## **Selected achievements**

**2024:** Numerous sites are successfully decontaminated in Basra, including the Basra Iron Mill Steel, leading to its reopening.

**2023:** A comprehensive strategy for managing radioactive waste and Naturally Occurring Radioactive Material (NORM) is developed and 57 out of 67 sites contaminated with depleted uranium are cleared.

**2019:** The nuclear regulatory framework for the authorization and inspection of radiation sources is drafted.



The sustainable production of strategically important wheat seeds was undertaken by research stations and laboratories which operate according to guidance provided by Iraq's Scientific Council for Seeds. (Photo: Council of Ministers, Iraqi Atomic Energy Commission)

also been implementing sterile insect technology to control agricultural pests.

## **National priorities**

- Radiation and nuclear safety and security
- Decommissioning of former nuclear facilities and sites
- Human health
- Radiopharmaceutical production
- Management of water resources
- Agriculture and rural development

## Main areas of IAEA support

- Health and nutrition
- Food and agriculture
- Radiation protection
- Nuclear safety

## **Project successes**

### Food and agriculture

Working with the IAEA, Iraq's Agricultural Research Department pioneered the development of high-grade seeds to enhance crop productivity and quality. This has strengthened the agricultural sector and increased food security.

In collaboration with the IAEA, the Agricultural Research Department has

### Soil and water management

With IAEA support, Iraq's Agricultural Research Department has achieved breakthroughs in nuclear fallout analysis, using specialized software to study fallout and fission products in soil. It is using this information to study wind and water erosion and dust storm formation.

In the field of water management, efforts have been focused on innovative measurement methods and irrigation techniques to minimize water losses.

## Successful radiological cleanup and industrial revival

Basra, a key Iraqi city, faced severe radiological contamination that hindered its industrial operations and ability to host international events. The IAEA provided critical support through technical assistance, strategy development, and capacity-building initiatives, leading to the successful decontamination of over 23 sites, including the Basra Iron Mill Steel. This allowed the mill to reopen after 20 years.

Additionally, a comprehensive strategy for managing radioactive waste and NORM was developed, and by 2024, 57 out of 67 sites contaminated with depleted uranium across Iraq were cleared. These efforts significantly improved public health and safety in Basra and reinforced Iraq's capabilities in radioactive waste management.

Building on this assistance, Iraq aims to continue enhancing its capabilities in RWM, further decontaminate remaining sites and strengthen its regulatory infrastructure for radiation protection and safety with ongoing support.

#### **Radiation protection and nuclear safety**

Iraq's Radiation Protection Centre (RPC) has developed and implemented authorisation, inspection and enforcement procedures for the use of radiation sources in medical and industrial applications, with IAEA assistance. The organizational structure of the RPC and its Integrated Management System have been optimized to enable it to discharge its regulatory functions more effectively and in line with IAEA safety requirements.

# Participation in the major initiatives

- NUTEC Plastics
- Rays of Hope
- ZODIAC

## Date of imPACT Review(s)

2021

## IAEA support received in the 21st century



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



