Transportation Economics: The Role of Transport Statistics in National Development

Training on Transport Statistics for Uganda Bureau of Statistics,

9 -10 August, 2017

National Bureau of Statistics
Presentation Outline

- Introduction
- Major Stakeholders in Statistical Production and Management
- Statistics and national development
- Transport Statistics and National
- Transport in Uganda
- Effects of Planning without Statistics
- Recent Initiatives in the Nigerian Statistical System (NSS)
- Challenges
- Going Forward
- Conclusion
Introduction

Why Statistics?
All governments need good statistics because good statistics are part of enabling environment for development

Relevant Quotations

- “Sound data represent the key weapon in the battle against poverty” President, Asian Development Bank

- “If you can’t measure it, you can’t manage it” Robert Kaplan

- “Statistics are the eyes of policy makers” Director of Economic Affairs Uganda Ministry of Finance
Statistics can be defined as facts or data of a numeric kind, assembled, classified and tabulated so as to present significant information about a given subject.
Introduction....

- Why Statistics?....

Statistics, Policy and Decision-making

POLICY MAKERS

DECISION MAKERS

NDP
SDGs
African Agenda 2063
ETC.....

Statistics

Statistics

National Bureau of Statistics
In general, Statistics are a powerful tool used for

- Planning
- Administration
- Monitoring/Evaluation
- Governance/Accountability
- Public Debate and Informed Choices
Introduction....

Why Statistics?....

In all the Stages of Policy Design and Decision-Making

- Statistics helps to identify issues
- Statistics is used to forecast the future
- Statistics used to monitor policy implementation and to evaluate policy impact
- Statistics is used for informed the design and choice of policies
Major Stakeholders in statistical production and management....
Major Stakeholders in Data Production and Management....

- **Major Data Producers**
  - National Bureau of Statistics (NBS)
  - National Population Commission (NPopC)
  - Central Bank of Nigeria (CBN)
  - Nigerian National Petroleum Corporation (NNPC)
  - All Federal & State MDAs
  - Statistical Units in all LGAs
Major Data Suppliers

- Households
- Urban
- Rural
- Large, medium, small and micro business Organisations
- Public Agencies
Major Stakeholders in Data Production and Management...

Data Users

- Policy Makers at both the Legislative and Executive arms of Governments,
- Public Sector Managers,
- Academics/Researchers
- Private Organisations
- Consultants
- International Organisations,
- The Media
- General Public
Types of Plans for national development

- **Perspective plan { 10yrs & above}**
  - Vision 2020

- **Mid term plan { 5 – 7 years}**
  - Economic Recovery and Growth Plan (ERGP)

- **Annual Plan/budget**
  - Recurrent Expenditure
  - Capital Expenditure
  - Revenue
Statistics and national development….

Key Areas….

Natural Resource Development
- Land
- Water- Rivers, Stream
- Forest
- Agriculture
- Mineral Resources

Environmental Stability (Ecosystem balance)
- Air
- Erosion & Desertification
- Urbanization
- Refuse Mgt.
- Etc.
Statistics and national development …

Key Areas in national development

**Human Development**
- Population/Quality
- Labour Force
- Education
- Health
- Poverty/Prosperity

**Infrastructure Development**
- Capital Formation
- Transportation
- Buildings
- Communication
- etc.

Government need statistics in all these area in National Development
Transportation contributes to the economic, social and cultural development of any country.

Every commodity produced needs transport at all stages from production to distribution.

However, inadequate transportation facilities retard the process of socio-economic development of the country.
Transportation and National Development….
The principal role of transport is to provide or improve access to different locations for businesses and individuals, for both freight and personal movements.

For the business sector, this involves connections between businesses and their suppliers, between businesses and other businesses, and between businesses and their markets.
For the household sector, transport provides people with access to workplaces, schools and shops.

It connects them to social, recreational, community and medical facilities, for personal and leisure activities.
Transport in Uganda

- Uganda is experiencing high levels of rural-urban migration, making mobility in Kampala challenging.

- GKMA (Greater Kampala Metropolitan Area) contains 2.3 million inhabitants.

- Transport facilities in the city take care of less than 10% of the urban people.
Transport in Uganda

- This put a strain on the central business district (CBD) as the sole centre of economic activity
- Because, Transportation Networks for the different modes have not been able to develop properly,
- Thus, the narrow streets of the city are unable to meet the increasing demand in transport, which results in severe congestion with many negative impacts
Problem Associated with Inadequate provision of Transport

The Societal problems associated with inadequate provision of transport facilities include:

- **Wastage of time:** Result to lost of man-hours which is a major factors of production
- **Non-regulation of Price:** lead to arbitrary increase in price
- **Un-coordinated transport system:** where a bus driver operates in an un-coordinated route
- **Lack of an integrated and affordable public Transport system**
Problem Associated with Inadequate provision of Transport

Wastage of time
Problem Associated with Inadequate provision of Transport

Un-coordinated transport system
Problem Associated with Inadequate provision of Transport

- **Congestion** – over stressing of the available facilities; it has its effects:
  - it causes chaos, Recklessness unsustainable urban transport system
  - It can lead to conflict btw commuters, btw operators and law enforcement agencies
  - Lead to disorderliness in the park
Problem Associated with Inadequate provision of Transport

Kampala during Rush hours
Problem Associated with Inadequate provision of Transport

CONGESTION

- KAMPALA’S traffic jams delays people to arrive at their destinations, and costs the economy shs. 500m (150,000 euro) every day.
- According to the State of Environment Report for Uganda 2008, the city experiences jams because of the huge rise in motorization which is not been accompanied by infrastructure facilities.
- For instance, during “peak hours – given that half of the 375,324 vehicles registered in 2008 are in Kampala, and each uses a minimum of one ltr of petrol in traffic jam every day, at shs 3500 (1.2 Euro) per ltr, this translates into losses of more than sh500m (150.000 euro) per day.”

(National road safety report 2010)
Problem Associated with Inadequate provision of Transport

SAFETY ISSUES

In the year 2010 24,000 road accidents were reported.
- 39% of the fatalities are pedestrians
- 32% Passengers
- 29% others which include motor cyclists, pedal cyclist and drivers.

This is one of the highest in the world

(National road safety report 2010)
Problem Associated with Inadequate provision of Transport

Reckless driving by motor cyclists, pedal cyclist and drivers
Problem Associated with Inadequate provision of Transport

Kampala is moving towards this
Transportation Investment

Transport investments have multiple overlapping economic impacts, which can be assessed from several perspectives.

The initial impacts of investments in transport can manifested in the following:

- changes in residential and industrial location, property prices,
- changes in the supply and demand for labour, and differential effects on the economy.
Socio-Economic Benefits of Transportation: Transport improvements usually increase the scale and scope of economic and social interactions (both for freights and passengers)

**Passengers**
- **Users**
  - Time and cost savings (e.g. commuting). Income from transport operations
- **Employers/Retail**
  - Wider access to labor or customers. Rent Income. Goods and services to users
- **Society**
  - Improved mobility. Increased social opportunities.

**Freight**
- **Operators**
  - Time and cost savings (e.g. deliverables). Income from transport operations
- **Customers**
  - Productivity gains (time and cost savings). Rent income. Goods and services to operators. Wider range of suppliers and markets.
- **Economy**
  - Formation of distribution networks. Attraction of economic activities. Increased competitiveness.
Transport Investment...

Transportation investments or interventions

Accessibility and mobility effects

Social impacts

Externalities

Economic impacts

Health impacts

Social wellbeing

Economic wellbeing

Economic development

External factors

Public opinion

Financial factors

Organisational factors

Economic conditions

Private investment factors

Feedback effects
Transport Investment

Transport infrastructure:
- Road & rail networks, ports, airports, other terminals

Information technology:
- IT infrastructure, intelligent transport systems

Institutional framework:
- Laws, rules, regulations, transport policies, logistical systems & management regimes

Passenger & freight transport services

Transport vehicles:
- Cars, trucks, trains, planes, ships etc.

International transport infrastructure & asset providers

International laws & requirements

International transport providers & organisations (e.g. ICAO)

Broader domestic regulatory framework
Importance of Transport Statistics: Good Governance

For Good Governance, Government Need Good Statistical information in the following areas

- Passenger rail transport
- Freight rail transport
- Urban and suburban passenger land transport
- Freight transport by road
- Transport via pipeline
- Sea and coastal passenger water transport
- Sea and coastal freight water transport
- Inland passenger transport
- Inland freight water
- Passenger air transport
- Freight air transport
- Warehousing and support activities for transportation
Importance of Transport Statistics: Good Governance

• To do this, Government has to
  ✓ identify the resources available to it,
  ✓ identify Programmes/Projects,
  ✓ formulate Policies and targets
  ✓ map out strategies for attaining set goals,
  ✓ monitor the implementation of programmes and policies, and
  ✓ evaluate the end results to see how far the objectives/goals are met

✓ The only effective instrument for doing this is ‘Statistics’!
Importance of Transport: Business efficiency

Government use these statistics to plan and invest in transportation which have direct impact in businesses.
Democratic debates that are based on good statistics will help to

✓ Identify societal problems that need attention---- (congestion, Man-hour lost, cost etc)

✓ Design programmes to eradicate problems

✓ Select appropriate actions to eradicate problems

✓ Forecast future situations based on chosen policy actions

✓ Provide bases for monitoring programme implementation

✓ Provide bases for evaluating programme outcome and impacts on society
Effects of Planning without Statistics

- Issues
  - Accountability
  - Transparency
  - Openness
  - Corruption
  - Informed debate, etc

- Cost
  - Wastages
  - Inadequacies
  - Poverty
  - Instability, etc
Recent Initiative in the Nigerian Statistical System (NSS)

- Statistics Strategies & new Legal Instrument
  - National Statistical Master Plan (NSMP)
  - National Strategy for the Development of Statistics (NSDS)
  - MDAs’ Sector Statistics Strategy (Transport sector)
  - State Statistical Master Plan (SSMP)
  - New Statistics Act
  - State Government Statistics Edicts
Recent Initiative in the Nigerian Statistical System (NSS)....

Federal level

Statistics Act

Extraordinary

Federal Republic of Nigeria
Official Gazette

No. 60 Lagos - 11th June, 2007 Vol. 94

Government Notice No. 39

The following is published as Supplement to this Gazette:

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State level

Statistics Edict

20 states have Statistics Edict in Place

Abia
Anambra
Cross River
Delta
Edo
Ekiti
Enugu
Gombe
Imo
Kaduna
Kano
Kogi

Kwara
Niger
Ogun
Ondo
Oyo
Rivers
Sokoto
Zamfara
Recent Initiative in the Nigerian Statistical System (NSS)….

- Improved Statistical Coordination

Diagram:
- NPopC
- CBN
- DPRS eg Transport sector
- NBS
- SBS

Federal level

State level
Recent Initiative in the Nigerian Statistical System (NSS)...

Establishment of Bureaus of Statistics

Federal level

NBS

State level

SBS

22 states only:

Abia
Anambra
Cross River
Delta
Ekiti
Enugu
Gombe
Imo
Kwara
Kaduna
Kano
Kogi
Lagos
Niger
Ondo
Oyo
Plateau
Sokoto
Zamfara

NATIONAL BUREAU OF STATISTICS
Recent Initiatives in the Nigerian Statistical System (NSS)…

- Clearing of backlog of data
- Filling of gaps in data production
- Conduct of mass Surveys and Censuses
- Emphasis on Administrative Statistics (The Compendium of Statistical Terms)
- Rebasing of the nation’s GDP from 1990 base year to 2010, thereby bringing in new sectors such as
  - Arts, Entertainment & Recreation
  - Information & communication
  - Professional, Scientific & Technical Activities
  - Etc.
Recent Initiatives in the Nigerian Statistical System (NSS)…

- Improved data production process & tool for data Management
  - Digitalized EA Maps
  - Scannable Questionnaires
  - Modern tools for data collection (GIS, GPS Technology)
  - Scanners for data processing
  - Powerful tools and Advanced software application for data analysis.

- National Data Centre & NBS website
  - www.nigerianstat.gov.ng for worldwide dissemination and Archiving
Recent Initiatives in the Nigerian Statistical System (NSS)…

- Enhance quality data
- Enhance access to data
Challenges

- Inadequate funding for statistical operations
- Apathy towards statistics by key stakeholders and decision makers
- Inadequate professionals in both statistical and Research fields
- Lack of application of Statistical findings in policy formulation and execution
Going Forward

- Improved Funding through Government and Donors
- Increase in statistical awareness through intensive advocacy
- Embracing the culture of evidence
- High political will to support statistical development and Research work
- Increased training and re-training of professionals in the fields of Statistics and Research
Conclusion

- Transport Statistics is critical in the design and implementation of national development framework
- Reliable and timely transport statistics needed for measuring the sector performance
- It is important that all stakeholders are carried along in the production of Statistics and in particular Transport Statistics
THANK YOU