

Iraq Salinity Project

Projects to support the Iraq Government to reduce soil salinity and increase agricultural productivity in central and southern Iraq

Iraq faces a growing agricultural crisis driven by increasing levels of salinity in its soil and irrigation water that is reducing the country's food production and threatens its food security. Today, some 70% of the country's irrigated area suffers from varying levels of salinity.

An estimated 25,000 hectares of farmland are abandoned every year, left uncultivable by elevated salt levels. This is caused by a combination of inadequate drainage and high salt levels in irrigation in the irrigated areas of South and Central Iraq.

Agriculture is a vital component of Iraq's economy: the largest employer and the second largest contributor to GDP. However, salinity of soil and irrigation water is a growing concern, especially in the country's traditional breadbasket – the Tigris-Euphrates basin in central and southern Iraq.

Iraq Salinity Projects

The Iraq Salinity Initiative was designed in 2010 for the Government of Iraq and for the Iraqi farmers by a group of international agencies led by ICARDA– the International Center for Agricultural Research in the Dry Areas to solve the problems of Iraq's salty soils and salty irrigation water.

Its goal is to ensure the country's long-term food security, by better understanding the current salinity situation in the country and producing a framework and interventions to reduce and manage salinity over the long term. The Initiative is producing a detailed scientific assessment of the situation, and tools, capacity building and technical support to Iraq's government agencies and agricultural services.

Call for partners

The support of the international community to improve productivity of saline land and water resources in Iraq is urgently needed, as only 40% of national food needs come from domestic production; 60% of agricultural commodities are imported.

We are seeking partners to support a long-term effort for continued salinity monitoring and management interventions. This will cover training at farm level, capacity strengthening and technical assistance to government and extension agencies in Iraq.

Salinity is affecting the Iraqi. The salinity projects are achieving a lot, but the main contribution is expected from the citizens of Iraq.

Iraq Salinity Assessment at three levels - farm irrigation system, regional.

This series of studies at farm, irrigation district, and regional levels is producing baseline information on the situation in three regions of Iraq.

These findings will be the basis for a National Framework for Salinity Reduction and Management and support to government agencies. The research findings will be of great value to Iraq and other countries facing similar natural resource degradation issues.

Objectives

- Develop a robust conceptualization of salinization processes in central and southern Iraq based on information available at field and basin level and quantify salt and water fluxes and areas affected by salinity;
- Determine appropriate strategic approaches to manage salinity that suit local environment and socio-economic conditions;
- Assessment of key productivity limitations and opportunities to wheat-based irrigated agricultural systems;
- Develop investment options for on-going salinity management in Iraq.
- Improving the livelihoods and welfare for poor farmers through sustainable management of salt-affected soils and water resources.

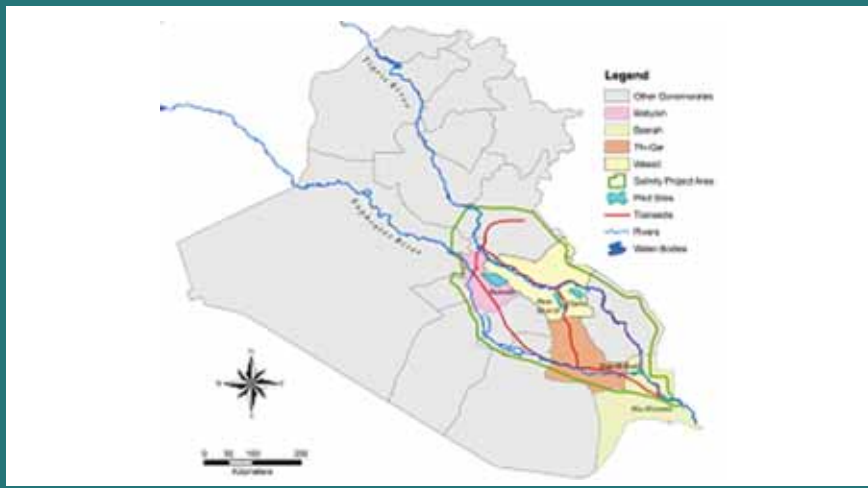
Projects' Components:

- Quantify the spatial distribution of salt land;
- Qualitative and quantitative trends in river/drainage water and agricultural productivity;
- Quantify and describe the relationship between groundwater level, groundwater salinity and irrigation;
- Assess the current state of irrigation and drainage infrastructure;
- Demonstrate the best bet practices for different salt tolerant crops, crop varieties and fodders;
- Develop methodologies to improve soil, agronomic, irrigation, water and drainage management for salinity control;
- Soci-economic policy.

Iraq Salinity Project

- Soil Salinity Management in Central and Southern Iraq
- On-farm Soil Salinity Management in Al-Nassiriah Area in Iraq

Support the Iraq Government to reduce soil salinity and increase the agricultural productivity in central and southern Iraq.



Partners

- Iraqi ministries of Agriculture, Water Resources, Science and Technology, Higher Education, Environment
- Australian partners: Commonwealth Scientific and Industrial Research Organisation (CSIRO), University of Western Australia (UWA)
- International centers: ICARDA -- the International Center for Agricultural Research in the Dry Areas. International Center for Biosaline Agriculture (ICBA), International Water Management Institute (IWMI)

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International Center for Agricultural Research in the Dry Areas
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