

# 3<sup>rd</sup> International Conference on Big Data for Official Statistics



**An Phríomh-Oifig Staidrimh**  
Central Statistics Office

Dublin, Ireland

30 Aug - 1 Sep 2016

## ***Capacity Building for Innovation in Official Statistics:***

## **Session 1: The Role of Statistical Training Institutes**





# The Mission and Role of EASTC in Capacity Building for Innovation in Official Statistics

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Wednesday, 31 August 2016





# PRESENTATION OUTLINE

1. Introduction
2. The Institutional Origins of EASTC
3. The Developments of EASTC Training
4. EASTC's Higher Training Innovation
5. Cooperation with Regional and International Partners
6. EASTC's Demographic Data System Innovation
7. The EASTC Way Forward
8. Conclusion

# 1. Introduction

1. Big Data as Sources for Official Statistics
2. Big Data Projects: Examples
3. Training in Methodology in Big Data
4. Big Data and SDG Indicators



## 2. The Institutional Origins of EASTC

- 3<sup>rd</sup> African Statisticians Conference, October 1963: UNECA assistance in establishing EASTC
- 30<sup>th</sup> August, 1965 EASTC began to train Official Statisticians in Dar es Salaam, TZ under EACSO & UNDP
- April 1978: STPA/UNECA asked TZ Government to run EASTC
- 1994: Diplomatic protocol for Anglophone countries, numbering 18 to-date from Eastern and Southern Africa.





### 3. The Developments of EASTC Training

- Early 2000' s: Training/Capacity building role in higher demand as African govt' s employing only graduates
- 2012: EASTC' s response – offering bachelor' s degree programme in OS; as well as PG programmes in OS for experienced statisticians with theory only
- Accreditation by UNESCO Standards



## 4. EASTC's Higher Training Innovation (1)

- EASTC Master's Degrees in Official Statistics (MOS) and Agricultural Statistics (MAS): 1<sup>st</sup> in Africa
- EASTC PhD Degree in Official Statistics: 1<sup>st</sup> in Africa
- Orientation towards training Data Scientists
- Capacity building strategies related to the use of Big Data in the statistical production process,





## 4. EASTC' s Higher Training Innovation (2)

The MOS programme:

- CBET philosophy (as other programmes)
- 41 modules aligned with sector accounts → National Accounts compilation
- lectures, tutorials, practical (hands-on) and personal study
- dissertation work





## 4. EASTC' s Higher Training Innovation (3)

The MOS programme:

MOS Graduates' competences:

- Applying statistical & analytical techniques in OS production;
- Assessing social aspects, economic performance and socio-economic issues by using OS
- Managing statistical office
- Researching on society' s socio-economic issues

## 5. Cooperation with Regional Partners

Training and capacity building programmes:

- UNSD, UNECA, AfDB, ISI, SADC EAC, COMESA, Statcom → Observer
- NSOs (Attendance to all committee of DGs in Africa)
- Internationally:
  - Ministry of Statistics and Programme Implementation of India
  - IASRI, ISI, ANU
- Africa – several universities for theories



## 6. EASTC's Demographic Data System Innovation

The Electronic Population Register:

- an inventory of residents within a country,
- recorded characteristics (date of birth, sex, marital status, *etc.*) and other socio-economic data, such as occupation or education.
- data collected using electronic application on mobile phone and stored electronically
- Designed by EASTC data scientists;
- Will reduce multiple registrations, such as passports, birth certificates, national IDs and hospital cards as everyone will have unique identification number for accessing their data in the system.





## 7. The EASTC Way Forward:

1. Innovation and Development in Official Statistics Systems
  - Weather stations' data;
  - Cultural activities data;
  - Political activities data;
  - Parallel/informal markets data;
2. Develop training courses targeting at developing methodologies for processing, estimation and use of Big Data
  - 3. Developing Big Data quality framework to ensure trust in the compiled official statistics;

## 8. Conclusion

Major quality problem of African Official Statisticians: ' uncertainty concerning population that should be registered: emigrants, immigrants & migrants – How should they be registered? According to international standards?

STC' s cooperation with offices for civil registration to improve the quality, completeness and consistency of the electronic population register, and to ensure reliable vital statistics .

STCs should also ensure strong involvement in the development of the new address system, which will benefit the performance of future censuses and surveys.

Big Data – use of mobile technologies (CAPI) to capture data

Use of Administrative records instead of surveys

