Saudi Arabia and FAO
Building capacities for supporting sustainable agricultural and rural development

FAO and the Kingdom of Saudi Arabia have a significant history of cooperation. For more than 50 years, FAO assistance has spanned the full spectrum of agricultural and rural development, with interventions carefully selected to meet top priority areas identified by the country and its regional setting. Some notable features of cooperation include the formulation of policy and regulatory frameworks, including national capacity development, and technical assistance to high-value horticulture.

Successful programme approach to extension

The FAO programme in Saudi Arabia is targeting the development of demand-driven extension services in support of small-scale farmers, fishermen and women’s agricultural cooperatives. The objective is to improve productivity, product quality and livelihood security. Resulting from the current cooperation agreement between FAO and the Ministry of Agriculture, the concept of Extension Centres for Integrated Farms (ECIF) is being jointly applied by several projects covering different fields of expertise: rural development, horticulture, irrigation, plant protection, date palm and olive production, to name a few.

The Extension Centres for Integrated Farms are considered a major achievement and are to be established in different regions with a view to assisting the Ministry in upgrading extension facilities and services, as well as promoting the adoption of innovative technologies and farm management tools. The centres focus on good agricultural practices (GAP) for consumer and environmental protection, reuse of animal and crop waste for compost, information exchange among farmers and technicians, and training events covering multiple aspects of sustainable agriculture for the benefit of farmers as well as Ministry staff.

In view of the impact achieved to date, the Government has granted funds for the Ministry to expand the ECIF approach to all of the country’s regions over the next five years.

Matching FAO’s expertise to Saudi Arabia’s development priorities

Strategic direction for FAO assistance to the Kingdom of Saudi Arabia is provided by the 2011-2016 Country Programming Framework (CPF), jointly developed with the Government and other partners and recently reviewed by FAO. The following four priority areas are emphasized:

- Sustainable management of natural resources
- Intensive and sustainable production of agricultural crops
- Sustainable development of animal resources and fish farming
- Capacity development

Accordingly, FAO’s country programme focuses on capacity development for staff of the Ministry of Agriculture and its main stakeholders. It provides expertise and technical assistance in:

- Water conservation – improving irrigation, crop water use, waste water reuse, and sustainable natural resource use
- Improved competitiveness and integration in value chains – strengthening the country’s presence on regional and international markets through innovative production and protection technologies and practices and quality products such as dates, olives, citrus, grapes and sub-tropical fruits
- Animal production and health, and food safety – improving camel breeding and derived products, producing veterinary vaccines and managing transboundary diseases through epidemiology-surveillance
- Aquaculture sector development – enhancing the institutional framework and resource management
- Rural development, food security and family farming – supporting cooperatives and family-based systems, including women’s agricultural associations, for effective inclusion of family farming in agricultural value chains
Developing fish and shrimp aquaculture

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The Government of Saudi Arabia considers aquaculture one of the most promising sectors for food production, employment opportunities and long-term economic development. Indeed, the country’s Fisheries and Aquaculture Sector Development Plan has set an annual production target of 1 million tonnes by 2030, starting from current levels of less than 30 000 tonnes per year.

FAO and Saudi Arabia are partnering to achieve sustainable development of the sector through a successful unilateral trust fund project. The intervention is designed to develop marine cage aquaculture; improve technologies and techniques for the production of juveniles and species diversification; strengthen the national framework aquaculture research; and build capacities of the Ministry of Agriculture as well as other aquaculture stakeholders. Several results have been achieved to date, including but not limited to:

- **A geographic information system (GIS) unit** — for site selection and spatial analysis in the Jeddah Fisheries Research Centre (JFRC), where the project is based.
- **The introduction of new culture systems with limited or zero water exchange**, involving technologies that improve biosecurity and reduce impact on natural resources. Research Centre (JFRC), where the project is based.
- **Strengthened scientific collaboration** between JFRC and national and international research institutions, which has led to joint research grants.
- **Technical and management training** at JFRC and abroad for both Ministry staff and private aquaculture stakeholders, and guidelines on site selection criteria and environmental monitoring.
- **A business model for small to medium-sized cage farm development** to support the Ministry and investors in licensing and farm establishment.

Improving irrigation under treated waste water

Notable results have been achieved through two FAO-Saudi Arabia cooperation projects. Designed to improve irrigation practices under treated waste water (TWW), both interventions entail capacity building through FAO technical and policy support to implementing institutions. The first project, involving the National Irrigation Administration (NIA) in Riyadh, was aimed at expanding TWW use in the country. FAO’s efforts have included assessing farmers’ practices at the NIA project site, setting up a soil and water quality monitoring system — including a soil-water-plant quality laboratory — and establishing a demonstration farm. Technical support has been provided to institutions in other regions of Saudi Arabia, and the TWW use has been promoted through workshops, field visits and other means.

The NIA laboratory and the soil and water quality monitoring system have proved very successful, as shown by the Ministry of Agriculture’s decision to create five similar laboratories in regions where large quantities of TWW are available for use in agriculture. The project has been requested to provide technical supervision of the establishment of these facilities, including staff training.

Aimed at improving TWW use at the Al Hassa Irrigation and Drainage Authority (HIDA), the second project is designed to ensure sustainable irrigation development and enhance HIDA capacities for managing non-conventional water resources. Outputs include improved operation and maintenance of new pressurized irrigation networks, the establishment of a water reuse training centre as well as a new, fully equipped and staffed central laboratory at HIDA headquarters. Further project achievements will include a Management Information System for the Al-Hassa irrigation scheme; strengthened farmers’ capacities for efficient and safe use of different water resources for agriculture; and the identification of areas requiring drainage and salt removal.

“Improving agricultural and food systems is essential for a world with healthier people and healthier ecosystems.”
José Graziano da Silva, FAO Director-General