

Sudan

IAEA Member State since July 1958

Selected achievements

2022: The integrated work plan for the development of Sudan's Nuclear Power Programme is reviewed and updated.

2022: A national network for food safety is established with six institutes.

2020: A laboratory for monitoring veterinary drug residues is established at the Central Veterinary Research Laboratory.



Scientists at the ARC's Biotechnology and Biosafety Research Center work on new plant varieties that tolerate the increasingly harsh environmental conditions associated with climate change. (Photo: N. Jawerth/IAEA)

National priorities

- Radiation and nuclear safety and security
- Food and agriculture
- Human health and nutrition
- Water and the environment
- Energy and industrial applications

Main areas of IAEA support

- Human health
- Agriculture
- Food safety

Project successes

Radiation safety

With technical assistance from the IAEA, Sudan has developed comprehensive radiation and nuclear safety and security capabilities. This includes the enactment of its first nuclear law in February 2017, positioning Sudan among only a few African states with such comprehensive legislation. The Radiation and Nuclear Safety Institute, which was planned and established with IAEA support, now provides personnel and workplace monitoring services and operates a secondary standard dosimetry laboratory (SSDL), a radioactive waste management facility, and foodstuff monitoring capabilities.

Food safety

With support from the IAEA, Sudan has made substantial progress in developing the human, institutional and infrastructural capacities needed to ensure the safety and quality of food and agricultural commodities for local and export markets. This assistance facilitated the collaboration among different national stakeholders to jointly enhance their analytical capabilities. IAEA assistance in this field also laid the foundations for a future reference laboratory, which will greatly enhance public health in Sudan through the peaceful use of nuclear and isotopic technologies.

Food security

Sudan is the third largest country in Africa and vast amounts of its land are dedicated to agriculture. About 70 per cent of the population is directly or indirectly engaged in agricultural activities, contributing more than 45 per cent to the national GDP. Food security remains a top priority.

Through IAEA assistance, Sudan released high-yielding banana mutants, two wheat varieties, and two tomato mutants resistant to leaf curl virus to increase its agricultural productivity.

In 2018, the development of Taфра-1, a drought-tolerant groundnut mutant marked another important milestone, with the predicted yield increase is expected to enhance food security and contribute to economic growth, potentially doubling farmer incomes.

Participation in the major initiatives

- NUTEC Plastics
- Rays of Hope
- ZODIAC

Date of imPACT Review(s)

2012



Calibration of a radiotherapy machine at the National Cancer Institute in Sudan. (Photo: SAEC)

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

