

EDUCATION AND TRAINING IN RADIATION PROTECTION IN DEVELOPING COUNTRIES

UGANDA

KIRAGGA FESTO:

**LECTURER AND RADIATION SCIENTIST
FACULTY OF SCIENCE
DEPARTMENT OF PHYSICS
GULU UNIVERSITY**

Introduction

- The current population is over 34 Millions as reported in the just concluded census of Sept 2014
- Located in Africa, East Africa. Along the equator.



Introduction cont...

Boarders:

- Southern Sudan-**North**
- Democratic Republic of Congo-**West**
- Rwanda and Burundi –**South-west**
- Tanzania-**South**
- Kenya –**East**
- Became a member of IAEA-1967
- Established regulatory body ((AEC) October, 2008 and Regulation February,2012



Introduction cont...

- ***Rationale***
- “Building competence in radiation safety through education and training is fundamental to the establishment of a comprehensive and sustainable national infrastructure for radiation safety, in order to protect the public from the harmful effects of radiation. However, several Member States in the Africa region lack national strategies for building competence in this important area” IAEA

Introduction cont...

- ❑ Education and Training (E & T) in radiation, transport and waste safety is not being done apparently in Uganda and many African states.
- ❑ The current statutory documents; The Atomic Energy Act 2008 and Atomic Energy Regulation 2012, do not stipulate out a national policy on E&T in RP. This gap was identified and is yet to be fixed
- ❑ However, the Atomic Energy Council's (AECs') human resource manual provides for career growth and development but this only caters for the secretariat and board members.

Introduction cont...

- ❑ With the expansion of the mining sector and the emergence of the oil and petroleum production in Uganda, there is need to train QEs, RPOs, RSOs and other health experts relative to their occupational requirements.
- ❑ Academic institutions have come up with training programmes where some education concepts on Radiation protection and safety have been incorporated eg;
 - ❖ Makerere University
 - ❖ Ernest Cook Ultrasound Education Research Institute (ECUREI)
 - ❖ Mulago Paramedical School
 - ❖ MUST & Gulu University

What has been done as regards Education and Training in Radiation, Transport and Waste safety in Uganda.

- ❑ In November 2012, a working group was formed, this acts as a temporary secretariat. The working group comprised of ;
- ❑ Ministry of Energy & Mineral Development (AEC & Nuclear Energy Unit(NEU))
- ❑ Project counterpart
- ❑ Teaching Institutions (MUK & ECUREI)

Status of Education and Training in Radiation, Transport and Waste safety in Uganda Cont.....

The working committee wrote to different stakeholders requesting them to nominate candidates that will constitute the steering committee. The stakeholders included;

- MOH
- MOE&S
- OPM
- Ministry of Trade & Industry (MT&I)
- Training Institutions

Status of Education and Training strategy in Radiation, Transport and Waste safety in Uganda Cont.....

- ❑ **UNCST**
- ❑ **NCHE**
- ❑ **MO Internal affairs & Defence**
- ❑ **MO Lands & Environment**

One staff from AEC benefited from the project.

Challenge

- ❑ Some of these stakeholders never responded to the requests but reminders are still being sent. This has delayed the process.

What is being done

Identifying different practices through inventories and notification exercises. This is being carried out by the AEC, the national regulatory body for peaceful application of ionising radiations in Uganda. From these exercises we;

- ❑ Identify the different practices (Medical, Industrial, Transport and waste management programmes, NORM practices, research and Education, Agricultural research, etc.
- ❑ number of sources
- ❑ Number of RSOs and Qualified experts

Cont.....

- ❑ Qualifications and competencies of the RSOs in respective practices and qualified experts
- ❑ Existing Training facilities
- ❑ Sensitisation of stakeholders through trainings, meetings and workshops
- ❑ Public awareness through conferences, workshops
- ❑ Studying and discussing the relevant IAEA publications on E&T

Future plans

- ❑ Setting up a steering committee
- ❑ Data collection across the country to guide in the carrying out needs assessment.
- ❑ Design E& T programme
- ❑ Development of E&T programme
- ❑ Implementing the E&T programme
- ❑ Evaluation of E&T programme

Challenges in most countries

- ❑ Availability of supporting legislations and regulatory documents
- ❑ Will from stakeholders
- ❑ Lack of political will
- ❑ Financial constraints to facilitate in coordinating workshops and meetings
- ❑ Lack of qualified personnel in radiation safety and protection

Need for major Assistance

- ❑ Expert mission to train staff, provide technical expertise and guidance in establishing and implementing the E&T programme.
- ❑ Financial assistance to facilitate coordination meetings, data collection and implementation of the programme

References

- Regional Workshop on Establishing a National Strategy for Education and Training in Radiation, Transport and Waste Safety 10-14 June 2013, Accra, Ghana **UNDER RAF 9048**
- IAEA Safety Guide (2001): Building Competence in Radiation Protection and the Safe Use of Radiation Sources. No. RS-G-1.4
- Regional Workshop on Establishing a National Strategy for Education and Training in Radiation, Transport and Waste Safety 4-6 June 2012, Gaborone: Botswana

Thank You

**FOR GOD
AND
MY COUNTRY**