

Nigeria

IAEA Member State since March 1964

Selected achievements

2021: Nigeria enhances the capacities of the National Animal Production Research Institute at Ahmadu Bello University (ABU) to improve cattle productivity, artificial insemination services and reproductive efficiency and to optimize nutrition.

2018: The diagnostic capacity of the National Veterinary Research Institute for avian influenza is enhanced using nuclear techniques.

2015: The Gamma Irradiation Facility at the Nuclear Technology Centre in Sheda, Abuja, is upgraded.

National priorities

- Human health and nutrition
- Food and agriculture
- Water resources management
- Nuclear radiation safety and security
- Research reactors

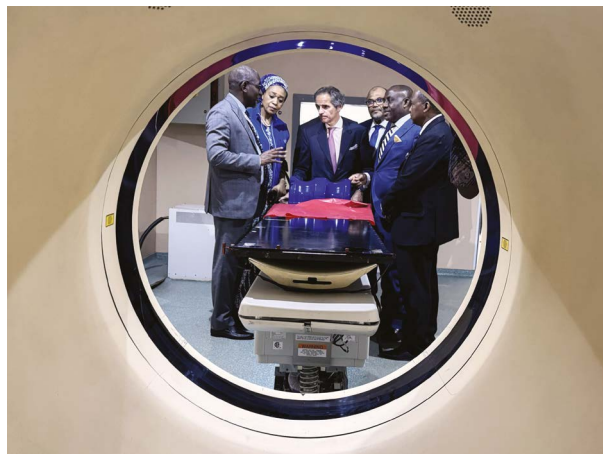
Main areas of IAEA support

- Animal health
- Urban air quality monitoring
- Food security
- Nuclear knowledge management

Project successes

Nuclear instrumentation

The Nuclear Instrumentation Division of the Birine Nuclear Research Centre oversees staff training and the maintenance, repair and refurbishing of nuclear instruments. With IAEA and AFRA support, it has successfully expanded its capacities, now offering maintenance services locally and providing training to users from other IAEA Member States within the AFRA region.



IAEA Director General Rafael Mariano Grossi visits the National Hospital in Abuja. (Photo: IAEA)

Nigeria also operates a gamma irradiation facility at the Nuclear Technology Centre in Sheda, Abuja, to provide services and enable research in the country. The IAEA provided training for staff, as well as advisory support and analytical instruments to enhance effectiveness. This has improved quality assurance and control requirements for exporting products. Through its bulk irradiation capability, the facility helped to reduce large post-harvest losses and supported a tsetse and trypanosomiasis eradication campaign.

Research reactor

Nigeria installed its first research reactor, NIRR-1, at the Centre for Energy Research, with IAEA support for staff training. The facility was configured for education and training use, neutron activation analysis and isotope production.

Increased demand for medical and material analysis applications has significantly surpassed the reactor's capacity. With IAEA support, Nigeria is now planning to acquire a new, higher capacity multipurpose research reactor to meet these needs and support future advancements in research, education and medical applications.

Animal health

With support from the IAEA, Nigeria has improved animal productivity in small farms by

employing nuclear and molecular techniques to detect and control parasitic and animal diseases. This initiative helped to enhance the capabilities of the National Animal Production Research Institute at ABU, Zaria, through staff training, advisory services and the provision of analytical equipment. The project resulted in a reduction of the mortality of small ruminants (e.g. goats, sheep) and contributed to the overall increase of local farmers' livestock.



IAEA and Nigeria Hydrological Services Agency (NIHSA) experts discuss how to optimize the use of an automatic weather station in Abuja, Nigeria. The IAEA Water Availability Enhancement Project (IWAVE) helps scientists and policy makers better understand their hydrological resources and provides reliable tools to improve the management of those resources. (Photo: O. Kracht/IAEA)

Participation in the major initiatives

- NUTEC Plastics
- Rays of Hope
- ZODIAC

Date of imPACT Review(s)

2024, 2011

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

