

AFRA-NEST

**A TOOL FOR HUMAN RESOURCE
DEVELOPMENT**

**12-16 May 2014
Vienna, Austria**

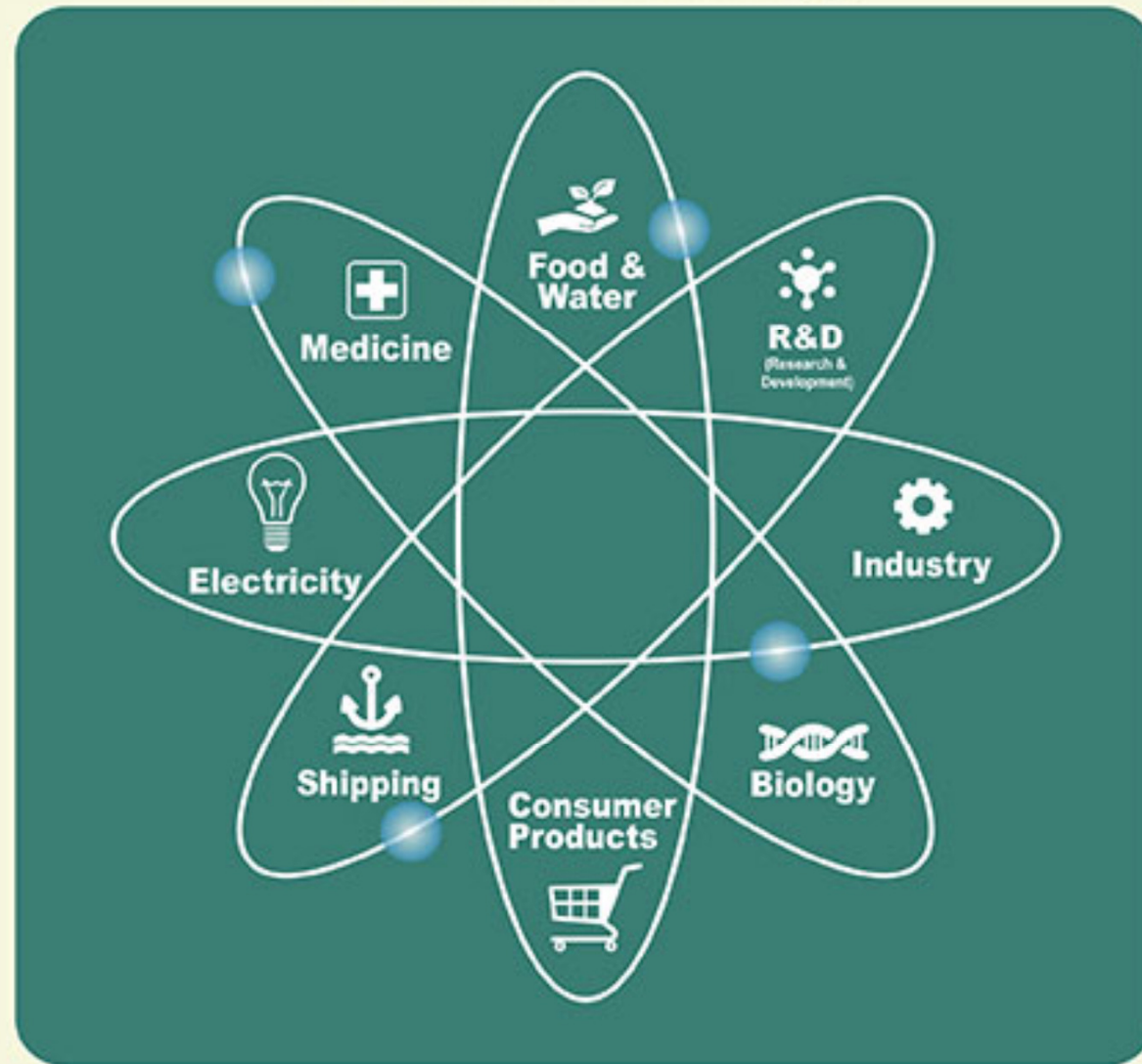
EDISON AMANOR

E-mail: e.amanor@gaecgh.org

E.H.K. AKAHO, Y. SERFOR-ARMAH



Uses of Nuclear Technology



nuclearenergy.ir

NUCLEAR PROFESSIONALS IN GHANA

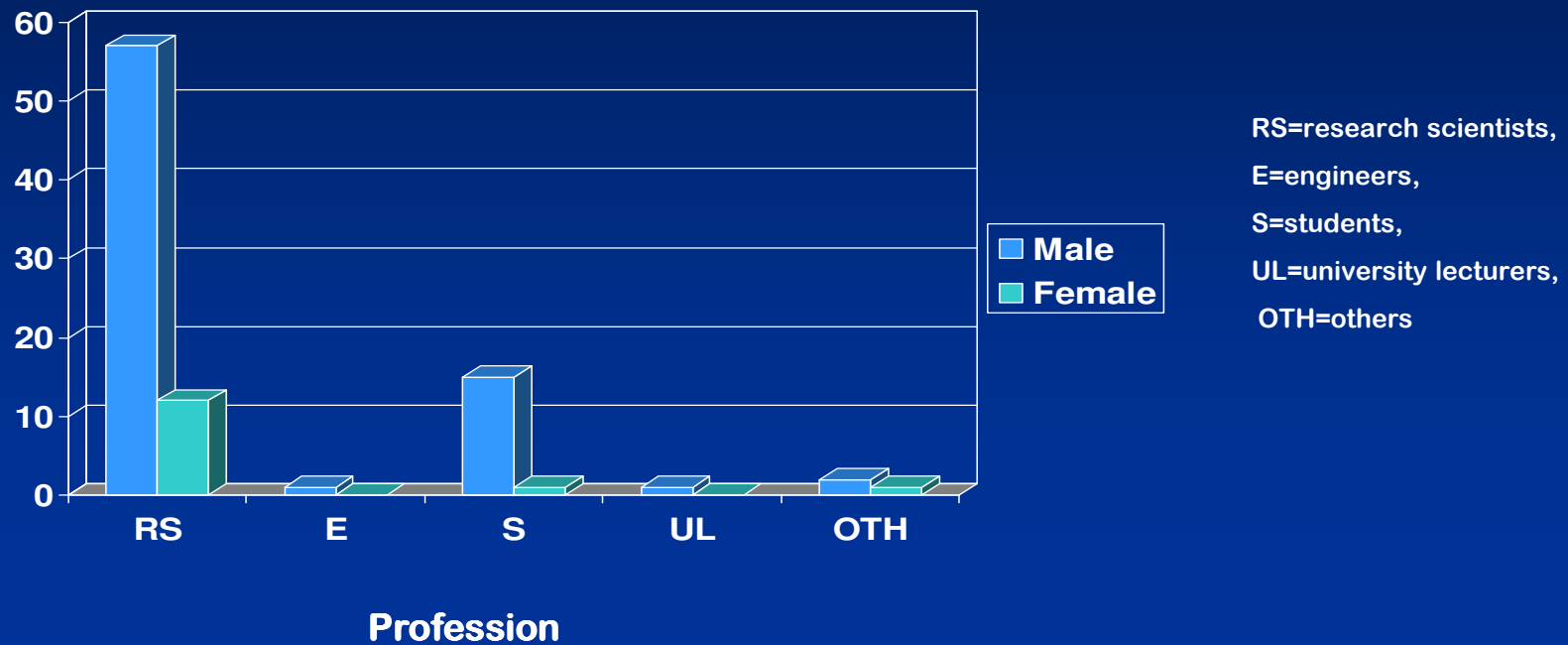


Fig. 2: Distribution of Nuclear Scientists by Profession and Gender (E.A. Agyeman, 2003)

NUCLEAR PROFESSIONALS IN GHANA

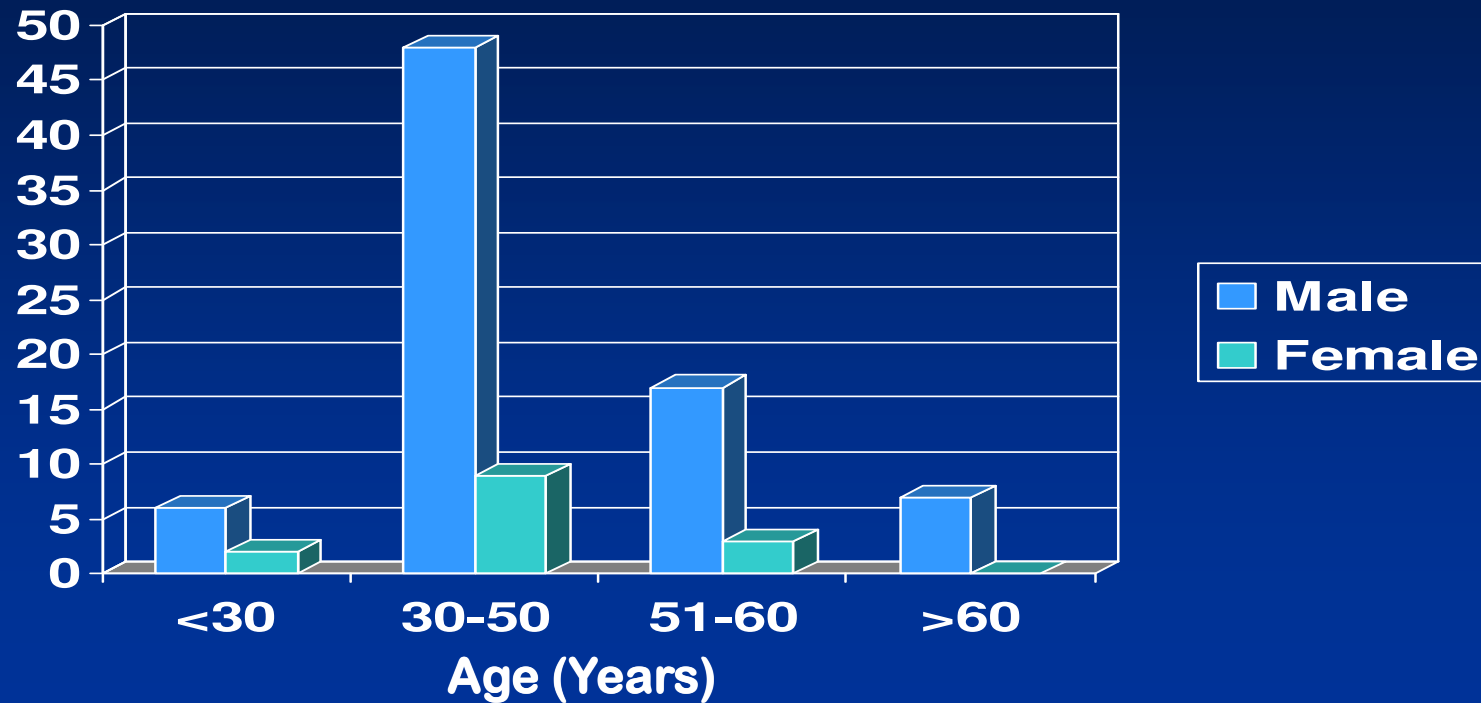
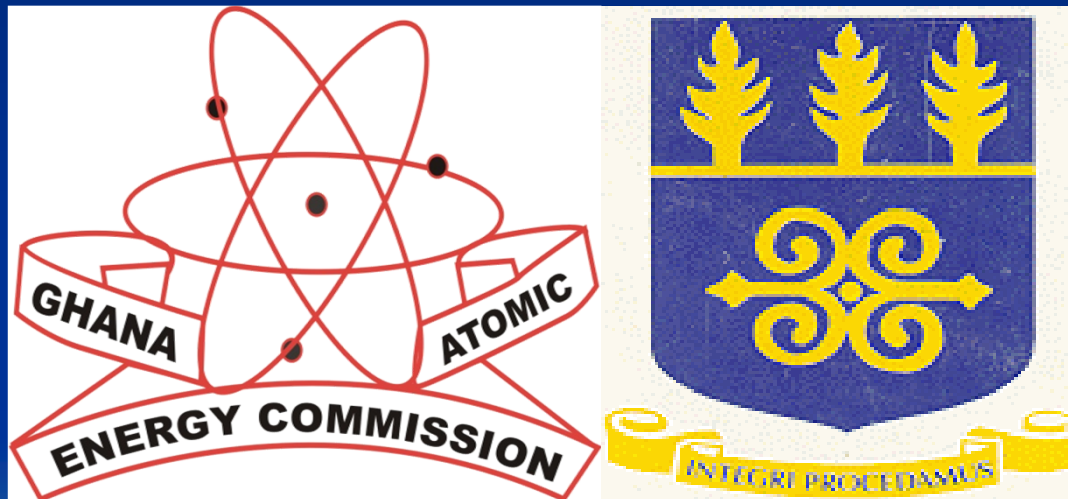


Fig. 1: Distribution of Nuclear Scientists by Age and Gender, (E.A. Agyeman, 2003)

**GRADUATE SCHOOL OF NUCLEAR AND ALLIED SCIENCES
UNIVERSITY OF GHANA
IN COLLABORATION WITH
GHANA ATOMIC ENERGY COMMISSION
IN COOPERATION WITH
INTERNATIONAL ATOMIC ENERGY AGENCY**



**PRESERVING, MAINTAINING AND ENHANCING
NUCLEAR KNOWLEDGE IN AFRICA**

15 May 2014

SNAS - AS RDC:

**This opens a new chapter
for cooperation in the
region in HR development
and research.**

INTRODUCTION

- AFRA, an African regional initiative of Member States, has also responded to this importance of HRD by setting up an AFRA High Level Steering Committee (AFRA HLSC) to administer an AFRA Network for Education in Nuclear Science and Technology (AFRA-NEST).

INTRODUCTION

- At a meeting of the AFRA Field Management Committee (AFRA FMC) in 2004, it was decided that importance must be given to the improvement of the Human Resource Development (HRD) and Nuclear Knowledge Management (NKM)

INTRODUCTION

- First Regional Seminar was organized in Dakar in 2005
- In Algiers, in 2006, a Task Force Meeting was held with the terms of reference to review the conclusions and recommendations of the Dakar Meeting

INTRODUCTION

- ASWAN Declaration of 2007
 - Formation of AFRA HLSC
- Recognition of Regional Designated Centers in Professional and Higher Education in Nuclear Science and Technology
- Creation of Database on Facilities, resource persons and supporting structures for the establishment of Web-based network and Website
- Developing proposals for the acquisition and installation of central nuclear advanced facilities for regional cooperation to support R&D, Education and Training.
- Launching of AFRA – NEST and Hosted in Ghana by SNAS

AFRA-NEST

AFRA-NEST

**Sustainable Energy Development
Sub-Network
(Energy Planning, Nuclear Engineering)**

**Radiation Protection Network
Sub-Network**

**Radiation Medicine
Sub-Network with VUCCnet**

**Food & Agriculture
Sub-Network**

**Water Resource Management
Sub-Network**

MEMBERSHIP

- Institutions in AFRA Member States
- Collaborating Members

STATUS

- **RDCs**
- Alexandria University of Egypt and SNAS of Ghana run Masters program in Nuclear Science and Technology with an option of Nuclear Engineering which could develop Human Resource for Nuclear Power Programmes
- Algeria, Ghana and Morocco organize Post Graduate Education Course (PGEC) in Radiation Protection.
- The Regional Learning Management System of AFRA-NEST went on-line in October 2013 with the url; <http://lms.afra-nest.org> and it's being restructured to be in line with other regional networks like ANENT and LANENT

STATUS

- At the First AFRA-NEST General Assembly that was held in Arusha, Tanzania, in August 2013, four working groups were formed as follows;
 - Information and Communications Technology (ICT)
 - Human Resource Development (HRD) Planning
 - Research Reactors and
 - Human Health Education and Training
- A fifth Working Group for Nuclear Power Development is envisaged to be established during the 2nd General Assembly Meeting in Lusaka, Zambia.

A C T I V I T I E S

- As a service of the AFRA Member States, AFRA-NEST will serve as a reference centre for training of nuclear science and technology professionals for Africa
- Exchange of information and materials for education and training.

A C T I V I T I E S

- Creation of a database of human resource and equipment.
- Support e-learning and distance education in AFRA Member States.
- Implement AFRA strategy on Human Resource Development (HRD) and Nuclear Knowledge Management (NKM).

A C T I V I T I E S

- Training Nuclear Scientist/Engineers, Technologists and Technicians in the Africa Region using curricular of both power & non-power applications of nuclear technology.
- Facilitate cooperation and networking with other Nuclear Education Institutions and National Networks.

A C T I V I T I E S

- Exchange of students, lecturers and researchers
- Formulation and harmonization of priority Masters Programs.
- Establishing of modalities for mutual recognition of degrees and transfer of credits.

A C T I V I T I E S

- Awarding of AFRA Fellowships/Scholarships to brilliant young nuclear scientists/engineers.
- Serving as a facilitator for communication and cooperation between AFRA-NEST member institutions and other regional and global networks.

A C T I V I T I E S

- AFRA-NEST would complement existing IAEA initiatives in focusing on education and would fit into existing IAEA frameworks.
- AFRA-NEST will address common problems related to nuclear education, training and outreach (NETO) as part of the IAEA's programme on nuclear knowledge management.

RECOMMENDATIONS

- The NKM Unit of the IAEA should continue assisting with the restructuring of the LMS portal of AFRA-NEST.
- Higher Commitment from the AFRA MSs.
- Support for free-flow of information between members.
- Closer Cooperation & Experience Exchanges with other Regional Networks & IAEA

CONCLUSION

- Regional Networks could serve as a common platform to meet the needs for human resource development.
- With **AFRA-NEST**, International co-operation would be strengthened.
- Systematic integration and sharing of available nuclear training resources.
- Cost of training future nuclear experts could drastically be reduced.

**THANK
YOU**

15 May 2014