

Selected achievements

2023: The Irradiation Centre at the National Polytechnic School (EPN) is launched. This important milestone paves the way for further collaboration with institutional and industrial sectors to increase the safe irradiation of agricultural products with export potential.

2022: Laboratory and other essential facilities needed to apply the sterile insect technique (SIT) for *Aedes aegypti* control are introduced in Quito and Galapagos.

2021: The first public paediatric radiotherapy service is launched.



A repowered irradiator and facility is launched at the National Polytechnic School (EPN) in March 2023 with support from the IAEA. (Photo: D. Montaluisa, EPN)

the application of advanced techniques (IMRT and VMAT) for effective, efficient and safe oncological treatment of children and adults requiring radiotherapy.

National priorities

- Human health
- Agriculture and the environment
- Industrial and energy sectors
- Radiation protection

Main areas of IAEA support

- Radiation safety
- Radiotherapy treatment techniques
- Irradiation technology
- Virus detection in response to natural emergencies
- Non-destructive testing techniques

Project successes

Human Health

The IAEA's longstanding support for Ecuador's cancer control efforts began in 2012 with a first impACT Review. This resulted in the development of a comprehensive national cancer control plan and was followed by a second impACT Review in 2019.

Since 2020, the IAEA has helped Ecuador to establish its first public paediatric radiotherapy service through training, procurement and

Water and the environment

In collaboration with the IAEA, Ecuador has significantly improved the management of its water resources, using isotopic techniques to measure aquifer recharge and identify clean water sources.

In 2015, an artificial recharge project was implemented to increase the amount of water entering aquifers through human-controlled means. It also helped to characterise 70 per cent of the coastal aquifers. This ensured that the communities of the drought-prone Santa Elena peninsula have a reliable source of clean groundwater.

The impact of mining activities on the quality of the country's water resources is of concern to the authorities. The IAEA helped Ecuador's Water Secretariat (SENAGUA) to monitor and manage local groundwater systems and enabled Ecuador to develop strategies to improve the conservation of water resources, including in the Zamora River Basin.

Ongoing cooperation with the IAEA includes a technical cooperation project to build capacity and develop strategies for water conservation and recovery in the cities of Quito and Cuenca. This is in line with governmental plans to ensure the availability and provision of drinking water in these two cities.

Insect pest control

Fruit crops and native land bird species in Ecuador and the Galapagos Islands (a UNESCO World Heritage Site) risk being destroyed by the Mediterranean fruit fly and *Philornis Downsi* fly.

With IAEA and FAO support, Ecuador successfully implemented the sterile insect technique (SIT) to reduce Mediterranean fruit fly populations.

This breakthrough allowed farmers to start cultivating non-traditional fruits such as golden berries, dragon fruit, and tree tomatoes leading to a US\$22 million increase in exports to the United States, Latin America and the European Union.



Equipment and support are provided to increase the capacities of the Carlos Andrade Marin Hospital (HCAM) to provide radiotherapy to patients with cancer. (Photo: IAEA)

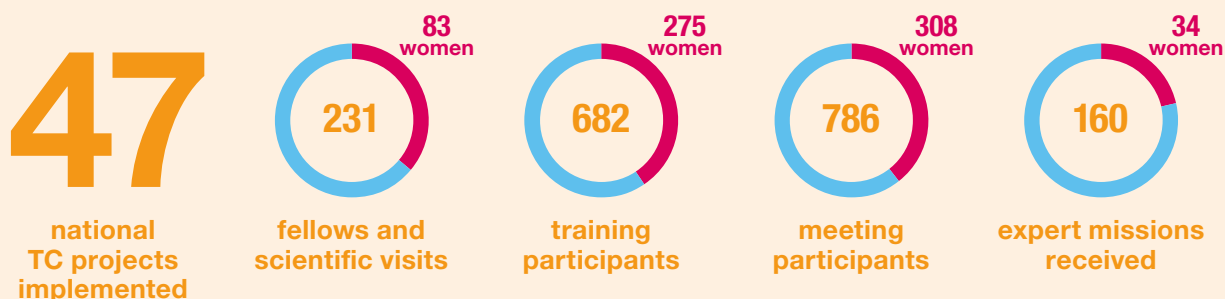
Participation in the major initiatives

- NUTEC Plastics
- Rays of Hope

Date of imPACT Review(s)

2019, 2012

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

