Botswana

IAEA Member State since March 2002

Selected achievements

2023: Botswana opens its first public radiotherapy centre with IAEA support.

2019: The Botswana National Veterinary Laboratory (BNVL) becomes a self-sufficient facility, providing first line diagnoses and diagnostic confirmations.

2019: An Integrated Resource Plan (IRP) is developed, helping the country to identify the investments needed in the electricity sector to meet future demand with minimum cost and in compliance with national development goals.



With IAEA support, the Botswana National Veterinary Laboratory (BNVL) has been transformed into a self-sufficient facility able to provide first line diagnoses and diagnostic confirmations. (Photo: BNVL)

National priorities

- Nuclear and radiation safety
- Food and agriculture
- Human health
- Water resources management
- Energy planning
- Tertiary education in nuclear science and technology

Main areas of IAEA support

- Agriculture
- Animal health
- · Food safety
- Insect pest control
- Human health and nutrition
- Energy planning
- Tertiary education in nuclear science and technology
- Radiation protection

Project successes

Human health

With IAEA support channeled through Rays of Hope, Botswana established its first public radiotherapy centre in July 2023 — an important step in providing accessible health services for its people.

IAEA support has been focused on training radiation oncologists, medical physicists, oncology nurses and radiotherapy technologists. The IAEA also guided Botswana in the construction of bunkers to house radiation treatment equipment in line with approved international radiation safety standards, and helped with the development of specifications for the procurement of equipment and in commissioning and acceptance testing.

Animal health and production

Botswana's technical cooperation programme on animal health aims to improve diagnostic capacity for transboundary animal diseases.

The Botswana National Veterinary Laboratory (BNVL) has been transformed into a self-sufficient facility able to provide first line diagnoses and diagnostic confirmations. In addition, IAEA support helped to establish satellite laboratories that perform 12 first line diagnoses in key agricultural areas of the country. The BNVL and

its five satellites play a pivotal role in providing animal disease (including zoonotic) diagnostic services. They also play an important role in the region as a regional service laboratory of the Food and Agriculture Organization of the United Nations (FAO) and for the IAEA.

Food safety

With support from the IAEA, Botswana strengthened the capacity of its national laboratory network to meet international market requirements for the safety and quality of farm products. The country established a functional national food safety control programme, supported by sound and internationally reliable testing and calibration service provided by the BNVL under the Ministry of Agriculture.

The laboratory has the capacity to locally monitor over 60 residues or contaminants and

analyses more than 6000 beef, dairy and feed samples locally annually — including over 4000 milk samples. This is complemented by the analysis of over 5000 samples conducted by the National Food Control Laboratory (NFCL) under the national Vulnerable Groups and School Supplementary Feeding Programmes. The country has also acquired a wide range of sophisticated analytical instrumentation with IAEA support.

Participation in the major initiatives

- Rays of Hope
- ZODIAC

Date of imPACT Review(s)

2013



