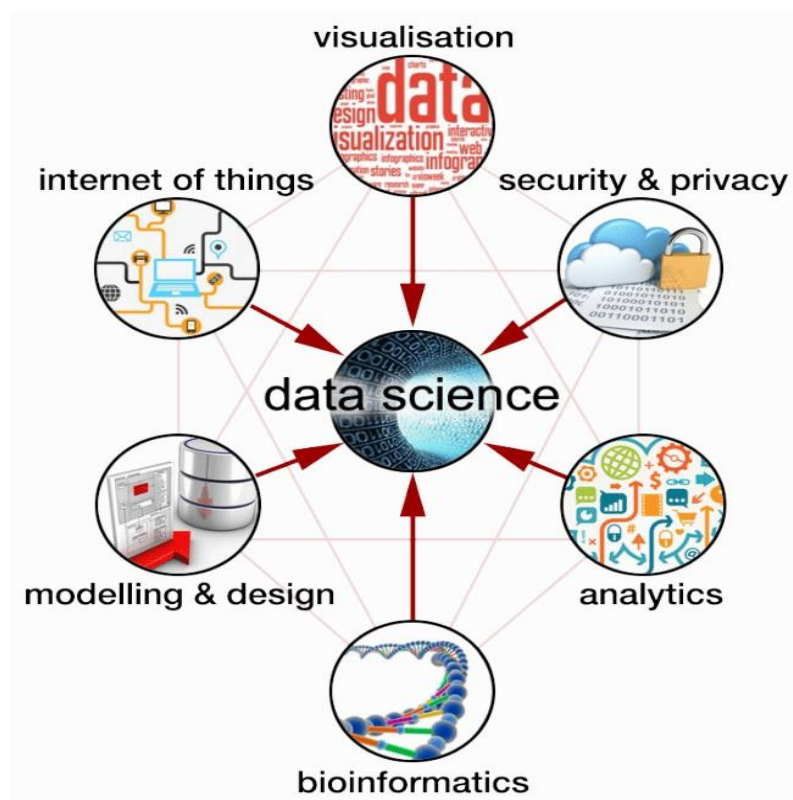




**NATIONAL COUNCIL FOR POPULATION AND DEVELOPMENT**

**THEMATIC AREA: POPULATION DATA, RESEARCH, AND INNOVATION**



## **Population Data, Research, and Innovation**

This thematic area focuses on advancing data-driven approaches, innovative technologies, and ethical considerations to inform policy and planning. It aligns with Kenya's commitment to leveraging data and research for evidence-based decision making, addressing population challenges, and fostering inclusive development.

### **Sub-Themes:**

1. **Leveraging Big Data and Administrative Data in Population Research** Big data and administrative records offer a wealth of real-time and longitudinal information. Harnessing these sources can enhance population research, providing granular insights into demographic trends, mobility patterns, and service delivery. Discussions will explore integrating traditional and nontraditional data sources, such as mobile phone data and government registries, to inform policy making.

2. **Use of Artificial Intelligence (AI) and other Innovative Population Data Collection and analysis Methods**

**AI technologies** are revolutionizing how population data is processed, analyzed, and interpreted. From predictive modeling to pattern recognition, AI enables sophisticated analysis of large datasets, uncovering trends that were previously inaccessible. This subtheme will highlight AI applications in areas such as migration forecasting, health outcomes, and resource allocation, while addressing potential biases in AI algorithms.

### **Innovative Population Data Collection and Analysis Methods**

Traditional data collection methods face challenges such as cost, timeliness, and coverage. This sub-theme will examine cutting-edge methodologies and their potential to improve data quality, accessibility, and relevance for population research.

3. **Real-Time Data, Monitoring and Evaluation**

Real-time data systems are essential for tracking and responding to dynamic population changes. Innovations in digital platforms, geospatial tools, and dashboards offer opportunities for real-time monitoring and evaluation, particularly in health, education, and disaster response. Discussions will center on creating adaptive frameworks for decision-makers.

#### **4. Innovative Approaches to Population Projections**

Traditional projection models often rely on static assumptions. Integrating dynamic data sources and advanced statistical techniques can generate more accurate and actionable forecasts. This sub-theme will explore novel approaches to population projections, addressing the complexities of migration, urbanization, and fertility trends.

#### **5. Ethical and Privacy Concerns in Population Data**

As data collection and analysis methods evolve, so do concerns about individual privacy and data security. This sub-theme will delve into ethical considerations, including informed consent, data ownership, and the potential misuse of sensitive population information. A key focus will be on establishing frameworks that balance innovation with safeguarding rights.

#### **Conclusion:**

This thematic area underscores the transformative potential of data, research, and innovation in addressing population challenges. By fostering dialogue, sharing best practices, and showcasing technological advancements, the conference seeks to empower stakeholders to leverage data for sustainable development, while upholding ethical standards.