METROPOLITAN POPULATION GROWTH IN ARAB COUNTRIES

By

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I. Inroduction

Object and Scope of the Study

Urbanization viewed as a process of population concentration can be studied at the macro and at the micro level. The macro analysis of urbanization treats the urban population in a given area as the unit of analysis, and examines its variat variation in time and space, and its characteristics vis-a-vis the rural or total population. On the other hand, the micro study of urbanization involves the individual urban units, whose social and demographic traits are examined. A typical micro-analysis will try to identify the factors stimulating or retarding the growth of the specified urban units (town, cities or metropolitan areas), their ecological features, economic structure and so on. Of these two kinds of studies, the more numerous are the macro-studies which deal with the urban population of a

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country, region or the world as a whole. Examples of such macro studies are the Kingsley Davis. (United Nations, 1969; Davis, 1969 and 1972). While such studies are important, they cannot provide all the answers sought by planners and policy makers, whose concern is to find solutions to such problems as transportation, water supply, waste disposal,housing and land values, which are specific to each urban unit.

This study examines at the micro level the recent demographic trends in selected metropolitan areas of the Arab World, and their relationship to changes in the total and urban populations in the respective countries. Secondly, the study provides estimates of net migration by sex and broad age groups for each metropolitan area. Thirdly, it analysis the pattern of variation in the metropolitan growth rates and their components, namely migration and natural increase. In sum this study is complimentary to the numerous macro-studies of urbanization in the Arab countries

Definition of Metropolitan Area

In any study of this kind, the most fundamental and difficult problem is the definition of the unit of analysis. Ideally, the delimitation of metropolitan area should take into account

the functional and spatial relationships that exista within a contiguously settled area, and should include within its limits all areas which satisfy certain criteria of functional integration. Such a scientific approach could not be adopted because of the limitations of the available data and the difficulty in arriving at a set of criteria suitable for the entire region. Consequently,metropolitan areas,for the purpose of this study are not strictly defined in comparable terms. Some of our areas are cities proper (CPS), whose populations do not therefore include those of the suburbs, while the others such as Greater Cairo are urban agglomerations (UAs) which include the suburbs.

This study covers the CPs or UAs in the Arab world whose population exceeded 100,000 in the most recent gensus. Where the administrative boundaries have changed between two recent censuses, the data of the first census has been adjusted to correspond with the later census. Only such places which have at least two satisfactory enumerations have been included in this study. Some important metropolitan centres such as Beirut and Tripoli (Lebanon), Riad and Jadda (Saudi Arabia),Aden (P.D.R.Y) and Amman (Jordan) have been regretfully excluded

from this study due to lack of comparable data for two census dates, even though some of them have carried out a census or survey recenly.

Altogether the study covers 49 metropolitan areas from 9 Arab countries. The region is subdivided into two subregions- North Africa and West Asia-to provide a broad regional framework for the analysis. 36 out of the 49 metropolitan centres are located in North Africa, which reflects both the higher degree of urbanization and greater availability fo statistical data for this subregion. The population of the metropolitan areas included in this study amounts to 25 percent of the total population of the region and 63 percent of its urban population.

Table 1. Coverage of the Study by Sub-regions, countries and Size Classes.

Country	Definition adopted	Censuses	All Size Classes	No. of metropolitan areas included: 100,000 to 250,000	250,000 to 500,000	500,000 to 1000000	1000000 and over	Metropolitan Pop. in second cencus (000)	as percent of: total population	as percent of: Urban population
North Africa										
Algeria	(CP)	1954								
		1966	5	3	1	1	-	1,753	14.8	38.0
Morocco	(CP)	1960								
		1971	10	6	2	1	1	3,714	24.1	68.7
Tunisia	(UA)	1956								
		1966	4	3	1	-	-	649	14.3	35.7
Libya	(CP)	1954								
		1964	2	2	-	-	-	313	20.0	81.3
Egypt	(UA)	1947								
		1960	11	9.	-	-	2.	7,446	28.7	75.5
West Asia										
Syria	(CP)	1960								
		1970	5	2	1	2	-	2,085	33,1	76.1
Iraq	(UA)	1957								
		1965	6	3	2	-,	1	2.506	31.1	60.9
Kuwait	(UA)	1965								
		1970	2	1	1	-	-	510	69.0	69.1

II. ANALYSIS OF METROPOLITAN GROWTH RATES

Geographical Variations

The growth rates of metropolitan areas in the Arab region vary from a high rate of 12.7 percent in Hawali(Kuwait) to a low rate of -0.9 percent for Kuwait city. The typical growth rate of the order of 5 percent, but there are considerable deviations from this typical rate. Broadly one may classify the metropolitan areas according to high, medium and low growth rates as follows:

Country	High (5% and over)	Medium (3% to 5%)	Low (below 5%)
Algeria	Algiers, Annaba, Constantine, Oran, Sidi Bel Abbas	-	-
Morocco	-	Rabat, Casablanca Fes, Kenitra, Meknes, Safi.	Tetouan, Marrakech, Oujda, Tanger.
Tunisia	-	-	Tunis, Bizerte, Sfax, Sousse
Libya	Tripoli, Bengazi	-	-
Egypt	Cairo, Shubra-El Khema.	Alexandria, Aswan Mahalla El-Khobra Suez, Zagazig	Asyut, Damanhour, Mansoura, Tanta
Sudan	Khartoum, Port Sudan, Khartoum North.	Omdurman	-
Syria	Hama, Homs, Latakia,	Damascus, Aleppo	-
Iraq	Al-Najaf, Bagdad, Basra	Hilla, Kirkuk Mousel	-
Kuwait	Howali	-	Kuwait City

One may observe a geographical pattern in the variations in metropolitan growth rates. Generally the metropolitan centres of Algeria, Libya and the Sudan have very high growth rates; the bulk of the metopolitan centres of Morocco and Egypt have medium growth rates, and in Syria and Iraq they are evenly distributed between the two groups. Tunisia stands out an area of low metropolitan growth rates. The countries are arrayed below in the descending order of their metopolitan growth rates:

Group	Country	Metropolitan growth rate %
I	Algeria	7.13
	Libya	6.13
	Kuwait	5.89
II	Syria	5.88
	Sudan	5.35
	Iraq	5.03
III	Egypt	3.72
	Morocco	3.50
	Tunisia	1.35

The countries seem to fall into three homogeneous groups. In the first group having very high meropolitan growth rates., we find a resurgent economy baded on oil production; in contrast,

the second group, which is predominantly agricultural countries also have high metropolitan growth rates. However this group comprises of countries with vast unexploited land resources an a low density of population. The third group consists of countr where population pressure is acutely felt.

Related Factors

We may examine what factors are associated with the variations in the growth rates. The degree of urbanization of the cou tries as measured by the percentage of population in localities of 20,000 and over, does not covary with the metropolitan growth rates for the countries. Nor does the size of population of the countries bear any association with the metropolitan growth rate It seems that the metopolitan growth rates are more influenced by specific characteristics of the individual centres. One such characteristic is the size of population. Growth rates of metropolitan centres of four size classes are as follows:

Size class	No. of centres	growth rate (percent)
100,000-250,000	33	4.10
250,000-500,000	8	5.56
500,000-1000,000	4	5.76
1000,000 and over	4	4.81

The relationship between growth rates and size classes to follow an inverted U-shaped pattern. Growth rates are low when the size of the centres are small, they increase gradually as the centres expand, and finally there is a stage when the growth rates begin to decline as the centres grow further. This point of "saturation" or "urban maturity" seems to be near the million mark as far as Arab countries are concerned.

Another variable that may have an association with metropolitan growth rates is density of the centres, which may be an approximate indicator of congestion. On a cursory examination, one finds that the growth rates are high in some of the congested centres (example,Algiers), while they are low in some less congested places (example Kuwait). A definitive conclusion regarding the relationship between metropolitan density and metropolitan growth will have to wait till further analysis is carried out.

III. MIGRATION TO METROPOLITAN CENTRES

Volume of Net Migration

Metropolitan growth is attributable to three factors-net migration, natural increase and annexation/detachment. of these, information on the last component is not available for

most centres and where they are available. the data for the inital date have suitably adjusted to correspond with the boundaries at the terminal date. Another adjustment that has been done is to make the intercensal period an exact multiple of 5 years, so as to correspond with the age grouping . For most metroplitan areas estimates of net migration have been derived by the Census Survival Ratio Method assuming that there are no differences in mortality between the metropolitan areas and the rest of the country, In reality, mortality in these centres are likely to be lower , and consequently our estimates of net migration are likely to be slightly on the high side. Since the extent of the differential in mortality between the metropolitan areas and the country as a whole is not known, no attempt has been made to apply mortality corrections. For countries that are subject to external migration, such as Algerian, Morocco, Libya, suitable "Closure" of the population was established before deriving the national survival ratios. For the metropolitan areas in Kuwait, Sudan and Tunisia, the CSR Method could not be applied due to absense of suitable or accurate age tabulations for one census or the other. In such cases, the vital statistics method has been applied on the assumption of appropriate rate of natural increase. The net migration estimates are shown in the Reference Tables at the end of the paper.

There are three centres where the volume of net migration exceeded 200,000 in a ten year period. These are Cairo, Algiers and Bagdad. Cairo has the distinction of attracting the highest volume of net migration (with over one million in ten years). There are three centres (Alexandria, Rabat and Casablanca)which received between 100,00 and 200,000 migrants in ten years. On the other hand five centers(Kuwait city, Tunis, Bizerte,Stax, and Sousse) which have suffered net migration losses. Of these the case of Kuwait city is unique, and is attributable to the growth of the modern cities of Hawali and Ahmadi, which act as "counter magnets".The losses observed for Tunisian Metropolitan centres are entirely due to the exodus of the French,which has been partially offset by the replacement migration that followed. If estimates are derived separately for the Tunisian Moslems, this would show significant migration gains.

Rate of Net Migration

The volume of net migration is influenced inter alia by the size of population. In order to facilitate comparisons between the different centres, we have computed the net migration rates by expressing the amounts of net migration as a ratio of the population at the second census. The net migration rates are shown in Reference Table B and D. There are considerable variations in

the net migration rates, from -5% to +8%. The typical net migration rate is of the order of +2%. The centres may be grouped according to high, medium and low rates of net migration below:

Country	High (over 2.5%)	Medium (1%to 2.5%)	Low (below 1%)
Algeria	Algiers,Annaba Constantine,Oran Sidi Bel Abbas		
Morocco	Rabat	Casablanca,Fes, Kenitra,Safi	Marrakech,Meknes Oujda,Tanger, Tetouan
Tunisia			Tunis,Bizerte,Sfax and Sousse
Libya	Benghazi	Tripoli	
Egypt	Cairo,Shubra El-Khema	Alexandria,Aswan Suez	Asyut,Damanhour Mnsoura,Mahlla El Kobra,Tanta,Zagazig
Sudan	Khartoum,Port Sudan,Khartoum North	Omdurman	--
Syria	Hama,Homs,Latakia	Damascus, Aleppo	--
Iraq	Bagdad,Basra	Al Najaf,Hilla Kirkuk,Mousel	--
Kuwait	Hawali	--	Kuwait

Five out of the 9 capitals have high migration rates, and almost all major ports have high net migration rates. The distribution of metropolitan areas according to high, medium and low net migration rates resembles closely the distribution of the centres according to high, medium and low growth rates.

Related Factors

We noticed in the previous section that growth rate of metropolitan areas bears an inverted U-shaped relationship with size classes. In view of the close association between net migration rate and growth rate, we should expect a similar relationship between migration rate and size classes of metropolitan centres. The following figures confirm this speculation:

Size Class	Net Migration Rate (Percent)
100,000-250,000	1.31
250,000-500,000	2.71
500,000-1000,000	2.84
1000,000 and over	2.34

Net migration rate increases upto the size class (500,000 to 1000,000) and thereafter it declines. If cross-sectional finding is valid temporally, we may assume in metropolitan population projections an increase in net migration rate upto a stage and thereafter a decline in the rate could be assumed.

Sex-age patterns in net migration

Estimates of net migration by sex and age groups for the metropolitan areas are presented in the Reference Tables A and B. (Also see Figures at the end). In 27 out of the 49 metropolitan centres the volume of net migration is greater for males than females. In the remaining 22 centres, females outnumbered males in the volume of net migration. The situation differed from one centre to another, but there is considerable similarity within each country. The sex patterns are summarized in the following figures:

Country	Sex-ratio in Net migration (percent)	Number of metropolitan areas having	
		males in excess	females in excess
Algeria	95.9	1	4
Morocco	81.3	-	10
Tunisia	102.2		
Libya	111.6	2	
Egypt	101.8	7	4
Sudan	----	5	
Syria	111.0	2	
Iraq	98.9		-
Kuwait	113.8		-

In some countries (especially the Maghreb) there is a tendency of female dominance in net migration to metropolitan centres. Similar tendency is noticed in western Europe and North America , but not in Asia. The explanation for female dominance in net migration can be sought in family migration and sequential migration. It is likely that migrants to metropolitan centres in Arab countries (unlike his counterpart in Bombay)prefers to move with his family, including his aged mother. Evidence for this is seen in the migration curve by age. As might be expected, the peak of the migration curve occurs in 20-34 for males, but the curve does not follow the bell-shaped pattern observed elsewhere. The amounts and rates of net migration are high both in the younger and older ages, very likely on account of family migration. In most countries (example, United States and India), there is a sag in the migration curve at older ages, indication return migration. In the case of the metropolitan centres of the Arab world, this is less evident.

IV. RELATIVE ROLES OF NET MIGRATION AND NATURAL INCREASE

Finally we may examine the contribution of net migration and natural increase to the population growth of metropolitan Centres of Arab countries. The relative shares of these

two compnents are shown in Reference Table D. It may be seen that natural increase is the predominant factor in 33 out of the 49 centres, At the same time, net migration has contributed to over one-third of metropolitan growth in 34 out on the 49 centres. The growth rate and its components for the different countries are shown below:

Country	Growth Rate (percent)	Net Migr Rat (percent)	Net.Inc Rate (percent)
Aleria	7.13	4.06	3.06
Morocco	3.50	1.03	2.47
Tunisia	1.35	0.80	2.15
Libya	6.13	2.14	3.99
Egypt	3.72	1.01	2.71
Sudan	5.35	2.75	2.60
Syria	5.88	2.67	3.21
Iraq	5.03	2.51	2.52
Kuwait	5.89	1.69	4.20

A feature of these estimates is that while there are great variations in growth and net migration rates, the natural increase rates have very little variations. It was noted earlier that the

variations in net migration rates are almost paralled to the variations in growth rates. This would indicate that while natural increase rate is the more important factor in population growth of metropolitan areas, the differentials in the rate of growth are more closely associated with rates of net migration. This hypothesis is tested below by ordering the metropolitan centres having above median and below median growth rates and examining how many of these have above median and below median natural increase and net migration rates:

Rate of Net Migration and natural increase	No.of centres with growth rates	
	above median	below median
Net Migration Rate		
above median	23	2
below median	2	22
Natural Increase Rate		
above median	17	8
below median	8	16

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Rate of Net Migration and natural increase	No.of centres with growth rates	
	above median	below median
Net Migration Rate		
above median	23	2
below median	2	22
Natural Increase Rate		
above median	17	8
below median	8	16

It is apparent that the variation in growth rate is more closely related to variations in net migration rate than to variations in natural increase rate.

V SUMMARY AND FURTHER ANALYSIS PROPOSED

This brief paper suppliments the macro study of urbanization in Arab countries, and tries to examine the variations in metropolitan growth rates at a micro level, and identify the individual contributions of net migration and natural increase to metropolitan growth. The metropolitan growth rates follow some geographical patterns. In countries with an oil-based economy the metopolitan growth rates are high; in countries with vast unexploited resources, they are again high, but slightly below the levels of the first group; in the third group of countries, which have pressure on land, metropolitan growth rates are low. While there are great variations in the growth rates, there is also "clustering" of growth rates in individual countries, with smaller variations "within" each country

Population size of the metropolitan area appears to be an important factor associated with variations in growth rates. Growth rates are low when the centres are small in size, they increase gradually as the centres expand, and finally there is a stage when the growth rates begin to decline. A paralled tendency is

observed for net migration rates also.

In terms of absolute numbers, Cairo,Algiers and Bagdad are the greatest gainers of population through migration. The typical net migration rate is of the order of +2% as against a typical growth rate of 5%. Natural increase emerges as the predominant factor in metropolitan growth, but the differentials in metropolitan growth rates are more closely associated with variations in net migrations rates.

Finally, it may be noted that all the possibilities of analysis of relationships of metropolitan growth are not exhausted in this brief paper. It is proposed to examine some additional variables, such as metropolitan density, administrative, functiona and other type of centres, the overall rate of economic growth etc as possible factors of the speed of metropolitan growth.

For some centres it is possible to classify population according to central city and suburbs (or banlieu). In such cases, it is proposed to examine the growth rates and their components for these two classes of areas within each metropolitan centre.

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Data Sources

Census Publications of Arab Countries included in the study.

A.Estimates of Net-migration by Sex and Broad Age-groups for Metropolitan Areas of Arab Countries(in 100)

Age	Algers		Annaba		Constantine	
	Males	Females	Males	Females	Males	Females
0- 9	415	405	43	43	73	70
10-19	483	510	40	52	86	97
20-34	564	555	60	65	80	101
35-49	330	275	42	27	76	57
50-59	86	117	9	14	13	23
60 and over	67	134	6	13	13	30
Total	1945	1996	200	214	341	378

Age	Oran		Sidi Bel-Abbas		Cairo	
	Males	Females	Males	Females	Males	Females
0- 9	101	100	16	16	863	819
10-19	93	125	16	24	1315	1589
20-34	134	136	35	21	1700	1266
35-49	91	67	24	14	792	778
50-59	12	23	4	6	330	375
60 and over	13	30	4	8	211	302
Total	444	481	99	89	5211	5129

Age	Alexandria		Aswan		Asyut	
	Males	Females	Males	Females	Males	Females
0- 9	75	68	6	6	- 1	- 1
10-19	223	374	6	7	11	13
20-24	293	76	26	15	--	- 7
35-49	55	71	6	1	5	4
50-59	37	45	4	2	4	2
60 and over	- 5	25	--	1	- 1	1
Total	678	659	48	32	18	12

Reference Table A.(continued)

Age	Damanhour		Mansoura		Mahalla El-Kobra	
	Males	Females	Males	Females	Males	Females
0- 9	- 9	- 9	- 7	- 7	---	---
10-19	13	26	19	44	13	27
20-34	3	-25	2	-20	-16	- 6
35-49	6	4	10	---	- 1	3
50-59	3	--	3	2	1	1
60 and over	-	2	- 5	- 1	- 6	1
Total	15	- 2	22	18	-9	26

Age	Shubra El-Khema		Suez		Tanta	
	Males	Females	Males	Femlaes	Males	Females
0- 9	26	26	33	31	-24	-23
10-19	25	14	12	22	1	35
20-34	54	52	35	54	-15	-42
35-49	31	13	16	11	7	- 5
50-59	6	5	4	5	- 1	- 4
60 and over	1	2	- 1	4	- 9	- 6
Total	145	112	99	127	-41	-45

Age	Zagazig		Baghdad		Al-Najaf	
	Males	Famales	Males	Females	Males	Females
0- 9	- 3	- 2	467	434	15	15
10-19	10	26	803	766	39	34
20-34	- 4	- 2	454	519	21	13
35-49	10	4	341	327	18	14
50-59	2	2	149	133	7	9
60 and over	- 3	1	99	179	8	8
Total	12	19	2313	2358	108	93

Reference Table A. (Continued)

Age	Basra		Hillah		Kirhuk	
	Males	Females	Males	Females	Males	Females
0- 9	104	97	15	14	16	15
10-19	172	162	30	32	53	44
20-34	101	107	11	13	46	19
35-49	70	89	6	13	2	7
50-59	43	39	5	5	9	7
60 and over	18	40	5	7	2	2
Total	508	532	69	84	128	94

Age	Mousel		Bengazi		Tripoli	
	Males	Females	Males	Females	Males	Females
0- 9	23	21	220	218	327	323
10-19	86	77	121	115	161	152
20-34	24	18	183	142	244	208
35-49	--	16	90	71	131	92
50-59	15	10	36	28	47	38
60 and over	9	16	41	39	50	53
Total	157	158	691	613	960	866

Age	Rabat		Casablance		Fes	
	Males	Females	Males	Females	Males	Females
00- 9	69	71	106	104	16	16
10-19	170	283	372	605	111	170
20-34	160	82	311	36	- 14	- 27
35-49	82	86	137	163	39	54
50-59	2	29	- 8	56	- 1	4
60 and over	34	36	- 37	- 7	5	2
Total	517	587	881	957	156	219

Reference Table A. (Continued)

Age	Kenitra		Marrakech		Meknes	
	Males	Females	Males	Females	Males	Females
0- 9	12	12	- 2	- 2	1	1
10-19	31	59	72	101	57	91
20-34	18	12	-20	- 32	-14	-26
35-49	14	11	-37	19	21	19
50-59	- 3	3	- 5	2	-10	4
60 and over	--	4	- 7	2	- 1	3
Total	72	101	1	90	54	92

Age	Oujda		Safi		Tanger	
	Males	Females	Males	Females	Males	Females
0- 9	-10	- 9	12	11	- 9	- 9
10-19	30	47	32	48	33	74
20-34	-27	-45	19	6	3	-29
35-49	15	20	22	21	3	--
50-59	3	22	5	5	- 6	- 3
60 and over	- 1	- 2	--	6	-11	-16
Total	4	13	90	97	13	17

Age	Tetouan		Damascus		Aleppo	
	Males	Females	Males	Females	Males	Females
0- 9	- 4	- 4	103	98	42	39
10-19	23	56	197	185	157	114
20-34	-11	-18	235	143	58	38
35-49	6	2	34	53	32	33
50-59	1	16	18	24	9	61
60 and over	- 8	-13	- 1	2	- 4	2
Total	7	39	586	505	294	287

Reference Table A.(Continued)

Age	Hama		Homs		Lattakia	
	Males	Females	Males	Females	Males	Females
0-9	40	38	57	52	64	60
10-19	79	56	99	87	95	85
20-34	39	32	63	55	73	69
35-49	33	32	45	39	44	42
50-59	11	12	14	12	14	13
60 and over	16	15	14	17	15	19
Total	218	185	292	262	305	288

. Net-Migration Rates by Sex and Broad Age-groups for Metropolitan Areas of Arab Countries
(Rates per 1000 of terminal population in each sex-age category)

Age	Algers		Annaba		Constantine	
	Males	Females	Males	Females	Males	Females
0- 9	256	247	168	168	176	176
10-19	476	509	244	313	320	357
20-34	576	554	413	399	343	384
35-49	547	517	408	285	488	360
50-59	351	489	225	350	209	344
60 and over	312	471	158	292	190	369
All ages	410	424	267	280	283	305

Age	Oran		Sidi Bel Abbas		Cairo	
	Males	Females	Males	Females	Males	Females
0- 9	174	175	112	113	118	118
10-19	278	362	174	250	268	325
20-34	425	391	364	232	325	239
35-49	432	340	422	257	206	228
50-59	129	260	162	239	232	290
60 and over	165	328	161	264	178	255
All ages	276	293	224	203	218	223

Age	Alexandria		Aswan		Asyut	
	Males	Females	Males	Females	Males	Females
0- 9	32	30	88	88	- 4	- 4
10-19	137	224	131	158	78	103
20-34	178	446	374	257	2	- 53
35-49	46	66	135	33	48	45
50-59	76	107	219	193	98	62
60 and over	- 12	63	22	104	-14	25
All ages	88	88	185	144	29	21

Reference Table B. (Continued)

Age	Damanhour		Mansoura		Mahalla ALKobra	
	Males	Females	Males	Females	Males	Females
0- 9	-46	- 46	- 30	- 30	--	--
10-19	89	173	109	239	64	136
20-34	24	-199	15	-120	- 98	- 33
35-49	65	40	82	- 4	- 8	27
50-59	82	- 12	57	42	10	14
60 and over	-33	70	-137	- 32	-183	35
All ages	24	- 4	28	23	- 12	30

Age	Shubra El-Khema		Suez		Tanta	
	Males	Females	Males	Females	Males	Females
0- 9	163	161	90	90	- 85	- 85
10-19	242	159	57	111	7	163
20-34	444	430	173	239	- 81	-212
35-49	358	188	91	82	51	- 37
50-59	214	225	61	109	- 28	- 75
60 and over	64	117	- 38	114	-178	-122
All ages	273	234	93	129	- 44	- 48

Age	Zagazig		Baghdad		Al-Najaf	
	Males	Females	Males	Females	Males	Females
0- 9	- 13	- 13	173	171	63	62
10-19	71	180	469	492	262	243
20-34	- 30	- 92	285	343	175	97
35-49	101	47	350	379	230	167
50-59	60	49	357	380	199	249
60 and over	- 96	31	260	399	190	165
All ages	21	30	297	325	163	136

erence Table B. (Continued)

Age	Basra		Hillah		Kirkuk	
	Males	Females	Males	Females	Males	Females
0- 9	178	175	97	96	50	50
10-19	457	471	292	334	250	240
20-34	333	349	130	160	207	108
35-49	306	396	114	260	18	70
50-59	368	394	232	214	171	169
60 and over	207	343	101	249	32	47
All ages	300	324	157	196	131	111

Age	Mousel		Bengazi		Tripoli	
	Males	Females	Males	Females	Males	Females
0- 9	48	48	107	107	71	72
10-19	286	292	272	309	180	210
20-34	84	69	326	232	212	154
35-49	2	114	37*	191*	96*	104*
50-59	239	169	175	245**	125**	186**
60 and over	106	177	103+	270+	41+	167+
All ages	115	126	190	202	129	132

Age	Rabat		Casablanca		Fes	
	Males	Females	Males	Females	Males	Females
00- 9	92	94	46	47	34	34
10-19	288	422	304	312	267	376
20-34	286	136	218	22	- 50	- 85
35-49	204	229	121	149	174	218
50-59	12	235	-196	168	- 16	51
60 and over	200	207	-108	- 18	44	16
All ages	198	217	119	125	98	131

Reference Table B. (Continued)

Age	Kenitra		Marrakech		Meknes	
	Males	Females	Males	Females	Males	Females
0- 9	54	55	- 3	- 4	3	3
10-19	190	329	173	237	185	281
20-34	156	82	- 77	- 93	- 67	-100
35-49	124	112	152	75	119	105
50-59	-100	109	- 47	28	146	64
60 and over	3	120	- 48	15	- 14	38
All ages	105	144	1	53	46	72

Age	Oujda		Safi		Tanger	
	Males	Females	Males	Females	Males	Females
0- 9	- 35	- 35	61	61	- 31	- 31
10-19	129	208	218	308	155	310
20-34	-198	-262	173	44	19	-148
35-49	123	151	216	198	22	- 2
50-59	- 60	58	117	150	-104	- 64
60 and over	- 21	- 48	- 9	126	-196	-242
All ages	5	13	141	147	15	17

Age	Tetouan		Damascus		Aleppo	
	Males	Female	Males	Females	Males	Females
0-9	- 21	- 20	73	73	38	38
10-19	151	322	202	199	194	157
20-34	- 92	-122	248	164	94	64
35-49	61	19	58	106	72	85
50-59	15	305	97	136	62	459
60 and over	-209	-323	- 3	79	- 25	10
All ages	10	54	136	124	89	79

Reference Table B. (Continued)

Age	Hama		Home		Lattakia	
	Males	Females	Males	Females	Males	Females
0- 9	118	117	121	121	212	212
10-19	333	265	456	302	487	477
20-34	226	200	264	236	447	441
35-49	286	296	248	250	367	412
50-59	306	315	254	254	376	413
60 and over	283	256	200	229	360	394
All ages	227	205	219	213	355	361

C. Comonents of Popualtion Growth in Metropolitan Areas of Arab Countries.
(in 1000)

	Metropolitan Area	Period	Population growth	Net Migration	Natural
A	Algers	1956 - 66	604	394	210
	Annaba	1956 - 66	76	42	34
	Constantine	1956 - 66	125	72	53
	Oran	1956 - 66	170	92	78
	Sidi-Bel-Abbas	1956 - 66	39	19	20
	Cairo	1950 - 60	2018	1034	984
	Alexandria	1950 - 60	469	134	335
	Aswan	1950 - 60	17	8	9
	Asyut	1950 - 60	29	3	26
	Damanhour	1950 - 60	31	1	30
	Mansoura	1950 - 60	4	4	34
	Mahalla El Kobra	1950 - 60	49	2	47
	Shubra El khema	1960 - 60	48	26	22
	Suez	1950 - 60	75	23	53
	Tanta	1950 - 60	35	- 8	43
	Zagazig	1950 - 60	33	3	30
	Baghdad	1955 - 65	705	467	238
	Al-Najaf	1955 - 65	54	20	34
	Basra	1955 - 65	154	104	50

Reference Table C. (Continued)

Metropolitan Area	Period	Population Growth	Net Migration	Natural Increasd
Hillah	1955-65	32	15	17
Kirkuk	1955-65	59	22	37
Mousel	1955-65	102	32	70
Kuwait City	1965-70	- 7	- 42	35
Hawali	1965-70	167	112	55
Bengazi	1954-64	63	25	36
Tripoli	1954-64	83	24	59
Rabat	1961-71	210	52.4	100
Casablanca	1961-71	499	184	315
Fes	1961-71	100	37	63
Kenitra	1961-71	48	17	31
Marrakech	1961-71	82	9	73
Meknes	1961-71	67	15	52
Oujda	1961-71	43	2	41
Safi	1961-71	44	18	26
Tanger	1961-71	42	3	39
Tetouan	1961-71	35	5	30
Damascus	1960-70	307	109	198
Aleppo	1960-70	220	54	166

Reference Table C. (Continued)

Metropolitan Area	Period	Population Growth	Net Migration	Natural Increase
Hama	1960-70	89	40	49
Homs	1960-70	120	56	64
Lattakia	1960-70	98	59	39
Khartoum	1966-64	75	42	33
Omdurman	1956-64	62	20	42
Khartoum	1956-64	37	22	15
Port Sudan	1956-64	31	15	16
Tunis	1956-66	59	-32	91
Bizerte	1956-66	7	- 4	11
Sfax	1956-66	5	-10	15
Sousse	1956-66	10	- 1	11

Average Annual Rates of Net Migration, Natural Increase and Relative Share of Net Migration and Natural Increase to Population Growth in Metropolitan Areas of Arab Countries

(Rates Per 100 of Average Population)

Metropolitan Area	Period	Growth Rate	Net Mig. Rate	Natural Increase rate	Percent Share	
					Net Migration	Natural Increase
Algers	1956-66	9.42	6,14	3.28	65,2	34,8
Annaba	1956-66	3,65	3,65	2.99	55,0	45.0
Constantine	1950-66	6.89	3.95	2,94	57.3	42,7
Oran	1956-66	7.08	3,85	3.23	54,4	45.6
Sidi Bel Abbas	1956-66	5.61	2,73	2.88	48,7	51.3
Cairo	1950-60	5.49	2.81	2,68	51.2	48.8
Alexandria	1950-60	3.66	1.04	2.62	28.5	71.5
Aswan	1950-60	4.33	2.02	2.31	46.6	53.4
Asyut	1950-60	2.59	0.29	2,30	11.0	89.0
Damanhour	1950-60	2.83	0.12	2.71	4,.2	95.8
Mansoura	1950-60	2.91	0.29	2,62	10.0	90,0
Mahalla El Kobra	1950-60	3,18	0.10	3,08	3.3	96.7
Shubra El Khema	1950-60	6,24	3.34	2,90	53.5	46.5
Suez	1950-60	4,54	1.36	3,18	29.9	70.1
Tanta	1950-60	2,08	-0.51	2.59	-24.3	124.3
Zagazig	1950-60	3.09	0.29	2.80	9,4	90.6
Baghadad	1955-65	6.12	4,06	2,06	66,3	33.7
Al-Najaf	1955-65	5.07	1.87	3.20	36.9	63.1
Basra	1955-65	6,01	4,06	1,95	67,5	32.5

Reference Table D. (Continued)

Metroplitan Area	Period	Growth Rate	Net Mig. Rate	Natural Increase Rate	P Precent Share Net Migration	Natural Increase
Hillah	1955-65	4.38	4.38	2.15	2.23	50.9
Kirkuk	1955-65	3.82	1.45	2.37	37.8	62.2
Mousel	1955-65	4.78	1.48	3.30	31.0	69.0
Kuwait City	1965-70	-0.89	-5.12	4.23	-	-
Hawali	1965-70	12.67	8.50	4.17	67.1	32.9
Bangazi	1954-64	6.40	2.59	3.81	40.4	59.6
Tripoli	1954-64	5.85	1.68	4.17	28.8	71.2
Rabat	1961-71	4.96	2.60	2.36	52.4	47.6
Casablanca	1961-71	3.97	1.46	2.51	36.9	63.1
Fes	1961-71	3.66	1.36	2.30	37.2	62.8
Kenitra	1961-71	4.21	1.51	2.70	35.9	64.1
Marrakech	1961-71	3.81	0.31	2.50	11.0	89.0
Meknes	1961-71	3.09	0.69	2.40	22.2	77.8
Oujda	1961-71	2.79	0.11	2.68	3.8	96.2
Safi	1961-71	4.15	1.74	2.41	42.0	58.0
Tanger	1961-71	2.54	0.18	2.36	7.2	92.8
Tetouan	1961-71	2.84	0.38	2.46	13.33	86.7
Damascus	1960-70	4.50	1.60	2.90	35.5	64.5
Aleppo	1960-70	4.14	1.01	3.13	24.4	75.6

Reference Table D. (Continued)

Metropolitan Area	Period	Growth Rate	Net Mig. Rate	Natural Increase	Percent Share	
					Net Migration	Natural Increase
Hama	1960-70	6.28	2.85	3.43	45.3	54.7
Homs	1960-70	6.09	2.82	3.27	46.3	53.7
Latakia	1960-70	8.39	5.08	3.31	60.5	39.5
Khartoum	1956-64	5.76	3.23	2.53	56.0	44.0
Omdurman	1956-64	4.18	1.38	2.80	33.0	67.0
Khartoum North	1956-64	6.32	3.88	2.44	61.4	38.6
Port Sodan	1956-66	5.15	2.52	2.64	48.8	51.2
Tunis	1956-66	1.34	-0.72	2.06	-53.9	153.9
Bizerte	1956-66	1.46	-0.84	2.30	-57.9	157.9
Safax	1956-66	0.71	-1.43	2.14	-201.1	301.1
Sousse	1956-66	1.88	-0.20	2.08	-10.8	110.8