

## POPULATION INTEGRATION BETWEEN EGYPT AND SUDAN AND ITS REFLECTIONS ON ECONOMIC DEVELOPMENT

*by*  
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The number of Egyptian people now is about 40 millions and the population of the Sudan estimated to be about 20 m. although the 1973 census points that the number is 15 m. only. The cause of this discrepancy is attributed to the turbulent conditions in the southern provinces during the census time.

The preceding fact shows that the population of the two countries now is about 60 m. Living on an area of about 3.5 m.km<sup>2</sup>, This means that the general density of population in the two countries is about 17 inhabitant per km<sup>2</sup>. This figure is not true as we know, that the (Ecumene) in Egypt and Sudan is very limited, especially in Egypt.

Although the study of the present population is important but the population future in the two countries is rather important and critical till the end of this century. We know that the population increase now in Egypt is about 23 per thousand and in the Sudan it is about 32 per thousand. Accordingly the population growth in the two countries will continue to be high in the next twenty years. But there are some important points concerning this matter :

### **First :**

Egypt has begun the population explosive phase early than the Sudan did since this phase at the beginning of this century and population is still in high rate growth to the sixties when some sectors of Egyptian people began to practise birth control, especially the educated sector. This birth control trend augmented in the last decade, and became one of the main population characteristics in Egypt. Accordingly we can hope that Egyptian population will attain the mature population phase at the end of this century or at the beginning of the following century. In this phase the mortality rate will be low as well as the rate of birth. This means that natural growth will be checked.

**Second :**

On the other hand Sudan population continued in the primary phase during the first half of this century, and this means that natural growth was low, because of the high mortality rate especially children, despite the high birth rate. Now there are some indicators that Sudan entered the second population phase, where high birth rate, and at the same time mortality rate begins to decline, in other words, Sudan has entered population explosive phase. There are some causes for this population phenomenon :

1. The provision in the field of health services.
2. The progress in the educational activities.
3. The low improvement in the standard of living.
4. The diffusion of polygamousity in several parts in the Sudan, especially in Southern Sudan, and Darfur, as women here are very important labour force and have a good economic role in family sphere.

These causes mentioned above mean that the Sudanese people will continue to increase till the end of this century and perhaps the first quarter of the following century. The diffusion of education and health services will continue, besides the raise of the standard of living in a broad sector of the Sudanese society, when the agricultural and industrial projects attain their targets.

**Third :**

This means that the increase of the population of Egypt and Sudan will continue, although there are differences between the two countries in the size and ratio of increase. It is estimated that the population in Egypt will be about 60 m. at the end of this century and the population of the Sudan will be about 32 m. and this points that the total will be 92 m.h., This figure is big and gives us the incentive to put plans to contain this problem in the two countries, separately and the two countries together. We should notice that the density of population in the two countries different according to their areas and also in comparison with their potentialities. The 1973 Sudanese census declared that the general density in the Sudan is about 6,8 inhabitants per km<sup>2</sup>, but this density reaches 55 persons in Khartoum province, and 88 in Blue Nile province. The causes of the first are the site of the Capital (the greater Khartoum) but in the second province the cause is the great agricultural projects.

This density has increased in the few last years because of two points :

A) The natural increase in the two provinces which reaches about 32 per thousand annually.

B) Internal migration and foreign immigration.

Further more Gezira area became a separate province, this means that density became higher.

In the other provinces in the Sudan, we see that densities are low or insignificant. The first type are : Kassala, Kordofan, Darfur, Bahr El Ghazal (nearly 6-9 h.km<sup>2</sup>). The second type are : Equatoria, North, Upper Nile, and Red Sea provinces, are less than the precedent figure.

The density of population in Egypt's provinces is very high, as nearly all the population is confined in the (Ecumene) in the valley and the delta. We can classify the density of population in Egyptian governorates into three categories : (1976)

**First :**

Plus than thousand inhabitants per km<sup>2</sup>. on the top comes Cairo governorate (23737) because of its historical heritage, its geographical site and the chances of work which emigrants hope for. After that comes Port Saed governorate which reaches 3642 h.km<sup>2</sup> because of its small area. Giza governorate is in the third rank where its density is 2396 its site near Cairo gives it some importance other governorate come after that as Kalyobia, Gharbia, Monofia, Assyut and Sohag (1672, 1181, 1117, 1108, 1244)<sup>(1)</sup>.

**Second :**

Density between 500-1000 per km<sup>2</sup> in :

Alexandria (865), Damietta (946), Dakahlia (787), Sharkia (627), Beni Sweef (839), Fayoum (624) Kena (922) and Aswan (914).

**Third :**

Density less than 500 h. per km<sup>2</sup> in provinces Kafr El Sheikh (408), Behera (251), Ismailia (244). There is an exception in this high densities in Suez governorate (11 per km<sup>2</sup>), We suggest that the atmosphere of war was the cause of this low density.

There are many great potentiabties in the Sudan especially in agricultural field, where there are rich soils and plenty of water (surficial or under ground water or rainfall) either in the central clay plains or in the Southern part of the Sudan. This great arable (cultivable) area estimated by 200.

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(1) Central Agency for public mobilisation and statistics population and development, Cairo, September, 1978 p. 137.

million Feddans may be utilised if skilled labour, capitals and good transport are supplied. On the other side, Egypt has a plenty of labour either skilled or not, and it can supply economic activities in Sudan with human resources, either in the field of agriculture or industry and general services, although statistics indicate unfair conclusions for manpower in Egypt as follows :

1. Infants (less than 15 years) 42.7 per cent from the total population, in comparison with 23.3 per cent in France, and Sweden and 29% in U.S.A.
2. Elders (over 65 years age) nearly 3.5 per cent in comparison with 12.1% in France, 10.2 in Sweden and 8.5 in U.S.A.
3. Labour age (15-65) nearly 53.8 in Egypt in comparison by 62.6% in U.S.A., 64.6% in France, 65.7% in Italy and 66.3% in Sweden<sup>(1)</sup>.

In spite of these conclusions man power in Egypt is more than work chances of the present economic activities. The following Table summarises some important conclusions about distribution of land use in Sudan (1973)<sup>(2)</sup>.

Type of use	Area in thousand	
	Feddans	percentage
Total land area	565,713	100,0
Cultivated land	16,985	3,0
(i) Cropped area	14,985	2,6
Irrigated	3,350	0,6
Unirrigated	11,635	2,5
(ii) Fallow	2,000	0,3
Cultivable waste	183,015	32,4
Uncultivable land	365,714	64,6

(1) C.A.P.M.S. Ibid p. 168 (in arabic).

(2) Cairo Demographic Centre, Research monograph Series No. 5,

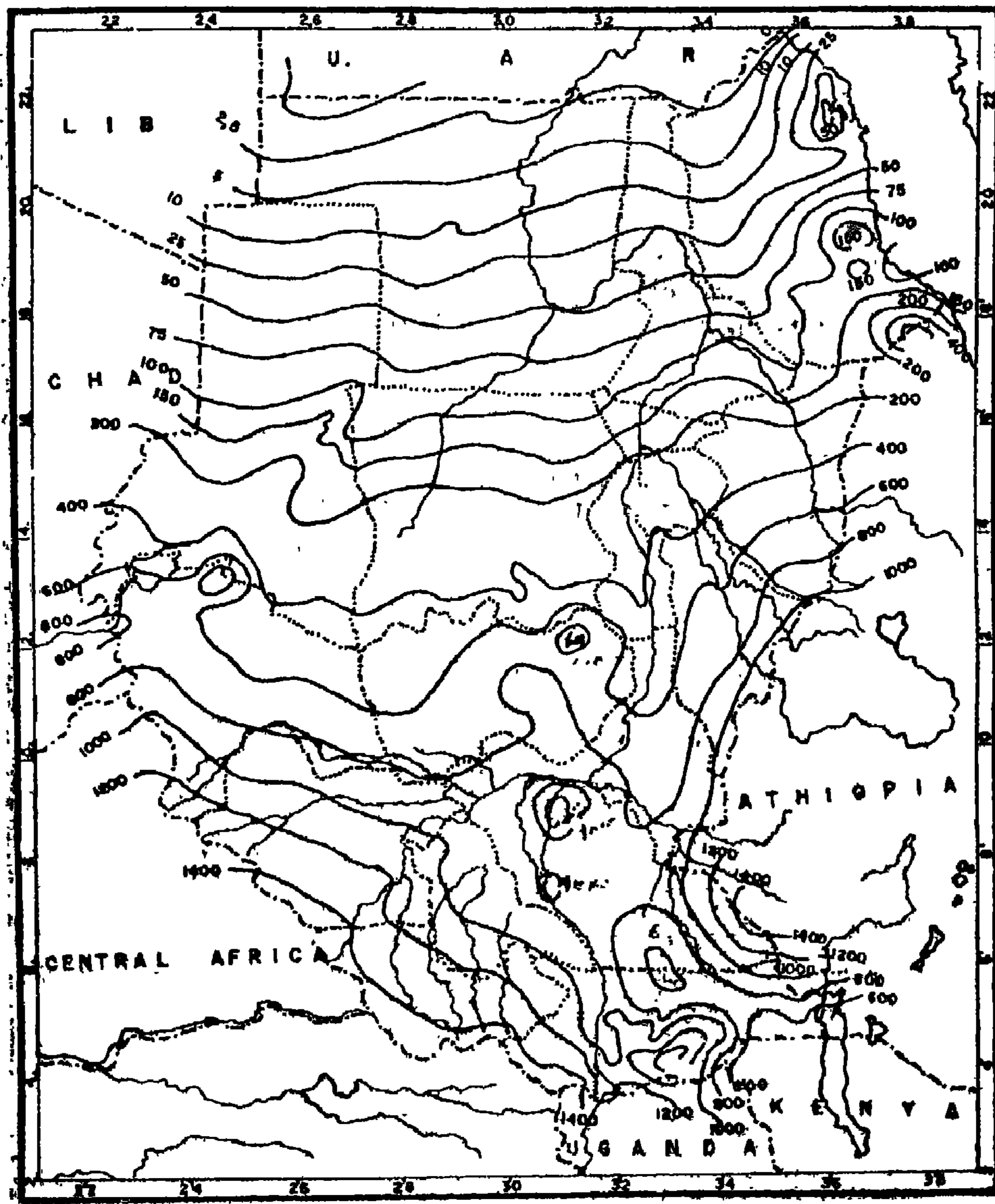
Demographic Aspects of Socio-Economic Development in some Arab and African Countries-Edited by : Huzayyin & T. Smith. Population and development: Sudan, p. 165.

See also : Ministry of Agriculture, Food and Natural Resource A brief Review of Agricultural Resource and Investment opportunities in The Sudan pp. 1 & 3 February, 1978.

Economic development likes a snow ball, when it runs it becomes bigger, and when its movement stops it will be dissolved or stand still as it is, and soon. When Agricultural development increases, exports will increase accordingly

AVERAGE ANNUAL RAINFALL 1931-1960 (mm)

SUDAN



Source

Bulletin of Agriculture statistics of the Sudan

Fig. 1.

and also national income will be augmented. In addition to covering the local demands from the local production and imported commodities. On the other hand the possibility of industrialization which depends on the agricultural production will be stimulated. At the same time animal wealth can be developed by following mixed farming practices, as there are close relations between the two fields in utilisation and production.

This idea is supported by a relatively high technology in Egypt than Sudan in the field of labour, and for this reason we discuss the idea of population integration between the two countries, since man power is important similarly with economic wealth, either agricultural or mineral. Japan gives us a good example for this, as its economic wealth is very limited, but it imports agricultural and mineral ores from other countries especially from South East Asia, and by its human resources industrialise these materials and re-exports them to the world, especially, South East Asian countries themselves.

Accordingly if the Sudan has the land without the efficient labour, and Egypt has the labour without the efficient arable land, we can find that the two cases are a unfavorable for both Egypt and Sudan, together. From this side the geographer must be a pointer to economic integration between the two countries as a whole, especially in the field of population. In this context we can give some figures about man-land relationship in Egypt and Sudan in comparison with some other arab countries (1960-1970).<sup>(1)</sup>

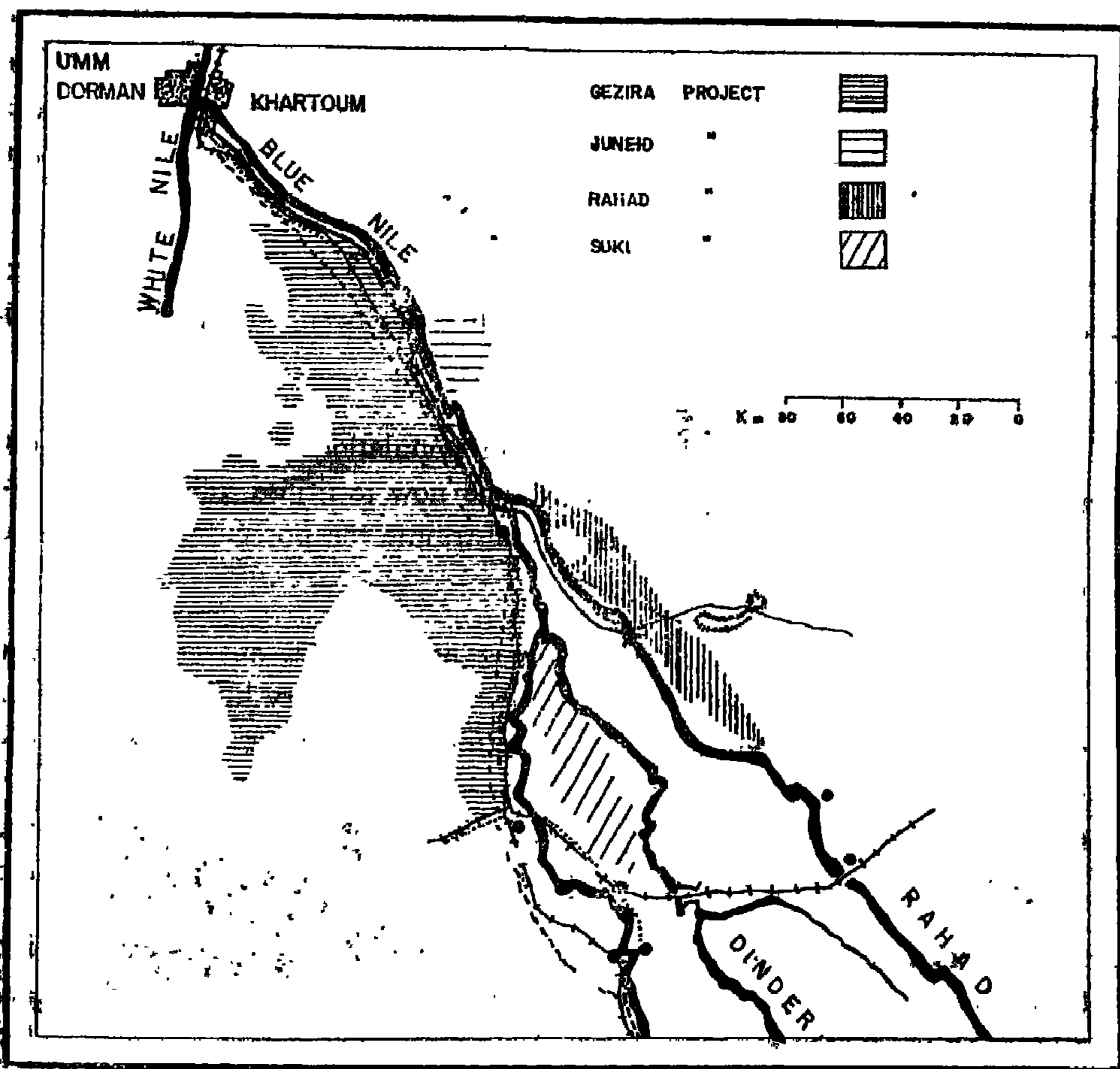
Country	Population density per thousand						Land value density pop. per 1000 U.S.		Relative growth in dex RC.
	Total land		Agr. land		Arable land				
	1960	1970	1960	1970	1960	1970	1960	1970	
	hectars	of	hectars	of	hectars	of	hectars	of	
Egypt	259	336	10,111	11,789	10,111	12,293	25	16	65.6
Sudan	49	65	—	497	—	2,178	19	29	155.1
Tunisia	233	313	492	661	847	1,135	23	31	136.9
Iraq	158	222	592	943	915	946	25	17	67.2

(1) C.D.C., Research monograph Series N: 5 Demographic aspects of socio-economic development in some arab and african countries (population pressure on land in some arab countries) p. 137.

We can see from this table that population density per total area is limited, while density per agricultural or arable land is very high in Egypt, high in Tunisia, moderate in Sudan, and low in Iraq. But land value density and relative growth index indicate an increase of population pressure in Sudan and Tunisia higher than in Egypt and Iraq. Population pressure is shown in different forms, such as the exodus of population from rural to urban areas and the shift of labour force from agricultural occupations to non-agricultural occupations. But when we discuss this topic we must notice :

1. Agricultural labour in Egypt now is limited, and wages are very high.  
This is due to :

AGRICULTURAL PROJECTS IN GEZIRA PROVINCE, SUDAN



Revised original project

Fig. 2.

- a. Emigration from rural to urban settlements to work in factories and other services. There is a very clear example of this case in El Mahalla El Kobra where thousands of workers going every day from their villages in (the city region) of Mahalla El Kobra to this industrial centre, especially in factories of cotton ginning and weaving. This case has become usual in other Egyptian cities.
  - b. In the last decade, many emigrants, skilled, or not, emigrate to oil arab Countries which absorbing many agricultural workers and skilled labour; but we should notice that this migration is temporary.
2. When we discuss migration from Egypt to Sudan we must notice that conditions must be convenient, psychologically, from the side of Sudanese people to the new comers, and from the side of Egyptian emigrants to acclimatize with the new conditions in Sudan. Also we must select some areas to settle the new emigrants. Egyptians like to stay in their home country, or they emigrate for a limited period, then they return to their homeland, although, in the last decade, some technicians emigrate forever to the Americas and Australia, but their number is limited.

In spite of a migration experience that has been achieved from Egypt to Iraq, by hundreds of farmers but this trial has not been evaluated, and it is still open to discussion and amelioration.

At the same time, and for the future of population in the two countries, we must shed some lights on the efforts done now to utilise fully the potentialities and to discover new frontiers to redistribute the population in the two countries.

In Egypt efforts began to explore new potentialities out of the narrow Nile valley and its Delta, where population density is very high, and there is pressure on the cultivated land. These efforts concentrate on the redistribution of population in new towns and societies out of the Nile valley and its Delta. These new societies are different in comparison with the traditional societies in the valley and delta, either in practice and pattern of utilization.

In Sudan, also, efforts began to utilize the great potentialities, which exist in the vast area of the Sudan. These efforts concentrate on agricultural sector, either in rainy area, or in irrigated lands. These efforts are accelerated especially, after the dominance of peace in Southern Sudan. The good example for agricultural schemes in Sudan is Gezira Scheme and its extension in Managel, which area is plus than two million feddans, and Rahad scheme



which liesson Rahad river tributary of Blue Nile, its planned area is about two million feddans, now cultivated area is about  $\frac{1}{2}$  of million feddans. There are also mechanised schemes, which depend on rainfall, especially in the central clay plains, which their area is about 4 m.f, besides traditional agricultural land, which extends in vast areas in central and Southern Sudan.<sup>(1)</sup>

Other efforts are done now for developing animal wealth by practising new techniques in this field, for example the Scheme of Damazen to utilise 621 thousands of feddans in mixed farming, and also the Scheme of Slait for producing meat.

According to the six years plan, there will be a good progress in the field of differentiation of crops in Sudanese economy. The table of Sudanese exports will be cotton 43% in place of 60% now., meat and ground nut 27% and sugar 10%, the remaining (20%) for other goods.

Also the six years plan concentrates on industrial development either cotton, ginning and weaving or sugar and meat.

All these efforts may open new frontiers for population future in Sudan. But this development will need some times till infrastructure can be achieved

On the road of cooperation and integration between Egypt and Sudan, time can be shorten to develop the potentialities in the two countries. Plans must be done in this field. These plans must be comprehensive and convenient with different conditions, (social and economic) in Sudan and Egypt. There is an important factor which affects this topic at a high degree, I mean transports between the two countries must be efficient and convenient with these plans.

#### Some Proposals :

There is already an integration area between Egypt and Sudan which contains ASWAN governorate in Egypt and the Northern province in Sudan. There are some projects in this area for cultivation and trade between the two mentioned areas but these projects run slowly because of lack of capitals (money); in addition, this area is poor in potentialities and adequate transport.

But the central clay plains in Sudan present a rich area by its agricultural potentialities. Here the fertile soil extends across Sudan from the Red

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(1) Estimated irrigable areas total about 10 million Feddans only 50% is developed now; totalling about 4,65.m.f.

sea mountains in the east to Darfur province in the west. Rainfall in the southern regions is enough. But this belt is not utilised now, although there are Gezira, Rahad and Guneid schemes which depend on water irrigation from Blue Nile, in addition to Khashm El Gerba scheme, which depends on Atbara River. We must notice also that population in this belt are rare out these schemes. For all these reasons we can propose some suggestions in this field :

1. Settlement of Egyptian farmers in the existing schemes especially Rahad scheme which is in the first stage (300 thousands feddans). We can propose the settlement of those Egyptian farmers in the second phase of the scheme (410 thousands feddans).
2. Settlements of Egyptian farmers in Suki project near Roseirs where a plenty of water and rich soils where Roseirs Dam and clay soil are existed in this area.
3. This extensions of Gezira scheme, will need a supply of labour force, Egyptian labour may cover this need.
4. Another areas in this central clay belt may attract a big number of Egyptian farmers to cultivate lands and increase agricultural production. These agricultural areas may be in Damazin, Gadaref and Dinder ... etc. We suggest that the central clay plains are the most convenient parts in

Sudan for Egyptian farmers because of these facts :

- A) The rich soil and the ample resoures of water which exist in this area.
- B) Transport (Roads and railways) here is more adaptable than other areas in Sudan.
- C) This area is adjacent to the main port of the Sudan (Port Sudan) so, agricultural and industrial production can be exported easily.
- D) These schemes are near to the important urban centre in the Sudan, i.e. great Khartoum which presents the large important consumption centre in all the Sudan.
- E) This central clay belt is not faraway (in climatic conditions, especially temperature) from these in upper Egypt from which we suggest to transfer labour force to Sudan.

We must remember that in the six year plan (1977-1983) Agriculture has allocated 32,0 per cent of the total public sector investment amounting to

Southern parts of this belt is enough to cultivate crops like American cotton dura (millet) and sesame. In the remnant parts of this belt water for irrigation L.S. 425 million. An investment of L.S. 290 million is also envisaged in the private sector which includes joint venture projects involving participation of the government<sup>(1)</sup>

We gave some centered lights upon population integration in the field of agriculture, because agriculture in Sudan holds a pivotal position among different sectors of the economy. It contributes nearly 40 per cent of the Gross Domestic Products while 80 per cent of the population depends for its subsistence on agriculture and related activities.<sup>(1)</sup>

On the other hand we can give some suggestions in the field of industry. We notice that on the eve of independence of the Sudan the contribution of the industrial sector to G.N.P. was 20% over the last nine years the contribution of the industrial sector ranged between 8,2% in 1968/69 and 12,1% in 1974/75. The five years plan included some objectives to increase the volume of industrial production by 57,4%, adoption a new production methods and techniques for increase in production and execution of a comprehensive investment programme in public sector. The six year plan has laid some objectives to develop these industries where Sudan has a comparative advantage, agro-industries based on local agricultural production, agricultural inputs such as cement, insecticides, agricultural implements and spares, in addition to giving attention to industrial production and its orientation for export purposes.<sup>(2)</sup>

But these objectives can not be achieved without skilled labour which is not efficient in Sudan. Egyptian skilled labour can support Sudanese industry. In this sector we give some suggestions :

1. Establishing more ginning and weaving factories in Gezira and Rahad Schemes, in Nuba Mts., Where American cotton is cultivated and in Khashm El Gerba scheme.
2. Establishing factories for utilising dairy products in Kordofan (South & North) province.
3. Establishing factories for utilizing animal skins in the centres of animal wealth.

(1) The six year plan of Economic and Social Development, 1977-1983, p. 12.

(2) Ibid. the same Page.

4. Food and beverage factories where Egyptian skilled labour can give its experience.

According to projection prepared about man power in the future in Sudan, we can notice that Labour force at 1985 will be 10 millions, while it was about 7.5 in 1975, and in 1980 nearly 8.6 of these numbers Sudan will be in need of man power, especially skilled labour for a long time to achieve objectives of the plans of economic development. Agriculture will be the most important sector in Sudan economy for a long time as the six years plan has indicated as follows :<sup>(1)</sup>

(Achievement of substantial increase of per Capital income in real terms through the development of both the modern and the traditional sectors. The plan aims at an annual growth rate of 7.5% in constant price with agriculture continuing to be the pivot of development and the leading sector of the economy. Development of the other sector will be interlinked with the agricultural expansion).

We say that this expansion cannot reach its maximum without man power which is not sufficient in Sudan and Egyptian labour can cover this deficiency.

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(1) Demographic aspects op. cit., p. 180.

(2) The six years plan Ibid.

# POPULATION DENSITY IN SUDAN

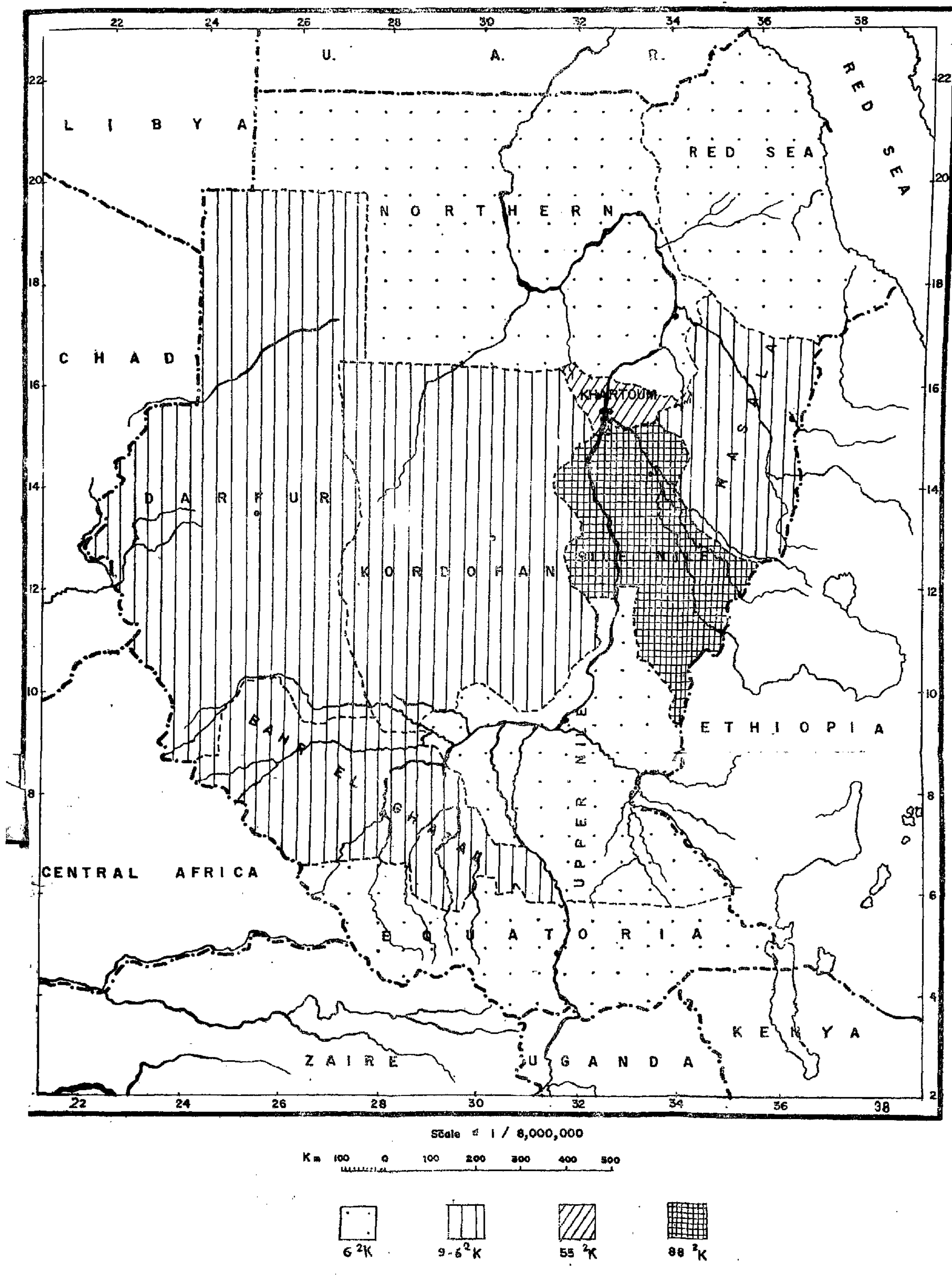


Fig. 3.

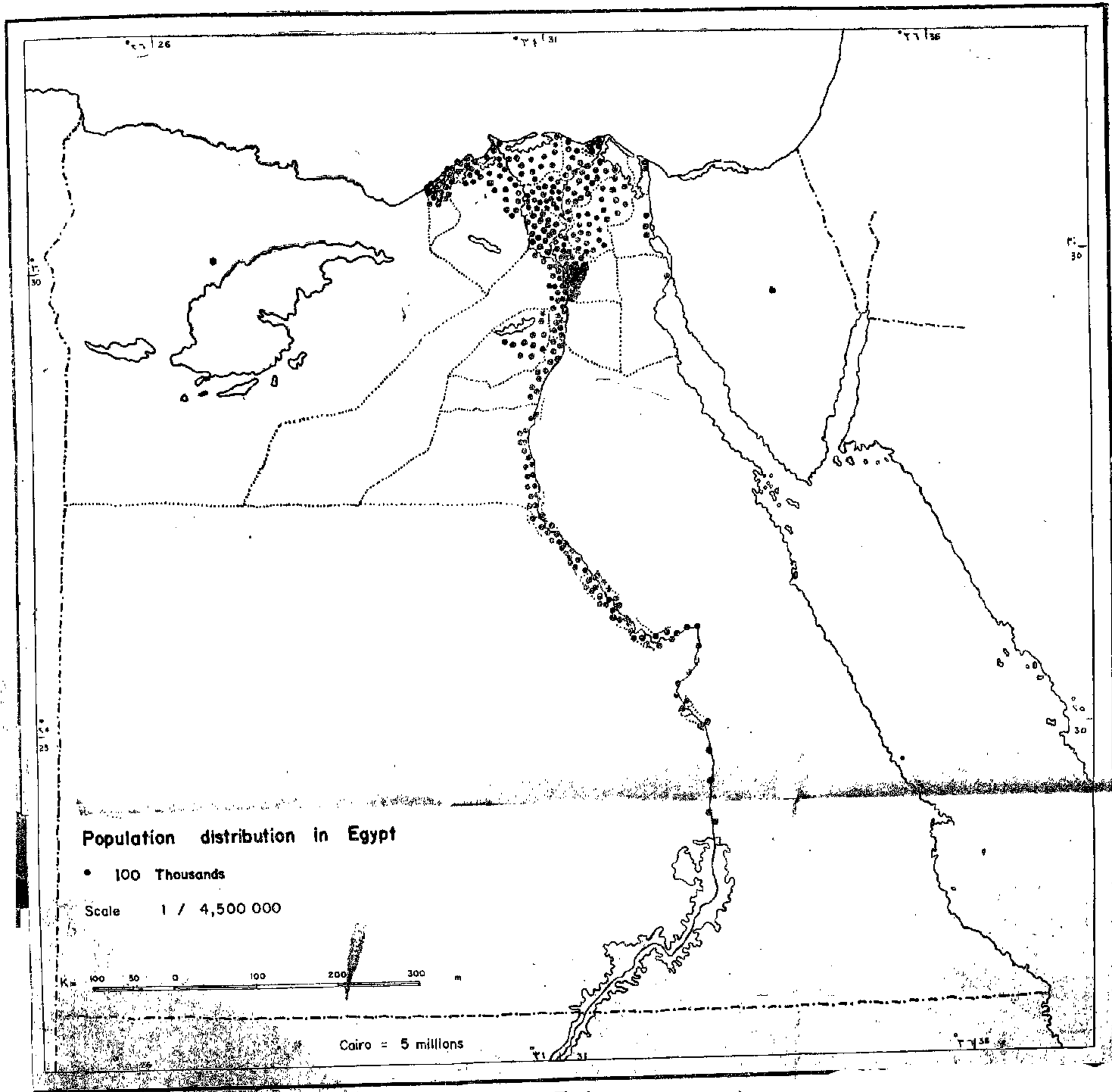
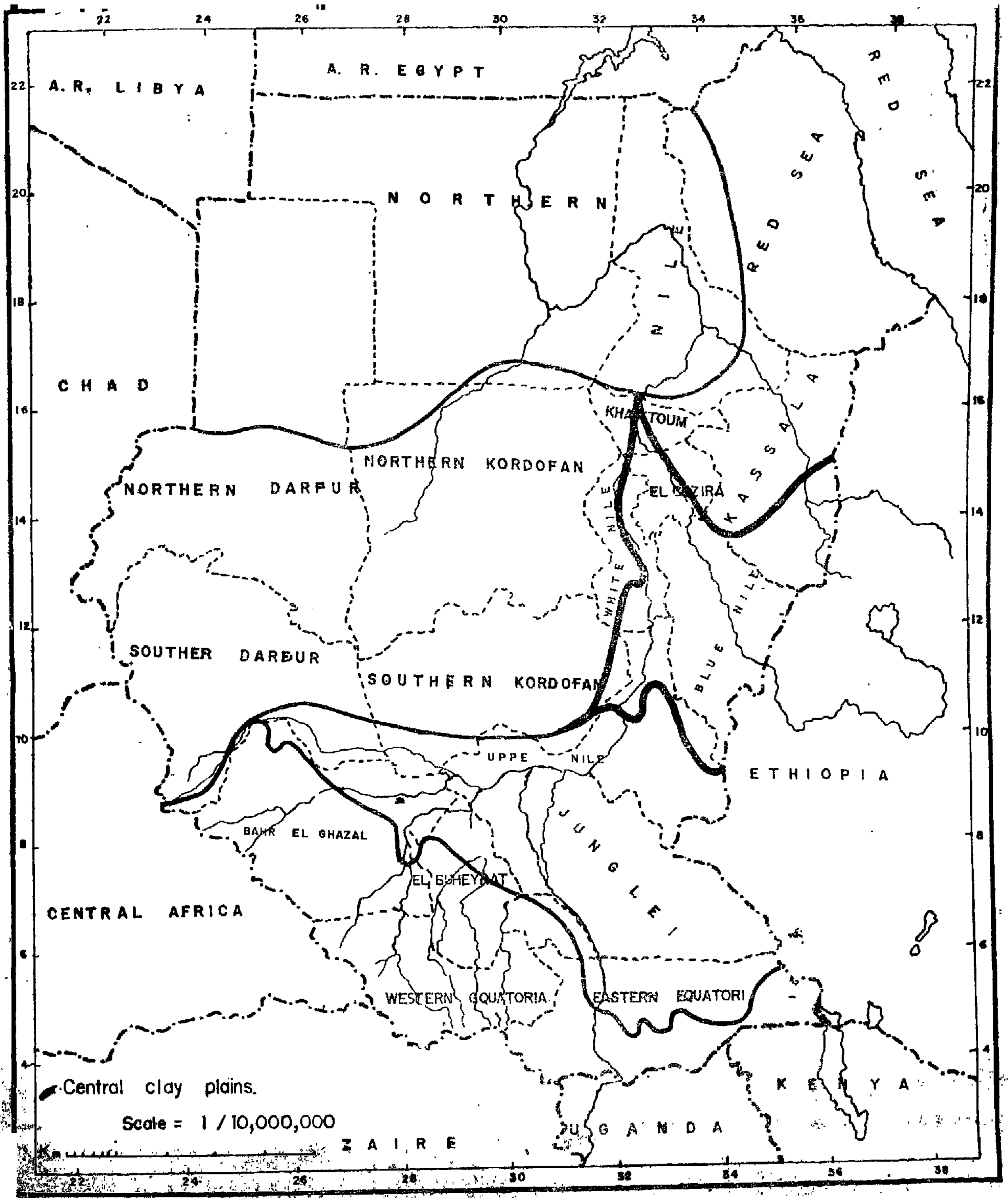


Fig. 4.



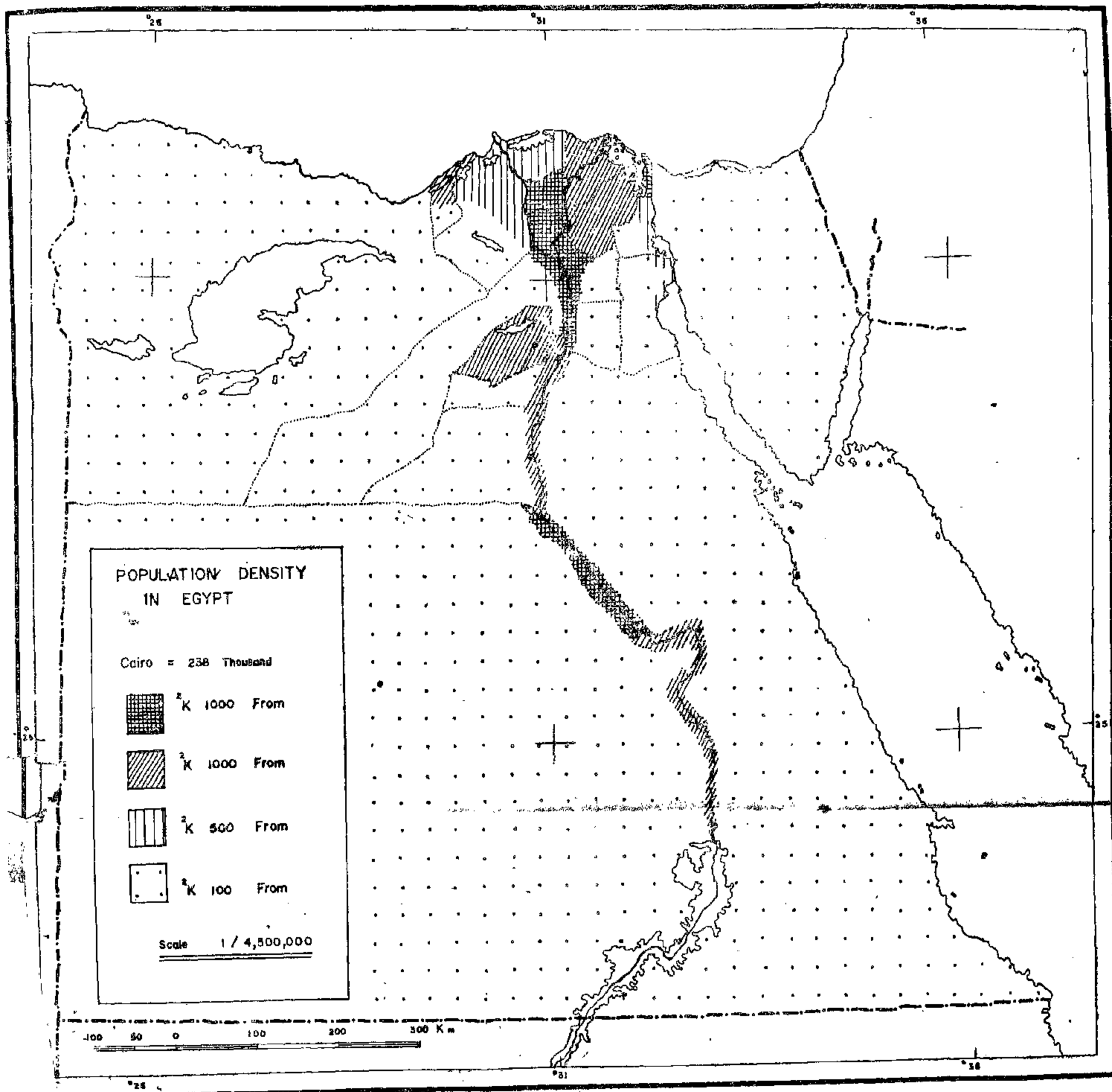


Fig. 6.