

Philippines

IAEA Member State since September 1958

Selected achievements

2023: The upgrade of the Multipurpose Gamma Irradiation Facility (MIF) to a fully automated commercial irradiator is concluded.

2022: The Philippines commissions a Subcritical Assembly to promote nuclear science and technology in the country.

2022: The Philippines completes a feasibility study to demonstrate the technical and economic viability of developing construction materials from post-irradiated recycled plastics.

2019: The National Crop Protection Centre uses nuclear applications to boost rice yields on 40 000 hectares of land by 20 to 30 per cent.

2018–2019: An Integrated Nuclear Infrastructure Review is conducted and the first Integrated Workplan established to develop infrastructure for a nuclear power plant.



Students in the Philippines measure natural radiation using a handheld survey metre developed for educational purposes. (Photo: T. Limoto/University of Tokyo)

the University of the Philippines to irradiate carrageenan, a natural seaweed extract.

New equipment and specialist training provided by the IAEA have enabled this innovative growth promoter to be used on rice crops, boosting yields in more than 40 000 hectares of farmland which had been affected by changing weather patterns.

As a result of this intervention, rice production increased by 20 to 30 per cent while only half of the recommended fertilizer dose was required. This success has the potential to significantly raise agricultural productivity and farmers' incomes.

Nuclear knowledge development and management

The Philippines built and began operations of the Philippine Research Reactor PRR-1 SATER in 2021-2022, a significant milestone in re-establishing nuclear capabilities in the country.

In 2023, an Integrated Safety Assessment for Research Reactors (INSARR) mission of the IAEA concluded that established practices for operations, radiation protection and waste management were in line with the IAEA safety standards.

The facility is expected to act as a training reactor for research reactor operators, regulators and users – paving the way for the Philippines to strengthen its knowledge and experience in the nuclear field and laying the foundations for research and development growth.

National priorities

- Food and agriculture
- National resources and the environment
- Energy and the industry
- Human health
- Nuclear safety and security
- Nuclear science and technology

Main areas of IAEA support

- Radiopharmaceutical manufacturing
- Nuclear power infrastructure
- Flood reduction

Project successes

Food and agriculture

The IAEA supported a project implemented by the National Crop Protection Centre of

Nuclear legislation

In 2022, a presidential executive order outlined the government's position for the inclusion of nuclear energy in the Philippines' energy mix.

At the Philippines' request, the Agency conducted an IAEA Legislative Assistance Mission in 2023. This involved awareness meetings with decision-makers and officials, emphasizing key instruments for nuclear safety, security, safeguards, and liability.

Participation in the major initiatives

- Atoms4Food
- NUTEC Plastics
- Rays of Hope
- ZODIAC



Workshop students observe radiation tracks as part of the cloud chamber experiment. (Photo: IAEA)

Date of imPACT Review(s)

2011

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

