

# Jamaica

IAEA Member State since December 1965

## Selected achievements

**2023:** The University of the West Indies and the IAEA sign Practical Arrangements to collaborate in education and training on the peaceful uses of nuclear technology.

**2022:** The first public nuclear medicine department is retrofitted with new equipment and re-opened at the University Hospital of the West Indies in a high-profile ceremony.

**2020:** Jamaica officially establishes its Hazardous Substances Regulatory Authority, becoming the first Member State of the Caribbean Community with an independent regulatory body to ensure the safe and secure operation of facilities involving ionizing radiation and nuclear technology.



Nuclear medicine department reestablished at the University Hospital of the West Indies. (Photo: N. Schloegl/IAEA)

## National priorities

- Nuclear safety and security
- Human health and nutrition
- Management of water resources
- Environment
- Food and agriculture sector
- Radiation technology
- Human resource development

## Main areas of IAEA support

- Cancer diagnosis and treatment
- Crop improvement
- Water resource management
- Regulatory and safety infrastructure

## Project successes

### Human health

In 2013, an IAEA-led imPACT review evaluated Jamaica's cancer care services and provided tailored recommendations for improvement.

To enhance breast cancer screening and bolster Jamaica's capacity to provide comprehensive cancer care, two mammography units were donated in December 2022.

Ongoing support provided by the IAEA includes training local professionals in cancer diagnosis and treatment – including nuclear medicine, diagnostic radiology and radiation therapy.

### Food and agriculture

With IAEA support, a mutation breeding programme was launched to enhance the quality and productivity of native crops while increasing their resistance to diseases.

New high-value varieties of sweet yam and ginger have been developed and are undergoing screening and selection for quality.

Additionally, the IAEA facilitated the establishment of the first national irradiation facility to provide services for mutation breeding, food irradiation, and sterilization of male mosquitoes.

This demonstrates the multifaceted impact of IAEA's assistance in agricultural, food, and health initiatives.

### Nuclear safety and radiation protection

In recent years, Jamaica has received IAEA support to strengthen its nuclear oversight capabilities and legislative standards.

The Nuclear Safety and Radiation Protection Act took effect in 2015, followed by the establishment of the Hazardous Substances Regulatory Authority (HSRA) in 2017. In 2019, Nuclear Safety and Radiation Protection Regulations were adopted.

Further IAEA assistance enabled HSRA to acquire radiation detection equipment and supported human resource capacity building for effective implementation of its regulatory functions.

In collaboration with Jamaican institutions, the IAEA has provided support for the establishment of a Postgraduate Educational Course (PGEC) in Radiation Protection and the Safety of Radiation Sources for the Caribbean.



Mass rearing facility of mosquitoes at the vector control programme of the Ministry of Health and Wellness. (Photo: N. Schloegl/IAEA)

## Participation in the major initiatives

- Rays of Hope
- ZODIAC

### Date of imPACT Review(s)

2013

### IAEA support received in the 21st century



### Contributions to South-South and triangular cooperation

