Key achievements in Vanuatu

- 2018: Vanuatu begins using a mutation breeding technique to enhance the productivity and quality of its crops.
- 2018: Vanuatu starts establishing technical capabilities to assess groundwater resources.

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.

In 2019, the IAEA established the Sub-regional Approach for the Pacific Islands (SAPI), which includes Fiji, the Marshall Islands, Palau, Papua New Guinea and Vanuatu, in order to promote cooperation in the field of nuclear science and technology for the attainment of national development priorities, and to provide focused IAEA technical cooperation support to the Pacific Island Member States.

Recent project successes

Food and agriculture

In November 2019, two scientists from the Vanuatu Agricultural Research and Technical Centre and one from the Department of Agriculture and Rural Development participated in regional training on developing crop varieties better suited to changing climate conditions, at the IAEA’s Seibersdorf Laboratories in Austria.

The scientists developed hands-on experience in all aspects of mutation breeding from initial detection and testing to DNA extraction and quality control. Throughout the course, participants worked with recently developed strains of bananas to understand how the new varieties were selected for their resilience to fungi and adverse environmental conditions.

A demonstration of ultrasound examinations for Port Vila Central Hospital’s radiologists and technologists in Vanuatu. The IAEA supported the country through an expert mission, clinical lectures and hands-on x-ray and ultrasound training for radiographers and physicians. (Photo: A.B. Barroso/IAEA)
Active national projects

• Strengthening Agro-Food Laboratory Quality Infrastructure (NHE5002)
• Continuing Development of Environmental Monitoring Capabilities for Groundwater Resources Assessment and Land and Water Management (NHE7002)
• Enhancing the Productivity and Quality of Crops through the Application of Mutation Breeding Techniques (NHE5001)
• Improving the Quality of Life of Patients by Strengthening Access to Radiological Services (NHE6001)
• Establishing Technical Capabilities for Groundwater Resources Assessment and Land and Water Management (NHE7001)
• Strengthening the National Infrastructure for Radiation Safety (NHE9001)

Vanuatu also participates in 5 regional and 4 interregional projects, mostly in the area of food and agriculture.

Other IAEA support to Vanuatu

IAEA support to Vanuatu is focused on the establishment of national radiation safety infrastructure to ensure that the existing use of ionizing radiation in medicine, agriculture and industry is safe for people and the environment. Assistance is also being provided to improve the assessment and management of water resources.

IAEA support to Vanuatu, 2015–2019

24 trained
(including 9 women)
7 international experts provided
7 attended specialist meetings
(including 4 women)

Based on data available as of April 2020

Priority areas of support

• Supporting national capabilities in radiology
• Enhancing crop productivity
• Improving groundwater resource assessment and land and water management
• Strengthening the national radiation safety and security infrastructure

Strategic documents supported

• Country Programme Framework 2017–2023, signed in May 2017

A fruit-seller at a Port Vila market in Vanuatu. Farmers on the South Pacific archipelago will benefit as local experts receive training on crop improvement using nuclear techniques to develop new crop varieties more suited to climatic changes and more tolerant to disease using IAEA supported nuclear techniques. (Photo: M. Garten/UN Photo)