## **Selected achievements**

**2018:** Bahrain strengthens its radiation emergency preparedness by training staff and by establishing six emergency radiation early warning stations throughout the country: five fixed and one mobile.

**2018:** Stable isotope techniques are used to study the causes of childhood and adolescent obesity.

**2016:** An advanced laboratory to detect toxins in agricultural produce and seafood is established at the Public Health Laboratory in Manama, Bahrain.



A workshop to enhance the quality of nuclear medicine practice took place in Manama and was attended by 40 participants from national hospitals and Bahrain's Ministry of Health. (Photo: IAEA)

## **National priorities**

- Food productivity
- Human health, specifically cancer treatment
- Management of groundwater resources
- Energy development planning

## Main areas of IAEA support

- Environmental monitoring
- Regulatory infrastructure for radiation and nuclear safety
- Development of national protocols for controlling radiation doses

# **Project successes**

#### Human health and nutrition

With IAEA and WHO support, Bahrain has taken steps to address obesity which affects 30 per cent of the population.

Stable isotopes have enabled Bahrain to study how children and adolescents burn energy and to make meal planning more effective. IAEA support has taken the form of capacity building, bolstering laboratory capabilities and training staff in the doubly labelled water technique to track energy consumption.

Bahrain also upgraded the nuclear medicine department at the Salmaniya Medical Complex in Manama. The IAEA provided specialist training to enhance operational and diagnostic skills and helped national experts develop a quality assurance system to ensure that accurate and safe doses of radiation are provided to patients during treatment.

The newly trained personnel will form the basis for future national train-the-trainers programmes.

#### **Nuclear safety and security**

With support from the IAEA, Bahrain strengthened its radiation emergency preparedness. Five radiation early warning stations and one mobile emergency radiation station were established nationwide.

The IAEA played a crucial role in procuring radiation monitoring equipment, providing specialist training, and supporting the development of emergency response mechanisms.

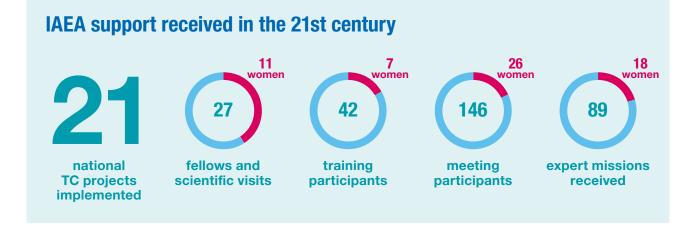
These measures have enabled Bahrain to respond more effectively to potential radiation and radiological emergencies, both locally and outside of the country.

# Participation in the major initiatives

• ZODIAC



A delegation from Bahrain visited the Seibersdorf Laboratories in Austria to become more acquainted with the broad scope of research activities and technologies which can support the country and its development goals for human health, food and agriculture, and water resource management. (Photo: IAEA)



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

