



CHAPTER XI

SHATANOUF PLANNING UNIT AND CENTRE

a. The Proposed Planning Unit

Before examining the country town of Shatanouf as a rural settlement we should examine first the planning unit of which it is the central town (see map no.39)

Shatanouf planning unit comprises, besides Shatanouf, the following villages:-

- 1. Kafr Mansour of 2102 inhabitants, and Ezbet Faigy of 110 inhabitants
- 2. Shi'sha' of 2200 inhabitants
- 3. Sarawa of 3249 inhabitants, with Ezbet Isa Zaid of 140, Ezbet El-Basta of 11, and Kafr Sarawa of 1615 inhabitants.

This with the country town of Shatanouf of 5433 inhabitants, bring the total population of the planning unit to 14,860 which is very close to the figure of 15,000 suggested as an appropriate population to be served by a Collective Centre and sufficient to justify the establishment of a rural industrial unit. There are however, two small settlements (Marya El-Gidy and El-Helwas) which are so close to the boundaries of the villages included in the Shatanouf unit that it would be logical to add them to this unit and this would raise the total population of the Shatanouf<sup>Unit</sup> to 17,208 persons.

The limits of the unit are determined by the Rossetta branch of the Nile and the village boundary of Darawa to the south, the Damietta branch of the Nile to the East. On the west and north the limits are determined by the boundaries of adjoining existing villages apart from the alteration referred to in the last paragraph. This area which is generally flat is the highest in the Ashmoun district.

The soil in this area varies between clay loam in the north and south, loam to the east and about the centre, and sandy loam along the Rossetta and Damietta branches. The last type form the 'Gezira' land in the south of the villages of Shatanouf and Sarawa. This is the land which lies between the river branch and the high cultivated land. It is cultivated once a year as it is flooded during

the months of August, September, and October during the flood season.

Through this area runs the main irrigation canal, El-Rayah El-Menufi, from south to north. The artesian water belts stretch to the east along the Damietta branch and to the south along the Rosetta branch. The area is served by a network of irrigation canals and drains.

The railway which serves the district of Ashmoun runs through the area with a station at Shatanouf, together with the main road along the water way of El-Rayah El-Menufi. In addition there are other roads and foot paths as shown on the map.

The area, as already mentioned, is served by three elementary schools in Shatanouf and one in each of the settlements of Kafr Mansur, Shi'sha' and Sarawa. Both Shatanouf and Shi'sha' have water works and a health centre. In addition there is a Collective Centre at Shatanouf.

These features are shown on the survey maps of the Ashmoun District.

#### Relationship between Settlements

What concerns us most in this chapter is the relationship between the different settlements of the Unit and the factors which determine this relationship. We find that the five large settlements lie on a line starting from Sarawa on the north east, and joining Kafr Sarawa, Shatanouf, Shi'sha' and Kafr Mansur at the south west end. Most of the hamlets (ezbas) are situated on the main canal of Rayah El-Menufi. The hamlets are owned by large land-owners whose ancestors determined their sites with regard to the main road which runs along the main canal south to the Barrage town and Cairo.

The main canal (El-Rayah El-Menufi) serves the area but it also separates the settlements to the east from those of the west, notably from the country town of Shatanouf. In fact, the people of Sarawa find it easier to do their selling and buying in the Sunday market of El-Ninaiya to the north because of the easier access to it. This fact puts Saraw village in an awkward position between El-Ninaiya for marketing and the country town of Shatanouf for its public services. A bridge over the canal would solve this problem. The same thing happens with regard to the villages of El-Hilwasi and Manyal Guweida which are connected to Shatanouf for marketing and to Kafr Quras, the centre of the northern planning



unit which they belong to for public services as well as for marketing. These facts and others concerning land ownerships and village boundaries call for a definition of the northern boundaries of the planning unit so as to include the two villages of El-Hilwasi and Manyal Guweida although their cultivated lands could continue as at present, to lie within the boundaries of the northern planning unit of Kafr Quras.

Direct access between the different large villages and the Unit centre of Shatanouf is not good at present and should be improved. The fellah can easily find his way along the field boundaries and the irrigation channels to any destination he desires; but this facility will, to a great extent vanish if land consolidation takes place, or the co-operative farming system is adopted.

It is now necessary to give a brief account of each settlement separately and its relation to the other members of the planning unit.

#### a. Shatanouf

Shatanouf, which is described at greater length later in this chapter, has a population of 5474 and is to be considered as the centre of the new planning unit, has to change its constitution from that of a large village to a central village or a country town as has been discussed before.

In Shatanouf 91% of the population own holdings of areas less than 5 feddans, 61% own holdings of areas between 5 and 20 feddans and 2.5% own holdings of areas more than 20 acres while nobody owns holdings of 200 feddans or more.

#### b. Sarawa and Kafr-Sarawa

Although the two settlements are under one village administration unit based on Sarawa they are nevertheless two separate settlements. They are separated by a distance of over one kilometre. It is only in isolated cases that we find this division or combination of settlements in the Nile Delta. Normally each village unit comprises only one village and a few isolated hamlets.

The two settlements are under one village administrative unit and have an area of 1185.6 feddans with a density of 3.71 persons per feddan. The total population of the two settlements and two hamlets is 9015 inhabitants, 3249 of them in Sarawa and 1615 in Kafr-Sarawa. The total number of families is 1020

with an average size of 5 persons in the family. Nearly  $\frac{1}{4}$  of the total land of the area comes under 'gezira' land or land at the river-sill with basin irrigation. The total cultivated land is divided into 14 hods of varying areas between 70 and 100 feddans. This area is delimited by the Rayah El-Menufi canal on the west, the Rosetta branch on the east, El-Ninaiya village boundary on the north, and Darawa village boundary on the south.

While Sarawa village stands in the middle of the fields with access to the main road along the Darawa canal to the east and to Rayah El-Menufi canal to the west, there is no direct access between the two settlements. Kafr-Sarawa, on the other hand, is situated very near to the Rayah El-Menufi canal, with the railway running just south of it but without a station. Foot paths are to be found along the boundaries of the different hods (land divisions) and along the small channels and distributors.

The two settlements have the same fortress type of plan and each is suffering from the same and usual defects of the Egyptian village.

In the two villages 92% of the population own holdings of less than 5 feddans 5% own holdings of areas between 5 and 20 feddans, 3% own holdings of areas more than 20 feddans, while nobody owns holdings of 200 feddans or more.

#### c. Shi'sha'

Shi'sha' is about one kilometre south-west of Shatanouf and is surrounded by a number of irrigation canals; Ashmoun El-Mustagidda and El-Naggar to the south, Sabal canal to the east running northwards, and Gannabiet Shi'sha' canal to the west also running northward. As the banks of the canals provide roads in the area, Shi'sha' is served by a system of roads along these canals. The main roads are those which run along the El-Naggar canal to the west and that running along Ashmoun - El-Mustagidda canal almost parallel to the Rosetta branch. The village itself is separated from this branch by about a kilometre of a stretch of 'gezira' land. Shi'sha' still has no direct access road to Shatanouf.

The area of Shi'sha's land is about 748.8 feddans, one third of which is a 'gezira' land. The major part of the land is divided into 6 hods. The total population of the village is 2200 inhabitants of 393 families with an average of 6 persons per family at a density of 2.88 persons per feddan.



The village has a typical fortress circular plan having its natural growth to the north. It is striking to notice that the village lies on the border of the land of Shatanouf due to the natural separation by three canals. Shi'sha's school itself lies within the boundaries of Shatanouf, and people from Shi'sha' also work within the boundaries of Shatanouf village.

The village enjoys more services than others of its size as can be seen from the public service map of Ashmoun.

In Shi'sha' 88.5% of the population own holdings of areas less than 5 feddans, 10% own holdings of areas between 5 and 20 feddans, and 1.5% own holdings of areas more than 20 feddans while no-one owns more than 200 feddans.

#### d. Kafr Mansur

Kafr Mansur, is about one and a half kilometres west of Shi'sha'. The village lies between El-Naggar canal to the north and the Ashmoun El-Mustagidda canal to the south. The village consequently benefits from the roads which run along these canals. Two main roads are linked with a third which runs through the village giving it the roadside type of plan. To the north there is the hamlet of Ezbet M. Faidi; although separated from Shi'sha' by the El-Naggar canal it still is an integral part of the village as far as public services and commerce are concerned. To the south there is another stretch of 'gezira' land.

The area of the village's land is about 457.6 feddans. The total population of the village is 2212 inhabitants of 386 families of 6 persons per family, a density of 4.83 persons per feddan. The village land is divided into 7 'hods'.

In Kafr-Mansur 91% of the population own holdings of areas less than 5 feddans, 6.5% own holdings between 5 and 20 feddans, and 2.5% own holdings of areas more than 20 feddans, while nobody owns holdings of 200 feddans or more.

## b. THE UNIT CENTRE

After getting a general picture of the district or Markaz it is now time to consider the rural settlement itself and, for this purpose, the country town of Shatanouf is examined.

Shatanouf is a rural settlement of 5021 persons and has the main characteristics of the Nile Delta country town. The main feature which distinguishes it is its physical setting with the Gannabiet-Shatanouf canal dividing it into two parts (Shatanouf to the west and Kafre-Shatanouf to the east), united by a common centre disposed on both sides of the canal and giving the place a somewhat more defined visual urban character than other Delta settlements of comparable population size. Otherwise, it does not differ much from any other village or country town in the Delta. It is suffering from the same ills from which its four thousand fellow villages are suffering.

### Situation

With a total area of a little less than nine square kilometres the Shatanouf 'village' unit lies in the extreme south of Markaz Ashmoun about 25 kilometres north of Caiss, with the Rosetta branch to the south and the Damietta Branch running parallel to its eastern boundary at a distance of over two kilometres to the east. Shatanouf occupies some of the highest land in Ashmoun and is surrounded by six other villages, three to the east and three to the west.

The 'village' is an administrative unit including in addition to Shatanouf (the country town) four 'ezbas' or hamlets. These are:-

1. Ezbet M. Farid of 107 inhabitants (47 male and 60 female)
2. Ezbet Eddaker of 50 inhabitants (25 male and 25 female)
3. Ezbet Hassan Yousef of 42 inhabitants (20 male and 22 female)
4. Ezbet Zaki Yousef of 208 inhabitants (102 male and 106 female)

and one isolated ~~farm~~ <sup>farm</sup>-house also classified officially as an 'ezbet'.



### Physical History

Shatanouf is situated on the oldest part of the Delta. Like most other Egyptian villages there are no traces or evidence to give a historical account of its background. It is only its situation which indicates that, <sup>it</sup> is one of the oldest rural settlements in the Delta. On the map of the world drawn by El-Sherif El-Idrisi, who died in 560 H. (viz 1150 A.D.) Shatanouf was then called Shantub.

An archaeologist whom the author consulted, <sup>(1)</sup> said that the village's name may have originated from an ancient Egyptian word, Shat-nafer, which means 'lake side'. This indicates that the village might have been situated on a lake side or on the edge of the marshes which used to cover a great area of the Delta in its earliest stages of formation.

### Morphology:

The main feature one can see from the air is the division of the village into two parts by the canal which runs from south to north, and which have been given different names, the western part being called Shatanouf and the smaller eastern part Kafre-Shatanouf. <sup>(2)</sup> (See figure no. 25)

The compact plan of the village is typical of that of the Egyptian village, with its tightly built-up area and confused pattern of narrow streets and lanes. (See map no. 40)

The village stands in the centre of the square shape which the roads and canals form. The plan in general is that of the road or canal-side type of village, with most of the shops and cafés situated along the two main streets on both sides of the canal.

The directions of the growth of the plan are clearly shown to be north and southwards along the canal's sides. The main growth is directed to the north, (see map no. 41) This direction is affected by the following factors:-

- a. The attraction of the refreshing northern breeze.
- b. The existence of the railway station in the north.

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(1) Dr. Agfour, Faculty of Arts - Alexandria University.

(2) The term 'Kafr' is sometimes used as a quarter or district.





FIG. 25

SHATANOUF





# SHATANOUF

scale 1:5000



## LAND USES

100 mts. 0

200

400

600

MAP NO. 40

### KEY

- |                   |                     |                     |
|-------------------|---------------------|---------------------|
| Public buildings  | Market place        | Orchards            |
| Residential areas | Cemeteries (moslim) | Fields PS: Police S |
| Shops             | Cemeteries (copts)  | Open spaces         |
| w: water work     | sch: school         | fm: flour mill      |
| m: mosque         | ch: church          | vh: village hall    |



# SHATANOUF




scale 1:5000



## GROWTH OF PLAN

100 mls. 0 200 400 600 800

### KEY

-  The village core before 1922
-  Extension between 1922 & 1932
-  Extension between 1932 & 1955

حصن ملك الحويدي

# SHATANOUF

scale 1:5000

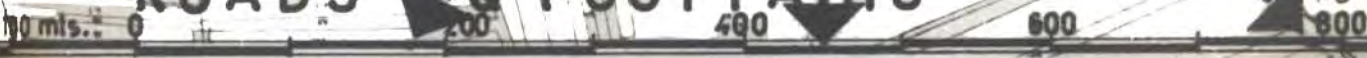




حصن ماهر الساحة والملك من ١٠

حصن مهران الحويدي من ١٦

حصن زيادة القصب من ١٥

## ROADS & FOOT PATHS



- KEY**
-  Ring road & other roads
  -  Footpaths



- c. The direction of the canal which is the main source of rural life.
- d. The existence of most of the village institutions in the northern part. These are the police stations, the 'shouna'<sup>(1)</sup>, the social centre and the flour mill.

### Communications

The village is served by the railway which runs between Cairo and Tanta via Kenouf and Shebin-el-Koam. This is the only railway in the whole Markaz. The railway station of Shatanouf,<sup>(2)</sup> serves about nine villages besides Shatanouf itself. There are nine trains which stop at this village, coming from Cairo to Tanta daily. Eight trains run from Tanta to Cairo daily and all trains stop at Shatanouf.

The village is also situated between three roads; one to the east running from south to north, another to the west running in the same direction and the third to the south running from east to west. The village is almost equidistant by about one kilometre from all three roads. It is about two kilometres from the Dametta Branch of the Nile and about one and a half kilometres from the Rosetta Branch. (See map no. 34) The village is also at a distance of a little more than one kilometre from Rayah-el-Memufi which<sup>is</sup> the third water way in the area.

Road conditions and bus services have already been<sup>mentioned</sup> in the study of Markaz Ashmoun. Bus routes are very few and the services are irregular. Due to the flatness and the open nature of the country side, the roads run<sup>- each.</sup> direction without encountering any serious obstacles or sharp bends.

Other means of communication consist of eight donkey and camel tracks which carry the bulk of the goods transport. (See map no. 42)

### Landscape

It is also noticeable that the pattern of the holdings is divided into plots creating a spider's web pattern around the village. (See figl 25)

The village looks like an 'organic' pattern lying on a flat green surface divided into tiny rectangles varying slightly in colour according to the different

(1) An open space with few sheds used as a storage place of agricultural products  
(See fig. 31)

(2) See fig. 28.

crops they hold. The whole area is dotted with tree-groves especially around the village buildings and along the roads, the tracks and the canal side.

A brownish-grey colour dominates the village buildings relieved only by occasional white washed buildings dotted here and there.

### Soil Types

There are three kinds of soil in the village vicinity. Pure clay in the north west changing to clay loam and then to loam and then clay loam in the south east, except for a small part in the south-west of the area which contains sand loam. The soil is of high fertility and contains a very low proportion of soluble salt.

### Land Utilization

The land is almost wholly given over to agriculture<sup>(1)</sup>, every available square inch being cultivated. This is one of the main reasons why the village plan is so compact. The land is the main source of livelihood for the whole nation, and so it should be carefully conserved.

The total cultivated area is about 1815 feddans, but as a result of the rotation system the actual cropped area amounts to about 3043 feddans. The total ~~cultivated~~ cultivated lands amount to 245 feddans which means 11.2% of the whole area. (See appendix. This area at present includes 40 feddans of built up area, plus 5 feddans given to the collective Unit. (See appendix No. 14)

The general productivity of the village unit is the highest in the Markaz and one of the highest in the whole country. The annual rent value for the year 1950 - 51 was about ££ 30 to ££ 40 per feddan.

From the cultivated land there are more than 190 feddans under orchard, but of the total area of 183034 feddans of cultivated land, a little more than 190 feddans are under orchards and include sixteen feddans of orange trees, five feddans of mangoe trees and ten feddans of guava trees, the rest being given over to other fruit trees.

The cattle-breeding industry is very small in the village. The live-stock in the area is kept for helping the farmers in their work, ploughing, irrigation and

(1) The area of the village and the 'ezbas' buildings plus the road and canal areas reduce the cultivated area to 88.0% i.e. 11.2% of the whole area is cultivated.



transport. In the village and the five large farms there are: 520 cattle, 200 donkeys, 44 camels, mules and horses, and 350 sheep and goats.

### General Internal Characteristics

Inside the village all is dust and disorder. There is no plan or system and not a single straight line. The alleys, strewn with dung and rubbish are extremely narrow being about 6 ft. wide. However, in some places they widen to about 20 ft in such places as the school, the 'Omda' house and in the business quarter which contains the shops and cafes. (See fig 26 and fig. 27)

Here and there one finds a small open space where some trees grow. These places are convenient for the activities of the mat-makers, shoe-makers and the copper pot polishers who come to the village every month or two. Itinerant vendors ply their trades up and down the tortuous village lanes, uttering their characteristic cries. Other open spaces take the form of 'gorns' which are threshing floors belonging to the different clans of the village.

The village activities concentrate along the canal sides where most of the shops and cafes are situated. To the north there is the cheerful sight of the Collective Centre and the new houses built near it which give hope for the future of the rural areas in the whole country. (See fig. 29)

The mosques and the church are the main public buildings around which the social life of the villagers concentrates.

### Cemeteries and Ponds

One of the main features of the old village plan were the cemeteries inside the built-up area sited near the graves of the holy men of the village - an echo of the old tradition of the Ancient Egyptians who used to bury their dead near their houses. But this feature in the village plan has disappeared by choosing sites outside the built up area for the cemeteries. In 1947 the Government ordered the removal of all cemeteries from inside the villages to places outside it. The bones of the dead were carefully removed to the new sites. Inside the built-up area of Shatanouf were seven cemeteries all for Moslems. At present there are five cemeteries for Moslems and two for Copts all situated outside the built up area to the south, southwest and southeast. Sites for cemeteries are chosen on the higher lands or where the soil is dry and more than usually sandy.

SHATANOUF



W. Shatanouf  
canal



Water tower  
&  
washing places



Washing up  
in the canal





The great mosque of Shatnouf



New houses for C.U. officials

IN SHATANOUF



A square in  
Shatanouf

In Shatanouf there were once four ponds but now all have been filled in and most of their sites added to the built-up area. Since 1945 this has been common practice in all the villages of the Nile Delta.

### Housing

The housing conditions in Shatanouf are appalling apart from some few houses owned by well-to-do landlords. The social welfare officer of the village carried out a social survey covering housing in 1951. From his survey the following results have been obtained:-

1. Of the 900 houses in the village, he was only able to inspect 256 houses<sup>(1)</sup>  
Of the total inspected 254 (99%) were built of mud bricks, In 249 cases (97%) the floors were of beaten earth, one house (0.4%) had a wooden floor and six (2.4%) had concrete floors.  
  
In twenty three cases (9.2%) the roofs were made of reed and timber, thirty-three (13.2%) wholly of wood and mere reed and wood for the rest (87.6%)
2. Twelve houses, (4.8%) consisted of one room only. Though three to four rooms were common, some houses had up to ten rooms (about 15% of the houses had more than four rooms)<sup>(2)</sup>
3. Few cases of crop and fuel stores were recorded. These can be neglected for as one farmer stated, 'These days we have nothing to store'.
4. Only in five cases (2%) was a bed to be found. A mere straw mat was the common 'bed'. In 100 cases (40%) sanitary amenities were recorded.
5. Most of the houses were owner-occupied, there being only 22(8.8%) occupied by a tenant.

Although the data collected was not complete, it certainly gives a general picture of a state which is very similar to that recorded in the case of Sangerg (Menoufiya), another village on which social research was carried out by the Rehabilitation Department of the Ministry of Social Affairs.

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(1) This was because of non-co-operation or absence of their inhabitants.

(2) In the whole village there are about 3,000 rooms, with an average of 3.3 rooms per house - General Census 1947.



The survey produced the following facts:-

1. 3% of the houses are adequate or could be repaired
2. 97% of the houses are not adequate for human habitation and should be rebuilt.

### Public Buildings

Most of the main clans living in Shatanouf has tended to occupy its own quarters in the village. There are five such main clans - four being of the Muslim faith (the clans of El-Shahaina in Kafr Shatanouf and El-Zakaina, El-Shawahna and El-Bhadira in Shatanouf) and one of the Christian Coptic belief (El-Nasara) (see p. no. 43). Each clan has its own place of worship comprising two main mosques and two smaller ones known as 'Zawiya' whilst the Copts have their own church. Furthermore, each main clan has its own village hall.

There is a main social centre or club serving the whole area, also a health centre and a clinic. The administrative and public service buildings comprise a 'shar' or mayor's residence, and adjoining it is the post, telegraph and telephone office. In the northern sector are the police station also the railway station and the station master's house. Also in the north is the 'shona' or public square area whilst the market and market buildings lie to the south (See figs 28 and 29.)

There is, on the north, on the opposite bank of the canal to the social centre a Collective Unit on a site of 5 feddans and comprising a school and experimental fields, a meeting hall, a small hospital of 15 beds, an animal dispensary and dairy production centre. (See figs 28 and 29.)

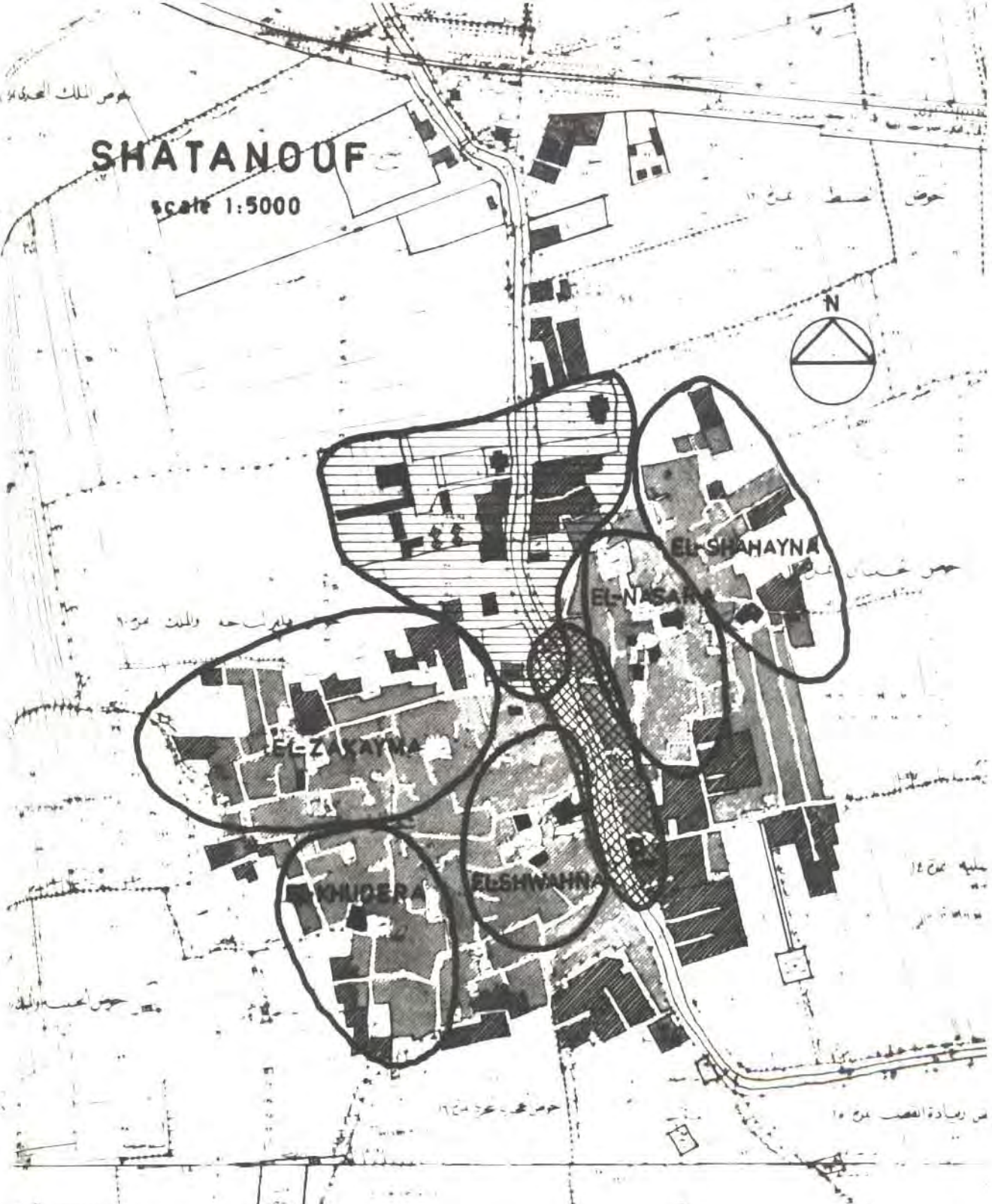
A public baths and wash-house adjoins the water tower just south of the Collective Unit (See fig 26.)

These buildings are either adequate or require some repairs, but all of them are serving their function properly. In any new plan, these buildings would have to be preserved, not only because they are adequate, but because rebuilding them would be very expensive. These are the buildings which would be responsible for retaining some of the existing character of the village.

*These buildings are adequate for their function except that of the*

# SHATANOUF

Scale 1:5000



## SOCIAL STRUCTURE

0 200 400 600 800

- KEY
-  Commercial centre
  -  Administrative & Civic centre
  -  Clans & Quarters





The Railway Station



The Agricultural Co-op. Society



IN SHATANOUF

The C.U. school



The C.U. clinic



Inside the Collective Unit

IN SHATANOUF



The way to the  
Collective Unit



Collective Centre. They should be removed from the inside of the village to the outside along side their experimental fields. This would also effect a physical and psychological separation between the school child and his home, a desired separation which at present encourages the child to leave the present schools as soon as he possibly can.

#### Shopping Centre

There are more than fifty shops in the village, half of this number is concentrated on both sides of the canal. These include most of the cafes and shops selling cloth, fruit, grain and meat. The Co-operative Society building also forms part of this group, (See fig. 26) The rest are scattered all around the village, serving the different clans and districts. (See map no. 40) Most of these are grocers and are just sufficient to satisfy day-to-day needs of the village community. It should be mentioned here that the Fellah's bread is homemade, and his green-grocery comes from his own field.

Clothing, hardware, fish and meat can be bought from the village market which is held every Saturday. Few people go to Ashmoun (The town) or to Cairo for this purpose.

The Co-operative Society stores play an important part in helping the Fellahs to buy their goods at reduced prices. As well as grocery and grain, it sells also clothing hardware and a limited variety of medicines.

Most of the shops are part of the shopkeeper's houses and their hygienic conditions are often very poor.

#### The Market and the Economy of the Centre

Shatanouf's market which is held every Saturday attracts sellers and buyers from about ten neighbouring villages and 'ezbas' (See fig. 32) Shatanouf itself lies in the sphere of influence of the Barrage Town's market which is held every Wednesday (See map no. 35).

The site of the market place does not give the village any special economic or commercial character. Few members of the village community have taken advantage of the opportunity which the market offers to develop local industries and handicrafts. The majority of the inhabitants are farmers using the market as a



A 'tomb' or 'house'



A plough



IN SHATANQIU

A 'tomb' or 'house'





A general view of the Collective Unit



Shatanouf slums

IN SHATANOUF



The 'shona'

IN SHATANOUF



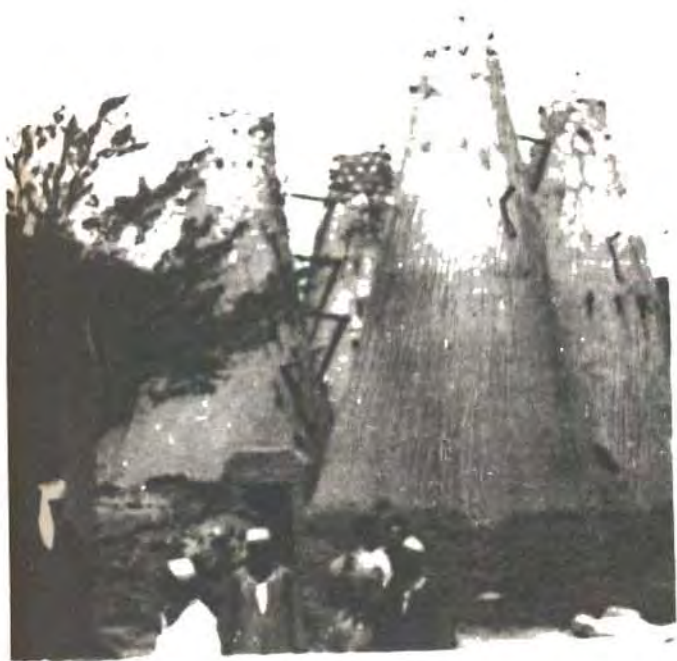
New pigeon tower  
in the C. Unit



In Shatanouf market



In Shatanouf market



Old pigeon tower



In Shatanouf market



place for selling their agricultural produce and buying their basic needs of living, (clothing, kereesen, meat, fish, hardware, grain and sometimes cattle and sheep).

The site of the market place is always chosen with regard to ease of access by the different ways of communications. It is always situated in a central position between a group of villages and at the same time near one of them as in the case of Shatanouf. The market place is owned by the local Authorities who charge 2 P.T. from anyone who wishes to sell his goods.

The market place is usually a place of exhibiting different crafts and trades. We find the shoemaker beside the blacksmith and the tattoo-artist beside the butcher, and the market place provides the village with a fair measure of entertainment.

The Market day is an important occasion in the life of the village community from either the social or the economic point of view.

### Public Services

#### 1. Water

The main source of water is the canal which runs through the village. Although there is a big water-works in the village and small pumps here and there, the Pellaheen usually find it more convenient to dip their jars and pots in the canal water. (See fig. 26) The canal side is attractive as a washing place for the women, where they meet, chat and watch their children washing themselves or swimming in the canal.

To lessen the effect of these bad and unhygienic conditions there should be a public washing place in every district in the village, getting its water from the central water works. Small swimming pools might be built as near as possible to the washing places to attract the children in summer time and to be under the supervision of their mothers. Where the canal runs through the village it might be advisable to separate it physically from the village by means of a masonry parapet or wall along its banks on both sides.

### b. Sewage Disposal

Only a few buildings are served by water closets discharging into septic tanks. About 9% of the houses have borehole latrines whilst the remainder rely on earth closets and even more primitive means. Some public conveniences for men only are also available at the mosques, but these are in a very insanitary condition and call for immediate attention.

Dr. M.M. Agamieh in his research on the 'Rehabilitation of the sanitary conditions in an Egyptian village' (Kom Bera in the province of Giza) recommended the establishment of borehole latrines in every house in the village. (1) He concluded that chemicals should be used to reduce the high population of insects. This may cost 50 P.T. (ten shillings) per capita per year. He estimated the total expenditure at 74 P.T. (fifteen shillings) per capita per year.

### c. Electricity

Apart from the Collective Centre which has its own electric generator the rest of Shatanouf has no electric lighting or power. Street, houses and public buildings are lit by kerosene lamps. However, it is hoped that Shatanouf will be one of the first villages to benefit from the rural electrification scheme in the near future.

### Recreation

The Social Centre provides the village with playgrounds for football and basket-ball. Indoor games take place in the social centre building.

The 'gorns' (threshing places) when not actually in use are attractive playgrounds for children of the different clans or districts especially on moonlight nights. This is another feature of community life in the village, children of every clan or district have their own activities. They sometimes compete with children from other districts.

The Social Centre arranges football matches with the neighbouring villages whenever this is possible.

The Wallah knows little of the cinema or theatre except that once a year the



Department of Health Guidance shows films in the village. Also the 'People's Theatre' Company gives one of its performances or plays in the village once every year or so. A story-teller might visit the village once or twice a year to entertain the Fellaheen in one of the village halls. The fellah might visit the cinema in a nearby town or village once a year if he has been able to save the equivalent of ten shillings.

The Fellah is meticulous in his observance of religious ritual and offers his prayers five times a day in the mosque or at a praying place on the edge of an irrigation channel which is called a 'massalia'. The Fellah is prepared to travel many miles to attend celebrations on the occasion of the birthday of a dead holy 'shikh', and then returns home laden with 'baraka' (holiness) and religious gifts.

### c. POPULATION

There has been a steady increase in the population of the Shatanouf area, its population reaching 5433 persons in 1947 but the rate of increase is gradually slowing down. The area of the land never increases. The result is a high pressure on the land which is about 2.6 persons per feddan on the gross area of the village. The pressure over the cultivated land is 3.8 persons per feddan (available for small holders) In addition, there is an excess of labour of about 55 persons in the whole village. This is calculated on the basis of four labour units. This excess of labour might be cured in the following ways :-

1. Emigration to places where new land is, or is to be, reclaimed. The nearest to Shatanouf is the new province in the west of the Delta (The Liberation Province) where 15,000 feddans have been already reclaimed.
2. Increasing and improving local industries.
3. The gradual introduction of partial mechanization in agriculture so that the farmer would not depend on his children as cheap labour and consequently lead to a lessening of the demand for children which would probably result in a reduction in the birth-rate.

In 1947, the population of Shatanouf itself was 5,021 , of which 2,501 were male and 2,520 female. The total built-up area of 45 feddans gives a density of 118 persons per feddan.

The population in 1957 is expected to be about 5,230 and in 1977 it is expected to about 5,440 if we neglect the factor of emigration which is likely to reduce this increase to a certain extent. At the present time there are 900 houses in the village inhabited by 1,300 families of an average size of 4 persons, i.e. 1.45 families per house. This is a prominent feature in the Fellah's social life and the rural habitat. The number of rooms in the village amounts to 3,037, i.e. there are 1.8 persons per room, which in itself is not an unreasonable average figure.



The population structure according to age and sex is shown in the following table and also as a pyramid diagram in Fig. 33.

Table 51 Population: Sex and Age Groups in Shatanouf.

| Age     | Male | Female | Total |
|---------|------|--------|-------|
| 0 - 5   | 401  | 397    | 798   |
| 5 - 9   | 377  | 318    | 695   |
| 10 - 14 | 377  | 290    | 627   |
| 15 - 19 | 236  | 230    | 466   |
| 20 - 24 | 165  | 225    | 390   |
| 25 - 29 | 182  | 216    | 398   |
| 30 - 39 | 381  | 413    | 794   |
| 40 - 49 | 279  | 276    | 555   |
| 50 - 59 | 174  | 168    | 342   |
| Over 60 | 173  | 186    | 359   |

From the following table, showing marital status of persons over the age of 16 years, it will be seen that only 13.2% are single persons and there is consequently a very high proportion of married people.

Table 52 Marital Status in Ashmoun. 1947

| Case     | Male | Female | Total |
|----------|------|--------|-------|
| Single   | 317  | 119    | 436   |
| Married  | 1153 | 1209   | 2362  |
| Divorced | 53   | 34     | 67    |
| Widowers | 39   | 310    | 349   |
| Total    | 1542 | 1672   | 3214  |

From these figures it will be seen that the population is a relatively young one, 62.2% being under the age of 30 years.

#### Occupational Structure

The table (No. 55) illustrating the different occupations of the population shows, as one would expect, that the majority of the people are occupied in agriculture. They were born and grew up in the village, the same as their fathers,

grand-fathers and great-grandfathers did before them. They were born on the village's soil and grew up with in in their work, in their homes, in their food and in their way of life. No outsiders have ever dared to change them. They have been raised with and by nature.

There is, of course, quite a number of people, as there is in any sizeable settlement in the world who provide the different services needed for the livelihood of the community, from trade or handicraft to social service and other types of work.

Table No. 55. shows population classified according to type of occupation. (See fig. 33)

Table 53 Population and Occupation in Shatanouf

| Type of work              | Male | Female | Total |
|---------------------------|------|--------|-------|
| Agriculture               | 1369 | 1341   | 2710  |
| Local industries          | 92   | 1      | 93    |
| Building and construction | 14   | -      | 14    |
| Communication             | 25   | -      | 25    |
| Trade and commerce        | 112  | 48     | 160   |
| Domestic Services         | 45   | 484    | 529   |
| Social Services           | 122  | 14     | 136   |
| Unspecified               | 209  | 163    | 372   |
| Unemployed                | 330  | 276    | 606   |

4645

These figures are taken from the 1947 Census and require increasing by about 4% to give the present day picture.

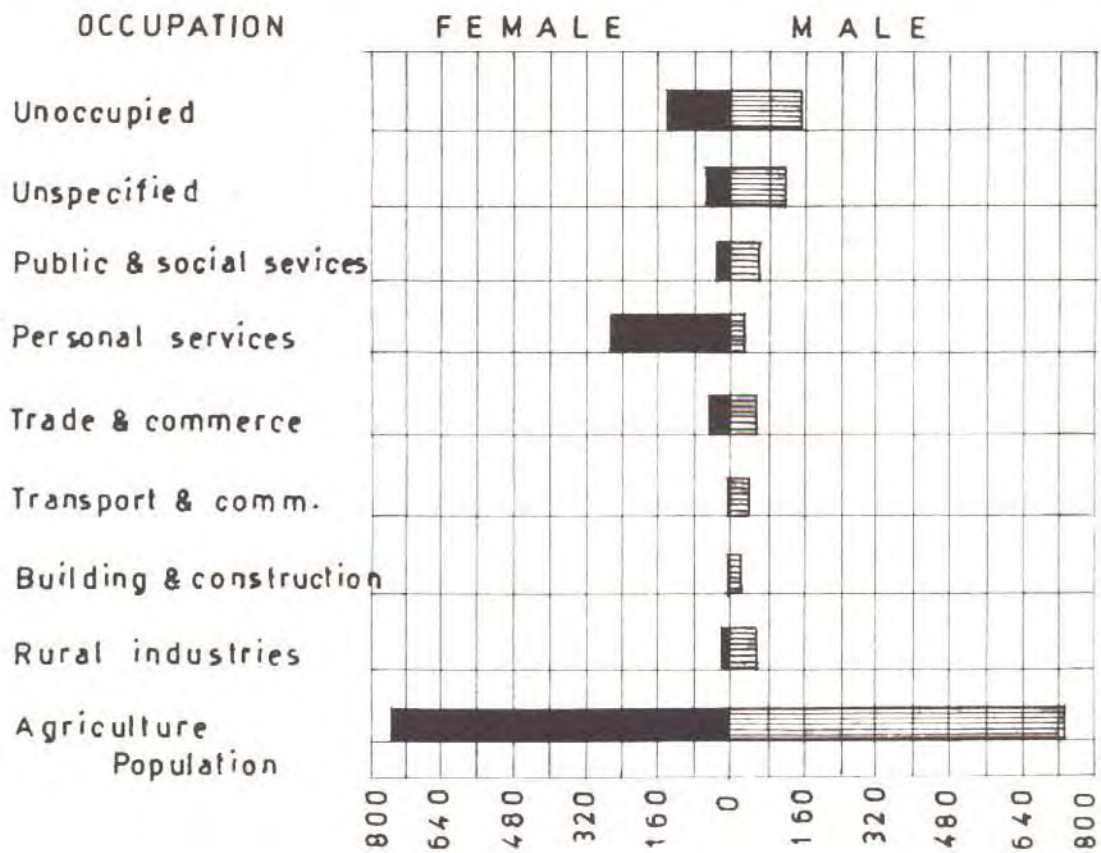
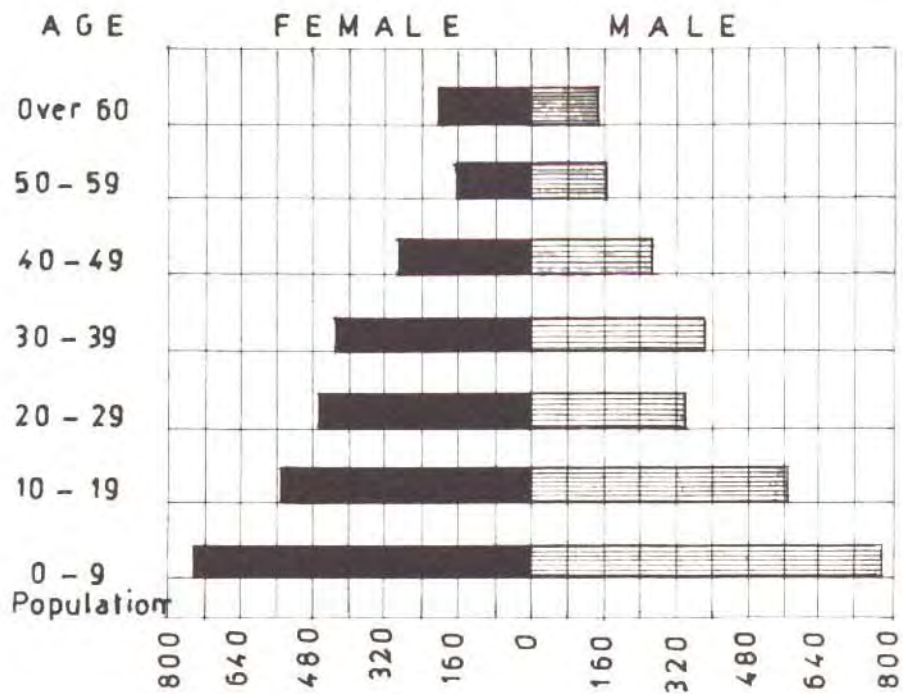
#### Economic Status of the Population

The following table shows how the land is distributed among the inhabitants of the village:-

Table 54 State of Tenure in Shatanouf

| Percentage of Population | Area owned                      |
|--------------------------|---------------------------------|
| 25.5%                    | Less than $\frac{1}{2}$ feddan  |
| 27.0%                    | $\frac{1}{2}$ - 1 feddan (acre) |
| 20.0%                    | 1 - 2 "                         |
| 7.0%                     | 2 - 3 "                         |
| 10.0%                    | 3 - 4 "                         |
| 2.2%                     | 4 - 5 "                         |
| 5.0%                     | 5 - 10 "                        |





**POPULATION PYRAMID & OCCUPATION  
IN SHATANOUF**

Table 54. continued.

| Percentage of Population | Area owned     |
|--------------------------|----------------|
| 2.3%                     | 10 - 20 feddan |
| 1.0%                     | over 20 "      |

On the other hand, if the population is divided into three income groups as follows:-

1. High income group owning more than 20 acres.
2. Middle income group owning from 5 to 20 acres.
3. Low income group owning less than 5 acres.

we get the following results :-

1. The High income group represents 1% of the population
2. The Middle income group represents 7.3% of the population
3. The Low income group represents 91.7% of the population.

These facts give a clear idea of the very low economic conditions of the life of the Fellaheen in Shatsnouf. This fact will have a great bearing on any new plan for the village and prior consideration must be given to economic factors.



#### d. EDUCATION

The system, the policy and the type of schools are the same as anywhere else in the Ashmoun district or the countryside of Egypt and these have already been discussed in Chapter X.

There are four schools in Shatanouf. The first belongs to the Collective Centre (See fig. 28) - a mixed school of 600 children of the compulsory educational stage. The second is a 'model' school - a mixed school for 160 children. The third is Sheikh Ali Shahin's primary school with 120 children. The fourth is El-Kafre primary school with 120 children. All the schools are for the first stage of education which is compulsory for children between 7 and 12 years of age.

To obtain the exact number of children who require education we have to find the number of those in the age group of 7 to 12 years. Between 5 and 9 years of age there are 380 boys and 320 girls, and between the ages of 10 and 14 there are 340 boys and 290 girls. This implies that there are about 360 boys and 305 girls between the ages of 7 and 12 years, i.e. 665 children. This number is calculated according to the 1947 census and is expected to be increased by about 10% in 20 years time and therefore the capacity of the schools should be sufficient for 396 boys and 355 girls, a total number of 751 children. This does not mean that the existing schools with an official total capacity of 1000 children are adequate since it must be appreciated that the Collective Unit School does not only serve the village of Shatanouf but also other villages comprising 10,000 inhabitants as every Collective Unit serves a community of 15,000 inhabitants, so that the theoretical total number of places for Shatanouf children is only 600.

Another feature of the village education is the campaign against illiteracy evening classes are held in the school's buildings and anyone who wishes may attend.

The following table gives the number of literate and illiterate people in the village in 1947 :-

Table 55

Educational Status in Shatanouf

| Case       | Male | Female | Total |
|------------|------|--------|-------|
| Illiterate | 1660 | 2088   | 3748  |
| Literate   | 626  | 199    | 825   |
| Unknown    | 22   | 40     | 62    |

It should be mentioned here that the accepted definition in Egypt of a 'literate' is a person who can write his own name. Therefore the number of those who are illiterate in the normal sense of the term is doubtless much greater than the official figure shows.

Among the total literates only between five and ten persons of higher education can be found. These very often leave the village for the big towns and cities where they can find higher paid jobs or get a position in a government office. The village is then left without much benefit from the élite it has produced, except in holiday time when some students participate in the welfare activities of their village.



e. HEALTH

Shatanouf is lucky enough to have a clinic, a health centre, a private clinic and a small hospital of 14 beds attached to the Collective Centre. About 75% of the population are suffering, <sup>from</sup> bilharzia as a result of using the canal water as drinking water without purifying it. The majority of the population is suffering also from other diseases, especially the children.

The sun and the fresh air help the Fellah to survive. Bad health is the result of the educational and economic problems of the rural community.

The health problem is so great that it is impossible to deal with <sup>it</sup> here, but we should bear in mind the poor housing conditions in which the Fellahen live, for this shares the responsibility for their bad health. The village, as a whole, as well as its houses, lacks good ventilation, sunshine and sanitary amenities.

## f. THE REDEVELOPMENT OF SHATANOUF

The redevelopment method to be applied to Shatanouf is that already described in the case of a country town, but nevertheless, the redevelopment of Shatanouf naturally must have regard to the development as a whole of the Planning Unit of which Shatanouf is the centre.

The first step in this connection is to plot the three different types of holdings as already defined, viz. (1) under 5 feddans, (2) 5 to 20 feddans and (3) over 20 feddans. From an examination of the register of holdings in Shatanouf it is found that these categories might best be defined more accurately in the case of this village, as (1) under 4 feddans, (2) 4 to  $19\frac{1}{2}$  feddans and (3) over  $19\frac{1}{2}$  feddans. All holdings of less than 4 feddans should be given a special colour, holdings and holdings between 4 and  $19\frac{1}{2}$  feddans should be given another colour. The rest of the cultivated land will then come under larger holdings of more than  $19\frac{1}{2}$  feddans. At the same time roads, railways, and canals should be shown on this map as well as all land divisions (hods) (See map no. 45)

Any consolidation required for dispersed and fragmented holdings should first be carried out in respect of the holdings of between 4 and  $19\frac{1}{2}$  feddans comprising the family farms; and then in respect to the larger estates. This is by no means an easy task. The state of land ownership creates the most difficult problem from the physical planning point of view. This problem involves other factors, such as soil types, land fertility and value, rotation systems, heredity, and other social and psychological factors, such as have already been discussed in Chapter VII.

The following examples of ownerships taken from the three different types of holdings in Shatanouf illustrate this fact.

In the case of the land which is to come under co-operative farming we get the following examples :-

a. ownerships of single plot: e.g. Owner No. 475<sup>(1)</sup> who owns plot No. 20 in 'hod' no. 7. His total ownership is 11 'Karats' and 23 'Sahms' -

(1) Taken from the official list of land holdings distribution in Shatanouf in 1946.



a little less than half a feddan. His case should not present any difficulty when establishing the co-operative farm.

b. Ownerships divided among separate plots but in the same 'hod' e.g.

Owner No. 477 who possesses three plots (part of No. 42, part of No. 45 and No. 7) in the 'hod' no. 8. The area of the first plot is 9K., 20 S., that of the second plot 14 K., 5 S., and that of the third plot 3K., 16S. This total ownership amounts to 1F., 3K., 17S.

In this case also there should not be much difficulty provided that the whole of the 'hod' concerned comes under the co-operative system. If not, he might exchange his land with another owner to their mutual advantage.

c. Ownerships divided among separate plots in different 'hods': e.g.

Owner No. 476 who owns the following plots :-

| Area of plot | Plot No. | Hod No. |
|--------------|----------|---------|
| 11K, 18S     | 22       | 8       |
| 2K, 12S      | 91       | 8       |
| 6K, 13S      | 105      | 9       |
| 11K, 3S      | 46       | 14      |
| 17K, 1S      | 98       | 14      |
| 11K, 14S     | 5        | 18      |
| 10K, 10S     | 21       | 18      |
| 14K, 20S     | 27       | 18      |

Total

3F. 3K, 19S.

This means that most of this land is in 'Hod' Nos 18 and 14. The owner in this case might join two co-operative farms if this system is to be applied to both 'hods' otherwise he would have to resort to the procedure of exchange.

If these three cases consolidation of individual ownerships is not to be applied. The problem will be limited to that of deciding which co-operative farm the fellah is to join by investing his total ownership in the co-operative venture.

The second category of ownership is that comprising family farms of 4 to 19½ feddans. In this case consolidation must be applied to fragmented ownerships, if the holdings are found to be more than one plot. An example of this is Owner No 192 who owns 8 plots in three different 'hods' as follows:-

| Area of Plot |    |    | Plot No.   | Hod No. |
|--------------|----|----|------------|---------|
| F.           | K. | S. |            |         |
|              | 12 | 5  | 44         | 7       |
|              | 5  | 25 | part of 91 | 13      |
|              | 1  | 15 | 95         | 14      |
| 1            | 0  | 13 | part of 96 | 14      |
| 1            | 2  | 22 | part of 23 | 14      |
| 1            | 11 | 7  | part of 24 | 14      |
|              | 23 | 22 | 109        | 14      |
| 1            | 1  | 4  | 25         | 14      |
| 6            | 11 | 15 |            |         |

In this case the total ownership could be consolidated in 'hod' no. 14 alongside plot Nos. 24, 109 and 25 as can be seen from the survey map. Exchange could be agreed on between individual owners or between an individual owner and a co-operative farm.

Farmers of this category could join a co-operative farm if no consolidation of their holdings could be achieved.

The same dispersion happens in the case of the large ownerships over 19½ feddans as in the case of Owner No. 184 who owns the following areas:-

| Area of Plot |    |    | Plot No.   | Hod No. |
|--------------|----|----|------------|---------|
| F.           | K. | S. |            |         |
|              | 3  | 0  | part of 36 | 7       |
| 6.           | 18 | 21 | part of 26 | 17      |
| 5            | 23 | 14 | part of 34 | 18      |
| 12           | 11 | 2  | part of 51 | 18      |
| 13           | 14 | 0  | part of 24 | 20      |
| 17           | 9  | 2  | part of 16 | 20      |
| 7            | 11 | 10 | part of 10 | 22      |
| 3            | 19 | 12 | part of 8  | 22      |
| 1            | 3  | 11 | part of 43 | 23      |
| -            | 16 | 2  | part of 31 | 19      |



| Area of plot |     |    | Plot No.   | Hod No. |
|--------------|-----|----|------------|---------|
| F.           | K.  | S. |            |         |
|              | 16. | 2  | part of 49 | 19      |
|              |     | 16 | part of 47 | 19      |
| 72           | 1   | 1  |            |         |

In this case consolidation should occur preferably in 'hod' no. 20 where about 30 feddans of the total ownership is to be found, or perhaps in two neighbouring 'hods'.

In the Shatanouf area most of the holdings, both small and large, are fragmented or dispersed.

To illustrate the scale of the task one must point out that the procedure of dividing the land into the three categories of farming systems or of consolidation will affect not only the total area of Shatanouf but also the total area of its planning unit. This is the great task facing the rural planner in the Nile Delta. Although it looks rather a complicated problem, the possibilities of its solution are quite feasible and have already been proved capable of application. It is a matter which demands both time and patience, all of which in the end prove very well worth while in a country such as Egypt.

In the village area of Shatanouf holdings of less than 4 feddans are situated mostly immediately around the town itself, whilst the larger holdings of more than 19½ feddans are to be found in the North and the South of the area. In between are the holdings of areas of between 4 and 19½ feddans. The total area of the cultivated land is 1828 feddans owned by 624 owners. From the 624 owners 550 (88%) own less than 4 feddans. They own about 548 feddans (30%) with an average of one feddan per owner. Out of the total number of owners, 61 (9.7%) own holdings between 4 and 19 feddans amounting to 419 feddans (22.5%) giving an average of 7 feddans per owner. The large bulk of the cultivated land is of holdings of more than 19 feddans and is owned by 14 owners (2.3%) The total area in holdings of more than 19½ feddans amounts to 870 feddans (47.5%) with an average

of 63.5 feddans per owner.

It is also clear from the survey map that most of the communities to be working in co-operative farms will be naturally housed in the main country town. The need may arise for the building of a few hamlets in the North and South of the village area to house agricultural labourers working on the large estates. The people who are to stay on their family farms will not want to change their residence and so will stay in the country town.

All the hamlets 'ezbas' found in the area, except that of El-Gazzar to the North of Shatanouf, are situated on the main road alongside the Rayah El-Menoufi canal. This was mainly due to the easy connection with Cairo where most of the land owners used to live. This situation conflicts with the idea of the settlement pattern of the rural Planning Unit recommended earlier in this study, as there is no direct access between the above mentioned hamlets and the country town as the centre of the planning unit. Attention must be paid to providing the necessary direct access between the country town and any new designed hamlets. It is also to be recommended that, where convenient, two or more new ezbas should be grouped together to form a hamlet of reasonable size. Examples of this grouping can be seen in the case of the proposed hamlets in the southern and northern parts of the Shatanouf area.

The boundaries of the existing land divisions (hods) are to determine the limits of the areas of the new hamlets as well as areas to come under the co-operative farming system. Advantage must be taken of the existing canals and roads which usually run along the banks of these canals. These canals and roads also act as natural boundaries for the new larger land divisions. (See map no.45)

The size of the new hamlets will be determined according to the areas which will be cultivated by their occupants. In the case of hamlets serving a co-operative farming area, a cultivable area would be between 100 and 150 feddans. If we allow 5 feddans for a family of 8, this will bring the size of the hamlet to something between 160 and 240 inhabitants. The limits of the co-operative farm will also be determined according to the planned rotation system. <sup>(1)</sup> drawn

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(1) Discussed in Chapter II



up by the agricultural adviser who will also be consulted on the consolidation problem.

At present most of the land divisions (hods) seem to be adequately served except those of El-Saubonk El-Sharqui (88.68f) El Mulk El-Bahari (79.8f.) and El-Hamed Wa Al-Garba (67.36f) to the North west. In the south there are the 'hods' of El-Haggniya El-Qibliya (110.88f) El Touta El-Qibliya (82.08f) and El-Touta El-Bahariya (70.72f) in the Gazira land. To the east there are the Hod El-Santa (99.28f) and a part of Hod Ziyada (about 70 f.)

Hod El-Saubonk El-Gharbi (99.8f) in the north can be adequately served by Babet El-Gazzar and Manial El-Guweda village outside the boundaries of Shatanouf area. Hod El-Nazili (81.08f) in the south can be adequately served from the village of Shi'sha' disregarding village boundaries. Part of Hod El-Hamed Wa Al-Garba can be served from the village of El-Helwasi which is to be included in Shatanouf Planning Unit (See map no. 45)

The railway which runs across the village area divides the area into two parts. It is undesirable for the farmer to cross this railway on his way to work.

Land comprising large estates in the southern part of the village area could be served by two new hamlets. The first for Hod El-Haggniya El-Qibliya (110.88f) and the second for the two hods El-Touta El Bahariya and El-Touta El-Qibliya both of 152.8 feddans of 'gezira' land. The size of the first hamlet will be 176 inhabitants and the second will be 240 inhabitants. Both should be situated on the higher land near the junction of Waslet-Ashmoun El-Mustagedda canal and El-Naggar canal and could, in fact, be combined to form a small village of 416 inhabitants. (See map no. 45)

Two other hamlets should be built along the Rayah El-Menufi canal, the first near the junction with El-Naggar canal. This hamlet will serve about 70 feddans under co-operative farming. The second co-operative hamlet could be situated just north of the railway and serve about 70 feddans. The size of each hamlet will be about 120 inhabitants.

Another new hamlet combining two 'ezbas' could be built in the north to serve an estate of 88.68 feddans of Hod El-Saubonk El-Sharqi, and another of 114 feddans in Hod El-Qibbala. The size of this hamlet will be about 330 inhabitants. (See map no. 45)

This procedure will lead to the establishment of six 'ezbas' housing a total of approximately 1,000 inhabitants from the country town of Shatanouf. This will result in a decrease of 35,660 square metres (about 17% ) from the built up area of Shatanouf. The population of Shatanouf will be consequently reduced to 4,300 inhabitants. Although this figure will put Shatanouf under the 5,000 figure it will still be considered as a country town.

The redevelopment in general of the main country town of Shatanouf could be carried out along the lines already discussed in this thesis, though some variation in the form will be necessary by reason of the present division of the village into two parts separated by the Gannabiet Shatanouf Canal (See map no. 45) This canal is a serious nuisance at the moment as it runs right through the centre of the town and now that pure drinkable water, and washing places are provided in selected parts of the town the existence of this canal inside the built up area is no longer desirable. The canal could either be diverted to run east of the settlement between its connection with El-Naggar canal to a place just south of the railway station or be converted along the stretch running through the town, thereby creating a widened main shopping street, and allowing for a greater degree of unification of the eastern and western section of the town. The latter solution appears to be the more practical one and has been adopted on the redevelopment plan.

This, is naturally no more than a general outline of what could be done in the field of replanning. Many other factors should be taken into consideration; mainly those relating to size of plots, form of land tenure, and other social factors. This will need precise figures and facts to make the final plan realistic. This can only be achieved by considering the planning unit as a whole. Areas taken by new roads, canals or areas added to the cultivated areas as a result of canal filling up, must be taken from or given to the co-operative farming society and not the individuals whose holdings are directly affected. This means that the process of replanning should be inspired by the same co-operative spirit which one hopes will prevail in the new community.



# SHATANOUF

scale 1:5000



## REDEVELOPMENT

MAP NO. 44



- KEY**
- |    |   |   |                   |
|----|---|---|-------------------|
| ■  | Public buildings                                      | ■ | Commercial centre |
| ■  | Existing residential areas                            | ○ | Local shops       |
| ▨  | Development areas                                     | □ | Open space        |
| M: | New market place, m: Mosque, C: Club, w: Water tower. |   |                   |

## CONCLUSION

In the case of an agricultural area such as the Nile Delta, forming part of a country which is suffering from over-population and with only limited resources capable of being developed to find employment for and ensure the subsistence of its surplus population, it would be difficult to over-estimate the need for effective planning. Such planning can contribute much towards the reorganisation of the area and help to achieve the maximum benefit from the cultivated land which is the main productive factor in the country.

Unfortunately, raising the production of the cultivated area to its maximum, necessary though this is, will not in itself suffice to meet the pressing population problem of the country. In some ways, if pursued as a separate unrelated policy, it may even tend to aggravate the problem by raising the efficiency of production, increasing the demand for agricultural labour and thereby adding to the surplus of labour. In this connection it is well to remember the words of Professor André Philip in his concluding address to the Conference on Regional Planning and Development held in London in September 1955 when he said :-

'... the accent must be put on the development of agriculture because the majority of the countries concerned are agricultural ones. We must aim at a higher standard of living for the farmers, which will make it possible for them to save. Large scale saving is a very long process, but this in turn will make possible industrialization. We must realize that modern technical methods of agriculture are very frequently not the answer to our problems, especially so in the case of heavily populated countries. We have to take into account that the agricultural practices, and habits and customs in backward countries have taken centuries to evolve and be adapted to the peculiar conditions of the country. We have to call in agricultural experts, but we must not forget that plans should never be imposed from the outside, but should develop from the inside.'

Improvements in agricultural production can indeed pave the way towards other developments and improvements, but certainly in the case of Egypt such an agricultural policy must be coupled with other schemes designed to absorb as many as possible of the surplus population. As Professor Philip implies the process of industrialization should follow, or as far as possible march side by side with the process of agrarian reform. In Egypt's case other possibilities also have to be considered, such as reclamation of some of the countryside's vast areas of desert or migration to the Syrian region of the United Arab Republic



Agricultural planning, therefore, should be considered as an integral part of land and country planning. This is particularly necessary in the case of the Nile Delta. This region will experience radical changes in the coming fifteen years as a consequence of the construction of the High Dam Scheme south of Aswan. This scheme will make possible the addition of two million feddans of arable land to the cultivated area of the Nile Delta. Such a major development calls for effective realisation through a properly conceived regional plan integrating the consequent new developments with the existing development of the Delta Region.

It is hoped that the suggestions put forward in this thesis will help in some way towards the realisation of such a plan. From the National Planning point of view the plan should be based on an economic programme with defined targets to be achieved in the social, educational and hygienic fields. For example the target for nutrition should be to increase individual intakes from 2,480 calories per person per day to 3,000 or 3,750 calories according to occupation. The present average expectation of life of 38.6 years is appallingly low and another national target might well be to attempt to raise this figure to about 45 years through the development of both preventive measures and curative measures. The abolition of illiteracy is another national target which calls for various forms of provision requiring organisation both at the regional and local levels. The definition of these objectives as well as the means and the consequent definition of the various standards which will govern the attainment of the different objectives will naturally be determined by the National Planning Committee.

Below the national level the country calls for division into a number of different regions, one of which would be the Nile Delta. These regions would then be divided into a number of Planning Districts which in turn would be further subdivided in the rural areas into defined Rural Planning Units each embracing between 10 and 15 villages and hamlets, these units serving as the basis for the distribution and location of the Rural Industrial Centres each catering for a population of 100,000 inhabitants and of the Rural Health Centres each serving a population of about 100,000 persons.

The adoption of the three systems of farming, i.e. co-operative farming, small family farms and large estates, besides being adequate to secure the maximum output from the cultivated land, will be, at the same time, a sound foundation for the new

society which the present regime is working to introduce a co-operative, socialist and democratic society. In view of the localised nature of the work involved in framing this foundation it seems clear that the work could best be organised at the level of the Rural Planning Unit as advocated in these pages.

The Rural Planning Unit should be the basic unit for field work and physical planning. At this level the planner can tackle the problem of the rural settlement itself and consequently the problem of the rural house. It is at the level of the Rural Planning Unit that co-operation should prove most fruitful between the architect, the builder, the engineer, the sociologist, the agriculturist, the doctor, the teacher and the scientist in their co-operative task of building a new environment and a new life in the countryside.

Planned co-operation is the key to rural reconstruction. This does not merely imply co-operative finance and marketing of crops, but also co-operation in cultivation and irrigation, and improvement of rural industries and communications - rural reconstruction in the widest sense of the term. Rural reconstruction and co-operative rehabilitation must not be separated.

The corporate life of the rural masses is to be revived not only in the village but also around groups of villages. There must therefore be strong intermediary agencies between the District authorities and the organs of the village. Here again the Rural Planning Unit would seem to be the most appropriate size of administrative unit for this liaison.

It is thus through methods of concentration and co-ordination that the entire range of activities coming under rural reconstruction can be successfully directed and integrated. This is essentially the meaning of rural planning.

The Fellah's life with its inefficiency, simplicity, fear and ignorance, is not an undivided whole, and the only form of rural programme which can hope to succeed is one which can improve him from all sides, economically, socially and morally.

Unless there is an established national policy for rural reconstruction nothing much of lasting value can be achieved. This is a matter of life or death for a nation which is suffering from overpopulation and if tragic disaster is to be avoided no time should be lost in directing much of the country's technical skills and other resources into the framing and execution of some such far-reaching policy for rural reconstruction.