

STRENGTHENING THE POTATO VALUE CHAIN IN THE KURDISTAN REGION OF IRAQ

Locations	Kurdistan Region of Iraq
Dates	01/07/2021 - 30/11/2026

Summary

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.

The problem

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

Progress towards results

Since the project's inception phase in 2021, the public and private partners have continued to progress towards the project objectives.

An efficient, high-specification potato cold storage unit has been operating since 2023, storing 10,000 tonnes of harvested potatoes in 2024. The storage unit is also used to maintain high-quality seed potato imported from Holland before it's distributed to farmers. Project donors and partners, KH, continue to provide farmers with high-quality seed potato varieties and training to ensure the potatoes produced meet the required quality standards. A bespoke French-fry processing line purchased from the Netherlands is due to be in place during 2025.

Health and safety training has been given to cold store personnel, while technical training has been provided to over 400 project stakeholders, including partner staff and extension agents of the Directorate of Agriculture (DoA), Duhok, part of the Ministry of Agriculture and Water Resources in Kurdistan Region, and KH. Topics included pest diagnosis, pest management, biological control, extension messaging, experimental design, monitoring and evaluation and survey techniques. To ensure that the maximum number of farmers are reached with pest diagnosis and management advice, training on these topics is now also being extended to agro-input dealers in Duhok.

The DoA continues to work with CABI to develop extension messages on pest management and Good Agricultural Practice for farmers and create pest management decision guides. Content for mass extension campaigns via TV, radio and farmer rallies has also been drafted and will be introduced in 2025. These capacity building activities will help to reach the targeted 8000 farmers.

Knowledge sharing through study visits is an important component of this project, and training on potato quality inspection and seed potato production for KH staff continues to take place in the Netherlands to support this. In June 2024, 11 staff from the University of Duhok (UoD) and the DoA visited Switzerland and were hosted by CABI's centre in Switzerland. Visitors were introduced to innovative agriculture production techniques, integrated pest management approaches and extension models applied in Swiss agriculture. Furthermore, over 300 value chain actors, including farmers, retailers and government employees, have attended workshops organized by project partners in KRI to raise awareness of recent agriculture developments and opportunities for investment in the potato value chain.

Three special studies are being conducted as part of the project: a comprehensive farmer baseline study has been completed and will be repeated in 2026 to assess impact. A study on gender in the potato value chain has been completed, and data on labour practices in potato production is being analysed. All three of these studies have been conducted by UoD and DoA staff with support from CABI.

Donors

	The Netherlands Enterprise Agency, on behalf of the Dutch Ministry of Foreign Affairs, KH
Partners	Directorate of Agriculture, Duhok, Ministry of Agriculture and Water Resources in Kurdistan Region, University of Duhok, KH, HZPC
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