Lao People's Democratic Republic

IAEA Member State since November 2011

Selected achievements

2024: Lao People's Democratic Republic enacts a new regulation in April that strengthens the national regulatory safety infrastructure in the area of radiation control.

2019: Lao People's Democratic Republic puts into effect its radiation protection law.

2019: IAEA Practical Arrangements are signed to strengthen South-South and triangular cooperation in the use of nuclear techniques in conjunction with Cambodia and Viet Nam.

2019: Isotope hydrology capabilities are established to improve assessments of water resources.

2017: Immunological, molecular nuclear and nuclear-related diagnosis capabilities for animal health are strengthened in Vientiane.

National priorities

- Enhancing the legal framework
- Nuclear and radiation safety and security
- Food and agriculture
- Human health and nutrition
- Water resources and the environment
- Energy planning and industrial applications

Main areas of IAEA support

- Animal diseases control
- Crop production
- Malnutrition in children
- Water resources management strengthening
- Energy planning support
- Human health



Laotian Fellow Phonesavanh Lathdavong receives technical instructions for an experiment using short- and medium-lived nuclides at the Dalat Nuclear Research Reactor in Viet Nam. (Photo: Department of Science, Ministry of Education and Sport, Lao People's Democratic Republic)

Project successes

Food and agriculture

In 2023, the highly productive mutant rice variety 'Saphart 1' which originated in the Salavanh province extended its reach to 34 villages, the Nongdeng Agricultural Center, and 117 farmers across 50 hectares of cultivation.

Additionally, 5000 kg of seeds were disseminated to 120 farmers across eight provinces, bolstering yields and food security.

On-farm demonstrations showcased improved rice, maize, and cassava management practices, with 'Saphart 1' outperforming traditional varieties.

This achievement made a significant contribution to sustained agricultural productivity and food security in the country.

Controlling diseases in livestock

With IAEA support, the National Animal Health Laboratory (NAHL) enhanced its diagnostic and control capacities for transboundary animal diseases.

Thanks to advanced immunological, molecular nuclear and nuclear-related diagnostic capabilities, the laboratory is now processing over 15000 samples annually. The IAEA helped to procure advanced 'Biosafety Level 3' laboratory equipment, complementing the government's investment in the construction of the facility.

With the IAEA's continued support, NAHL is progressing towards becoming a selfreliant reference and confirmation laboratory for the diagnosis and control of animal diseases, with only the occasional use of a regional reference centre when needed.

Participation in the major initiatives

• Rays of Hope

Date of imPACT Review(s)

2022, 2014



With the financial support of the European Commission's CBRN CoE (Centres of Excellence) initiative, Radiation detection equipment is provided to Cambodia, Indonesia and Lao People's Democratic Republic to support IAEA Member States in security management of radioactive material and enhance detection capabilities of radioactive material outside regulatory control. (Photo: D. Calma/IAEA)

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation



