Key achievements in Zimbabwe

- 2017: Graduation of the first MSc students under the Medical Physics Programme.
- 2017: Release of improved varieties of cowpea to farmers.
- 2009: Establishment of the Radiation Protection Authority of Zimbabwe with its National Radiation Protection Board as an effectively independent regulatory body for the country.

Recent project successes

Agriculture
Cowpea is among the four most important legumes produced and consumed in Zimbabwe, and plays a key role in contributing to the country’s food security. Zimbabwean farmers have seen a 10–20% increase in their cowpea yields thanks to the use of a new variety released in November 2017. The variety was developed using nuclear techniques, with support from the IAEA and the Food and Agriculture Organization of the United Nations. The crop has shown an increased tolerance to drought and greater resistance to insects.

Health
The Government of Zimbabwe has received IAEA support through a number of projects to establish nuclear medicine services. This includes the training of the only nuclear medicine physician in Zimbabwe at this time. With cost-sharing from the government of Zimbabwe, a dual-headed single photon emission computed tomography (SPECT) gamma camera was installed at Mpilo Central Hospital in May 2014.

Radiation safety and nuclear safety
Following the establishment of the Radiation Protection Authority of Zimbabwe, three national projects were implemented to strengthen the regulatory infrastructure through human resource development and the provision of technical equipment. In 2014, an IAEA Integrated Regulatory Review Service mission reviewed the national regulatory infrastructure for radiation safety of Zimbabwe. The country has since reached an excellent level of progress in Thematic Safety Area 1 on regulatory infrastructure.

Atoms for peace and development
The International Atomic Energy Agency is the world’s central intergovernmental forum for scientific and technical cooperation in the nuclear field. It works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security.

The IAEA’s technical cooperation programme helps countries to use nuclear science and technology to address key development priorities, including health, agriculture, water, the environment and industry. The programme also helps countries to identify and meet future energy needs. It supports greater radiation safety and nuclear security, and provides legislative assistance.

Cowpea farmers harvesting a new cowpea mutant variety (CBC5) in Matabeleland South, Zimbabwe. The variety was developed using nuclear techniques.
(Photo: Prince M. Matova/Crop Breeding Institute, Zimbabwe)
Active national projects

- Establishing an Artificial Insemination Centre to Enhance the Rebuilding of the National Herd (ZIM5024)
- Strengthening Nuclear Medicine Services (ZIM6022)
- Strengthening Radiotherapy and Quality Assurance Services at Government Centres (ZIM6023)
- Determining Sources of Groundwater for Improved and Sustainable Water Use (ZIM7001)

Zimbabwe also participates in 45 regional and 3 interregional projects, mostly in the area of health and nutrition.

Previous IAEA support to Zimbabwe

In recent years, IAEA support focused on developing drought tolerant varieties of legumes, improving soil and water management, monitoring livestock diseases, strengthening laboratory capacity for food safety, and controlling tsetse flies. In human health, efforts focused on re-establishing and consolidating radiotherapy and nuclear medicine services in Harare and Bulawayo. Support was also provided to strengthen the national regulatory infrastructure, particularly in the area of public exposure control.

IAEA support to Zimbabwe, 2009–2019

- 547 trained (including 186 women)
- 64 international experts provided
- 74 attended specialist meetings (including 21 women)

Priority areas of support

- Improving food and agriculture
- Strengthening human health
- Water resources management
- Energy development
- Radiation safety and regulatory infrastructure
- Industrial applications

Zimbabwe’s contribution to South-South and triangular cooperation, 2009–2019

- 94 expert and lecturer assignments provided by Zimbabwe
- 278 training course participants
- 34 fellows or scientific visitors hosted

Based on data available as of April 2020

Cancer control imPACT Review conducted: November 2010

Strategic documents supported

- Country Programme Framework 2017–2021, signed in September 2017