



Key achievements in Mongolia

- 2019: Mongolia's first LINAC machine is inaugurated at the National Cancer Centre in Ulaanbaatar.
- 2019: The Institute of Veterinary Medicine in Ulaanbaatar establishes the capacity to begin providing rapid tests for food safety and animal diseases.
- 2019: The Biocombinat facility in Ulaanbaatar begins producing vaccines and medicines to control disease outbreaks in livestock.
- 2015: Mongolia amends its Nuclear Energy Law giving regulatory responsibilities to the Nuclear Energy Commission and inspection authority to the General Authority for Specialized Inspection.

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.



The National Cancer Centre of Mongolia in Ulaanbaatar was supported by the IAEA through the procurement of dosimeters and immobilization devices. (Photo: NCC)

Recent project successes

Human health

New cancer cases in Mongolia have increased by 38 per cent over the last ten years. This rise became a major concern for the Government, who sought to address the issue by improving the delivery of cancer care.

With IAEA assistance, Mongolia upgraded the brachytherapy unit at the National Cancer Centre of Mongolia in Ulaanbaatar and provided the centre with dosimeters and immobilization devices. Support was also provided to procure a gamma beam radiation protection system and an X-ray calibration system.

Mongolia's First General Hospital also received assistance to upgrade its computed tomography (CT) and single photon emission computer tomography (SPECT) medical imaging system, to ensure improved quality assurance and delivery of services to cancer patients.

Animal health

IAEA support has helped Mongolia to strengthen the State Central Veterinary Laboratory's analytical capacities to swiftly and effectively identify and contain peste des petits ruminants (also known as sheep and goat plague) and foot-and-mouth disease outbreaks. Further assistance included the procurement of equipment and consumables.

The project has helped improve animal health, food safety and security, and is paving the way for increased livestock product exports and better incomes for farmers.

Radiation safety

The IAEA has enhanced the capacity of Mongolia's General Agency for Specialized Investigation to ensure the safe and secure use of nuclear technology, particularly in the medical, agricultural and industrial sectors. The IAEA supported the procurement of instruments to measure radiation, and provided training in a wide range of areas, including occupational radiation exposure control, patient dose and safety assessments, and regulatory control of mining activities. Training also focused on all regulatory functions such as authorization, inspection and enforcement. These improvements have helped the country ensure the safe and secure use of nuclear technology.

Active national projects

- Developing Human Resources in Nuclear Science and Establishing Electron Beam Capacities for Flue Gas (MON0012)
- Developing the National Infrastructure for Establishing a Subcritical Assembly for Enhanced National Nuclear Research and Education Capabilities — Phase I (MON1008)
- Developing Capacities for the Production of Radioisotopes (MON1009)
- Enhancing Livestock Production Through the Improved Diagnosis and Prevention of Transboundary Animal Diseases (MON5023)
- Enhancing Food Safety Analytical Capabilities for Veterinary Drug Residues and Related Contaminants Using Isotopic Techniques (MON5024)
- Improving Breed Characterization of Cashmere Goats to Facilitate the Establishment of Strategic Breeding Programmes (MON5025)
- Enhancing the Quality of Radiotherapy Through Introducing Linear Accelerator Based Advanced Technologies (MON6020)
- Improving the Quality of Radiotherapy Services for Common Cancers through the Implementation of Linear Accelerator Based Stereotactic Body Radiation Therapy (MON6021)

Mongolia also participates in 32 regional and 9 interregional projects, mostly in the area of health and nutrition.

Previous IAEA support to Mongolia

In 2019, the IAEA provided support for Mongolia's linear accelerator-based (LINAC) radiotherapy and brachytherapy cancer services and the introduction of quality assurance and control measures. Additional support was provided to improve the monitoring and analysis of food and veterinary drug residues, and programmes to address transboundary animal diseases.

The country also benefitted from training in nuclear science and technology, which included the establishment of electron-beam capacities, which in the future will help with wastewater treatment, and food processing and sterilization for export.

IAEA support to Mongolia, 2009–2019



447 trained
(including 250 women)

49 international experts provided

100 attended specialist meetings
(including 50 women)

Priority areas of support

- Enhancing human health
- Supporting agriculture and livestock production
- Improving water resource management and the protection of the environment
- Ensuring the safe management of radioactive resources
- Facilitating nuclear energy planning
- Strengthening nuclear and radiation safety and security

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

67

training course participants



expert and lecturer assignments provided by Mongolia

Based on data available as of April 2020

Cancer control impACT Review conducted: October 2009

Strategic documents supported

- United Nations Development Assistance Framework (2017–2021)
- Country Programme Framework 2016–2021, signed in November 2015

www.iaea.org/technicalcooperation

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

