

# Morocco

IAEA Member State since September 1957

## Selected achievements

**2023:** The Institut National d'Oncologie is designated as one of the first Rays of Hope Anchor Centres at the 67th IAEA General Conference in Vienna.

**2020:** A fruit fly mass rearing facility at Agadir completes construction and is commissioned.

**2019:** A surveillance network is established in preparation for the suppression of the Mediterranean fruit fly.

**2016:** The Moroccan Agency for Nuclear and Radiological Safety and Security (AMSSNuR) is established.

## National priorities

- Nuclear and radiation safety
- Food and agriculture
- Human health and nutrition
- Water resources management
- Introduction of nuclear power
- Industrial applications

## Main areas of IAEA support

- Human health
- Agriculture
- Water resources management
- Radiation protection

## Project successes

### Food and agriculture

With IAEA support, the National Office for Food Safety has enhanced the capacity of Morocco's network of national veterinary laboratories to detect drug residues. The number of accredited detection methods for drug residues and animal diseases has more than doubled since 2016. This advancement has strengthened the country's ability to respond to outbreaks



Taking a sample from a cow to test for foot-and-mouth disease. (Photo: F. El Mellouli/LRARC)

such as avian influenza and rabies, and has enhanced the quality assurance and quality control of molecular biology analyses. The IAEA supported the early detection and emergency response to incursions of invasive fruit fly species by providing global positioning systems (GPS) for maps and geographical information systems (GIS) for data analysis. This informed the development of an area wide campaign to prevent the incursion of these invasive pests.

Using nuclear technologies, Morocco identified a new strain of the foot and mouth disease (FMD) in 2019. This led to successful vaccination campaigns, and Morocco is now celebrating four years without FMD cases.

### Human health and nutrition

With support from the IAEA, the International University of Rabat successfully launched a Master of Science in Nutrition and Nuclear Techniques programme in 2023, enrolling ten students from French speaking African countries. This programme aims to provide students with the expertise to effectively build nutrition strategies and master skills on stable isotopic and nuclear techniques related to nutrition.

Additionally, IAEA-supported national and regional projects have enhanced Morocco's cancer care and treatment capabilities by strengthening radiotherapy and nuclear medicine infrastructures and professional skills, in line with the performance and sectorial strategy of the Ministry of Health.

In recent years, the IAEA has assisted Morocco's National Centre for Nuclear Energy, Sciences and Technology (CNESTEN) in producing radiopharmaceuticals at the Triga Mark II reactor to cover domestic needs for almost thirty nuclear medicine departments.

### Isotope hydrology

The IAEA assisted Morocco in an initiative to analyse the groundwater in the Sebou Basin, which covers 6 per cent of the country's surface area and is home to 6.2 million people. Enhanced national expertise in using isotope tools has led to a more comprehensive understanding of the interaction between surface water and groundwater, which will support the Government's efforts to improve the management and sustainable use of groundwater in the country.



Scientists from CNESTEN sampling a spring in the Gharb plain (Photo: Acil Ghassan/CNESTEN)

### Participation in the major initiatives

- NUTEC Plastics
- Rays of Hope
- ZODIAC

### IAEA support received in the 21st century



### Contributions to South-South and triangular cooperation

