DIGITAL IMAGE COLLECTION CHARLES VAN SANTEN 1960-2000

1. INTRODUCTION TO AGRICULTURAL SERIES BY SUBJECT

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IRAQ

1.1. Intensive river based farming systems along the river Tigris: Baghdad province 1966-1969. Slides IRQ 001-056

Intensive river based farming systems along the Tigris river are located in narrow strips of land along the river bank. These lands are irrigable from the adjacent river. Irrigation is either with traditional waterwheels or through irrigation water intake structures depending on local conditions including topography. Irrigations schemes range from small-scale traditional village types of schemes covering a few tens of hectares to large scale irrigation schemes with hundreds to thousands of hectares of land.

The images of farming systems shown, describe only small-scale traditional and semi traditional irrigation systems. Note that the higher lands located outside these strips, to which no irrigation is feasible, are part of the semi desert. Borders between the irrigable land and the non irrigable land are very sharp. Under Iraq conditions, with temperatures of over 50 C in the summer and with a low annual rainfall of 100 cm, any land, which for topographical reasons or otherwise can not be irrigated is semi desert. Such land is unsuitable for crop production and can at most be used for grazing of camels and goats.

The traditional farming systems along the river banks include crops and livestock husbandry.

a. The cropping system

The cropping system is characterized by three layers of crops.

-The lowest layers of vegetation includes crops such as alfalfa(-lucerne-Medicago sativia L.) a fodder crop, cucumbers, egg plants, water melon, tomato, onions, garlic and various types of leaf vegetables.

-The middle layer of vegetation includes fruits trees such as almond, cassia (an oil crop), citrus, fig, grape, mulberry, pomegranate, ricinus(an oil crop) and others.

-The highest vegetation layer consists of date palms-Phoenix dactylifera.

Details of these crops are given as individual images.

b. Livestock

Livestock include water buffalo, sheep, goats and poultry and draft animals such as horses, donkeys and camels.

c.Other aspects

-Repairs of roof and walls of farm houses are made from wattle a mixture of mud, straw and cattle dung.

-Brick making is mainly for sales to urban areas

-Production of flat round bread (gubbuz) made in traditional ovens-tamur.
Flour used in the tamur is traditionally grinded hard wheat-triticum durum.
Gubbuz, eaten with a meat or vegetable stews or eggs is the main staple food of the Farm family. It is complimented by sour buffalo milk drinks. Food served during Traditional celebrations consist of rice with raisins and almond and roasted lamb or Chicken. In areas near rivers also roasted carp- masgouf is consumed during celebrations.

-Traditional river water transport mode, which is called named gufa. A gufa is constructed of reeds and made waterproof by bitumen, a natural asphalt type of product derived from asphalt sources from the Hit region, some 100 km north east of Baghdad. Already bitumen was used for water proving of boats and house during the Sumerian period 3000 – 2000 BC

Note: Mixed farming systems along the Euphrates River are comparable and some of the slides were actually taken along the Euphrates River.

1.2. Agricultural Cooperatives in Baghdad Province:
A socio-economic survey conducted during 1968; Slides 057-064

The Institute for Cooperation and Agricultural Extension of the Ministry of Agriculture and Agrarian Reform, Baghdad, Iraq, is a training institute for staff of the ministry. This staff is assigned to work in the Agrarian Reform Areas of Iraq assisting the newly established agrarian reform cooperative societies in cooperative and farming activities. Most of the farmer settlers before joining an Agrarian Reform Scheme were either farm laborers or nomad farmers with only experience of livestock raising.

During April- September 1968 a socio–economic survey was conducted in the Baghdad province among the 53 cooperatives established in the Agrarian Reform Areas in this province. The aim of the survey was to establish a bench mark of the progress of these recently established cooperatives and to compile a format for annual surveys for co-operatives in the Agrarian Reform Areas of Iraq.

The survey covered information on cooperative and farming activities in the area of the forty societies, based on the situation one or two years after establishment. Cooperative activities included: tractor operations for land preparation; provision of agricultural supplies- seed, fertilizers and pest and disease control measures; cooperative marketing of wheat and cotton; cooperative consumer shops and cooperative farming activities.

During the survey it was learned that only 40 of the 53 cooperatives were already operational. It was therefore decided to include only data from these cooperative societies in the survey report. About 7.100 farm families had received a plot of 9.25 ha farm land (37 donum) in the area of the 40 cooperative societies or scheme. Each scheme is occupied by an average of about 180 farm families with a total farm area of 1 660 ha.

The mixed farming system in the area includes wheat and barley as winter crops and vegetables and cotton as summer crops. In addition farmers grow fruit trees and raise livestock. Water is essential for crop production in Iraq and in 33 of the societies water was obtained by pump from the Tigris River, while in seven societies it was obtained by flow. E.g. the intake of the river water in those cases was higher as the land and this allowed gravity water distribution. As schemes were recently established and the irrigation/drainage systems not completed, only part of the area was actually cropped during 1997/98. Yields were still below average country yields.

The present slide series covers the visit to the Tell Masood Cooperative Society.

Images taken included: chairman, board members and buildings.

References: A Report on the Agricultural Cooperative Societies in the Agrarian reform Areas of Baghdad Liwa 1966-1968 by Mawfak E Hadithi and C.E. van Santen
UNSF Institute of Cooperation and Agricultural Extension Baghdad 1968

1.3. The Greater Mussayib Project, Hilla Province
A socio-economic survey conducted during 1969 Slides 065-089

The Greater Mussayib Project, Hilla Province, is located 90 km south of Baghdad. The project area measures 80 000 ha of which 60% is assigned for small holder farming in plots of 16.6 ha and distributed to 3050 farm family settlers. The project is an irrigation scheme. The water intake of GMP is from the Euphrates, 10 km upstream of the Hindiya Barrage. The water flows via a main irrigation canal of 50 km and is distributed to the plots of the settlers with a branch system consisting of 15 main branch canals.

The project was established in 1955 and the first farm family settlers received their plot of land during 1957/1958. During the initial years support to settlers was limited and the progress of development of the project remained under the target planned.

Government therefore decided in 1964 to renovate the project. The renovation was supported by United Nations Development Programme with funds and staff.

The present report on a Socio-Economic Survey was conducted during May-June 1969 to study the socio economic situation of the settler families and to offer guidance on farm-, cooperative and marketing development. The survey was conducted by staff of the Baghdad Institute for Cooperation and Agricultural Extension on request of the Greater Mussayib Project.

The mixed farming system on each settler plot of 16.5 ha gross included:
Winter crops : 5.5 ha - wheat, barley, horse beans and alfalfa for fodder
Summer crops: 2 ha - green gram, cotton, onions, cucumber, sesame, tomato & others
Orchard : 0.75 ha – vines, apples, pomegranates, apricots and dates.

NB. Due to problems in the irrigation system of the project it was till 1969 not possible to irrigate the entire area of 16.6 ha per farm unit. The planned renovation of the Project aimed to redress this situation and provide irrigation water for 100% of the area during the winter crop season

Livestock : buffalo 4
Sheep 22
Goats 6
Donkey 1
Poultry 6

Nominally all settlers are member of one of the projects cooperatives. Farmers received tractors services for land preparation seeds and fertilizers, extension services and marketing facilities from the local cooperatives. Membership is obligatory

An interesting feature of the Greater Mussayib project is that it is exactly located on the site of an old irrigation project which was covering physically the same area in the period of approx. 1200- 1000 BC (Before Christ). Based on old cuneiform reports it was established that the modern layout of the irrigation system is exactly the same as the original lay out of 1200 BC. The only modern innovation is the establishment of an additional canal system for deep drainage. This system with canals and underground drainage pipes allows draining the irrigation water at a depth of 3.5 m. This allows during each winter from December– Feb. to flush-out the salt deposit which was built up during the previous summer period when evaporation is very high.
It is anticipated that in this way the project will not easily salt up as in the1200-1000 BC period.

According to the cuneiform reports, crops in the earlier period also included wheat and barley as winter crops with yields per ha of about 25 to 50 percent higher as at present. Summer crops in 1200 and today both included vegetables. Livestock formed in the 1200 –1000 BC period also an integrated part of the farming system. (Private communication from Dr Dhari Al Hardan Director General GMP.

References: Co-operatives and Marketing in the Greater Mussayib Project.
E.B. Loveridge, R.A .Russell, C.E. van Santen & Mohammed Talib.
Institute of Co-operation and Agricultural Extension. Baghdad 1969.