



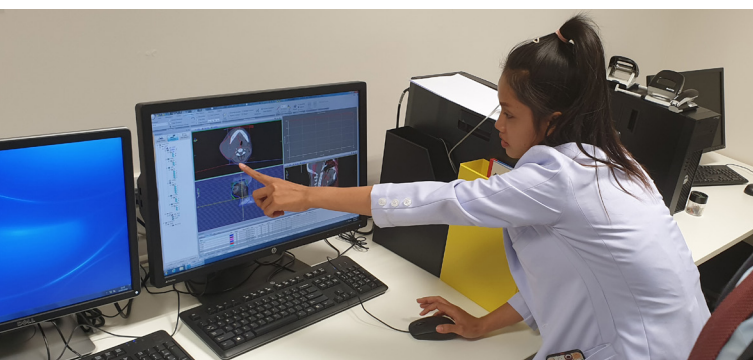
Key achievements in Lao People's Democratic Republic

- 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 and molecular nuclear and nuclear-related diagnosis capabilities for animal health are strengthened in Vientiane.

Atoms for peace and development

Widely known as the world's 'Atoms for Peace and Development' organization within the United Nations family, the IAEA is the international centre for cooperation in the nuclear field. The Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.

The IAEA's technical cooperation (TC) programme helps countries to use nuclear science and technology to address key development priorities in areas including health, agriculture, water, the environment and industry. The programme also helps countries to identify and meet future energy needs. It supports greater radiation safety and nuclear security, and provides legislative assistance.



The IAEA supported training for a medical physicist at the Radiotherapy Centre of the Mittaphab Hospital in Vientiane. Here she describes a patient's condition and radiation treatment plan based on a computed tomography scan. (Photo: M Kurylchyk/IAEA)

Recent project successes

Nuclear legislation

The establishment and adoption of a legal framework for radiation safety is crucial for a country to control its radiation sources and promote the peaceful uses of nuclear science and technology. With IAEA support, Lao People's Democratic Republic established legislation for radiation protection. This provided the basis for further development of a regulatory system to manage the safe and secure use of radiation in a number of sectors, such as human health.

The IAEA provided technical and legislative assistance while the law was drafted and promoted among parliamentarians, government authorities, key stakeholders and counterpart institutions. The law was adopted by the National Assembly in December 2018 and signed by the President in January 2019.

Controlling diseases in livestock

The IAEA improved the ability of Lao People's Democratic Republic's National Animal Health Laboratory (NAHL) to diagnose and control transboundary animal diseases. Lao People's Democratic Republic is now processing over 15 000 samples annually due to its newly enhanced first-line immunological and molecular nuclear and nuclear-related diagnostic capabilities.

The IAEA complemented the government's investment in the construction of the facility by procuring advanced 'Biosafety Level 3' laboratory equipment. The facility now provides special diagnostic services and helps research. With the IAEA's continued support, NAHL is progressing towards becoming a self-reliant reference and confirmation laboratory for the diagnosis and control of animal diseases, with only the occasional use of a regional reference centre when needed.

South-South and triangular cooperation

The IAEA is facilitating South-South and triangular cooperation activities between Viet Nam and its neighbouring countries, Cambodia and Lao People's Democratic Republic. The signing of two complementary Practical Arrangements with the three countries provides a framework for collaboration in a broad range of priority areas. These include non-destructive testing, radiation medicine, radiation processing, mutation plant breeding and radiation safety infrastructure. Through these agreements, Lao People's Democratic Republic receives expert support on nuclear science and technology, while

making its facilities and analytical laboratories available to specialists from Cambodia and Viet Nam.

Active national projects

- Establishing Basic Non-Destructive Testing Infrastructure (LAO1001)
- Building National Planning Capability for Sustainable Energy Development (LAO2001)
- Improving Soil Fertility and Water Use Efficiency in the Cassava-Rice-Soybean Production System under Smallholder Farming Systems (LAO5002)
- Using Nuclear and Molecular Techniques for Early and Rapid Diagnosis and Control of Transboundary Animal Diseases in Livestock (LAO5003)
- Enhancing National Capability for Crop Production and Controlling Trans-Boundary Animal Diseases (LAO5004)
- Reducing the Incidence and Impact of Transboundary Animal and Zoonotic Diseases (LAO5005)
- Improving the Quality and Safety of Radiology, Radiotherapy and Nuclear Medicine Services (LAO6002)
- Building Capacity in the Use of Stable Isotope Techniques to Measure Body Composition for Addressing Malnutrition in Children - Phase II (LAO6004)
- Addressing Malnutrition of Children Using Stable Isotope Techniques (LAO6005)
- Enhancing the Quality of Radiation Therapy Services (LAO6006)
- Enhancing Surface and Groundwater Management Competencies by Analysing Radioactive and Other Chemical/Toxic Contaminants - Phase II (LAO7002)
- Developing a National Infrastructure for Radiation Safety (LAO9002)

Lao People's Democratic Republic also participates in 27 regional and 7 interregional projects, mostly in the area of food and agriculture, and health and nutrition.

Previous IAEA support to Lao People's Democratic Republic

In recent years, IAEA support focused on strengthening control of transboundary farm animal diseases, enhancing national crop production capabilities, improving capacities to address malnutrition in children, strengthening management of water resources and supporting energy planning. In human health, improvements were made in radiology, radiotherapy and nuclear medicine services.

IAEA support to Lao People's Democratic Republic, 2011–2019



183 trained
(including 64 women)

38 international experts provided

86 attended specialist meetings
(including 21 women)

Priority areas of support

- Enhancing the legal framework
- Supporting nuclear and radiation safety and security
- Strengthening the food and agriculture sector
- Improving human health and nutrition
- Protecting water resources and the environment
- Strengthening energy planning and industrial applications

Lao People's Democratic Republic's contribution to South-South and triangular cooperation, 2011–2019

1
expert and lecturer assignment provided by Lao People's Democratic Republic

1
training course participant

Based on data available as of April 2020

Cancer control impact Review conducted: April 2014

Strategic documents supported

- United Nations Partnership Framework 2017–2021, signed September 2016
- Country Programme Framework 2020–2025 (to be signed September 2020)
- Practical Arrangements between the IAEA, Lao People's Democratic Republic and Viet Nam on Strengthening South-South and Triangular Cooperation for Implementation of the IAEA Technical Cooperation Programme, signed September 2019

www.iaea.org/technicalcooperation

The IAEA collaborates with National Liaison Officers and Permanent Missions to deliver its TC programme.