



## Key achievements in Cameroon

- 2018: Maize productivity more than doubles using isotopic techniques and fruit tree seedling survival rates increase by 95-100% in irrigated systems, compared to 30-60% for non-irrigated systems.
- 2018: An artificial insemination centre and an animal health laboratory are established at the Institute of Agricultural Research for Development in Bamboi.

## Atoms for peace and development

The International Atomic Energy Agency is the world's central intergovernmental forum for scientific and technical cooperation in the nuclear field. It works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security.

The IAEA's technical cooperation programme helps countries to use nuclear science and technology to address key development priorities, 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.



Scientists, field and laboratory technicians from Cameroon have been trained to help local farmers to cut fertilizer and water use whilst sustaining crop yields in integrated cropping systems. (Photo: IRAD)

## Recent project successes

### Livestock production

An IAEA project assisted Cameroon reduce its milk production gap, which stands at 25 percent or €30 million per year. An artificial insemination centre and animal health laboratory were set up at the Institute of Agricultural Research for Development (IRAD) in Bamboi. The project increased average milk production of dairy cows from 2 to 15 litres of milk per day. Having received training in milk processing, small dairy producers (including women) have benefitted from the resulting financial gains - from an average loss of \$4.50 per cow each month to earning \$38 from each cow in the same amount of time. With these results, Bayemi Henri from IRAD received an award as the best scientific researcher in Cameroon.

### Agricultural water and soil management

Cameroon's farmers have for many years practiced a mixed crop system as part of subsistence farming systems, but this failed to ensure sustainable productivity. This has been due to intensive use and rapid extraction of nutrients from the soil, particularly secondary and micronutrients, resulting in lower productivity and crop sustainability, and increased land degradation. Isotopic techniques were used to improve soil fertility, which increased maize productivity from 3.7 to 9.3 metric tonnes per hectare. The survival rate of fruit tree seedlings also increased to 95-100% after transplanting in irrigated systems, compared to 30-60% survival rates in non-irrigated systems.



IAEA supported isotopic techniques are helping to reverse the effects of increased land degradation in Cameroon caused by over-intensive soil use. (Photo: IAEA)

## Active national projects

- Using Nuclear Techniques to Improve Milk Production (CMR5019)
- Developing Best Nutrient and Water Management Practices to Improve Soil Fertility and Productivity and Minimize Land Degradation Using Isotopic Techniques (CMR5021)
- Controlling Transboundary Animal diseases with Special Emphasis on Peste des Petits Ruminants (CMR5022)
- Strengthening Laboratory Capabilities to Monitor Contaminants in Fisheries Products (CMR5023)
- Establishing Safe and Effective Basic Radiotherapy Services at Yaounde and Douala (CMR6014)
- Using Stable Isotope Techniques to Assess Vitamin A and Nutritional Status of Mother-Infant Pairs (CMR6015)
- Improving Cancer Control and Treatment through Upgraded Radiotherapy and Nuclear Medicine Services (CMR6016)
- Establishing a Secondary Standard Dosimetry Laboratory - Phase I (CMR6017)
- Establishing a National Radioactive Waste Management System (CMR9007)
- Sustaining National Regulatory Infrastructure (CMR9008)
- Establishing a National Radon Plan for Controlling Public Exposure Due to Radon Indoors (CMR9009)

Cameroon also participates in 51 regional and 5 interregional projects, mostly in the area of radiation protection and nuclear safety.

## Previous IAEA support to Cameroon

In its strategy for aligning support for nuclear technology with Cameroon's national priorities for sustainable development, the IAEA has historically focused on food safety, agricultural production, human health, water resources development, energy planning, industrial quality control, and the development of radiation protection infrastructure.

### IAEA support to Cameroon, 2009–2019



511

trained  
(including 151 women)

28

international  
experts  
provided

98

attended specialist  
meetings  
(including 19 women)

### Priority areas of support

- Strengthening food security
- Improving health and nutrition
- Enhancing access to drinking water
- Supporting the exploitation of mineral resources
- Improving management of energy resources
- Strengthening environmental protection

### Cameroon's contribution to South-South and triangular cooperation, 2009–2019



113  
expert and lecturer  
assignments  
provided by  
Cameroon

18

training course  
participants

50

fellows or  
scientific visitors  
hosted

Based on data available as of April 2020

### Cancer control impact Review conducted: June 2013

### Strategic documents supported

- Country Programme Framework (2014–2018), signed in September 2014

[www.iaea.org/technicalcooperation](http://www.iaea.org/technicalcooperation)

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