



EASTERN AFRICA STATISTICAL TRAINING CENTRE
CHUO CHA TAKWIMU MASHARIKI MWA AFRIKA



<http://www.eastc.ac.tz/>

Training Environment Statisticians at EASTC in support of FDES

Workshop on Environment Statistics in support of the
implementation of the Framework for the Development of
Environment Statistics (FDES 2013)
Arusha, Tanzania, 6-10 July 2015



Outline of the Presentation

- Introduction
- What we teach in Environment Statistics
- How we teach Environment Statistics
- Why we teach Environment Statistics
- Assessment
- Challenges of Trainers
- Comments from Workshop participants



Introduction

- Like in all other programmes, Teaching Environment Statistics at EASTC follows the Competence-Based Education and Training (CBET) curricula.
- Environment statistics describe the qualitative and quantitative aspects of the state of the environment and its interaction with human activities and natural events by integrating data from a multitude of different subject areas and sources(Source UN).
- It is an emerging statistical field that facilitates evidence based policies and decision making to support sustainable development.



What we teach in Environment statistics

Bachelor's degree

1. Environmental statistics from different sectors
2. Environmental statistics to determine environmental situations
3. Environmental issues and human development
4. Environmental problems
5. Environmental policies for sustainable environment.

Master's degree

1. Environment statistics
2. Environment statistics for assessing socio-economic aspects of a society
3. Statistical methods in producing statistics of environmental issues in a society
4. Relevant statistics for assessing the status and impact of environmental issues in a society



How we teach Environment statistics

- Teaching environment statistics involves the set of learning tasks which the learner pursues one after the other and the trainer makes sure that each of the tasks is completed.
- The course is structured to be interactive and the emphasis is on learning by doing.
- The learning context of the course is based on Classroom lectures, Guided independent works, Practical demonstration where needed, Case study



How we teach Environment statistics

Example 1: Teaching Environmental Statistics for **Bachelor's degree** in Compilation of environmental statistics from different sectors involves the following learning tasks:



How we teach Environment statistics

(Learning tasks for Bachelor's degree)

- Describing concepts related to environmental statistics
- Identifying classification of environment resources according to international standards (if any)
- Identifying data needed for environmental statistics(e.g. waste, land and agriculture, forests, air and climate, energy and minerals marine and coastal areas etc)
- Identifying sources of environmental statistics
- Developing tools and/or acquire relevant equipments for collecting data
- Using tools and/acquired equipments to collect data
- Using accepted standards and practices to compile environmental statistics



How we teach Environment statistics

Example 2 : Teaching Environmental Statistics for **Master's degree** in the Use of statistical methods in producing statistics of environmental issues in a society involves the following learning tasks:



How we teach Environment statistics (Learning tasks for master's degree)

- Describing the system of producing environment statistics
- Explaining challenges for monitoring and evaluating and environment issues of a society in developing countries
- Using a system of collecting, compiling, disseminating different statistics related to environment issues



Why we teach Environment statistics

- *Bachelor's Degree*

Teaching Environmental Statistics bachelor's degree students is based on the following principle:

“To produce graduates who can work independently in all fields of environment statistics without professional supervision”



Why we teach Environment statistics

- *Master's Degree*

The programme is designed to produce competent, responsible and innovative strategic statistical professionals who will work as managers at senior levels of decision making at NSO, Government Departments and/or international organizations within the framework of Environment Statistics.



Assessment

- Tests 30%
- Assignments/ practical 10%
- Semester Exam 60%



Challenges of Trainers

Environment Statistics, as an emerging statistical field of Official Statistics, is not taught by any teacher at every university. Normally students are trained at STCs such as EASTC by teachers with working experience from NSOs, Government Departments and International organizations such as ISI (i.e. From hands –on experience).



Challenges of Trainers

However, most STCs including EASTC face shortage of teaching staff and inadequate teaching materials in the field of environment statistics.

This situation limits the capacity of most countries to produce reliable environment statistics for effective policy and decision makers.



Comments from Workshop participants

In Concluding the presentation;

- EASTC kindly request participants, after this presentation to comment towards improvement of Environment Statistics curriculum



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Thank you for Your Attentive Listening

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