

Landed property and economic change in Tripolitania

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One of the many problems facing the planners who are formulating the second Libyan national development plan is the improvement of agricultural productivity. It has been suggested by Libyan economists that a major obstacle to development of the agricultural sector is the confused state of land holding. (1) This paper will discuss the present situation regarding land holding and the nature of fragmentation against the background of economic change.

There are three zones of land holding in Tripolitania, corresponding roughly with the three natural regions into which the country is divided according to the incidence of rainfall. The littoral gardens, a series of discontinuous oases running close to the coast, constitute the first and most important region. Here rainfall is greater than 250 millimetres in an average year and water is available for irrigation from a shallow water table. South of the oases, the littoral steppe lands run between the foothills of the interior and the coastal oases, or, in places to the sea itself. Thirdly, there is the open steppe of the arid interior.

1 — Azonni, M.M., and Attiga, A.A., "Analysis of available agricultural data in relation to agricultural production and planning", Technical sub-committee, Draft Five Year Plan, 1962.

In the oasis garden area, most of the land is held under private title at the present day. In the littoral steppe zone private ownership by both individuals and tribal groups is the general rule. Lands of the open steppe are held by the Government of Libya, but over large areas occupation by tribal groups has resulted in the practice of communal land holding. Much of the following discussion will refer to the situation concerning land holding in the first two regions.

In the centuries before the Arab conquest of Libya, that is before the ninth century A.D., economic activity in Tripolitania had been concentrated in the fertile oases and hill areas of the north. All available evidence indicates that the resources of these northern areas supported a prosperous and sedentary society engaged in cereal cultivation and orcharding. (2) The Arab conquerors of the ninth and eleventh centuries laid waste the agricultural areas and assimilated surviving human groups to their nomadic society. (3) Thus at the close of the twelfth century, the oases and steppe were united to form a continuous grazing land held by nomadic herding groups.

Since the migration cycle of the nomadic groups is based upon the availability of pasture in different climatic regions at different times of years, the Arabs introduced a simple recognition of different natural regions into Tripolitania. The oases and hill areas of the north were used as refuges during the long and dry summer and as areas of supplementary cropping for grains and tree crops. The early autumn and spring pastures of the open steppe each gave rise to further regional specialisation. Accordingly, most tribal groups occupied lands lying along a north-south axis beginning in the oases of the north, passing through the littoral steppes, and ending in the open steppe of the south. The broad division of land use zones which emerged from the Arab

2 — Broc, A., "Orcharding in Tripollania", Alfred Broc Ing. E.C.A.T., Farm at Sidi Ben Zid Mission, 1954.

3 — Evans-Pritchard, E.E. "The Sanusi of Cyrenaica", Oxford at the Clarendon Press, 1949.

conquests is reproduced in the present day pattern of land ownership.

During the era which began with the Arab conquests and closed in 1911 with the collapse of effective Turkish rule in Libya, communal ownership of land was associated with annual division of tribal territories among the members of the tribal groups. Every member was allotted a number of parcels of land, each located on one of the various types of land within the tribal boundaries. Each individual's parcels were intended to comprise shares of the differing land use qualities, i.e. grazing land, arable land, orchard or palmery. Annual re-distribution of lands was necessary to take into account variations in the size of the nomadic group and in the pasture needs of each group over time. All male married members of the tribal group had an inalienable claim to a share of the tribal domains as a personal right and not through inheritance of a father's share. Thus any increase or decrease in the number of families was reflected in the annual division of lands. Similarly, flock numbers owned by each family tended to fluctuate widely with variations in herding skill and luck and the uneven incidence of drought conditions throughout the tribal lands. Hence the pasture needs of the individual herding group tended to vary from year to year, often to the degree where the loss of livestock eliminated sections of a tribe from the migration cycle.

The nomadic system and the land holding pattern associated with it was losing much of its vitality by the close of the nineteenth century. Relative peace and order under the Turkish administration had encouraged permanent settlement in the more fertile oases and hill lands of the north. Many tribal fractions, and even whole tribes, had built semi-permanent dwellings in the oases and had undertaken simple land reclamation works. There was a natural tendency for the owners of the constructions to retain the land on which they were built from one year to another. By the close of the nineteenth century, annual re-distribution of oasis lands in the north was no longer practised, although herding activity in the steppes continued.

The trend towards arable farming was encouraged by the Turkish administration. Communal land holding had been officially discouraged since the early years of the sixteenth century, when the Turks had first invaded Libya. Taxation in the subject territories had been scheduled on the basis of the individual rather than the tribe, and the existence of unknown numbers of tribesmen working over vast areas made administration difficult and often impossible. Early in the eighteenth century it was enacted that there was no legal necessity for a man to remain in a system of joint ownership. But declarations of this kind promulgated in the Ottoman capital appear to have had no immediate influence on the Tripolitanian tribal organisation.

In 1858, the formulation of the Ottoman Land Code explicitly forbade joint ownership by tribes or similar groups. These laws could be enforced only in the northern areas of Libya, since the country was on the margins of Turkish military control. It is apparent, however, that the accumulated force of legislation and the action of local officials in Tripolitania had undermined the strictly communal system by the end of the nineteenth century. In the larger oases of the north, particularly in the environs of Tripoli, many individuals had registered their lands with the Turks. In outlying areas such as Misurata, this trend was less marked, but even here some five per cent of owners had registered title to oasis lands.

The trend towards individual ownership of land in the northern areas culminated in the land divisions of Tripolitania mainly in the years 1900 to 1914. Transfer from common to individual ownership was accomplished by the traditional method of dividing the land by its land use quality and distributing a parcel of each kind of land to each family. This is reflected at the present time in the dispersion of farm holdings over wide areas within the tribal lands and the existence of a large number of non-contiguous fragments of land making up one holding. In Zavia Oasis, one farmer holds seventeen parcels of land. (4) In Tripolitania as a

4 — Theodorou, N.T. "Report to the Government of Libya on indigenous and Italian farm enterprises in the Zavia area". F.A.O. Report N°. 259, Rome 1954.

whole, the average holding is made up of nine parcels, with a range from a minimum holding of two parcels to a maximum holding of 44 parcels. (5) In Tripolitania, fragmentation of land was an initial state of existence for farm holdings resulting from the division of land during the evolution of private property from the communal pattern of ownership. At the present time, 64 per cent of the total area of private agricultural holding is owned by the farmer who works it, 33 per cent is held under tribal ownership and three per cent is held under rental. (6)

An interesting effect of this late transition from communal to individual ownership is that land holding retains a relatively egalitarian aspect even today. Throughout Libya farm size varies as follows: —

Area of farm holdings in Libya — by size groups (7)

Hectares	Number	Per cent
Less than one hectare	11,264	8.0
one to ten	53,581	38.6
ten to twenty	27,097	19.4
twenty to fifty	29,282	21.0
more than fifty	18,141	13.0
TOTAL	139,365	100.0

This feature is even more remarkable if oasis land only is taken into account and land in the dry-land steppe eliminated from the totals. In Zavia Oasis, in the west of Tripolitania, the following picture emerges:—

Area of irrigated farm holdings in Zavia — by size groups (8)

5 — Azonni and Attiga, op. cit.

6 — Agricultural Census of Libya, Tripoli 1962.

7 — Ibid.

8 — Theodorou, op. cit.

Hectares	Number	Per cent
Less than one	43	62
1.1 to 2	18	26
2.1 to 33	3	4
3.1 to 4	3	4
4.1 to 5	0	—
5.1 to 10	2	3
10.1 to 15	1	1
TOTAL	70	100

All the farmers interviewed at Zavia owned oasis land and only three men varied substantially from the average level of ownership. All farmers were resident upon their lands, and it is worthy of note that absentee land-lordism was very uncommon in Tripolitania. The use of Mogharsa (9) contracts has become more widespread since that time implying an increase in absentee-landlordism, though of the least pernicious kind.

The reasons for Tripolitania's atypical situation regarding distribution of land amongst rural peoples, particularly vis-a-vis other Arab states of the Maghreb and the Middle East, lie in the peculiar conditions and timing of the sedentarisation process. Sedentarisation took place at the end of a long period of social and economic evolution and was associated with a highly distinctive geographical milieu, that is the fertile oases and hill lands of the north. The division of these lands into individual holdings was achieved by general consent amongst the communal groups and according to traditional practice. It must be emphasised also that this allotment of lands amongst the tribal members took place only half a century ago, and the operation of fragmentation by inheritance, which will be examined in greater detail later, has not been the sole decisive factor.

9 — Mogharsa : a contract under which a farmer may develop, mainly orchard, areas on land owned by another person. The land is normally divided into two equal parts once developed, with the farmer taking one half and the owner the other.

Political factors have been important in hampering the rise of a strong landlord class in Libya. Within the tribal organisation the shaikhs of Tripolitania have rarely assumed unified control in anything but name over the group as a whole. Traditionally, the shaikhs were appointed by the tribal members or had to gain acceptance by the majority of members as a basis for their position as head of the tribe. In theory, and often in practice, the shaikhly hierarchy was responsible only for dealings between one group and another group of the same status. Thus the tribal shaikh represented his tribe to shaikhs of other tribes in times of warfare or at social gatherings. The settled political conditions which prevailed in the nineteenth century along the littoral reduced inter-tribal strife and thereby removed the necessity for the rise of strong and united tribes led by shaikhs.

The limited nature of Turkish military control in Tripolitania during the nineteenth century was reflected in a fluctuating frontier on the geographical margins of the northern areas. Such fluctuations were caused by the rise of strong tribal groups and confederations of tribes in the outlying areas. In order to restrain the power of the tribes in these areas, the Turks were at great pains to limit shaikhly authority by intervention, bribery and refusal to deal with communal groupings. Thus at the time of the sedentarisation in the northern oases and hill lands, the administration in Tripolitania was unwilling to accept registrations of tribal land in the name of the shaikh. Following the edicts of 1858, each member of the tribe was personally responsible for registering his own land, and for political reasons the edicts appear to have been enforced strictly.

Following the Italian occupation of Libya in 1911, the shaikhs assumed a more important role in regional affairs than had been the case under the Turks. In most outlying districts, the colonial administration sought to rule through the shaikhs. The Italians treated the shaikhs as being vested with sole political power in the tribe and with ownership rights to tribal land. This situation was not reflected in any material change in the pattern of ownership for several reasons. In the first place, there were no recorded

registrations of land during this early period of occupation. More important perhaps, Italian policy was soon changed, since the shaikhs led the Tripolitanian revolt against the Italians during the First World War, when Italian forces were driven back into one or two fortified enclaves along the northern coasts. After the pacification of Tripolitania in the early 1920's, the Italian administration undertook a policy aimed at removal of shaikhly influence from all sectors of tribal government. The lands of dissident shaikhs were converted to State domain or sold. By the early 1930's the shaikhs had ceased to be of importance as a land owning group.

The present-day pattern of land ownership in Tripolitania is characterised by a relatively even distribution of land amongst rural peoples for the reasons outlined above. But it has been indicated that the allotment of land amongst tribal members was conducted on traditional practice whereby farm holdings were dispersed over wide areas and often made up of a large number of non-contiguous fragments. Obviously, the division of land according to the practices evolved under a herding economy is going to offer many problems to a society whose major economic interest after land division and sedentarisation is arable farming and orcharding. Before discussing these crucial matters, it will be necessary to examine the nature of the fragmentation of holdings and explain some aspects of terminology.

The following major points arise with respect to fragmentation in Tripolitania. The descriptive word "fragmentation" is used without any generic connotation. The process of parcellement is the division of land holdings into small holdings for inheritance purposes. The process of morcellement will be regarded as the subdivision of each of several parcels constituting a single holding into smaller holdings for inheritance purposes. An example to illustrate the difference between the two processes should clarify the position. If, for example, a farmer had six plots of land making up his agricultural holding from the time of the division of the tribal lands, which he intended to leave to his six sons at his death or at their marriage, he would be faced with two alternatives. Either he would give each of his sons one plot of land — which would be parcellement — or, he would divide each of his

six plots of land into six sections and give each son one section of each of the original plots of land — this would be morcellement.

The operation of Islamic land law in Tripolitania gives rise only to the parcellement process. Morcellement arises from traditional practice originating in the nomadic herding economy. It has been shown that the nomadic groups use annual redistribution of land to accommodate changes in population numbers and flock numbers. In nomadic society, land was allotted to tribal members on its land use quality so that each member had use of various seasonal grazing lands, palmery, arable dry-land and orchard. Land allotments were further fragmented for climatic reasons. The incidence of rainfall in Tripolitania is such that even areas in close proximity receive significantly different amounts of rain in any year. Thus, as an insurance against failure of crops or pasture in one area, nomadic groups would have rights to similar land use areas in different localities. The tribal groups at the time of sedentarisation took these same precepts to the northern oases and hill lands, where, combined with the emergence of individual land ownership and sedentary farming, they have produced the pattern of morcellement which is apparent today.

Here it will be relevant to discuss those elements in Islamic land law which pertain to Tripolitania as they operate in conjunction with local custom. It is usual that the death of a land owner is followed by the break up of his estates. In Islamic law as operated at the present time, a personal estate, no matter how small, may be left to any number of beneficiaries. Generally, the widow has first claim upon some 25 per cent of the total estate usually taken in goods not land, while the residue is normally divided in the ratio of two to one between sons and daughters. In the case of a landowner having neither wife nor progeny, his estate is divided among all relatives having claim upon it. It would be unusual in Tripolitania for there to be one beneficiary of an estate, since primo-geniture is recognised neither by law nor custom. Families are large, averaging from four to six children per family, hence it is unusual for one child to inherit the whole

of his father's property by virtue of being an only child. (10)

The division of a farm holding need not necessarily take place at the death of a land owner. Following nomadic tradition, sons may take their share of land when they marry and move out of the family dwelling. Two important effects result from the original family and assumes ownership of his share of his father's land, so the opportunity for integrated family farming operations is reduced and the new farm is separated physically from the family lands. In the second place, if there are three sons in the family when the marriage of the eldest takes place, then the division is done on the basis of one third of the lands each. But it has happened that after the first or even second son has married, the father's second wife has produced a younger generation who have equal claims upon the estate. Thus, the remaining estate is subject to intense division amongst the rest of the family.

In many, but not all, of the oases of Tripolitania, land inherited by daughter is farmed as an integral part of the family estate until she is married and bears a son. After the birth of a son, the land may become his property. Thus if a female marries outside the tribe the land will then constitute a parcel belonging to a man whose main lands lie in a different area, perhaps many miles away. Where this system operates, it adds to the greater dispersion of lands **property**.

The continuing practice of morcellement in Tripolitania may be accounted for by more practical reasons than social egalitarianism and custom. To understand the factors which underlie the presence of the morcellement process in the modern land owning pattern, it is necessary to take notice of the environmental characteristics of the Tripolitanian oasis and hill lands and the kind of agriculture which prevailed there in the period following sedentarisation of the tribes, that is, post-1911.

The climate of the northern oases and hill lands of Tripolitania is characteristically Mediterranean in type. The area has a mild winter when the greater part of the rainfall is experienced. Spring

10 — Census of Libya 1954, Department of Census and Statistics, Tripoli,

is warmer and drier, and is followed by an intensely hot and dry summer. The arid features of the climate are mitigated to some degree by the availability of sub-surface water supplies at shallow depth which are present throughout the year. In this environment, small areas of land under irrigation can be made to produce a large variety of crops and fruits. The nomadic herding groups took advantage of this situation as they gained interest in sedentary cultivation.

Minifundia farming in the northern littoral of Tripolitania has been a natural response of a subsistence-level community to the possibilities offered by the land resources.

And it is here again that the problem of fragmentation enters directly into the argument, since morcellement allows the division of different types of land so that the broadly-based activity of the self-sufficient minifundia unit may profit from the special value of each land use area. Grazing land is utilised for meat and dairy production, dry land for cereals, irrigated land for vegetables and orchard crops and oasis dryland for palms and olives. Minifundia farming organisation creates pressure upon land in a unique way that is highly localised and discriminatory between varying land types. Real differences in land are appreciable over short distances even in the oases, where transition from sandy loam to loamy sand to exposed hard pan formations brings about declining soil fertility. The situation of wells, the courses of wadis and roads, and the incidence of palms all tend to accentuate these distinctions.

It is most important to bear in mind that the opportunities for employment outside agriculture were limited in the period before 1945. Seasonal and contract work for Arabs with the Italian administration rarely involved change of place or residence or long periods of residence outside the tribal area. Thus, in this period very few of the sedentary peoples of the northern oases and hill lands gave up their farms and moved to the towns.

The area of fertile, well-watered land in Libya is extremely limited, with only 0.62 per cent of the total land utilised for arable and orchard cultivation. (11) In these circumstances, rural peoples

11 — Azonni and Attiga, opus, cit.

held to their lands. As long as the farmer had no scope for employment outside tribal society, and as long as he had to be content with his low standard of living, hard work and low returns were accepted.

It has been shown that there were sound environmental reasons for the continuance of the morcellement process after the sedentarisation of nomadic groups. Where subsistence farming is practised in Tripolitania, it may be expected that fragmentation of landed property will continue on the pattern outlined. There is a tendency amongst present-day administrators to treat the fragmentation problem as one arising from rural conservatism to be cured by legislation. Certainly, experience at Wadi Caam Settlement has shown that it is far from simple to introduce a system of land holding which varies radically from traditional practice.¹² The Arab farmer has exhibited an attachment to land in his ownership and has often preferred the burden of cultivating a number of dismembered fragments of private land than farm a compact area on a tenancy. Even where the advantages of farming single blocks can be demonstrated, as at Wadi Caam, the Arab cultivator has proved slow to adapt to the new situation. Initiative by the administration in legislation and rural education could do much to mitigate the problems arising from fragmentation. But the underlying causes of fragmentation will not be removed until the self-sufficient farm unit has ceased to exist for economic reasons.

Since 1945, and particularly since 1951, there has been an increasing rate of social and economic change in Tripolitania, and increasing commercial and social contact with areas outside Libya. Closely allied with this impact of new ideas, the pattern of rural life has changed greatly in recent years. Exploitation of oil resources has opened a large number of employment opportunities in the towns since 1951 and the urban market for agricultural goods has grown correspondingly greater.

12 — McLachlan, K.S. "The Wadi Caam Project — its social and economic aspects", in "Field Studies in Libya", editors Willmot and Clarke, Research Papers Series No. 4 (1960), University of Durham.

The loss of rural population to the towns has been marked since 1951. As this trend accelerates under planned economic development, it may be expected from experience in comparable areas that pressure on land resources should decline.(13) (14)

The release of pressure upon land in terms of persons per square kilometre of agricultural land does not in itself imply a lessening in the strength of subsistence minifundia organisation. The major force being exerted in Tripolitania upon the self-sufficient unit is urban demand for agricultural products. The rural peasant community is not adjusted to appreciate the scope and variety of demand from the towns, but the urban merchants are in a position to do so, and many of them are sufficiently acquainted with the rural areas to influence production. Commercial production undertaken by the peasant removes the economic *raison d'être* for the self-sufficient basis of the Tripolitanian minifundia unit. The spread of commercial farming and the drift to the towns has permitted the more money-minded and intelligent to consolidate their holdings, a move which has been followed by many farmers in areas adjacent to towns and main lines of communication. Under these conditions, the morcellement process becomes less oppressive and, after some time it is apparent that legal action could introduce land reform to support the trend. In the immediate environs of medium and large towns, however, use of small plots for house construction has had an important reverse effect.(15)

The major effects of morcellement of farm holdings into a number of non-contiguous plots in terms of physical effort, is that every farm operation is multiplied by the number of plots held by the farmer. From the figures in the following table, it is clear that duplication is the minimum multiplication of farm operations affecting most farms.

13 — Beeley, B.W. "The farmer and society in Malta", C.A.R.C., Durham 1959.

14 — Warriner, D., "Land reform and development in the Middle East", 1957.

15 — Allan, J.A. Comments on the selection of field areas on the preparation and completion of field sheets for the land use survey and on the land use patterns which emerge, Paper presented to Libyan University-London University Seminar, Faculty of Arts, Benghazi, February, 1968.

Number of parcels in oasis gardens in Zavia, Homs & Sahel (16-17)

Number of parcels	Percent of farms		Average size of parcels in hectares	
	Homs & Sahel	Zavia Oasis	Homs & Sahel	Zavia Oasis
1	20	6	2.00	2.19
2	10	21	2.80	0.66
3	30	20	2.23	0.24
4	20	19	2.21	0.22
5	10	13	1.00	0.18
6 or more	10	21	0.33	0.24

Only twenty per cent of the farmers at Homs and Sahel and five per cent of the farmers interviewed at Zavia worked only one oasis plot. The figures tend to hide the fact that in Homs and Sahel the number of parcels ranged from one to eight and in Zavia from one to thirteen. The task of moving labour, implements and draught animals from plot to plot is formidable, especially when farming operations have to be carried through within a short space of time. During the former rains of autumn, the sowing of cereals and other dry-land and semi-irrigated crops must be accomplished rapidly to make optimum use of light rainfalls. At these times, the multiplication of operations arising from fragmented holdings is an important obstacle to efficient practice.

In the oasis gardens, the distance between plots of land owned by one particular farmer may not be great. In the Oasis of Zavia, the distance between plots varies from contiguity to half a kilometre.⁽¹⁸⁾ Experience in other areas of Tripolitania is rather different. Dispersion of plots is greater in Misuratino, for example, where one farmer in the District of Homs also owns land in a

16 — Theodorou, *op. cit.* (Sample of 70 farms).

17 — McLachlan, (Sample of 20 farms) quoted in a geographical study of the coastal zone between Homs and Misurata, Tripolitania. A geography of economic growth, Durham University, 1961.

18 — Theodorou, *op. cit.*

bordering district with some five kilometres separating the two areas under cultivation. Considerable distances between plots of land constituting one holding obviously aggravate the problems outlined previously.

The recent spread of commercial agriculture in Tripolitania has been associated with the use of modern systems of water lifting and reticulation for semi-irrigated winter and irrigated summer cropping. The dispersion of landed holdings has proved the greatest obstacle to the use of these modern systems, and in some areas of intense fragmentation has precluded their use. In areas of fragmented holdings, irrigation is wasteful and expensive, since the well owned by a farmer is rarely situated centrally to his parcels of land. In practice, most commercial farmers faced with this problem use that well on their lands which is best suited to continuous extraction of water by means of motor pumps. From the well-head, water must be led to each of the irrigable plots of land by means of roughly constructed channels which often pass over pathways, cross sandy palmeries and skirt other farmers' fields. Quite apart from the cost of constructing and maintaining water channels, the system is physically inefficient. Losses of water through evaporation, seepage and theft along the courses of the channels lead to an average water loss of about 50 per cent of the water leaving the well-head. Thus, the arguments for consolidation of holdings are gaining general currency amongst commercial farmers, most of whom face these problems.

A distinct field pattern has evolved in association with the practice of morcellement in Tripolitania. The attempt to share parcels of land on a basis of equal surface area and quality has led to a haphazard field shape emerging in the rural landscape. The present pattern of field boundaries in the Sahel el-Ahamed illustrates the range of shapes which have resulted from the morcellement process (see Figure 1).

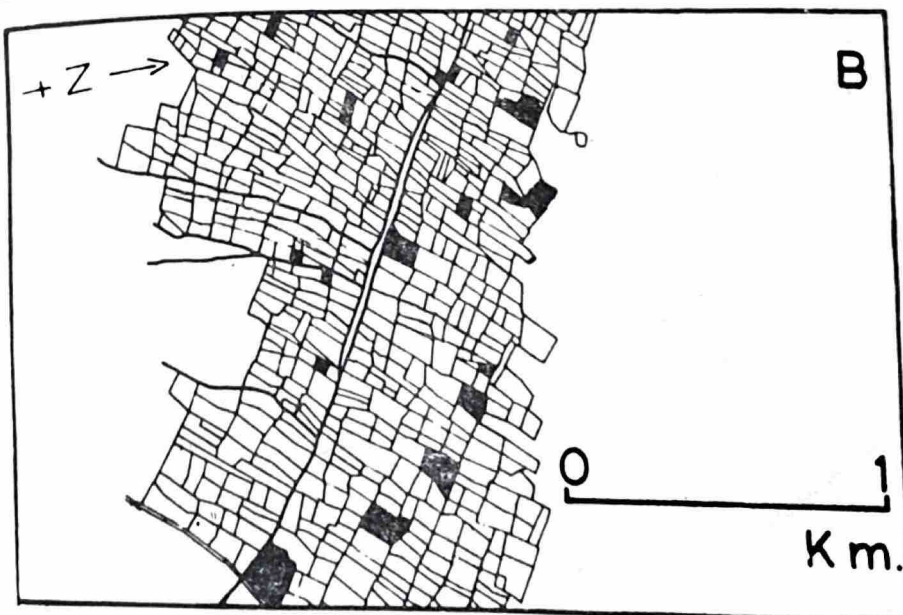
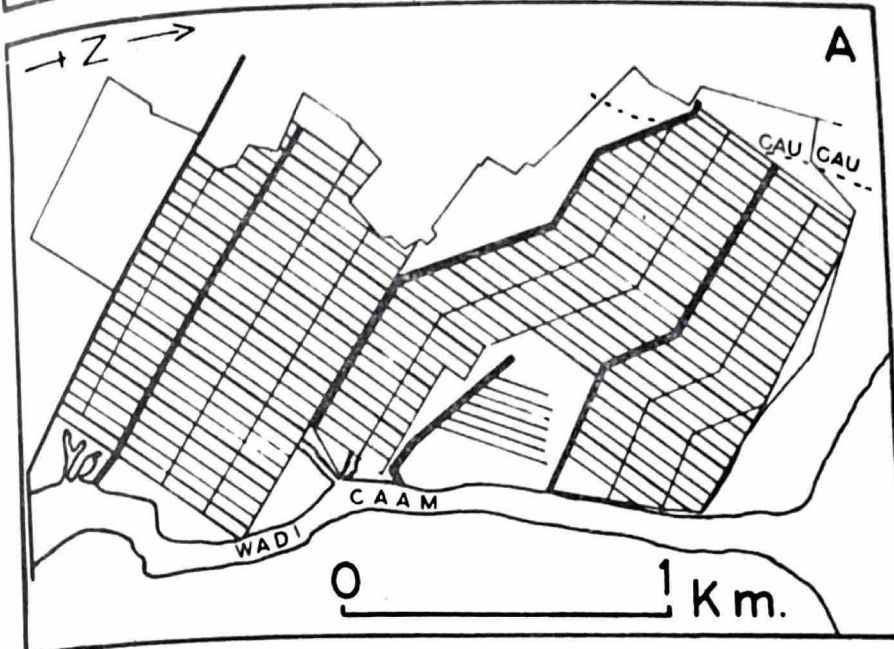
One problem arising from the pattern of field boundaries is that access has to be provided to each separate plot of land. In many oases of northern Tripolitania, a large proportion of valuable land is given over to paths and tracks. Further problems are the

extended lines of irrigation channels which become necessary to transfer water from well-head to non-adjacent fields along all intervening boundary walls. All in all, narrow and irregular strips of land tend to aggravate the problems already noted concerning fragmentation and the maintenance of old techniques.

It will be apparent from this discussion that the agricultural landscape is undergoing a gradual change in terms of field size, field shape and the configuration of farm holdings. In the course of the last fifty years, land holding has moved from the communal to the individual owner. In this process, steppe mores and the character of the physical environment served to produce a self-sufficient farming economy based on a highly developed sense of differences in land quality, expressed through the practice of morcellement.

Knowledge of modern agricultural methods has spread amongst the Arab farmers since 1951. Field extension work by government and other organisations such as the Food and Agricultural Organisation has augmented the impact of commercial, urban pressure on the agrarian economy. Furthermore, opportunities for employment outside the agricultural sector have become more numerous since the beginning of intensive development of oil resources. The spread of commercial agriculture and increasing opportunities for urban employment have had an impact upon the nature of land holdings in Tripolitania, and it seems likely that the worst features of morcellement will disappear in the future. Nonetheless, the dispersion of land holdings and the established effects of the morcellement practice represent an obstacle against which the introduction of modern techniques of production will have to bear heavily.

GROUND PLAN
 A - WADI CAAM PROJECT
 B - OASIS GARDENS



- Waste land
- = Wadi
- Field boundary
- Road
- Irrigation canal