Honduras

IAEA Member State since February 2003

Selected achievements

2019: The National Commission of Atomic Energy is established.

2017: Honduras' first public brachytherapy unit is inaugurated at the national Hospital San Felipe in Tegucigalpa.

2016: The General Directorate of Radiological Safety is established.

National priorities

- Radiation protection and safety
- Human health
- Agriculture and food security
- Management of water resources

Main areas of IAEA support

- Radiation safety and regulatory control
- Dosimetry infrastructure
- Cancer diagnosis and control
- Capacity building in food safety and pest control

Project successes

Isotope hydrology

Nearly half of the population of Honduras' capital, Tegucigalpa, does not have access to drinking water.

In response to this significant problem of water scarcity, Honduras has been collaborating with the IAEA to explore the suitability of its water aquifers as a quick and economical solution to improve the availability of drinking water in the city.

Isotope hydrology and geochemical techniques were used to identify zones with sustainable, high-quality water sources and increase access. They provided insights into aquifer locations, hydrogeological functions of the city's replenishable aquifers, and helped identify areas that are particularly vulnerable to pollution.

The IAEA has been helping Honduras to find solutions to improve the availability of drinking water in the capital city Tegucigalpa. (Photo: National Autonomous University of Honduras)

The data helped inform sustainable water management strategies to improve the availability and distribution of drinking water in the city.

The experience and knowledge gained through this project will benefit provinces of the 'Dry Corridor' of Honduras, where drought is a recurring issue.

Radiation oncology in cancer management

Honduras established its first public brachytherapy service at Hospital San Felipe in Tegucigalpa. It now offers treatment for various types of cancer, including cervical, prostate and breast cancers.

Hospital staff, including radiation oncologists, medical physicists, therapists and nurses received comprehensive training in the proper use of equipment to ensure safe and effective treatment.

The new facility is expected to benefit approximately 1000 patients annually, significantly increasing access to cancer treatment in the country.

Nuclear medicine and diagnostic imaging

Cardiovascular diseases and cancer account for nearly 40 per cent of deaths in Honduras, but until very recently, there were no public services providing early and reliable diagnosis.

To address this, the IAEA supported the establishment of the country's first public nuclear

medicine facility at Hospital San Felipe in 2020.

Nuclear medicine uses small amounts of radioactive material to help diagnose and treat various diseases, including cancers, heart conditions, and neurological disorders.

IAEA support included procuring a SPECT-CT machine and training doctors, physicians, and technicians in nuclear medicine.

This has enabled earlier diagnosis and a more effective treatment of diseases, contributing to improved healthcare in Honduras overall.

Participation in the major initiatives

- Rays of Hope
- ZODIAC

Scientists in Honduras have been using istope technology to identify zones with high-quality, sustainable water sources. (Photo: National Autonomous University of Honduras)

Date of imPACT Review(s)

2016

IAEA support received in the 21st century

29
national TC projects implemented

113 fellows and scientific visits
32 women

297 training participants
93 women

423 meeting participants
185 women

68 expert missions received
21 women

Contributions to South-South and triangular cooperation

3
fellows and scientific visits hosted

54 meeting participants hosted
24 women

9 expert missions supported
5 women

ARCAL