working Committee (AEWG), EXCO, and Agricultural CEO's Forum to introduce and review sectoral strategies.

Principal Statistician | Department of Agriculture, Land Reform and Rural Development | *Mar 2005 – Sep 2006*

- Managed a team of statisticians producing provincial agricultural statistical reports and comparative year-on-year analyses.
- Designed farmer-facing questionnaires and facilitated data-collection workshops across provinces to improve data completeness and accuracy.
- Compiled and published provincial profiles covering production volumes, income, expenditure, and price indices on the departmental website for public and stakeholder use.
- Post-publication analysis of the Census of Commercial Agriculture and Crops & Markets Estimates publications.

Senior Survey Statistician | Statistics South Africa | *Jan 2003 – Feb 2005*

- Collected, edited and processed data from Municipal Financial Statements to analyse local-government fiscal variables (water, electricity, sanitation, refuse removal).
- Developed Excel tabulation plans and built comparative tables and graphs for the Municipal Census, presenting findings to national stakeholders (National Treasury, National Electricity Regulator).
- Analysed the impact of Fiscal Local Government Grant allocations using financial and non-financial survey data.
- Conducted stakeholder workshops with municipalities to review and refine survey questionnaires and indicators.

Junior Bank Teller / Customer Services Officer | Standard Bank | *Jun 2000 – Jan 2002*

- Being the friendly face of frontline desk for customer services. Interaction with customers, servicing clients on their daily banking needs. Processed customer transactions (deposits, withdrawals, stop payments), maintaining accuracy and data integrity across customer records.

EDUCATION

Data Science Training:	Profile loaded on GitHub Self trained	Feb-April 2026
BCom Honours – Economics / Econometrics	University of South Africa (UNISA)	2020 – 2024
Masters in Business Administration (MBA)	Milpark Business School, Johannesburg	2010 – 2014
Bachelor of Commerce (Economics & Statistics)	Vista University / University of Pretoria	1996 – 1999
National Diploma in Education (Mathematics & Science)	University of North-West (formerly Unibo)	1994 – 1992
Research: BCom Honours empirical thesis — Impact of Climate Change on Economic Growth in South Africa (Econometrics focus).		
MBA thesis: Knowledge and Information Management in Small Business Enterprises.		

KEY ACCOMPLISHMENTS

- Conceptualised and introduced the national Producer/Farmer Register, officially launched by the Minister of Agriculture in 2022 — now a cornerstone data asset for monitoring and supporting smallholder farmers.
- Delivered Power BI dashboards for the Farmer Register and self-trained Car Sales/Coffee shop Sales/TV Viewership Data Analysis Assignments projects, providing executives with live data visibility across the agricultural sector.
- Represented South Africa at OECD, FAO, IGC and SADC (AU) international forums, contributing quantitative analysis and official statistical responses that inform continental food-security strategies.
- Participated in the Agricultural Economic Working Committee (AEWG), EXCO and Agricultural CEO's Forum, shaping national agricultural data strategy.

CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

- Power BI Certified (Microsoft) — dashboards in production use across departmental projects.
- Data Science Training in SQL(DataBricks, Snowflake, Looker/ BigQuery) DataStudio, PowerBI, Python(Pandas), and EViews for statistical modelling and economic forecasting.