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## E-waste statistics

Summary of countries' experience

April, 2018 – E-waste statistics workshop - Zanzibar





- Outcomes of UNU's November E-waste Statistics training in Arusha as part of UN Statistical Division Environment Statistics Workshop
- From the Global E-waste Monitor

# The Global E-waste Monitor 2017

## Quantities, Flows, and Resources

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 **ISWA**  
International Solid Waste Association



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# Main challenges in the African and Arab region



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- Lack of public awareness
  
- Government policy and legislation
  - No e-waste specific legislation
  - No translation of Basel Convention
  - Some countries with effective take-back/collection system and EPR system
  
- Dominance of informal sector collectors and recyclers (uncontrolled, ill-equipped) - lack of modern/adequate recycling facilities
  - Severe pollution of the environment + exposure of labourers and populations to hazardous chemicals
  - Poor efficiencies in recovery of precious components
  - Illicit labour + lack of proper means & equipment
  
- Lack of financing of hazardous waste management activities.

# Best practices in the Arab region



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- Increased concerns/interest from Governments in adopting comprehensive and integrated approaches to solving the e-waste problem.
- Advisory, technical, and financial support from UN agencies, development agencies, national governments, private sector, and the alliance of OEMs in Africa.
  - Partnership between the government of Egypt and the Sustainable Recycling Industries (SRI)
  - Partnership between the governments of Egypt and Italy and UNDP.
  - Creation of a facility in UAE serving as the region's largest centre of expertise for e-waste management in the Middle East.
- Interest by private business outfits to establish modern recycling plants

# East African Community Workshop with United Nations Statistical Division



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# E-waste policies and legislations



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- Legislation on e-waste in place
  - Implemented: Rwanda, Uganda
  - Draft: Kenya
  - Not specific to e-waste: Burundi, Tanzania, South Soudan
- Informal sector
  - Well established (Burundi, Rwanda) and even licensed (Kenya)
  - Not well established (Tanzania, Uganda, South Sudan)

# E-waste Statistics



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- Yes, there is data !
- But not yet official statistics
- Research of government researchers and local universities, internet service providers
- Extracted from Revenue Authority's data (Kenya,Tanzania, Uganda)
- Interview of formal and informal retail stores (Rwanda)
- Estimates from data of import (South Sudan)
- Estimates on total e-waste volumes (Kenya, Rwanda)
- Data on collection & recycling of e-waste only in Rwanda



# Statistics on Imports and exports of e-waste



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- Measuring import and export of e-waste
  - Only few countries in the region collect/measure such data
  - Data collected by UNEP and UNU (Kenya); E-waste Inventory Report (Rwanda)
- Data on illegal intercepted e-waste
  - No country surveyed in the region collect such data

# Biggest challenges



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## ■ E-waste statistics

- Lack of structured system responsible for handling e-waste
- Lack of e-waste policy and legislation.
- Lack of technical/financial capacity

## ■ New actions to improve e-waste statistics

- Establish/develop policy and legislation on e-waste.
- Technical capacity building / collaboration with statistics centres (UNU)
- Identify indicators for E-waste statistics, baseline survey
- Mobilize financial means
- Awareness raising (advocacy programme)
- Establishment of e-waste collection centres
- Clear description and division of tasks among authorities



# Status of E-Waste in Rwanda



- A growing demand for ICT especially by government: One laptop per child, telemedicine, e-education, e-agriculture, computers, mobile phones, television...
- A survey of Nov 2014 - Jan 2015 focused on 15 major EEE in Rwanda: PCs, PC printers, Mobile phones, Copying machines, Refrigerators, Air conditioners, Televisions, Washing machines, Car batteries, Dry cell batteries, Stabilizers, Electric cooking, stoves, Electric water heating systems, Fluorescent lamps and Radios
- The survey revealed that there is an annual growth in the importation of EEE to Rwanda of about **5.95%** (between 2010 and 2014).
- ▶ The survey indicated that Rwanda has an e-waste annual generation potential of 9,7417 tons of which 7,677tons (**81.52%**) will be contributed by individuals, 597tons (**6.34%**) by private institutions and 1,143tons (**12.14%**) by public institutions.





# Collection and Recycling of E-Waste



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- E-waste dismantling facility in Bugesera Industrial Park is the second of its kind in Africa, and so advanced that it can recycle 7,000 tons per year.





# Collection and Recycling of E-Waste

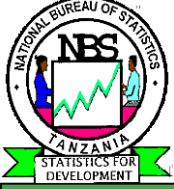


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- 160 tons of E-waste have been collected and transported to the e-waste dismantling.
- Precious metals such as gold, copper, and silver, along with other electronic components, are being extracted, recycled and sold to be made into other valuable items

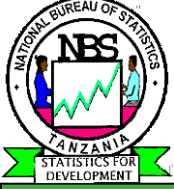




## 1. Background Information

### - Causes and Drivers of e Waste in Tanzania

- Rapid growth of IT sector – eg. **the percentage of households having a mobile phone doubled from 25 % in 2007 HBS to 57% in 2011/12 HBS**
  - government decision to remove all taxes and duties on importation of computers and its peripherals... **increase in importation of used e-products**
  - flexibility on regulations for establishment of media and telecommunication companies - **increase in use and production of e-products**

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## 2. Compilation of E-Waste Statistics

- There is no coordinated system for e waste statistics compilation in Tanzania;
- **Some Estimates from different sources:-**
  - Crude estimates by VPO – 18,000-33,000 tonnes of e waste are generated annually
  - E waste generated from computers was between 3,000-9,500 tonnes in 2015 (*survey (2011) conducted in Tanzania by Magashi11* )
  - Estimates by VPO, Global average growth rate is 4-5% but in Tanzania is high as 33%



# Challenges



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- Low levels of awareness on the dangers associated with e-waste,
- Informal repair and refurbishment of electronic and electrical equipment



### 3. E-Waste Management - Legislation

- Tanzania has **no specific e-waste management legislation.**
- E-waste is managed through the **solid waste and hazardous regulations** prescribed under the Environmental Management Act (2004).
- Part VIII of the Environmental Management (**Hazardous Waste Control**) regulations, 2009 of the Environmental Management Act (2004) addresses **the issue of electrical and electronic waste.**



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Thank you for your attention!