



Key achievements in Albania

- 2018: The 'Mother Teresa' University Hospital in Tirana receives its second linear accelerator (LINAC) radiotherapy machine, significantly reducing treatment waiting times for cancer patients.
- 2018: The first Master's programme in Medical Physics is taught at the Polytechnic University in Tirana.
- 2017: The Agricultural University of Tirana develops and begins trials of 11 new wheat varieties with potential to produce greater yields.

Atoms for peace and development

Widely known as the world's 'Atoms for Peace and Development' organization within the United Nations family, the IAEA is the international centre for cooperation in the nuclear field. The Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.

The IAEA's technical cooperation (TC) programme helps countries to use nuclear science and technology to address key development priorities in areas 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.



Over the past decade, the 'Mother Teresa' University Hospital in Tirana, the only public hospital providing radiotherapy treatment in the country, received IAEA support for training and the procurement of equipment. (Photo: A SilvaGarduno/IAEA)

Recent project successes

Human health

Over the past decade, the IAEA has been providing assistance to the 'Mother Teresa' University Hospital in Tirana, the only public radiotherapy centre in the country, to help improve its cancer services.

IAEA supported the procurement of diagnostic equipment, introduced the latest treatment methods and provided intensive training for clinical staff. The hospital can now treat 1350 cases a year, which is around 20 per cent of cancer patients in the country and 90 per cent of all patients requiring radiotherapy in Albania. The hospital's new capacity has also allowed more complex cancer cases to be treated without referring patients abroad and has reduced waiting times from three months to four weeks.

Nuclear science and education

Medical physics plays an important role in ensuring the safe and effective use of radiation to diagnose and treat diseases, and supports the provision of quality healthcare.

The IAEA worked with Albania's Polytechnic University in Tirana to establish the country's first Master's programme in Medical Physics in 2018. Support was provided to establish the course curriculum, together with training for lecturers, learning materials and laboratory equipment.

Crop breeding

One fifth of Albania's economy relies on the agricultural sector, so proper management of land and water resources is essential. Climate change is having an adverse effect on the Balkan region, which is visible in poor crop yield and quality.

To address this, the Agriculture University of Tirana worked with the IAEA to use ionizing radiation to develop mutated wheat varieties more tolerant to the changing environmental conditions, of higher quality and with better yields. Training was also provided for national experts on the application of crop breeding techniques and the use of equipment, including a digital moisture tester, wireless rain gauge and a seed cleaner. Chemicals and consumables necessary for germination analysis and molecular screening of plants were also provided. This assistance enabled the Agricultural University to develop and trial 11 new wheat varieties with promising quality and yield potential.

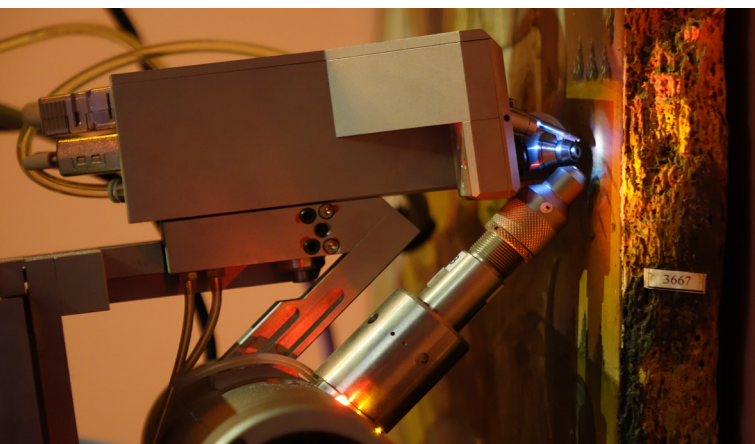
Active national projects

- Improving and Enhancing National Capabilities for Early Detection of Vector Borne Diseases through the Application of Conventional and Molecular Methods (ALB5008)
- Supporting the Effective Implementation of the New National Cancer Control Programme - Phase III (ALB6017)
- Enhancing Nuclear Medicine and Radiotherapy and Improving Patient and Staff Safety in Mother Theresa University Hospital Center (ALB6018)
- Upgrading the Radioactive Waste Storage Building According to International Standards (ALB9010)
- Upgrading the System of Dosimetry Control for Occupationally Exposed Workers and the Radon Measurement Infrastructure for Protecting the Public (ALB9011)

Albania also participates in 31 regional projects and 1 interregional project, mostly in the area of human health, and radiation protection and nuclear safety.

Previous IAEA support to Albania

Previous IAEA support focused on strengthening the radiotherapy capabilities of the 'Mother Teresa' University Hospital. Assistance also focused on non-destructive testing, enhancing national capacity for radiation monitoring and emergency warning of incidents, and supporting the establishment of an education and training programme in Medical Physics and Radiation Protection and Safety.



The IAEA supported researchers at the Albanian Institute of Applied Nuclear Physics to use non-destructive testing (NDT) and non-destructive assay (NDA) techniques to analyse a portrait of Saint George. Beams of X-rays interact with the atoms in the portrait to reveal clues about its history and how it was created. (Photo: A. Silva/IAEA)

IAEA support to Albania, 2009–2019



324 trained
(including 171 women)

43 international experts provided

223 attended specialist meetings
(including 93 women)

Priority areas of support

- Improving human health and nutrition
- Protecting natural resources, exploration and exploitation
- Environment protection and conservation
- Supporting food production and agriculture
- Strengthening radiation protection, safety and security

Albania's contribution to South-South and triangular cooperation, 2009–2019

61 expert and lecturer assignments provided by Albania

8 training courses hosted

4 fellows or scientific visitors hosted

Based on data available as of April 2020

Cancer control imPACT Review conducted: August 2005

Strategic documents supported

- United Nations Sustainable Development Cooperation Framework 2017–2021
- Country Programme Framework 2018–2023, signed in December 2017

www.iaea.org/technicalcooperation

The IAEA collaborates with National Liaison Officers and Permanent Missions to deliver its TC programme.