

**GHANA'S STATEMENT DELIVERED BY DR. A. W. Q. BARNOR
CHAIRMAN GHANA ATOMIC ENERGY COMMISSION AT
THE 60TH REGULAR SESSION OF THE IAEA GENERAL
CONFERENCE HELD IN VIENNA, AUSTRIA, FROM 26-30
SEPTEMBER, 2016**

**Mr. President,
Director-General of the International Atomic Energy Agency,
Excellencies,
Distinguished Ladies and Gentlemen,**

The Ghana delegation joins other speakers, to warmly congratulate you and your bureau on your election to lead this session. We commend you and your bureau for the professional conduct of this meeting, so far, and assure you of our full support and cooperation. My delegation congratulates the Agency for the sixty years of effective cooperation in advancing nuclear science and technology the world over. Ghana also congratulates and welcomes the Government and People of the Islamic Republic of Gambia, St. Lucia and Saint Vincent and the Grenadines on their membership to the Agency and assure them of our support. I am confident that their membership will further enhance the work of the Agency.

Mr. President,

Ghana is undertaking various activities regarding the development of a strong infrastructural base for our nuclear power programme. These include: establishment of an independent regulatory body; a generalised programme management system, ratification of a number of required international treaties and conventions for developing a nuclear power programme; gap analyses on various laws and legislation; review of previous electric energy demand assessments study; development of human resource strategy and gap analysis; development of stakeholder engagement strategy and stakeholder consultations and public awareness sessions; siting and related activities, among others.

In line with our capacity-building agenda, two national workshops were organized this year in the areas of Stakeholder Involvement and Nuclear Power Communications and Management System Development. Ghana applied for an Integrated Nuclear Infrastructural Review (INIR) mission and a Self-Evaluation Report (SER) was submitted in March 2016. Subsequently, a pre-INIR mission was held in Ghana in August 2016. The main INIR mission is scheduled for January, 2017. Furthermore, a nuclear energy policy document has been developed within the framework of the national energy policy.

Mr. President,

Ghana is party to a number of International Legal Instruments of the Agency. These include: the Applications of Safeguards in connection with the Treaty on Non-Proliferation of Nuclear Weapons; and Additional Protocol to the Agreement on Safeguards in connection with the Treaty on Non-Proliferation of Nuclear Weapons. Ghana has also acceded to the Convention on Nuclear Safety; The Comprehensive Nuclear Test Ban Treaty (CTBT); The African Nuclear Weapon Free Zone (Pelindaba) Treaty; Amendment to the Convention on Physical Protection of Nuclear Material; The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

In addition, Parliament has also given approval for Ghana's accession to the Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency, the Convention on Early Notification of a Nuclear Accident, and the Convention on Supplementary Compensation for Nuclear Damage (CSC).

At the national level, the Atomic Energy Commission Act, 2000 (Act 588) and the Nuclear Regulatory Authority Act 2015 (Act 895) are the two main legal regimes governing our nuclear agenda.

The Nuclear Regulatory Authority Act, (Act 895) passed by Parliament in 2015 effectively established a truly independent

regulatory body as required by the constitution of Ghana and various international legal instruments. The Nuclear Regulatory Authority is an independent body regulating all the other institutions and individuals whose activities could lead to radiation exposure. Regulations on Siting of Nuclear Facilities, Safeguards and Radioactive Waste Management are currently under development with support received from the Agency, US-DOE, and US-NRC.

Mr. President,

The Core of Ghana's Miniature Neutron Source reactor is being changed from highly enriched uranium (HEU) to low enriched uranium. The LEU core has been fabricated and the Zero Power Test (ZTP) has been performed. The LEU core loading is expected next month. The HEU has already been unloaded and waiting to be shipped out of the country. This project is being carried out with the sponsorship from the US Government and the Agency. The whole exercise is expected to be completed by the end of 2016.

The Government of Ghana, as part of its long term management strategy for disused sealed radioactive sources (DSRS) has opted for the Agency developed Borehole Disposal System (BDS) as an end-point management option. The BDS is being implemented with the Ghana Atomic Energy Commission (GAEC) as the implementing institution. The project is being carried out with assistance from the

IAEA through Technical Cooperation and donor support from the Canadian Government. An initial site investigation and characterization as well as Safety Assessment (SA) for the BDS have been performed.

Mr. President,

The IAEA facilitated and provided support to Ghana to establish a 1.7MV Pelletron accelerator facility equipped with Ion Beam Analytical (IBA) capabilities to allow for non-destructive multi-elemental analysis of samples. The Accelerator was commissioned in March 2016 jointly by the Director General, H.E. Yukiya Amano and Hon. Mahama Ayariga, Minister of Environment, Science, Technology and Innovation on behalf of the President of the Republic of Ghana.

Mr. President,

Nuclear science and technology has over the past decades played a cardinal role in the developmental agenda of many countries. It has a direct bearing on the Sustainable Development Goals (SDGs) and its importance in achieving the SDGs cannot be overstressed. Ghana has not relented on its effort to promote sustainable nuclear education and training in the broader framework of capacity building and nuclear knowledge management for the nuclear industry. Ghana continues to provide support for the Nuclear Education and

Training at the Graduate School of Nuclear and Allied Sciences (SNAS), which is an Agency African Regional Designated Centre (RDC) for Professional Training and Higher Education in Nuclear Science and Technology, Radiation Protection and Medical Physics. Consequently, Ghana has recently expanded the physical infrastructure at the School.

The School, launched its 10th Anniversary in March 2016, and we were highly honoured to have the Director General of the Agency, Mr. Yukiya Amano, grace the milestone ceremony with his presence. Ghana remains grateful to the Agency for the opportunity to implement the Human Resource Development (HRD) initiatives and Nuclear Knowledge Management (NKM) programme at the School and for its immense support to the programme.

Mr. President,

The Sterile Insect Technique (SIT) has huge potential for the management of insects and pests of agricultural, medical and veterinary importance. The Ghana Atomic Energy Commission (GAEC), is exploiting the SIT for the control of populations of tsetse flies and mosquitoes, which are major vectors of trypanosomiasis and malaria respectively. The SIT is also being developed for the control of *Bactrocera dorsalis*, a pest of quarantine importance on fruits and vegetables. With the support of the Agency, insectaries for rearing

mosquitoes, tsetse flies and fruit flies have been established at GAEC to carry out SIT research and development.

Ghana installed its first Gamma Irradiation Facility (GIF) in 1995 with the support of the Agency and was upgraded in 2010 to enhance its commercial use in post-harvest management of food and sterilization of medical and pharmaceutical products. In health care delivery, the GIF is currently being used for sterilization of medical items from the nation's leading hospitals. Plans are in place to utilize this technique nationwide to reduce post-harvest losses.

Mutation breeding to create variability and subsequent production of mutants with desired traits in crop plants is also a major activity at GAEC to support the agriculture sector. Currently, GAEC is using gamma irradiation to develop new crop varieties of yam (*Dioscorea esulenta*), cassava and oil palm. Different mutant lines of these crops are on the field for their evaluation for high yield, improved nutritional quality, resistant to diseases as well as drought tolerance. In the floriculture industry, mutation induction is being used to developed flower varieties with different petals for their aesthetic value.

Mr. President,

In our pursuit to support activities of the Agency in the sub region, Ghana hosted many regional training courses, workshops and meetings. Notable among these were the first coordination meeting on the TC project on “Strengthening Africa’s Regional Capacity for Diagnosis of Emerging or Re-emerging Zoonotic Diseases, including Ebola Virus Disease (EVD), and Establishing Early Warning Systems”. This is an off-cycle project approved by the Board of Governors of the Agency upon a request by Member States during the peak of the Ebola crisis in West Africa. The meeting reviewed national organizational set ups as well as national diagnostic of participating countries. Work plans based on needs/gaps identified were also developed at this meeting.

Additionally, the final as well as the first Coordination meeting to finalize Phase one and initiate phase 2 of the regional project on “Establishing a Food Safety Network through the Application of Nuclear and Related Technologies” was hosted by Ghana this year among others.

Mr. President,

Ghana hosted a team of staff from the Office of the Internal Oversight Services (OIOS) of the Agency in the second quarter of 2016 for the Country Level Evaluation and Audit (CLEA). The team evaluated

Ghana's TC projects covering all the programmes undertaken with the support of the Agency since 2005. The report on this mission will help Ghana streamline its programmes and activities towards improving the implementation of future projects.

In line with our quest to achieve the highest sustainable growth and make GAEC visible and relevant to the populace, GAEC is embarking on several programmes to ensure sustainability of nuclear science technologies as a major tool for economic development. Among these are the establishment of technical support organization and also partnership with both local and international private institutions to promote nuclear technologies which have been developed over the years. Ghana is also taking part in the Agency TC Project on Sustainability of National Nuclear Institutions.

Mr. President,

I would like to conclude by assuring you of Ghana's continuous support to the Agency in the discharge of its mandate and to offer our full support for the candidature of the Director General H.E. Yukiya Amano. The Agency has achieved a lot in its sixty years of existence, but there is still a lot of work to be done and Ghana feels that he is well placed to provide the needed leadership going forward.

I thank you.