Selected achievements

2023: The Marine Environmental Radiation Monitoring Laboratory (MERM) from the Department of Atomic Energy (DAE) at Yangon improves its capacity to monitor environmental radiation.

2019: Foot-and-mouth disease free zones are identified locally using nuclear-derived immunological and molecular technologies.

2019: Non-destructive techniques are used to conduct quality control testing in public and private industrial sectors.

National priorities

- Agriculture and livestock production
- Radiation safety and nuclear security
- Water resource management
- Industrial applications of radioisotopes
- Human health
- Nuclear science and technology

Main areas of IAEA support

- Nuclear medicine and radiotherapy
- Livestock breeding
- Marine environmental monitoring
- National nuclear analytics

Project successes

Animal health

Foot-and-mouth disease (FMD) is a severe and highly contagious viral disease which has affected millions of cattle, sheep and goats in Myanmar.

With support from the IAEA, the Food and Agriculture Organization of the United Nations and the World Organisation for Animal Health,



Medical physicists and technicians prepare a patient ahead of radiotherapy treatment at the Yangon General Hospital, Myanmar, in November 2016. (Photo: M. Gaspar/IAEA)

Myanmar has been strengthening its capacity to control incidences of the disease.

Rapid-diagnosis kits, veterinary lab equipment, and expert guidance were provided in the context of this successful collaboration, enabling Myanmar to establish local FMD-free clusters.

Additionally, in 2023, the IAEA facilitated the procurement of laboratory equipment and chemicals, enabling Myanmar to conduct crucial testing, research, and data collection for transboundary animal diseases and enhancing its capabilities to develop disease control strategies.

These measures are helping to ensure greater food safety and security and have strengthened the country's capacity to respond effectively to future outbreaks.

Water and the environment

The Department of Atomic Energy at the Ministry of Science and Technology has been applying isotope techniques to assess freshwater resources in order to better understand surfacegroundwater interaction, the origin of water, the history of groundwater recharge, the rate of replenishment and residence times.

In 2022, a study of isotopic and hydrochemical characteristics was conducted in the Kyaung

Gon area Ayeyarwaddy division to help planners and decision makers manage and protect groundwater resources more effectively from the impact of human activities.

A nationwide isotope mapping initiative aims to establish baseline data in support of future climate change adaptation and mitigation efforts.

Participation in the major initiatives

- NUTEC Plastics
- ZODIAC

Date of imPACT Review(s)

2015



Zaw Oo, a dairy farmer in Myanmar, has seen his income increase and costs fall as a result of switching to artificial insemination of his cows. (Photo: M. Gaspar/IAEA)

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

