

# Namibia

IAEA Member State since February 1983

## Selected achievements

**2023:** New drought tolerant varieties of cowpea and sorghum crop seed released to farmers.

**2023:** A pilot project confirms that a small drip irrigation system has helped to increase irrigation water use efficiency by over 80 per cent compared with rainfed agriculture and has improved yields by up to 70 per cent in farmers' fields.

**2022:** Treatment of patients with skin and other superficial cancers starts using an orthovoltage unit installed at Windhoek Central Hospital.



Namibian farmers examine cowpea crops grown to be more resistant to drought. (Photo: IAEA)

## National priorities

- Nuclear and radiation safety
- Food and agriculture
- Human health
- Energy planning
- Water resources management
- Marine and coastal environment
- Human resources capacity building

## Main areas of IAEA support

- Human health
- Food and agriculture
- Science and technology

## Project successes

### Food security

Namibia is one of the driest countries in Africa. Approximately 92 per cent of the country is defined as very arid, arid or semi-arid, and its rainfalls are rare and erratic.

In the country's first plant breeding programme, which began in 2009 with IAEA support, Namibia's Ministry of Agriculture, Water and Forestry enhanced existing seed varieties of cowpea and sorghum. The new varieties were

released in 2018, and Namibia facilitated seed multiplication for the following cropping seasons. The new varieties, which produce higher yields during a shorter growing period, benefited over 8000 farmers in the first season, with more farmers getting involved as the seed production increases. As part of this cooperation, several Namibian plant breeders were certified, and plant breeding laboratory technicians were also trained.

A drip irrigation system, developed as part of an IAEA technical cooperation project that started in 2020, has helped to increase irrigation water use efficiency by over 80 per cent compared with rainfed agriculture, and has improved yields by up to 70 per cent in the fields of farmers who participated in the project.

### Human health

With IAEA assistance, Namibia established public sector radiotherapy and nuclear medicine facilities at Windhoek Central Hospital and Oshakati in the north of the country. The need for further expansion of public sector facilities has been described in a strategic bankable document that was endorsed by the Minister of Health in 2018.

Skin and related cancers, such as Kaposi sarcoma, are among the leading forms of cancer in Namibia. An orthovoltage unit, which uses low energy X rays to effectively treat these types of cancer, was purchased through government cost-sharing and installed at Windhoek Central Hospital. Treatment of cancer patients started in 2022, demonstrating

Namibia's high commitment to providing essential cancer care to patients in the country.

**Marine environment**

Namibia's first comprehensive study on radionuclides and trace elements in coastal waters, supported by the IAEA, revealed low radionuclide levels but higher concentrations of certain trace elements. The findings, presented to the Namibian Government in a scientific report by the IAEA, recommended further investigations to determine whether these increased trace element levels result from human activity along the coast or are linked to the underlying geology.

**Participation in the major initiatives**

- Rays of Hope
- ZODIAC



The IAEA has also provided Namibia with support in the field of food safety. Here, a technician in the laboratories of the National Standards Institution prepares a sample for analysis. (Photo: P. Ellitson/NSI)

**Date of imPACT Review(s)**

2010

**IAEA support received in the 21st century**



**Contributions to South-South and triangular cooperation**

