

Mauritius

IAEA Member State since December 1974

Selected achievements

2024: A new radiotherapy centre is established.

2019: The irradiation facility of the Ministry of Agro-Industry and Food Security is established.

2019: Three new high yielding varieties of tomato are released.



An IAEA representative poses with Prime Minister Pravind Jugnauth, Minister of Health Dr. Kailesh Jagutpal, and other senior members of the Ministry of Health and new National Cancer Centre in front of the PET/CT scanner that it helped to procure. (Photo: Anon/Ministry of Health Mauritius)

National priorities

- Food and agriculture
- Human health and nutrition
- Water and the environment
- Energy planning
- Industrial applications

Main areas of IAEA support

- Human health
- Water resources management
- Agriculture
- Food safety
- Radiotherapy and nuclear medicine

Project successes

Food and agriculture

With support from the IAEA, Mauritius has developed new, high yielding tomato varieties, named Summer King, Summer Star and Rising Star. Seeds from the local Mauritius tomato variety were irradiated at the Joint FAO/IAEA Plant Breeding and Genetics Laboratory in Seibersdorf, Austria and subsequently underwent rigorous testing for characteristics including growth rate, shape, colour, heat resistance and yield potential. Following further testing

in plots representing different environmental conditions throughout the country, the seeds were distributed to more than 100 farmers in 2019, and demand for them continues to grow.

Human health and nutrition

Since 2009, Mauritius has collaborated with the IAEA to address the growing obesity issue. With the help of the IAEA, it has carried out several studies to measure body composition using a stable isotope method called the deuterium dilution technique. These studies paint a more accurate picture than those using standard measurements such as the body mass index (BMI).

Initially focusing on children aged 6 to 13, the results revealed that the BMI method underestimated obesity — which indicate risks of chronic diseases — in both boys and girls. Communication of these findings to health and education authorities provides a foundation for long term improvements in obesity monitoring and prevention and has led to an increase in physical education in schools.

Water resources management

Since 2016, Mauritius has worked in partnership with the IAEA to combat nitrate pollution detected around Port Louis that threatens ecosystems and local fisheries. With IAEA assistance,

scientists from the National Environmental Laboratory collected chemical and isotopic data in river stations and water boreholes around the city and identified mechanisms influencing water quality around the area. The results of this technical cooperation project form the basis for a comprehensive report that provides recommendations for both government authorities and local communities to improve the effectiveness of water management and to safeguard environmental and public health in the region.

Participation in the major initiatives

- Rays of Hope
- ZODIAC



Isotope hydrologist takes water samples from a pollution site detected around Port Louis. (Photo: I. Matiatos/IAEA)

Date of imPACT Review(s)

2018

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

