

# Tajikistan

IAEA Member State since September 2001

## Selected achievements

**2023:** The Occupational Exposure Control service upgrades its capacities.

**2023:** The new laboratory on Water Quality, Isotopes and Sanitation is established and equipped with modern technology.

**2021:** The new ZODIAC National Lab is established.



Cobalt-60 unit provided at the Republican Scientific Center of Oncology with IAEA support. (Photo: CBRN)

## National priorities

- Human health
- Water resources management
- Climate adaptation

## Main areas of IAEA support

- Regulatory framework for nuclear and radiation safety
- Environmental monitoring
- Agriculture
- Cancer diagnosis and treatment

## Project successes

### Radiation protection

In 2023, the Tajikistan government strengthened its regulatory body's technical support services and completed the construction of the new building which will house sixteen laboratories and four specialized training rooms. The IAEA contributed modern equipment for occupational exposure control, the SSDL lab, X ray diagnostic quality control, medical exposure control and radiological mapping. Young specialists were also trained in dosimetry and exposure control through fellowships in advanced facilities in other European countries.

In addition, two national regulations on radiotherapy and nuclear medicine were developed and approved by the regulatory body, improving services to effectively implement state programmes and national strategies.

### Cancer treatment and diagnostics

With IAEA support, Tajikistan improved its capacity for the early detection and prevention of oncological diseases by enhancing diagnostic and treatment services nationwide.

The installation of modern equipment for radiation therapy planning at the Sughd Regional Oncology Center in 2019, facilitated by the IAEA, eliminated the need for patients from the Sughd region to travel to the capital or foreign clinics to be treated.

Ongoing TC initiatives, including the procurement of brachytherapy, CT, and other diagnostic equipment, will further support the sustainable development of Tajikistan's oncology centres.

### Water resources management

In cooperation with the IAEA, Tajikistan has been assessing the hydrological processes of glacier degradation.

New technologies for analysing and monitoring glacier degradation have been implemented in line with national priorities for promoting environmental sustainability and sustainable water resource management. These have involved measuring water flow in glacial rivers and developing models that can be used to inform strategies to mitigate the effects of climate change.

With IAEA support, the Center for Glacier Research acquired modern equipment to strengthen its comprehensive research programme on glacier processes and conservation. This ongoing cooperation is in line with Tajikistan's declaration of 2025 as the 'International Year of Glacier Preservation.'

## Participation in the major initiatives

- Rays of Hope
- ZODIAC

## Date of imPACT Review(s)

2012

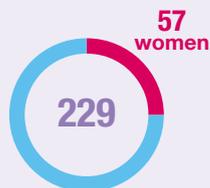


IAEA staff and officials outside a Government building in the Soghd region of Tajikistan during a 2018 mission to assess priorities in cancer care. (Photo: S. Khabib)

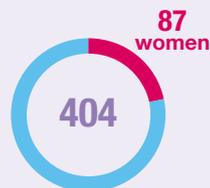
## IAEA support received in the 21st century

31

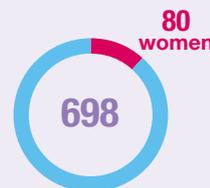
national TC projects implemented



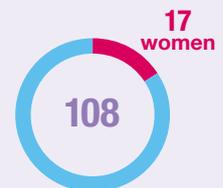
fellows and scientific visits



training participants



meeting participants

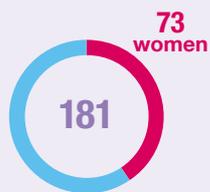


expert missions received

## Contributions to South-South and triangular cooperation



fellows and scientific visits hosted



meeting participants hosted



expert missions supported