

Senegal

IAEA Member State since November 1960

Selected achievements

2011–2021: The legal and infrastructure framework is improved for the peaceful use of nuclear techniques in the country.

2015: Tsetse flies are eradicated in the Niayes region using the sterile insect technique.

National priorities

- Nuclear and radiation safety
- Human health
- Food and agriculture
- Industrial applications
- Environmental management

Main areas of IAEA support

- Human health
- Radiation safety
- Water and soil management
- Insect pest control
- Livestock production

Project successes

Legal and infrastructure framework

With support from the IAEA, Senegal enacted a comprehensive nuclear law in 2021 (Law No 2021-44) on radiation protection, nuclear safety, security and safeguards, complementing Decree No 2010-893, on the organization and operation of the Radiation and Nuclear Safety Authority (ARSN) in 2011. In 2016, Senegal amended its penal code to make malicious acts involving radioactive materials a criminal offence, sending a strong signal on the importance of peaceful and safe uses of ionizing sources in the country.



IAEA Director General Rafael Mariano Grossi visits the Dalal Diam hospital in Senegal as he announces the launch of a new initiative to improve cancer care in the region. (Photo: K. Laffan/IAEA)

Human health

In cooperation with the IAEA, Senegal has introduced molecular techniques and the use of radioisotopes to evaluate anti-malarial drugs, improve cardiovascular and ischaemic heart disease management, and enhance radiotherapy and nuclear medicine services for cancer treatment.

This cooperation has resulted in a significant improvement of the country's services to patients through advanced diagnostic and treatment techniques, a pool of qualified medical personnel, and the establishment of expertise in radiation medicine in the country. Senegal now actively contributes to capacity building in other countries in the region through providing training in nuclear medicine and radiotherapy.

Sterile insect technique

In 2007, Senegal successfully implemented a tsetse eradication campaign in the Niayes region, covering a 1000 km² target area to combat the spread of animal trypanosomosis — a disease that had a devastating impact on livestock in Senegal. This initiative of the Ministry of Livestock comprised an integrated pest management programme based on the use of the sterile insect technique (SIT), supported by the IAEA's technical cooperation programme and PUI funds from

the USA. Through this collaborative effort, the Niayes region is now tsetse and trypanosomosis free, and monitoring data indicate that the tsetse fly population has been successfully eradicated and the disease is no longer being transmitted.

Participation in the major initiatives

- NUTEC Plastics
- Rays of Hope
- ZODIAC

Date of imPACT Review(s)

2020, 2010



Experts discuss the implementation of integrated nuclear security support plans at a workshop held in November 2019 in Dakar, Senegal. (Photo: B. Battistella/IAEA)

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

