The Kurdistan Region of Iraq’s (KRI) favourable climate and soil fertility offer the ideal basis for potato production, while the activities of cultivation and post-harvest provide important sources of employment and income in rural areas. Land and labour are also in abundance, making the potential to significantly increase production. However, due to a lack of investment in the value chain and the limited training received by trainers and extension workers, these factors are underutilised. Although progress has been made in potato production and productivity, the full agricultural and economical potential of this crop is not being realised. Through the intervention of a public-private partnership, this project aims to strengthen the potato value chain in KRI through improved production and processing, access to markets, training and employment opportunities for internally displaced people (IDP) and refugees, and the capacity building of farmers and other stakeholders.
Insufficient investment in KRI's agricultural sector has resulted in a growing dependency on imported food of low quality being offered at low prices to consumers. Smallholder farmers, therefore, find it difficult to compete against imported goods which results in small profit margins and an unwillingness to invest in technology and increased production. Post-harvest losses are also substantial due to poor infrastructure, a lack of suitable storage facilities and the absence of processing facilities. Consequently, agriculture in KRI remains a 'low input/low output' system.

Potato farmers face considerable production challenges. For example, there is a shortage of quality and affordable potato seed and a lack of access to improved seed varieties, while pest management is not consistent with good agricultural practice requirements. In addition, access to knowledge, which could help to overcome these, is hampered by the absence of investment in research and diagnostic services. The poor links between research and extension adds further problems which lead to unsustainable crop production. Extension services are also under-resourced. Limited training and site visits result in extension agents having less ability to provide farmers with good advice on production and post-harvest handling.

What we are doing

This CABI-led five-year project is being implemented in the Duhok Province of KRI through a public-private partnership.

The goal is to meet demand for locally produced and processed potato products through further development and completion of the Potato Value Chain. The project aims to achieve an increased and more resilient income for farmers and a sustainable, locally sourced value chain that supplies the regional market and contributes to local economic development.

The project involves two main areas of activity: building the capacity of target groups through the training of trainers and provision of information resources; and establishing post-harvest services, a potato processing plant and cold storage through infrastructure investment and training.

**Project Area 1:**

**Build capacity of target groups through training of trainers and provision of information resources, leading to:**

- Increased awareness and knowledge of best practices
- Increased access to high-quality inputs
- Adoption of new production methods by farmers
- Increased production and productivity, including increased production area

**Project Area 2:**

**Establish post-harvest services and a potato processing plant through infrastructure and training, leading to:**

- Local production of French fries using local potatoes
- Employment of trained IDPs, refugees or other vulnerable groups (women, youth)
- Increased access to processing facilities for locally produced potatoes

Through these activities, the project will promote sustainable economic growth in the potato production and processing sector. This growth will help to reinvigorate the agricultural services sectors, improve the competitiveness of smallholder farmers and create job opportunities for some of KRI's most vulnerable groups of people.
**Expected outcomes and outputs of the project:**

- 8000 farmers directly reached through capacity building activities on good agricultural practices and with access to high-quality seed potatoes
- One potato processing facility (the first to be established in Iraq) with the capacity to process 6000 tonnes of french fries per year
- One cold storage unit built with a capacity of 1750 tonnes
- 800 farmers guaranteed access to market of french fries factory
- 10,000 workers provided with job opportunities in potato farming
- 160 jobs created and skills developed in potato processing
- 8000 farmers with increased income/productivity and more resilient to income shocks

**Results so far**

The inception phase finished in 2021 which included setting up systems, agreements and carrying out a baseline survey.

Since then, an efficient, high-specification potato cold storage unit has been built with a capacity of over 1,750 tonnes. A building to house a potato processing facility has also been constructed and is ready for the Dutch-imported processing line to be installed in early 2024. This is the first to be established in Iraq and will have the capacity to process over 6,000 tonnes of French fries per year. To fulfill this processing line, project partner, KH, is providing farmers with the varieties of seed potato and training to ensure that the potatoes produced meet the required quality standards.

Training has been provided in KRI for over 120 partner staff, including extension agents, on pest diagnosis, pest management, biological control, extension messaging, experimental design, monitoring and evaluation, and survey techniques, and specifically for KH staff on potato quality inspection and seed tuber production in the Netherlands. Furthermore, 15 days of training material has been translated from English into Arabic and is available to all project partners. Knowledge from training has been incorporated into partners’ training with farmers and into the University of Duhok teaching curriculum.

Farmer practice baseline has been conducted to feed into an impact evaluation at the end of the project, and special studies on gender, and field labourers are in progress.

**Donors**

The Netherlands Enterprise Agency, on behalf of the Dutch Ministry of Foreign Affairs, KH

**Partners**

Ministry of Agriculture & Water Resources in Kurdistan Region, University of Duhok, KH, HZPC

**CABI Project Manager**

Anna Wood