Iran and FAO

Partnering for food security and safeguarding natural resources

FAO and Iran have had a significant history of cooperation since the country joined the Organization in 1945. Cooperation was strengthened with the establishment of a country office in 1978, and over the years FAO has provided policy and technical assistance in promoting sustainable development of the country’s agriculture and rural sectors. More recently, interventions have focused on policy advice and overall agricultural planning, improvements to forestry, increased agricultural and aquaculture productivity, and capacity development. Another key area today is the development of sustainable small-scale agriculture based on agro-ecological approaches and climate-smart agriculture.

Matching FAO’s expertise to Iran’s development priorities

FAO assistance in Iran is currently shaped by the 2017-2021 Country Programming Framework (CPF), which is centered on four strategic priority areas:

- Environmentally sustainable and climate-smart agriculture
- Food security and food safety
- Inclusive and resilient rural development
- Knowledge-based economy and society

Jointly developed in cooperation with the Government and under the leadership of the Ministry of Agriculture Jihad (MAJ), the CPF ensures cross-sectoral participation, thanks to the involvement of the Ministries of Health and Medical Education, Energy, and Cooperatives, Labour, and Social Welfare as well as academic institutions and field and decentralized institutions and structures.

In addition to supporting FAO’s Strategic Framework and regional priorities, the CPF is closely aligned with the United Nations Development Assistance Framework (UNDAF) for Iran 2017-2021 and contributes to the Sustainable Development Goals (SDGs).
Iran – home to one of the world’s most important agricultural heritage systems

The country’s Kashan region has one of the oldest Persian agricultural systems, which draws on Qanats for irrigation, tapping alluvial aquifers at the heads of valleys and conducting the water along underground tunnels by gravity. The Qanat irrigation technology and related knowledge system in Iran date back to at least 800 BC. The system has sustained food security and livelihoods for centuries by providing a reliable source of water to traditional family farmers, mainly in dry areas where farming would otherwise be impossible. In 2014, Iran’s Qanat irrigation system was designated a Globally Important Agricultural Heritage Systems (GIAHS) and recognized by FAO as a model of innovation and adaptability, delivering important benefits to the ecosystem.

Improving seed systems towards ensuring food security

Availability of quality seeds is an essential prerequisite for enhanced crop productivity. Ensuring farmers – particularly small-scale farmers – have access to quality seed varieties is at the heart of sustainable crop production.

To achieve this, the Ministry of Jihad-e-Agriculture (MoJA) and FAO initiated a technical cooperation project in April 2013 to strengthen the country’s seed development system. The project created a link between FAO technical staff and national professionals in MoJA as well as a platform for facilitating the sharing of expertise and experience.

The initiative aimed to address constraints related to seed processing systems – from seed sorting, to its drying and grading, treatment and packaging. Additionally, the project sought to address the underlying causes of the low productivity of traditional forage production systems by introducing environmentally suitable high-yield forage seeds.

In two years, this intervention strengthened the capacities of MoJA to develop varieties that are adapted to the climate change, especially those suited to marginal environmental conditions and which produce quality seeds, such as alfalfa, clover, sainfoin, vetch, sorghum, millet, and several grass and cereal crops. This led to enhanced national food security and increased diversification of agricultural exports.

Managing transboundary pests

Tomato borer (Tuta absoluta) is one of the most damaging transboundary plant pests. It originated in South America and was introduced to the Middle East through Europe and North Africa, with the first sightings reported in Iran in October 2010 in West Azerbaijan. In less than one year, 26 provinces in the country were affected.

Tomato is one of the major vegetable crops in Iran, which has tomato farms and glasshouses in 32 provinces and a total production area of 177,060 ha. Annual production exceeds 6.6 million tonnes. Tomato is produced for domestic consumption and for export as fresh product and is also processed as tomato pulp and tomato sauce for export.

Given the transboundary nature of tomato borer, between 2012 and 2014, FAO implemented a regional project to monitor the pest and develop guidelines for pest detection and control.

In Iran, the project has helped minimize the damage of tomato borer through development of healthy tomato transplants, providing technical knowledge to the national professionals and practitioners for building and maintaining safe greenhouses and for promoting the use of fully-automatic tomato-planting machines. Some 600 Iranian experts (40 percent women) and 740 local farmers (30 percent women) were trained in the effective management of the pest, including how to safeguard production of such a strategic agricultural product as tomato.

Adaptation of Quinoa: an innovative approach to climate-smart agriculture

In an effort to identify crops that can adapt to a changing climate, countries in the Near East and North Africa region and FAO have opted to produce Quinoa owing to its highly nutritional value and agronomical versatility. The crop has proved to be an important alternative to traditional crops with regard to regional and global food security, especially in regions facing food production limitations as result of severe impacts of climate change.

In Iran, thanks to the joint efforts of the Government and FAO, Quinoa was fully evaluated for its adaptation and productivity. Based on the extensive fieldwork undertaken in Karaj, Ahwaz, Siranshahr, Jiroft and Kahnouj, the crop was found to be adaptable to local climate conditions and was therefore introduced to farmers.

“Pro-growth and pro-poor policies, processes and institutions can help accelerate sustainable development.”
José Graziano da Silva, FAO Director-General