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EXPLORING
AGRICULTURE IN IRAQ

2025

AHK Deutsches Wirtschaftsbüro Irak
مكتب الارتباط الألماني للتجارة و الصناعة في العراق
نوسینگەی پەیوەندیکانی بازرگانی و پیشەسازی لەلمانی لە عیراق

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Overview
Agriculture in Iraq

Agriculture is vital in Iraq and the Kurdistan Region's economies, contributing to food security, employment, and rural development. Despite significant potential due to fertile lands and abundant water resources, the sector faces numerous challenges, including outdated infrastructure, climate change, and political instability.
Griculture is one of the oldest economic activities in Iraq and a vital part of the country's social and economic fabric.

With over 22 million hectares of agricultural land, of which only 5 million are actively utilized, the sector holds substantial untapped potential.

- Contribution to GDP (2024): 5.8%, compared to 7.3% in 2010.
- Export Volume: Over USD 2.1 billion annually, driven by dates, wheat, and vegetables.
- Agricultural Workforce: Around 30% of the population is directly or indirectly employed in agriculture, with a significant portion being women and youth.

Historical Significance and Current Developments

- Iraq, once known as the "Land Between Two Rivers," was a global hotspot for grain cultivation and irrigation agriculture.
- Over the past two decades, agricultural production has been significantly impacted by water scarcity, conflict, and climate change.
- Newly introduced technologies, such as pivot irrigation systems and climate-resilient crop varieties, have shown initial successes.

Regional Perspectives: Kurdistan and the Rest of Iraq

Kurdistan lies at the heart of the fertile crescent, where agriculture first took root almost 10,000 years ago. Evidence suggests that it was one of the first regions in the world to begin the cultivation of wheat and barley and the domestication of sheep and goats. Today, agriculture continues to play a vital role in the life of rural areas and the region's economy.

The Kurdistan Region is renowned for its fertile lands and diverse agricultural output, ranging from grains to fruits and vegetables. Its Mediterranean climate, characterized by mild, wet winters and warm, dry summers, provides ideal conditions for high-quality agricultural production.

The region also benefits from strategic proximity to major export markets in Turkey, Iran, and the Gulf states.

Kurdistan Regional Statistics (2025):

1- IRRIGATED LAND:

Approximately 328,428 hectares are cultivated, with 70% of the land dependent on rain-fed agriculture.

2- PRODUCTION VOLUMES:

- Wheat: 850,000 tons.
- Fruits: 75,000 tons, including high-demand exports such as grapes, pomegranates, and apples.
- Vegetables: 150,000 tons, primarily tomatoes, cucumbers, and potatoes.

3- EXPORT POTENTIAL:

Potato Exports: The Kurdistan Region has witnessed a significant increase in potato exports, particularly to Gulf nations like Qatar, Saudi Arabia, and the UAE. New cold storage and transportation facilities near Duhok have reduced spoilage by 15%, enabling exports to reach 50,000 tons annually.

Water Usage in Kurdistan

- Rainwater Dependency: Over 90% of agricultural activity depends on rainwater. This reliance has become increasingly unsustainable due to declining annual rainfall.
- Groundwater Reliance: The use of wells has risen to 73% of farming enterprises, often resulting in over-extraction and aquifer depletion.
- Water Efficiency Initiatives: Projects introducing drip irrigation systems have demonstrated 25-30% water savings in pilot regions like Sulaymaniyah.



Agriculture in the Rest of Iraq (2025):

Central Iraq

Central Iraq is a critical agricultural hub, contributing significantly to the country's production of wheat, rice, and vegetables. The region benefits from its proximity to urban centres like Baghdad, providing ready markets for perishable goods.

Key Products:
Wheat, rice, onions, and tomatoes.

Challenges:

1. Urban expansion has reduced agricultural land by 15% over the past decade.
2. Soil salinization in irrigated areas leads to lower yields.

Southern Iraq (Basra, Najaf)

Southern Iraq is the heart of date and rice production. Basra alone accounts for over 65% of Iraq's date exports, making it a cornerstone of the country's agricultural export strategy.

Key Products:

1. Dates: Iraq produces over 700,000 tons annually, with the majority cultivated in Basra.
2. Rice: High-quality varieties such as Anbar rice are predominantly grown in Najaf.

Challenges:

1. Soil salinization affects 60% of irrigated lands, causing a 20% decline in rice exports over the past five years.
2. Water shortages during the summer months limit rice yields.

Western Iraq (Anbar)

The arid Anbar region has historically focused on barley and livestock production, with ongoing efforts to introduce desert farming techniques.

Key Products: Barley, sheep, and goats.

Opportunities:

1. Desert farming innovations, including hydroponic systems, are enabling cultivation in previously non-arable lands.
2. New irrigation projects could transform an additional 20,000 hectares of desert into productive farmland by 2030.

Detailed Challenges in Iraq and Kurdistan

Water Scarcity

- Due to upstream dams and climate change, water inflows from the Tigris and Euphrates Rivers are expected to decrease by 40% by 2050.
- **Losses from Inefficient Systems:** Over 50% of irrigation water is wasted through flood irrigation methods

Climate Change

- **Temperature Rise:** Projections indicate an increase of up to +2.8°C by 2050, with drought frequency rising by 25%.
- **Agricultural Impact:** Wheat production has declined by 15% in the last five years due to rising temperatures and reduced rainfall.

Soil Salinization

- **Affected Lands:** About 60% of irrigated lands in the south are impacted by salinization, drastically reducing productivity.
- **Economic Losses:** The cumulative cost of salinization has reduced annual agricultural output by approximately USD 1 billion.

Technological Gaps

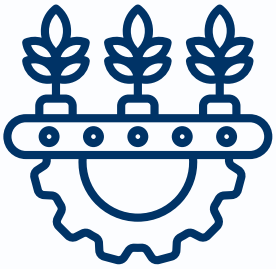
- **Post-Harvest Losses:** An estimated 30-40% of crops are lost due to poor storage and logistics.
- **Limited Access to Machinery:** Only 25% of farms have access to modern agricultural equipment.

Investment Opportunities and Solutions

Modernizing Irrigation System

-Introducing drip irrigation and pivot systems to maximize water efficiency.
- **Impact:** Reducing water consumption by up to 50% and increasing yields by 15-20%.

Agro-Processing Industry



- **Potential:** Increasing processed data from 20% to 50% within five years.
- Modernizing processing facilities for tomatoes, grapes, and rice could boost exports by 30%.

Renewable Energy Usage

- Solar-powered pumps and cooling systems are reducing energy costs by 40% in pilot projects.
- **Example:** A solar irrigation project in Basra reduced operational costs by 35%.

Digitalization and Smart Farming

- Sensors to monitor soil moisture and weather conditions.
- **Success:** Pilot projects in Erbil increased wheat yields by 25%, saving farmers an average of USD 300 per hectare annually.

Sustainability and Climate Adaptation

A- Climate Change Challenges

Iraq is among the countries most vulnerable to the impacts of climate change. Rising temperatures, reduced water availability, and increasingly frequent extreme weather events are exacerbating the difficulties faced by the agricultural sector.

Key Climate Impacts:

- **Temperature Increases:** Average annual temperatures have risen by 1.5°C since 1980, with projections of an additional +2.8°C by 2050.

- **Drought Frequency:** Severe droughts now occur every 2-3 years, compared to once every decade in the 1980s.

- **Water Shortages:** The flow of the Tigris and Euphrates Rivers has decreased by 40% over the past 40 years due to upstream dams and climate shifts.

B- Sustainable Agriculture Practices

Sustainability in agriculture is essential to combat the effects of climate change and ensure long-term productivity. Several practices are being promoted in Iraq to reduce environmental impact and improve resilience.

Sustainable Practices Being Implemented:

1. Conservation Agriculture:

Techniques such as minimal tillage and crop rotation are being introduced to improve soil health and reduce water loss.

- **Impact:** Studies in Basra showed a 20% increase in soil fertility over three years.

2. Agroforestry:

- Integrating trees into farmland improves biodiversity, provides shade, and reduces soil erosion.
- Pilot programs in Anbar added 15,000 hectares of tree cover, reducing wind erosion by 30%.

3. Efficient Water Use:

- Adoption of drip irrigation and precision irrigation systems has reduced water use by 25-40% in pilot areas like Najaf and Duhok.

4. Integrated Pest Management (IPM):

- Natural predators and biological controls are being used to reduce dependence on chemical pesticides.
- Results from programs in Erbil show a 50% reduction in pesticide use, lowering costs and improving food safety.

C- Climate-Resilient Crops

The introduction of crop varieties that can tolerate extreme conditions is a cornerstone of climate adaptation in Iraq.

Resilient Crops Being Tested:

1. Drought-Resistant Wheat:

- Introduced in central and northern Iraq, these varieties yield 15% more grain in low-water conditions.

2. Salt-Tolerant Rice:

- Successfully cultivated on previously unsuitable saline soils in Najaf and southern provinces.
- Productivity increased by 20%, providing a viable solution for 60% of Iraq's saline-affected farmland.

3. Heat-Tolerant Vegetables:

- Modified tomatoes and cucumbers are thriving under high-temperature conditions, extending the growing season by 30 days.



D- Renewable Energy in Agriculture

The integration of renewable energy sources has proven to be a cost-effective and sustainable solution for powering agricultural operations.

Notable Renewable Energy Projects:

1. Solar-Powered Irrigation: In southern Iraq, over 50 farms have adopted solar pump systems, reducing energy costs by 40% and enabling year-round irrigation.

- Expansion plans aim to reach 500 farms by 2025.

2. Solar Greenhouses:

- Solar-powered greenhouses in Erbil and Sulaymaniyah allow for off-season cultivation, boosting productivity by 35%.

3. Biogas Plants:

- Agricultural waste is being converted into bioenergy.
- A pilot project in Basra produces 30,000 kWh annually, enough to power 5,000 households.

E- Ecosystem Restoration

Efforts to restore Iraq's degraded ecosystems are essential for long-term agricultural sustainability.

Restoration Initiatives:

1. Reclaiming Saline Land:

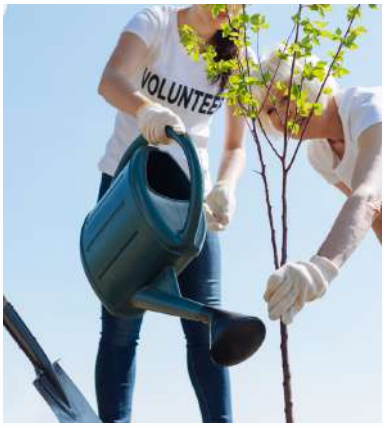
- Drainage systems and gypsum applications are being used to rehabilitate saline soils.
- In 2023, 15,000 hectares of saline-affected land in southern Iraq were reclaimed, increasing crop yields by 10%.

2. Wetland Restoration:

- Restoration of the Mesopotamian Marshes is enhancing biodiversity and providing livelihoods for local communities.
- Over 50,000 hectares of wetlands have been restored since 2018, supporting fish farming and rice cultivation.

3. Tree Planting Initiatives:

- A program in Anbar has planted 2 million trees, reducing desertification and providing shade for livestock.



F- Policy and Institutional Support

Sustainability requires strong policy frameworks and institutional backing to succeed.

Policy Highlights:

1. National Strategy for Climate Adaptation (2021):

- Focuses on water resource management, renewable energy, and agricultural resilience.

2. Partnership with International Organizations:

- ·Collaboration with the GIZ, FAO, and UNEP has introduced global best practices to local farmers.

3. Subsidy Reforms:

- ·Subsidies are being redirected to support sustainable practices, such as the adoption of renewable energy and climate-resilient seeds.

G- Success Stories in Sustainability

1. Integrated Farming Systems in Kurdistan:

- Farmers in Sulaymaniyah combined solar energy, drip irrigation, and crop rotation, increasing yields by 30% while reducing water use by 40%.
- The project covered 1,000 hectares and generated USD 1 million in additional revenue in 2023.

2. Salt-Tolerant Rice in Najaf:

- A collaborative project between Iraq's Ministry of Agriculture and Japan's JICA cultivated 5,000 hectares of saline soils.
- This initiative boosted productivity by 20% and generated export contracts with India worth USD 10 million.

3. Wetland Agriculture in the Mesopotamian Marshes:

- A wetland farming initiative reintroduced sustainable fish farming and rice cultivation.
- Over 2,000 families now benefit from this project, with income levels increasing by 25%.

4. Carbon Farming in Anbar:

- Introducing no-till farming techniques has reduced soil erosion and increased organic matter.
- Farmers reported a 15% increase in wheat yields and a significant reduction in input costs.

H- Future Goals for Sustainability

The integration of renewable energy sources has proven to be a cost-effective and sustainable solution for powering agricultural operations.

1. Scaling Renewable Energy:

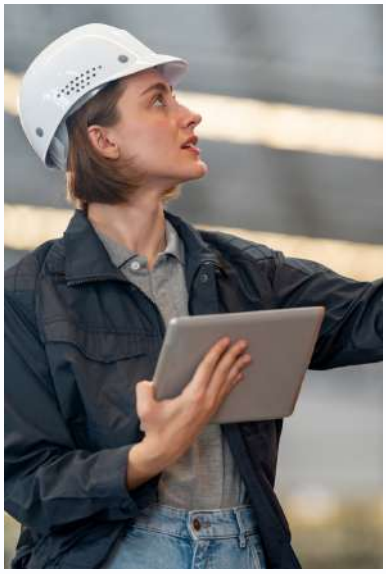
- Expanding solar and wind energy projects to power irrigation systems across 50% of irrigated farms by 2030.

2. Resilient Supply Chains:

- Developing infrastructure for cold storage and logistics to reduce food waste by 50%.

3. Expansion of Agroforestry:

- Increasing tree cover by 10 million hectares to combat desertification and improve carbon sequestration.



Success Stories in Sustainability in Kurdistan and Iraq

1. The Cattle Dairy Project in Simele, Duhok:
This project is in Kurdistan's agriculture, covering 2,500,000 square meters and introducing 1,500 high-quality dairy cows through a collaboration between a Kurdish company and Germany's Lohfelden Zve. Featuring advanced facilities for dairy and meat processing, biogas production, and fodder manufacturing, the project aims to boost local production, reduce imports, and create jobs. AHK Iraq facilitated this partnership, underscoring its commitment to strengthening the region's agricultural sector.

2. Integrated Farming Systems in Kurdistan:
Farmers in Sulaymaniyah combined solar energy, drip irrigation, and crop rotation, increasing yields by 30% while reducing water use by 40%. The project covered 1,000 hectares and generated USD 1 million in additional revenue in 2023.

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Overview of Agriculture in Kurdistan by Dr.Noura

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Overview

Agriculture is vital to Kurdistan's economy and rural livelihoods, supported by fertile lands and diverse climates. Despite challenges, the sector is increasingly in demand, with growing adoption of sustainable practices. NGOs, local companies, and stakeholders are reimagining agriculture to combat poverty and hunger through initiatives like capacity building, agricultural startups, youth engagement, and controlled-environment farming with various greenhouse technologies. Other efforts include introducing new crop varieties, food processing, value chain development, animal husbandry, and the increasingly popular poultry farming. However, many projects lack long-term sustainability, often ending after achieving minimal results.

Key Agricultural products in Kurdistan

The Kurdistan region has a long history of producing staple field crops. The geographical distribution and the main cultivated and produced crops are shown in Figure (1) and include:

1. Cereals and legumes: wheat is cultivated on a larger scale in comparison to rice, chickpeas, lentils and sesame.

2. Fodder crops: Barly is planting alongside wheat on a large scale besides corn and alfalfa.

3. Oil crops: Olive, sunflower and soybean.

4. Fruits: Grapes, pomegranates, apples, figs, and peach are widely cultivated and exported. Additionally, citrus fruits such as oranges, as well as newly introduced fruits like nectarines, peaches, plums, and apricots, are grown and processed on a smaller scale.

5. Vegetables: Tomatoes, cucumbers, onions, and potatoes are mainly planted in large scale in open field and also under controlled conditions (low tech greenhouse) besides eggplants, peppers, lettuce garlic, okra, squash, herbs and other leafy vegetables are produced primarily for local consumption. Recently, potatoes have begun to be exported to Gulf countries, whereas they were previously imported.

6.Livestock: Cattle, sheep, goats, chickens, in addition to bees.

Successe Production Map

Despite these successes, production capacity remains constrained by traditional farming practices, water scarcity, and inadequate infrastructure, preventing the sector from reaching its full potential.

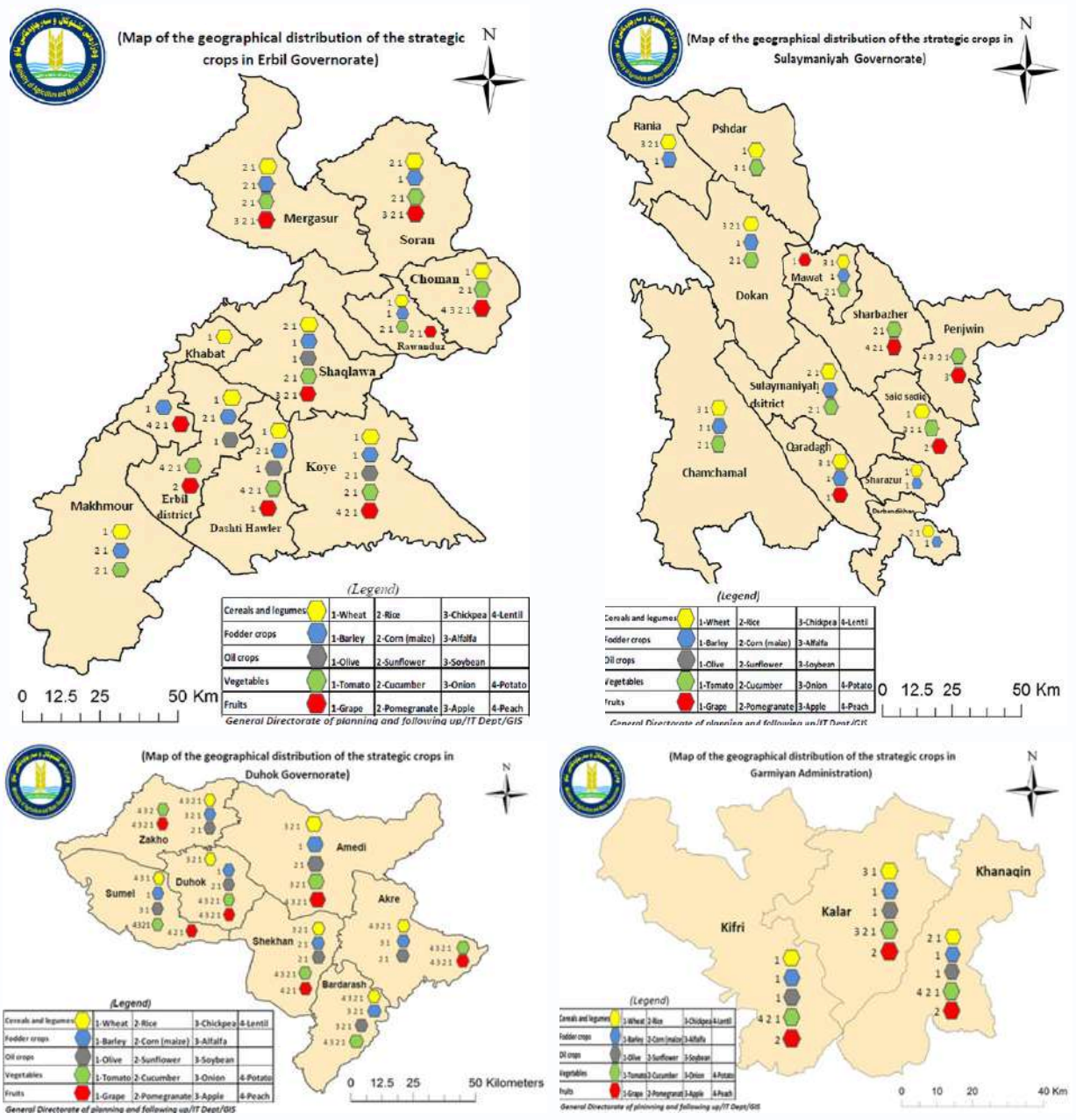


Figure 1:Geographical distribution of cultivated crops in Erbil, Sulaymaniyah, Duhok and Garmiyan (Retrieved from Ministry of Agriculture and water resources

Challenges

1. Water Scarcity

Water scarcity is a major issue across Iraq, including the Kurdistan region. While some cool-season crops depend on rainfall, the region has seen a drastic decline in annual precipitation, from approximately 1,000 mm to 100 mm, accompanied by erratic rainfall patterns. Groundwater levels are also dropping, with some wells reaching depths of nearly 500 meters. Additionally, inefficient irrigation systems and the use of low-quality materials exacerbate environmental risks.

The reasons for the reduction in available water sources for irrigation were demonstrated in an assessment published by IOM Iraq (2024), as shown in Figure 2.

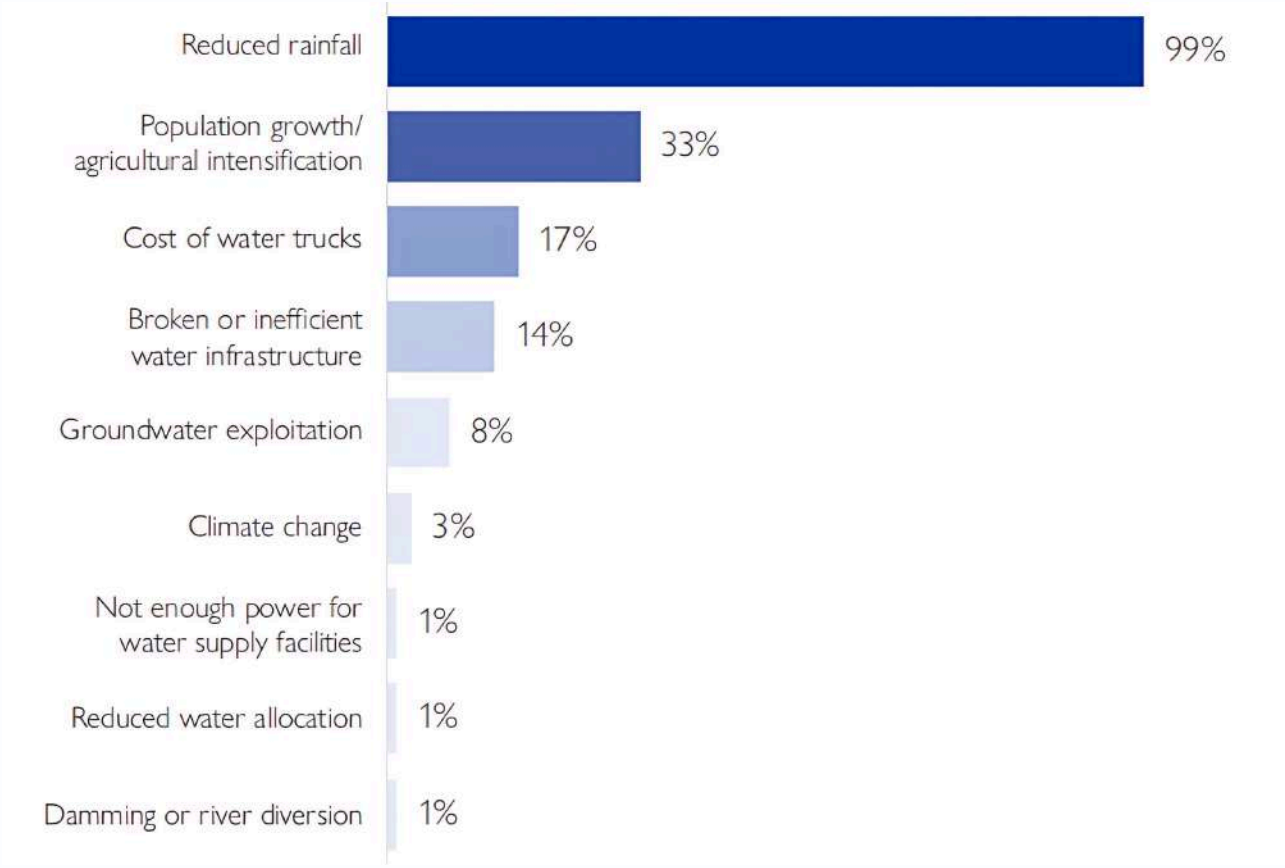


Figure 2: Reasons for the reduction in available water sources for irrigation. (Retrieved from https://dtm.iom.int/reports/climate-vulnerability-assessment-kurdistan-region-iraq-june-2024).

2. Climate Change: Rising temperatures are displacing populations from rural areas to cities, leading to abandoned agricultural practices. Many crops fail due to low heat resistance. While controlled-environment farming offers an alternative, it increases market prices, compounding economic challenges. The Kurdistan government has faced delays in paying government employees, leaving many citizens financially strained.
The most prevalent environmental hazards in 2024, as assessed by IOM Iraq in Kurdistan, were a 73% increase in temperature, 47% sand and dust storms, 11% droughts, and 3% wildfires.

3. Limited Access to Modern Inputs: Farmers struggle with outdated equipment and lack access to quality seeds and fertilizers. Most certified vegetable seeds are imported, facing environmental mismatches and inadequate storage conditions. This, combined with poor-quality fertilizers and pesticides, has led to soil degradation in some areas.
The availability of financial services to support investments in agricultural production is notably constrained, particularly for smallholder farmers. Limited access to credit represents a critical obstacle to sectoral development, as many farmers are unable to secure the resources required to enhance or restore their productive assets, including land, infrastructure, and equipment. Accessing formal credit systems is often hindered by challenges such as non-compliance with Islamic financial principles, stringent application processes, and elevated interest rates. Furthermore, reliance on private moneylenders entails prohibitively high costs and inflexible repayment terms. Awareness of alternative financial mechanisms, such as microfinance institutions, remains insufficient among agricultural communities, further exacerbating the issue.

4. Infrastructure and Logistics: Poor transportation and storage facilities contribute to significant post-harvest losses. Traditional farmers often resist adopting new technologies due to a lack of awareness and support.

5. Market Access: Poor transportation and storage facilities contribute to significant post-harvest losses. Traditional farmers often resist adopting new technologies due to a lack of awareness and support.

6. Policy and Support: Inconsistent policies, limited subsidies, and inadequate training programs hinder networking and collaboration between government, educational institutions, and the private sector.

Proposed Solutions

- **Water Management**

Collaboration with international organizations and companies to establish water management strategies, including dam construction, rainwater harvesting, and efficient irrigation systems (e.g., drip irrigation, hydroponics, and water boxes). However, these systems must be implemented correctly, considering topography and community needs rather than political interests.

- **Capacity Building**

Continuous and well-monitored training programs for farmers on modern techniques are essential for sustainable growth. According to a report published by The International Labour Organization (ILO) in September 2022 (www.ilo.org/publns) Workers seem to have limited if any awareness and understanding of their rights. And most workers have not received training on safety, skills or rights.

- **Infrastructure Development**

Investment in cold storage facilities, transportation networks, and processing units is critical. Strengthening the agricultural value chain and improving rural infrastructure, such as roads connecting villages and cities, are urgent priorities.

- **Market Linkages**

Establishing cooperatives and enhancing access to national and international markets can help farmers introduce high-quality products to the global market.

Opportunities for German Companies

German companies can contribute to Kurdistan's agricultural development through:

1. **Technology Transfer**: Precision farming equipment, modern irrigation systems, and advanced greenhouse technology.
2. **Capacity Building**: Workshops and training programs on sustainable farming and advanced agronomy.
3. **Biotechnology**: Supplying quality seeds, biofertilizers, and biopesticides tailored to local conditions.
4. **Renewable Energy**: Solar-powered irrigation pumps and cold storage systems.
5. **Value Addition**: Food processing partnerships to reduce post-harvest losses.
6. **Research Collaboration**: Joint research on drought-resistant crops and pest management strategies.
7. **Crop cultivation**: Opportunities for the cultivation of several high-value crops, including processing and packaging of their products.
8. **Livestock breeding**: Opportunities for the breeding of livestock, including processing and storage of the products.
9. **Animal Feed Manufacturing**: Facilities dedicated to producing high-quality feed for livestock.
10. **Certified Seed Production**: Development and distribution of certified seeds to enhance crop yields.

11. **Timber Forests**: Establishment of new forests for sustainable timber production.

The Kurdistan Region offers several compelling advantages table (1) for investment in agriculture and food processing projects, including:

- Extensive arable land resources support a wide range of agricultural activities.
- The region produces a variety of crops and livestock, providing opportunities for diverse farming ventures.
- A pool of experienced farmers and agricultural graduates is available, with competitive labor costs.
- Investors gain access to a vast and underdeveloped domestic market as well as neighboring regional markets.
- Projects in less developed areas benefit from additional incentives, alongside the broad advantages provided under the Investment Law.

Table 1: key facts and figures of agricultural sector in Kurdistan Iraq (Retrieved from *https://invest.gov.krd/sectors-and-opportunities/agriculture/* and https://dtm.iom.int/reports/climate-vulnerability-assessment-kurdistan-region-iraq-june-2024).

Data and Research in Agriculture

Currently, agricultural data in Kurdistan is limited and fragmented. Primary sources include government reports, NGO studies, and research by local universities. However, agricultural faculties face significant challenges, such as poor infrastructure, outdated equipment, and low enrollment due to uncertain career prospects. The lack of research facilities and reliance on outdated practices limit the quality and impact of academic contributions.

Gaps in Data and Research

- Absence of real-time data on soil health, weather, and water resources.
- Limited research on pest resistance, crop diversification, and seed quality control.
- No centralized data platforms for agricultural decision-making.

German collaboration could introduce advanced data collection systems, enhancing decision-making capabilities in the sector

We extend our sincere gratitude to Dr.Noura for sharing her invaluable insights.

Key facts and figures	
Agricultural land	4,451,424 hectares
Arable land	1,696,816 hectares
Irrigated land	328,428 hectares
Orchards	56,542 hectares
Rangelands	1,734,443 hectares
Forests	963,623 hectares
Rural Population	1,148,480 (18% of the population)
Workforce in Agriculture	10% of the total workforce
Agricultural colleges	14
Agricultural research centers	17
Climate zone	Mediterranean
Most common water sources for irrigation, by percentage of locations	
Rainfall	90%
Borehole/well	73%
River/stream	44%
Tap	17%
Irrigation canal (man-made)	15%
Water truck/tanker from private suppliers	9%
Other	4%

Export Strategies

1. Key Export Markets

- **Gulf Cooperation Council (GCC) Countries:**

1-Iraq exports over 65% of its dates to Gulf nations, including Saudi Arabia, UAE, and Qatar.
2-Dates are primarily consumed fresh, but there is growing demand for value-added products like date syrup and date sugar.

- **Europe:**

1-European consumers, particularly in Germany, the UK, and France, have shown increased demand for organic and fair-trade agricultural products from Iraq, such as organic dates and dried fruits.
2-Certification requirements (e.g., GlobalG.A.P.) are essential for entering these markets.

- **Asia (India, China, and Southeast Asia):**

1-India is a growing market for Iraqi dates and spices.
2-China has expressed interest in processed rice and premium dates.

2. High-Demand Products

- **Dates and Date Products:**

1-Iraq is the second-largest producer of dates globally, exporting varieties like Zahidi, Khastawi, and Medjool.
2-Processed products like date syrup, paste, and powder offer higher export margins.

- **Cereals and Grains:** Wheat and barley exports are primarily targeted toward neighboring countries like Jordan and Turkey.

- **Dried Fruits and Vegetables:** Grapes (raisins) and tomatoes (paste and dried forms) have strong export potential.

3. Infrastructure Needs for Export

- **Cold Chain Development:**

1-A lack of temperature-controlled storage and transport facilities leads to post-harvest losses of 10-15% for perishable items like vegetables and fruits.
2-Modernizing cold chain logistics could reduce losses to under 5%.

- **Haven Expansion in Basra:** The Basra Port accounts for 60% of Iraq's agricultural exports. Planned expansions aim to increase its capacity by 15% over the next five years.

4. Branding and Marketing Strategies

- **National Branding:** Initiatives to market Iraqi dates under a unified brand could enhance global recognition, similar to how Tunisia successfully branded its Deglet Noor dates.

- **Participation in Global Trade Fairs:**

1-Iraqi agricultural producers are increasingly present at international expos like the Gulfood Exhibition in Dubai and Biofach in Germany.
2-Such events have already generated export contracts worth over USD 25 million in the past two years.

5. Compliance with International Standards

- **Organic Certification:** Organic products have premium pricing in Europe and North America. A project with the German government enabled 120 date farms in Basra to obtain organic certification in 2023.

- **GlobalG.A.P. and HACCP Standards:** Certification for food safety and quality remains crucial for accessing high-end markets.

Success Stories

1. Basra's Date Processing Industry

- **Investment Outcome:**

1-A new processing facility in Basra, funded by an international donor consortium, was established in 2022.
2-The factory processes 15,000 tons of dates annually into syrup, paste, and sugar.

- **Economic Impact:**

1-Exports increased by 20% in the first year.
2-Created 250 permanent jobs and seasonal opportunities for an additional 1,000 workers.Market Expansion: Secured export contracts with high-end supermarkets in the UK and Germany.

2. Smart Farming Pilot in Kurdistan

- **Project Details:** A pilot program implemented by an EU-Iraq partnership introduced digital tools, including soil moisture sensors, drones, and weather monitoring systems, to 30 farms in Erbil.

- **Results:**

1-Cereal yields (wheat and barley) increased by 25%, while water usage decreased by 20%.
2-Farmers reported savings of up to USD 300 per hectare annually.

3. Drought-Resilient Rice Project in Najaf

- **Initiative:** A collaborative effort between Iraq's Ministry of Agriculture and Japan's JICA introduced drought-tolerant rice varieties in 2021.
- **Outcomes:**

1-The project cultivated 2,000 hectares of saline-affected land, previously considered unsuitable for agriculture.
2-Yield per hectare increased by 15%, while production costs dropped by 10%.

4. Potato Export Success

- **Kurdistan Region's Potatoes:** New cold storage and packaging units near Duhok enabled the export of 50,000 tons of potatoes to Gulf countries in 2023.
- **Economic Gains:** Potato farmers in the region saw income growth of 35%, enabling reinvestment into modern farming techniques.

5. Renewable Energy Integration in Agriculture

- **Solar-Powered Irrigation:** A solar project in southern Iraq installed 50 solar pump systems for irrigation.
- **Impact:** Water costs dropped by 40%, and productivity increased by 15%.
- **Scaling Potential:** The project is expected to expand to 500 additional farms by 2025.

6. High-Value Exports to Europe

- **Organic Dates:**

1-With assistance from the GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit), 120 farms in Basra achieved organic certification in 2023.
2-Resulting exports to Germany, Switzerland, and Scandinavia generated USD 10 million in revenue within the first year.

Future Prospects for Exports

1. Exploring New Markets:
Africa and South America present untapped opportunities for Iraqi agricultural exports, particularly for high-demand crops like rice and spices.

2. Value-Added Products:
Diversifying from raw exports to processed goods like frozen vegetables, ready-to-cook rice, and premium fruit juices could multiply export revenue by 40% over the next decade.

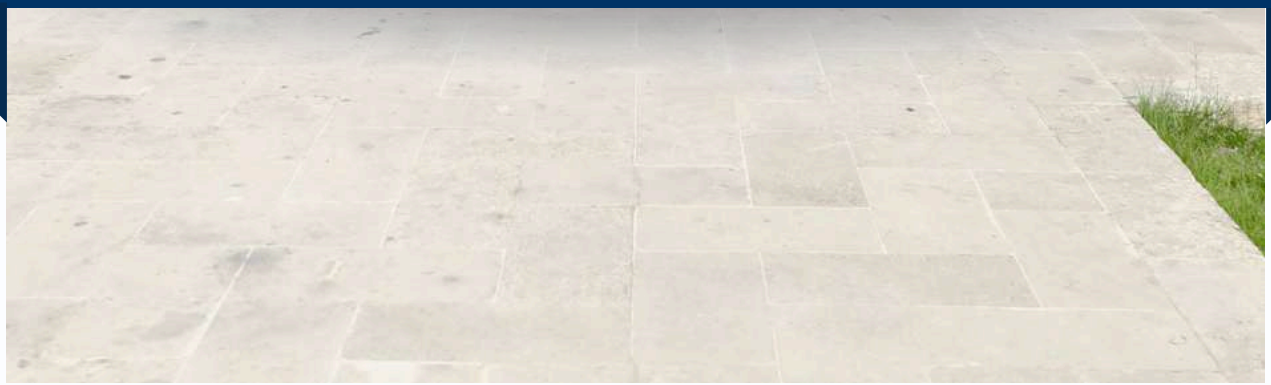
3. Scaling Organic Farming:
Expanding organic farming practices beyond dates to include other crops like grapes, tomatoes, and olives will position Iraq as a supplier of high-value, eco-friendly products.

Sources

1. Food and Agriculture Organization (FAO)
Reports on agriculture, water use, and climate adaptation in Iraq and the Middle East, with a focus on sustainable practices and value-added product development.
2.United Nations Environment Programme
(UNEP) Climate risk assessments and water resource management studies, including "UNEP Regional Climate Risk Assessment for the MENA Region."
3.International Fund for Agricultural Development (IFAD) Focused on rural development and sustainability initiatives in Iraq and Kurdistan, including irrigation and infrastructure projects.
4.Iraq's Ministry of Agriculture
Official data on agricultural production, irrigation practices, saline land reclamation, and policies for climate-resilient crops.
5.Kurdistan Regional Government (KRG)
Local initiatives in renewable energy, agricultural modernization, and export strategies, with a focus on cold storage development and potato exports to Gulf countries.
6. GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit)
German-Iraqi collaborations on renewable energy projects, organic farming certifications, and smart agriculture technologies.
7. JICA (Japan International Cooperation Agency)
Projects on drought-resistant crops, saline land reclamation, and the introduction of salt-tolerant rice in Najaf.
8.International Water Management Institute (IWMI)
Research on water efficiency and resource management in arid regions of the Middle East, focusing on drip and precision irrigation systems.
9.National Strategy for Climate Adaptation (2021)
Iraq's policy document outlining strategies for sustainable water management, climate-resilient agriculture, and adaptation to changing environmental conditions.
10.Academic Publications
Peer-reviewed studies on soil health, agroforestry, climate adaptation, and water-efficient irrigation techniques, with contributions from Iraqi universities and international researchers.
11. Media and Trade Publications
Coverage of Iraqi participation in expos like Gulfood Exhibition (Dubai) and Biofach Germany, as well as reports on infrastructure and export trends from outlets like Reuters and The National (UAE).
12. Case Studies and Pilot Projects
Documentation of key projects in Iraq, including:
·Basra's date processing facilities (job creation and export expansion).
·Solar irrigation initiatives in Najaf.
·Wetland restoration in the Mesopotamian Marshes (biodiversity and fish farming).
13.International Trade Centre (ITC)
Export data and trends for Iraqi dates, cereals, and vegetables, with analysis of certification requirements like GlobalG.A.P. for European markets.
ucts.

GET IN TOUCH

Thank you for choosing to explore the agriculture sector in Iraq with us. We hope this brochure serves as a valuable resource in your journey to understand and engage with this vibrant sector.



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Erbil, Iraq | World Trade Center (Gulan Tower), Gulan Street | 7th Floor, Office No. 03

Baghdad, Iraq | AL-Mansour Melya Hotel, Floor 1L | Hay Al-Salheya, Haifa Street

AHK Deutsches Wirtschaftsbüro Irak

مكتب الأرتباط الألماني للتجارة و الصناعة في العراق

نوسینگەی پەیوەندیەکانی بازرگانی و پیشەسازی لەئەلمانیا لە عیراق

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