Afghanistan

IAEA Member State since May 1957

Selected achievements

2019: Afghanistan approves and adopts National Radiation Protection Regulations.

2017: Afghanistan approves its Nuclear Energy Law.

National priorities

- Radiation safety infrastructure
- Food and agriculture
- Human health and nutrition
- Human capital development

Main areas of IAEA support

- Radiation medicine
- Radiation safety and nuclear security for health purposes

Project successes

Cancer control

The IAEA has been helping the country to re-establish its national cancer treatment centre by building capacity to use radiation techniques and provide sustainable and quality medical imaging and treatment services.

Forty-three specialists (almost half of all fellowships and scientific visits from Afghanistan since 2001) have received training to support the new centre.

Food and agriculture

Smallholders in Afghanistan face many challenges including low soil fertility, poor access to water irrigation systems, poor market access, lack of knowledge on best agricultural practices, and issues related to extreme poverty and subsistence farming.

Istiqlal Hospital Mammography Unit in Kabul, Afghanistan. (Photo: Tuuli Hongisto/WHO)

These challenges can result in significant disparities in the management of crops, the quality of harvests and in farmers' incomes.

The IAEA has been training Afghan researchers on using nuclear and isotopic techniques to better understand and manage soil, water and nutrient resources. Crop productivity has since improved and has helped to reduce the amount of money the country spends on importing wheat from neighbouring countries.

Water management

Over the past four decades, Afghanistan's infrastructure for supplying freshwater was severely damaged and, in parts, destroyed.

Low levels of rain and continuous droughts, coupled with rapid population growth, made the sustainable supply of drinking water a national priority.

The IAEA has been helping Afghanistan to apply isotope hydrology techniques to accurately assess and manage water resources. These assessments have provided important information on the groundwater resources in the underground Kabul basin. For example, the quality and quantity of water, how long the aquifer can be used, and the time needed for it to recharge.

Since 2001, the IAEA trained eight Afghan fellows in isotope hydrology and in the applications of isotopes and radiation in industry.

Participation in the major initiatives

- NUTEC Plastics
- ZODIAC

Date of imPACT Review(s)

2018

A technician prepares soil samples for chemical analysis at the Agriculture Research Institute of Afghanistan in Kabul. The IAEA is training researchers to use nuclear and isotopic techniques to better understand and manage soil, water and nutrient resources. (Photo: M. Malek/IAEA)

IAEA support received in the 21st century

35
national TC projects implemented

138 fellows and scientific visits
16 women

75 training participants
9 women

174 meeting participants
29 women

48 expert missions received
6 women

Contributions to South-South and triangular cooperation

1
expert mission supported