

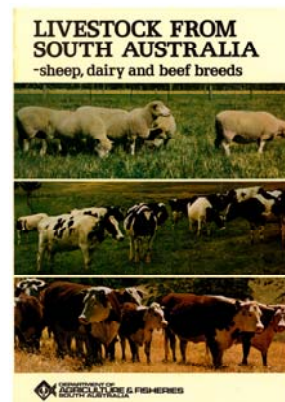
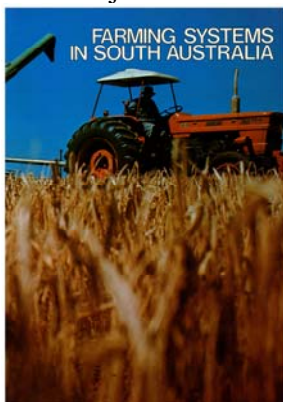
OVERSEAS PROJECTS

SOUTH AUSTRALIA AND IRAQ AGRICULTURE

Australia has had considerable influence in agricultural development in Iraq from 1972 when Dr Al Fakhry, Dean of the Faculty of Agriculture at Mosul University spent six months in Southern Australia and on return, taught details of aspects of the dryland farming system in his university. In 1974, representatives of AACM and Elders visited Iraq, and as a result, the Iraq director of Field Crops and the Director of the Tell Afer Field Station near Mosul, visited Australia.

The SA Minister of Agriculture, the late Tom Casey visited Iraq in 1974, and John Shearer exhibited large cultivation equipment at the Baghdad Trade Fair. Later, SA Seedgrowers Cooperative (Seedco) established six demonstration sites in Northern Iraq. Negotiations continued with government officials, and Arabic translations of various dryland farming books (illustrated below) were despatched to Iraq.

By 1979, Iraq was negotiating contracts with the South Australian and Western Australian Governments. South Australia, through SAGRIC International, secured a contract for \$US9.5m, including \$US3m of agricultural machinery to establish a 5000 ha demonstration farm at Ain Kawah, 15 km north of Erbil. Western Australia, through the WA Overseas Projects Authority, secured a contract for a research development at Tell Afer and Sinjar.



About this time, the Iran-Iraq war commenced, interspersed by bursts of competitive nationalism by resident Kurds who were inclined to spend their weekends in military exploits.

The South Australian area at Ain Kawah was fenced and subdivided with 160 km of fencing from Australia. Houses were built, research facilities established and equipment brought in. Broadacre cereal cropping was initiated with modern cultivation and harvesting machinery and its use demonstrated by Australian farmers. Seventy pasture trials and 950 ha of medic pasture were established. Within a couple of years, the fencing had all disappeared into the mountains where it was evidently used to grow tomatoes, and the incorporation of livestock into the farming system was abandoned. The pasture plot yields were biased by the passage of 6000 sheep following traditional migration paths across the plot area. Nevertheless, it was shown that 2.5 sheep/ha could be carried. In September 1982, a shootout between the peshmerga and the local military garrison occurred on the research farm. By 1985, 2500 hectares of wheat was sown, yielding 4350 tonnes of grain (1.7 tonnes/ha, a good yield by Iraqi standards). A major field day attended by the SA Minister of Agriculture was held in April 1985. Unfortunately, that year, the Iraqi project Director, Ezzaddin Nejmiddin Abdul-Karim was shot, and later, the Regional Deputy Director of Agriculture, Dr Zahir Hamad Tahad, a Kurd, fled to Iran. He returned with his family during an amnesty in 1988 and was shot and his family imprisoned at Abu Graib. The South Australians withdrew from Iraq at the conclusion of the project in 1985 (Tideman 1994).

The Western Australian program, which went for four years, involved 2000 hectares at Tell Afer, 80 km west of Mosul, and 7000 ha near to the Syrian border beyond Sinjar. The Tell Afer project involved both pastures and cereal cropping, the principal objective being to train local graduates in Australian dryland farming practices. Fencing, a shearing shed, machinery sheds, equipment and staff houses were installed. A local Bedouin was employed to live on the property and explain to other passing Bedouin the purpose of the work and encourage them to go around. This was generally effective and most of the fencing survived for the duration of the project, which involved mixed wheat-sheep activities. The 7000 ha at Sinjar was much drier and devoted to medics where reasonable stands were established. Overall, there were about 300-400 projects. Again, there were some difficulties with passing flocks of stock. Numerous reports and a 30 minute video were among outputs of the project. Management was not without drama, the first project director being imprisoned and deported (English, *pers. com.*).

In 2003, various delegations visited Iraq, including Don Plowman and Roger Hartley from South Australia. They established that around 2.5 million hectares is now planted to wheat and barley each year, the average yields being 0.73 and 0.62 t/ha respectively. There has been a steady decline in yields for over a decade and there is no indication that this will change without some fundamental changes in production technologies. Cropping had been expanded into low rainfall areas, previously used only for grazing. Not only is production unprofitable, the land that had been disturbed by cultivation is very prone to erosion and related forms of degradation. There are also a variety of issues facing Iraq's irrigated agriculture (about 3.25m ha). These are complex and vary between region and production system, including severe degradation of the total irrigation infrastructure, shortage of water supply, increasing

salinity of irrigation water and increasing salinisation of land. In the late 1990s there were 2100 scientific and technical graduate staff involved in agricultural research. Approximately 20% of these were employed within the Ministry of Agriculture, 50% within the education system and the remainder within a number of smaller research groups. The physical infrastructure has been neglected for more than a decade and is in serious decay. The sanctions of the late 1990s, the recent war and looting have removed most of the nation's office, laboratory capacity and all equipment. Refurbishment of some buildings has commenced however few are functional because of lack of staff and equipment, and some are occupied by dissidents. Scientists are generally well trained with a high proportion holding PhDs or Masters degrees. This has been offset by the total lack of contact with the international scientific community. It is only now that Iraqis have any Internet access.

However, in 2004, it was found that the Research Farm at Ain Kawah established by South Australians was still in use and had been extended, though the WA facilities appeared to be no longer extant.

References

- English, L. (2006). WA Department of Water, Perth, *pers. com.*
Tideman, A.F. (1994). The Medic Fields, SAGRIC International, Adelaide, 136pp