



Key achievements in Sudan

- 2018: An Integrated Work Plan is developed which will contribute to the development of Sudan's nuclear infrastructure.
- 2017: Comprehensive nuclear law enacted.
- 2009: Sudan starts to improve capacities to ensure food safety and enhance the export food products, with IAEA support.

Atoms for peace and development

The International Atomic Energy Agency is the world's central intergovernmental forum for scientific and technical cooperation in the nuclear field. It works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security.

The IAEA's technical cooperation programme helps countries to use nuclear science and technology to address key development priorities, 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.



Women farmers have worked closely with IAEA-trained scientists from the Agricultural Research Corporation to set up and run more than 50 small-scale farms and home gardens for over 400 women. (Photo: Nicole Jawerth/IAEA)

Recent project successes

Radiation safety

In February 2017, Sudan enacted its first nuclear law, which was reviewed by IAEA experts prior to its approval. The law, referred to as the 'Nuclear and Radiation Activities Regulatory Control Bill', made Sudan one of only five African Member States to have a comprehensive nuclear law, which combines radiation safety, nuclear security and safeguards. Moreover, the law ushered in the creation of an independent regulatory body by formally splitting the Sudanese Nuclear and Radiological Regulatory Authority (SNRRA) from the Sudan Atomic Energy Commission (SAEC) and placing it under a multi-stakeholder governing body called the Sudanese Nuclear and Radiological Regulatory Authority Board.

Food safety

The IAEA facilitated the development of significant human, institutional and infrastructural capacities that ensure the safety and quality of food and agricultural commodities, including those destined for export. There was previously no single laboratory with the facilities or the capacity to test chemical residues in animals or food products. The support has enabled different stakeholders (Veterinary Research Laboratory, National Food Research Centre, Agricultural Research Council and the Sudanese Standards and Metrology Organization) to work together and develop their analytical capacities.

IAEA assistance in this field has laid a reasonable foundation for a future reference laboratory, which will greatly enhance public health in Sudan through the peaceful use of nuclear and isotopic technologies.

Active national projects

- Sustaining Nuclear Instrumentation Maintenance Capabilities (Medical and Scientific Equipment) (SUD1007)
- Developing National Nuclear Infrastructure for a First Nuclear Power Plant (SUD2005)
- Enhancing the Delivery of Education in Radiation Medicine and Nuclear Sciences (SUD0012)
- Applying Nuclear Techniques to Improve Crop Productivity and Livelihood of Smallscale Farmers in Drought Prone Areas (SUD5037)
- Implementing the Sterile Insect Technique for Integrated Control of Anopheles Arabiensis, Phase II (SUD5038)
- Enhancing the Capacity to Monitor Pesticide and Veterinary Residues in Food Using Nuclear and Complementary Techniques (SUD5039)
- Establishing Cold Kits Manufacturing Facility for Radiopharmacy Laboratory (SUD6031)
- Expanding the Delivery of Cancer Services (SUD6033)
- Strengthening National Nuclear and Radiological Safety Capabilities (SUD9009)

Sudan also participates in 52 regional and 5 interregional projects, mostly in the area of health and nutrition.

Previous IAEA support to Sudan

In recent years, Sudan received assistance from the IAEA to enhance the delivery of radiotherapy services, and improve the productivity of crops affected by climate change. To support non-IAEA funded activities under a sterile insect technique mosquito project, the Sudanese government accessed a grant from the Islamic Development Bank in 2008, with some government funding. This work will continue until 2019. Further assistance has been delivered to repair and maintain medical and scientific instrumentation, strengthen radiation protection, and prepare for the introduction of nuclear power using the IAEA Milestones Approach.



The IAEA facilitated the development of human, institutional and infrastructural capacities in Sudan that have started to ensure the safety and quality of food and agricultural commodities. (Photo: Nicole Jawerth/IAEA)

IAEA support to Sudan, 2009–2019



833 trained
(including 223 women)

102 international experts provided

126 attended specialist meetings
(including 32 women)

Priority areas of support

- Enhancing human health
- Improving agriculture
- Sustaining water resources
- Developing radiation safety infrastructure and facilities
- Developing the energy infrastructure
- Strengthening industry

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

98 expert and lecturer assignments provided by Sudan

321 training course participants

4 fellows or scientific visitors hosted

Based on data available as of April 2020

Cancer control imPACT Review conducted: April 2012

Strategic documents supported

- United Nations Development Assistance Framework (2018–2021), signed in May 2017
- Country Programme Framework 2015–2020, signed in April 2015

www.iaea.org/technicalcooperation

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