

**Integrating Survey Data, GIS and Small Area Estimation**  
**StatsTalk-Africa:**  
**Tuesday 16<sup>th</sup> April 2024 15:00-16:30 EAT**  
**Concept Note**

---

## Background

International agenda like SDGs and Agenda 2063 have put data and indicators at the core of their frameworks. As sources of official data, national and international statistical systems are under pressure to furnish data for planning, decision making and policy formulation. Besides the government agencies and development partners at the national and international levels, the public, researchers, and academia require quality and timely data.

The demand for various agriculture, socio-economic, and health statistics for small geographical areas is steadily increasing at a time when survey agencies are constantly looking for ways to reduce costs to meet fixed budgetary requirements. In the current survey environment, the application of standard sample survey methods, which require a large sample, is generally not feasible for small domains, as the cost would be prohibitive. Small area estimations techniques are widely used to supplement these data. One of the key factors that leads to the success of small area estimation (SAE) methodology in many applications is the availability of strong auxiliary variables. The accessibility of Big Data from disparate sources (e.g., administrative/register records, social media data, mobile phone data, sensor data, satellite data, etc.) brings new opportunities for statisticians to develop innovative SAE methods.

In this context our first speaker Professor Lahiri will discuss the challenges of producing small area estimates using sample survey data alone and how the sample survey data can be effectively integrated with alternative databases in producing reliable small area estimates. Further an application where survey data can combine with geospatial data in producing improved estimates of crop acreage for small geographical areas will be highlighted.

We then move on to the challenges for development of Urban Spatial Frameworks in Africa our second speaker Mr. Ayenika, will showcase Luanda, Angola case study which is to guide urban planning efforts towards the creation of economically vibrant, resilient, connected, and socially equitable cities. By utilizing geospatial, statistical data, SAE and spatial suitability analysis, the study would discuss a blueprint for urban spatial frameworks, serving as the foundation for sustainable and inclusive urban development in African cities.

## Objective

The ACS is convening the monthly webinar series – **StatsTalk-Africa** – to provide a space for a dialogue about data, statistics, and innovative tools with data experts and users. Specifically, StatTalk-Africa aims to:

1. Serve as a knowledge-sharing and exchange platform.
2. Demystify and promote greater understanding of key statistical concepts and alternative data sources that could be harnessed in the African context.

## Date and Time

The Webinar is scheduled for 16 April 2024 Tuesday 15:00 – 16:30 EAT

## Language

English will be the official form of communication for this webinar series.

## Registration link

Microsoft Teams meeting

**Join on your computer, mobile app or room device.**

[Click here to join the meeting](#)

Meeting ID: 357 863 493 61

Passcode: aiW4Nx

[Download Teams](#) | [Join on the web](#)

**Join with a video conferencing device.**

unitevc@m.webex.com

Video Conference ID: 126 869 786 5

[Alternate VTC instructions](#)

## Contact Persons

Ms. Anjana Dube [anjana.dube@un.org](mailto:anjana.dube@un.org)

Mr. Peter Njagi, ECA- ACS, [njagi1@un.org](mailto:njagi1@un.org)