

Additional Agricultural Background

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A 2004 Congressional Research Service Report describes the agricultural potential in Iraq. It has a total surface area of 43.7 million hectares (about the size of Wyoming and South Dakota combined) of which 34 million (77%) is not viable for agricultural use under current conditions. Approximately 22% are involved in agricultural activities. Wheat and barley have been Iraq’s most important crops. With respect to crop production, Iraq’s agricultural sector can be divided into two distinct regions: the predominately rain-fed North and the predominately irrigated Central-South. Agricultural production is generally characterized by smallholding, although the rain-fed farms of the north tend to be larger (averaging 10-30 hectares) than the irrigated farms of the Center-South (averaging 1 to 2.5 hectares.)

The extreme northeastern frontier of Iraq bordering Turkey and Iran is mountainous with cold winters and cool summers. This area is reportedly the location that originally domesticated sheep. Livestock grazing occurs throughout the country’s agricultural zones, but is more widespread in the north where hillside grazing prevails. Small ruminants (sheep and goats) are the most prevalent livestock species. However beef is the most traditional source of protein for many Iraqis. Commercial poultry production has increased since the 1960’s and occurs in close proximity to the urban centers.

The hill country of northern Iraq has sufficient precipitation to support rain-fed agriculture. From the foothills of north-central Iraq, a broad, dry rolling plain (used primarily for desert grazing and marginal agriculture) sweeps downward to the fertile valley of the Tigris and Euphrates rivers where irrigated agriculture predominates. South-western and western Iraq is mostly desert, extending into Syria, Jordan, and Saudi Arabia. Some vegetable production under drip-irrigated plastic tunnels is being practiced in the central part of the country.

Area cultivated annually to field crops such as cereals, pulses, and vegetables varies with weather and market conditions, generally averaging about 4 million hectares. (UN FAO Statistics.) Cereal production (mostly winter wheat and barley) is the principal agricultural activity accounting for approximately 70% of area. However, we find that this varies as farmers are introduced to alternative crops such as rice.

Fruit orchards are well suited to Iraq’s temperate hillsides. Over 300,000 hectares are permanently in tree crops – mostly dates but also some olives, grapes, oranges, apples, and other fruit orchards. Date palms are the most important tree crop farmed in Iraq and have been traditionally the largest export after oil.

According to the U.N. Food and Agricultural Organization, in 1990 Iraq's irrigation potential was estimated at over 5.5 million hectares – 63% of the Tigris basin, and 35% of the Euphrates basin, and 2% in the Shatt al-Arab basin. However, only 3.5 million hectares were estimated to be fully or partially equipped for control irrigation that same year. Of this total a much smaller area was actually irrigated since substantial area has been abandoned due to poor irrigation system maintenance leading to water logging and salinity. Problems related to poor irrigation system management and low usage rates include the growing salinity problem for which no effective national-scale desalinization program has ever been developed; problems related to the evolution of land and water rights; difficulties experienced with silt and weed clearance from canal beds and silting up of flood-irrigated land; and labor shortages resulting from rural-urban migration. A further problem relates to the growing importance of pump-irrigated systems that have replaced flow-irrigated (gravity-driven) systems. Pump irrigation can be more effective and reliable at delivering water to fields, but it is vulnerable to the availability of fuel and machine parts.

Technically, salinity is not an insurmountable problem, but would require heavy investment in an effective drainage system, as well as rebuilding and maintaining of existing canals. In addition to increased water flow and effective drainage system, the degree of salinity can be improved by plant selection, tillage practices, and soil management.