



## Key achievements in Kyrgyzstan

- 2020: Kyrgyzstan continues to improve its governmental and regulatory infrastructure for radiation safety, in accordance with IAEA safety standards and legal instruments.
- 2017: Kyrgyzstan improves radioecological monitoring at legacy or abandoned uranium sites.
- 2016: Kyrgyzstan begins training radiation medicine staff in preparation for the establishment of the country's first nuclear medicine services for diagnostic imaging.

## 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.



Training participants visit Kadzhi-Sai as part of an IAEA regional course in 2019 to assess the environmental impact arising from naturally occurring radioactive materials and contaminated abandoned sites in Issyk-Kul, Kyrgyzstan. (Photo: G Abasova/Tailings Management Agency)

## Recent project successes

### Radioactive waste management, decommissioning and remediation of contaminated sites

Kyrgyzstan is establishing a system to monitor the safety and environmental aspects of 'legacy' uranium sites, for which the IAEA provided expert assistance, specialist training and equipment. In 2017, an inventory was carried out of the uranium tailings (a waste byproduct of mining) and its dumps in Mailuu-Suu, Min-Kush and Shekaftar. Work is now underway to remediate these sites by removing uranium efficiently and thoroughly. In 2019, the previously abandoned Tuya-Moyun and Kyzyl-Jar uranium legacy sites were put under the control of the Ministry of Emergency Situations. In 2021, an information management system is being established to ensure chronological monitoring over time, and to record the available data and characteristics of all uranium legacy sites under the management of the Ministry's Tailings Management Agency. This will help improve decision making for the management of Kyrgyzstan's uranium legacy sites.

### Governmental and regulatory infrastructure for radiation safety

In line with its five-year national safety action plan, Kyrgyzstan is improving its regulatory infrastructure to ensure there is adequate national radiation protection and safety. The IAEA supported the development and review of two new national radiation safety laws (currently pending Parliamentary approval), and assisted in authorization and inspection procedures. In preparing these legislative changes, the roles and responsibilities of three different authorities with regulatory functions were reviewed to avoid gaps and duplications.

Through expert advice, national training courses, fellowships and scientific visits, the IAEA assisted in enhancing the regulatory capacities of specialists from the State Regulation Centre on Environment Protection and Ecological Safety, part of the State Agency of Environmental Protection and Forestry, and the practical inspection capacities of the Department for Radiation and Nuclear Safety of the State Inspectorate for Environmental and Technical Safety. Additional support was provided to enhance the knowledge of the Department for State Sanitary Epidemiological Control of the

Ministry of Health for the review and assessment of facilities and authorization applications, including in nuclear medicine, and the conduct of shielding calculations as part of the linear accelerators commissioning applications.

### Human health

With IAEA assistance, Kyrgyzstan is improving the capacity of the National Centre of Oncology (NCO) in Bishkek to provide quality diagnostic and treatment services for cancer patients. This support included improving radiation protection and providing training for nuclear medicine staff, radiation oncology specialists and a medical physicist.

As a result of the cooperation and Kyrgyzstan's progress in improving the regulatory infrastructure, the Nuclear Medicine Department of the National Centre of Oncology will start offering the country's first diagnostic imaging services to patients in 2021 using an IAEA-procured double-head single photon emission computed tomography/computed tomography (SPECT/CT) camera. The IAEA also supported the training of specialists in other areas such as radiation oncology, which is essential for enhancing the NCO's overall radiotherapy service capacity.

### Active national projects

- Establishing Effective Testing and Systematic Monitoring of Residues and Food Contaminants and of Transboundary Animal Diseases (KIG5001)
- Restoring Nuclear Medicine (Phase II) (KIG6007)
- Strengthening the Capacity of the Radiological Laboratories of the Sanitary and Epidemiological Service of the Ministry of Health (KIG7004)
- Improving the Regulatory Infrastructure for Ensuring the Radiation Protection and Safety of the Population (KIG9006)
- Improving the System of Monitoring and Control Over Uranium Legacy Sites According to International Safety Standards (KIG9007)

Kyrgyzstan also participates in 28 regional and 3 interregional projects, mostly in the areas of health and nutrition, water and environment, and radiation protection and nuclear safety.

### Previous IAEA support to Kyrgyzstan

In recent years, IAEA assistance focused on supporting the radiological monitoring of uranium legacy sites, enhancing laboratory capacities for environmental monitoring and the protection of human health, establishing nuclear medicine services in the country and enhancing the nuclear regulatory infrastructure.

### IAEA support to Kyrgyzstan, 2009–2019



307 44 137

trained  
(including 138 women)

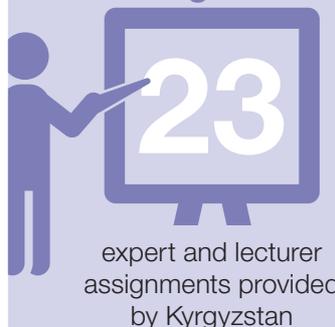
international  
experts  
provided

attended specialist  
meetings  
(including 70 women)

### Priority areas of support

- Improving the governmental, legal and regulatory infrastructure for radiation safety
- Ensuring the radiation safety of people and the environment
- Improving radiological monitoring in the public health sector
- Improving the infrastructure and capacity of the national health system, including modernization of medical services for cancer prevention, diagnosis and treatment
- Improving food security and sustainable crop and livestock production

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



3  
training  
courses  
hosted

1  
fellow or  
scientific visitor  
hosted

Based on data available as of April 2020

### Cancer control impACT Review conducted: March 2015

### Strategic documents supported

- Country Programme Framework 2018–2023, signed in September 2018
- Integrated Nuclear Security Support Plan (INSSP) 2018–2021
- Strategic Master Plan for Environmental Remediation of Uranium Legacy Sites in Central Asia, signed in September 2017

[www.iaea.org/technicalcooperation](http://www.iaea.org/technicalcooperation)

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