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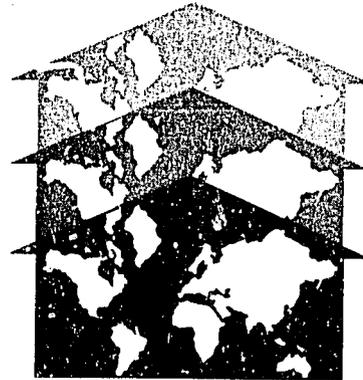
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**NEAR EAST BUREAU COUNTRIES  
CURRENT AND PROJECTED  
URBANIZATION AND  
ASSOCIATED INDICATORS**

April 1983

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**OFFICE OF HOUSING  
AND URBAN PROGRAMS  
AGENCY FOR  
INTERNATIONAL DEVELOPMENT**

Prepared by

**PADCO**

**PLANNING AND DEVELOPMENT  
COLLABORATIVE INTERNATIONAL**

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CURRENT AND PROJECTED URBANIZATION  
AND ASSOCIATED INDICATORS

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NEAR EAST BUREAU COUNTRIES  
CURRENT AND PROJECTED URBANIZATION  
AND ASSOCIATED INDICATORS

I. INTRODUCTION

This paper is a report on current and projected urbanization and associated indicators for nine countries within the regions served by the Near East Bureau (NEB) of AID. The NEB countries included are: Yemen AR, Egypt, Morocco, Tunisia, Jordan, Lebanon, Turkey, Portugal and Israel.<sup>1</sup>

**A. Major Conclusions**

This report has been prepared for PRE/H at the request of the Near East Bureau. Its purpose is to provide indicators relevant to the preparation of urban strategies for resolving development problems in the NEB countries.

Relatively high levels of urbanization in this group of countries already present requirements for urban jobs, housing, urban infrastructure and services, which are difficult for them to provide from their own resources. All of the NEB countries currently receive substantial amounts of international assistance to provide for domestic investment (see Table 7). The amounts range from a low of \$38 per capita in Lebanon to a high of \$613 per capita in Israel in 1980.

**Development planning and programming, by these countries themselves and international donor agencies alike, should now be based upon an expectation of dramatic increases in urban population and requirements for urban services. This overall conclusion is based on a number of findings in this report:**

- It is likely that the relative portions of the population in rural and urban areas in the NEB countries will be approximately reversed over the next two decades — going from about a 60 percent rural to 40 percent urban split in 1980 to about a 60 percent urban to 40 percent rural split in 2000. Lebanon and Israel already have more than 70 percent of their total population in urban areas (76 percent in Lebanon and 89 percent in Israel). If current trends continue, this will be true, also, of Tunisia, Jordan, and Turkey by the year 2000.
- About half of the expected urban population increase of 65 million in the two decades will occur in the largest (primary) cities of these countries, if current trends continue. Casablanca grew by 7.2 percent a year from 1960 to 1980, Istanbul by 6.3 percent a year, Sana'a by 6 percent a year and Beirut by 5.6 percent a year.

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<sup>1</sup>Oman has not been included in this analysis due to limited comparable data.

- The combination of continued population growth and rural to urban migration will mean that urban population will grow by over 60 million compared to total population growth of about 72 million from 1980-2000. The result will be that between a quarter and third of the total urban residents in 2000 will have migrated to urban areas from rural areas in the 1980-2000 period.
- Based upon World Bank projections of poverty for Europe, the Middle East and North Africa, about 85 percent of the poverty of these countries in 2000 will be in urban areas compared to about 62 percent in 1980. Thus the special problems of the poor will be increasingly felt in urban areas. Preparations should begin now to meet this challenge in addition to planning for very substantial rural to urban migration.
- The NEB countries are heavily dependent on international assistance. External capital flows range from 13 percent of domestic investment in Portugal to 71 percent of domestic investment in Israel. The average for NEB countries is over 30 percent.
- Domestic saving falls far short of providing sufficient resources to support 1980 levels of domestic investment; and, unless there are dramatic and unforeseen changes in growth and saving patterns in these countries, even larger shortfalls in the future. In Yemen AR and Jordan, domestic saving was negative in 1980. In the other NEB countries, domestic saving ranged from a low of 36 percent of domestic investment in Israel to a high of 89 percent in Tunisia. On average (excluding Yemen AR and Jordan), domestic saving was only slightly more than half of domestic investment.

The indicators presented in the body of this report highlight two major aspects of future urbanization that will require attention by development agencies in the individual countries and international donor community. First, indicators are provided which show the relative degree of expected requirements for urban jobs, housing, infrastructure and services -- in short, the amount of increased demand for urban employment, shelter and services. Second, indicators are provided which show the relative degree of difficulty these countries will have in supplying the resources needed to meet these demands.

The need (requirements or demand) is shown by indicators of:

- The expected increase from 1980 to 2000 in the percent of the total population which is urban;
- the amount of rural to urban migration implied by the expected growth in urban population; and
- the degree of severity of social conditions that will need to be ameliorated through development programs. (Indicators of Social Conditions are listed in Figure 1, p.19)

The degree of expected difficulty in providing resources (the supply of resources) is shown by indicators of:

- economic capacity to generate urban economic growth in income, employment, and output;
- the adequacy of domestic investment (including contributions to investment in NEB countries by international development assistance agencies.
- the adequacy of domestic saving to meet the increased urban requirements if there are shortfalls in international assistance.

These six indicator groups -- three indicating expected urban demand and three indicating capacity to supply resources to meet the demand -- permit priority rankings for the countries on each of the six groups and an overall ranking. These priority rankings are shown in Table I.

In planning urbanization strategies, both relative needs and the expected ability of the country to provide resources to meet the needs must be taken into account. The final column in Table I, "Overall Priority," represents a systematic approach to taking both of these factors into account. Both factors show relatively adverse conditions for Yemen AR, Jordan and Turkey. Morocco's high priority comes from its current deficiencies in social conditions and its relatively weak economic performance.

Among NEB countries, Egypt and Tunisia rank close together but have different patterns. Egypt will continue to urbanize fairly rapidly, but generally ranks as a lower priority than Tunisia on relative "Needs" criteria. However, Egypt is showing a relatively weaker economic performance than Tunisia, as is demonstrated by its relatively higher priority on "Resource Capacity" criteria. Israel and Portugal, because of continued urbanization but relatively slow population growth, rank as high priority on needs arising from their urban growth being a large proportion of their expected total population growth; however, overall both Israel and Portugal have relatively better social conditions and have relatively high marks on resource capacity compared to other NEB countries. The level of international assistance counts for a much larger portion of Israel's resource capacity, however, than is true of Portugal.

## **B. Magnitudes of Urbanization and Adjustment Problems**

### **I. Current and Projected Urbanization**

In 1980, the NEB countries had a total population of 137.9 million of which 61.6 million (44.7 percent) lived in urban areas. The World Bank projects that these countries will have a total population of 210 million by 2000. If urban population grows at the annual rate for the 1970-80 period, the urban population would more than double to 126.4 million people (60.2 percent). If urban population were to grow at the rate which would be predicted from a

TABLE I  
PRIORITIES FOR URBAN DEVELOPMENT CONCERN  
NEED AND RESOURCE CAPACITY CRITERIA<sup>1</sup>

Size of Projected Change in Percent of Population in Urban Areas	NEEDS		RESOURCE CAPACITY			Overall Priority
	Number of Projected New Urban Residents Compared to Total Population Increase	Needs Arising from Adverse Social Conditions	Overall Economic Capacity	Adequacy of Domestic Saving	Adequacy of Domestic Investment	
Turkey	Portugal	Yemen AR	Yemen AR	Yemen AR	Morocco	Yemen AR
Yemen AR	Israel	Morocco	Turkey	Jordan	Jordan	Jordan
Tunisia	Turkey	Jordan	Morocco	Morocco	Egypt	Morocco
Portugal	Jordan	Tunisia	Egypt	Egypt	Turkey	Turkey
Jordan	Tunisia	Egypt	Jordan	Turkey	Yemen AR	Egypt
Morocco	Egypt	Turkey	Israel	Israel	Tunisia	Tunisia
Egypt	Morocco	Israel	Tunisia	Tunisia	Israel	Israel
Israel	Yemen AR	Portugal	Portugal	Portugal	Portugal	Portugal

<sup>1</sup>Countries are ranked from highest to lowest urban development concern on each criteria among the NEB countries. The overall priority is the unweighted average of the rankings on the six criteria. Lebanon and Oman are not ranked due to missing data. The data supporting these priority rankings is provided in the text of the report. Columns 1-3 come from Table 4, p.9; and columns 4-6 come from Table 5, p.10.

continuation of 1970-80 rates of growth in GNP per capita, the urban population would reach 131.3 million people (62.5 percent) by 2000.<sup>2</sup>

In 1980, the sum of the populations of the largest city of each of the countries was 19.8 million (14.4 percent of the total population). A continuation of their past growth rates would raise their total population to 49.9 million in 2000 (23.8 percent of the total population).

Thus, for the NEB countries there will be a need to provide employment, housing and services to support an additional 72 million people overall. The urban perspective is more dramatic — the above projections indicate a net increase in urban population requiring services of 64.8 to 69.7 million people. These figures, also, show a net increase of about 30 million in the nine primary cities of the NEB countries.

Comparable data on urbanization for each of the NEB countries is shown in Tables 2 and 3 to provide a sense of the variations among the countries. Table 2 shows that every NEB country has shown considerably higher growth rates in their urban population than in their total population. This implies continuing rural to urban migration in these countries. Lebanon has experienced four times as rapid growth in its urban population as in its total population. The urban growth rate in Yemen AR and Portugal has been over twice as large as the growth in total population. On average, about 45 percent of the population in NEB countries is urban and over 32 percent of the urban population resides in the largest city of each country.

Table 3 shows projected population and urban growth from 1980 to 2000. The expected total population growth is that projected by the World Bank. Urban growth is projected two ways. First, urban growth trends in the 1970-80 period are projected to be maintained from 1980 to 2000. Second, economic growth trends are projected to be maintained and the urban population increase associated with the growth in GNP calculated.<sup>3</sup> In general, future urban population projected on the basis of past urban growth is less than that projected on recent GNP growth. This is true of Yemen AR, Egypt, Tunisia, Jordan and Portugal. An implication of this is that these countries (and international donor agencies supporting them) should consider allocating a portion of the proceeds of their economic growth to programs which anticipate likely future urbanization rates even higher than those in the past.

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<sup>2</sup>GNP per capita is highly correlated with urbanization. For NEB countries, the correlation is 0.75. The high estimate for urban population is derived from a calculation of the increase in GNP per capita if current growth continues and the difference this would make in urban population. The regression equation used for this calculation is: Urban Population as Percent of Total Population =  $-152.172 + 28.46 \ln(\text{GNP per capita})$

<sup>3</sup>See footnote 2.

TABLE 2  
URBANIZATION INDICATORS IN NEB COUNTRIES

Country	Total Population		Urban Population				Largest City Population		1980 Primary City Population (Millions)	
	1980 Population (Millions)	1970-80 Average Annual Growth of Population (Percent)	As Percentage of Total Population		1980 Urban Population (Millions)	Average Annual Growth Rate (Percent)		Percentage of Urban Population In Largest City		
			1960	1980		1960-70	1970-80	1960		1980
Yemen AR	7.0	2.9	3	10	0.7	8.0	8.3	N/A	25	0.175
Egypt	39.8	2.1	38	45	17.9	3.3	2.8	38	39	6.98
Morocco	20.2	3.0	29	41	8.3	4.2	4.6	16	26	2.15
Tunisia	6.4	2.1	36	52	3.3	3.8	3.9	40	30	1.00
Jordan	3.2	3.0	43	56	1.8	4.5	4.7	31	37	0.47
Lebanon	2.7	0.7	44	76	2.0	6.2	2.8	64	79	1.62
Turkey	44.9	2.4	30	47	21.1	5.1	4.5	18	24	5.06
Portugal	9.8	1.3	23	31	3.0	1.3	2.9	47	44	1.34
Israel	3.9	2.6	77	89	3.5	4.3	3.2	46	35	1.21
Totals	137.9		32 %	45 %	61.6					19.83

Source: World Development Report, 1982

TABLE 3  
PROJECTED POPULATION AND URBAN GROWTH  
(Millions)

Country	1980 Population	2000 Population	Population Growth	1980 Urban Population		2000 Urban Population Based on Past Urban Growth <sup>1</sup>		Expected Urban Population Growth	2000 Urban Population Based On Past GNP Growth <sup>2</sup>		Expected Urban Population Growth
				As % of Total	No.	As % of Total	No.		As % of Total	No.	
Yemen AR	7.0	11	4.0	10	0.7	31.4	3.4	2.7	35.1	3.9	3.2
Egypt	39.8	60	20.2	45	17.9	51.9	31.1	13.2	64.0	38.4	20.5
Morocco	20.2	36	15.8	41	8.3	56.6	20.4	12.1	55.1	19.8	11.5
Tunisia	6.4	10	4.6	52	3.3	71.5	7.2	3.9	78.7	7.9	4.6
Jordan	3.2	6	2.8	56	1.8	74.8	4.5	2.7	87.6	5.3	3.5
Lebanon	2.7	4	1.3	76	2.1	89.1	3.6	1.5	N/A	N/A	N/A
Turkey	44.9	67	22.1	47	21.1	76.0	50.9	29.8	67.1	45.0	23.9
Portugal	9.8	11	1.2	31	3.0	48.9	5.4	2.4	58.8	6.5	3.5
Israel	3.9	5	1.1	89	3.5	95-100	5.0	1.5	95-100	5.0	1.5

<sup>1</sup>This column is 1980 population times the 1970-80 annual growth rate raised to the 20th power. Israel is shown as 95 to 100 percent because urban size in 2000 at 1970-80 rates would exceed total population in 2000.

<sup>2</sup>This column is 1980 population plus population growth projected by using the 1960-80 growth rate of GNP per capita to project 2000 GNP per capita and then using a regression equation of the form: Percent urban = a + b ln (GNP per capita) to estimate the change in urban population between 1980 GNP per capita and 2000 GNP per capita. Israel is shown again as 95-100 percent because urban size in 2000 would exceed total population in 2000.

Source: World Development Report and PADCO calculations.

Morocco and Turkey, on the other hand, face the possibility of continuing urban growth at past rates without the necessary economic growth to support the urban population.

## 2. Relative Severity of Adjustment Problems

There are three different ways to approach the question of how serious the relative adjustment problem will be for each of these countries in gearing their investment and development strategies to the amount of urbanization to be expected over the next two decades. First, the greater the change in the relative proportion of the population, which is urban rather than rural, the greater the degree of adjustment that would be required. Second, the countries witnessing greater absolute change in urban population relative to the change in total population would tend to experience greater adjustment requirements. Third, countries which already have more adverse social conditions will have greater adjustment problems in coping with rural/urban migration and urban poverty. Table 4 shows how the nine countries rank on these three criteria from greater to lesser adjustment requirements.

Obviously, increased urban population poses substantial investment requirements for plant, equipment, and land for job creation as well as housing, community services and infrastructure within urban areas and inter-urban infrastructure to link urban settlements with each other and with their rural hinterland. Two measures of the severity of such costs, which are developed in a subsequent section of this paper, are (1) the number of years of investment at the rate of domestic investment in 1980 it would take to provide services for the expected year 2000 populations and (2) the number of years of investment at the rate of current domestic saving to provide equivalent services. The first measure includes both domestic and international contributions to domestic investment in 1980. The second measure indicates how difficult it would be for each country to cope with urban requirements if international assistance were not to be forthcoming. A third measure of resource capacity is an index of recent economic performance. These summary measures are reported in Table 5.

The rankings in Table 4 can be thought of as representing the potential problems posed by the requirements for urban jobs, housing, infrastructure and social services. The rankings in Table 5 can be thought of as representing the potential problems posed for financing the required jobs, housing, and infrastructure. Taken together, then, they permit a combined ranking of the NEB countries from greater to less problems resulting from the expected future urbanization; these combined rankings are shown in Table 6.

From the perspective of AID programming to deal with urbanization issues and problems, the first three rankings in Table 6 suggest priorities based upon expected country needs for urban support arising from expansion of population in urban areas. The second three rankings suggest priorities based upon availability of financial resources, both domestic and international, and current economic performance to cope with the needs of the expanding urban population.

TABLE 4  
COUNTRIES RANKED BY SEVERITY  
OF ADJUSTMENT PROBLEMS

<u>Change in Percent Urban<sup>1</sup></u>		<u>Average Change in Urban Population<sup>2</sup></u>		<u>Social Indicators</u>	
<u>Country</u>	<u>Average Percentage Point Changes</u>	<u>Country</u>	<u>Ratio of Added Urban to Added Total Population</u>	<u>Country</u>	<u>Index of Adverse Social Conditions<sup>3</sup></u>
Turkey	24.55	Portugal	2.45	Yemen AR	-1.69
Yemen AR	23.25	Israel	1.36	Morocco	-0.761
Tunisia	23.10	Turkey	1.21	Jordan	-0.030
Portugal	22.85	Lebanon	1.15	Tunisia	0.139
Jordan	20.20	Jordan	1.11	Egypt	0.222
Morocco	14.85	Tunisia	0.92	Turkey	0.332
Lebanon	13.10	Egypt	0.83	Israel	0.353
Egypt	12.95	Morocco	0.75	Portugal	0.929
Israel	11.00	Yemen AR	0.74		

<sup>1</sup>These figures are the average of the two projected 2000 urban percentages from Table 3 minus the 1980 urban percentage for the country.

<sup>2</sup>These figures are the average of the two estimates of urban population growth from Table 3 divided by the projected total population growth.

<sup>3</sup>These figures are the unweighted averages of the social indicators shown in Annex C, Table C.2.

TABLE 5  
COUNTRIES RANKED BY ADEQUACY OF ECONOMIC RESOURCES

<u>Domestic Investment Levels<sup>1</sup></u>		<u>Domestic Saving Levels<sup>2</sup></u>		<u>Index of Economic Capacity<sup>3</sup></u>	
<u>Country</u>	<u>Number of Years</u>	<u>Country</u>	<u>Number of Years</u>	<u>Country</u>	<u>Index</u>
Morocco	20.3	Yemen AR	Indefinite/Negative Saving	Yemen AR	-0.469
Jordan	16.2	Jordan	Indefinite/Negative Saving	Turkey	-0.263
Egypt	14.0	Morocco	38.8	Morocco	-0.164
Turkey	13.1	Egypt	27.1	Egypt	0.041
Yemen AR	13.0	Turkey	19.6	Jordan	0.181
Tunisia	12.6	Israel	17.6	Israel	0.331
Israel	6.4	Tunisia	14.1	Tunisia	0.409
Portugal	3.2	Portugal	7.3	Portugal	0.612
Lebanon	Data Unavailable	Lebanon	Data Unavailable	Lebanon	Data Unavailable

<sup>1</sup>These figures show how many years of investment at 1980 total domestic investment levels would be required at unit urban development costs, shown in Section II and Annex A, to provide for the projected urban population only.

<sup>2</sup>These figures show how many years of investment at 1980 total domestic saving levels would be required to provide for the projected urban population only.

<sup>3</sup>These figures are the unweighted average of the economic performance indices shown in Annex C, Table C-3.

TABLE 6

RELATIVE SEVERITY OF URBANIZATION  
PROBLEMS IN NEB COUNTRIES<sup>1</sup>

<u>Country</u>	<u>Urban Percent Change</u>	<u>Urban/ Total Change</u>	<u>Social Conditions</u>	<u>Domestic Investment</u>	<u>Domestic Savings</u>	<u>Economic Capacity</u>	<u>Average Rank</u>
Yemen AR	2	7	1	5	1-2	1	2.9
Jordan	5	4	3	2	1-2	5	3.4
Turkey	1	3	6	4	5	2	3.5
Morocco	6	8	2	1	3	3	3.8
Egypt	7	6	5	3	4	4	4.8
Tunisia	3	5	4	6	7	7	5.3
Israel	8	2	7	7	6	6	5.5
Portugal	4	1	8	8	8	8	6.2

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<sup>1</sup>The rankings in this table are from 1 = most severe to 8 = least severe. Lebanon is unranked due to unavailable data, and also, because of the recent war damage to Beirut and other Lebanese settlements. Rankings are taken from Tables 4 and 5 above. The average rank is the sum of the ranks divided by six, i.e., an unweighted average.

## II. INTERNATIONAL ASSISTANCE, INVESTMENT REQUIREMENTS, DOMESTIC INVESTMENT AND SAVING

All of the NEB countries received substantial international assistance in recent years. Table 7 shows the levels and relative magnitudes of this international assistance in 1980.

**One major result of this international flow of capital into the NEB countries is that they have been financing substantially greater domestic investment than would have been possible utilizing only their own resources.** Table 8 shows the amount of gross domestic investment, gross domestic saving, and the difference.

The increased urbanization in these countries will pose substantial new requirements for investment in plant and equipment for employment generation, housing, community facilities, intra-urban infrastructure (water, sewer, circulation, electricity) and inter-urban infrastructure (bulk water, power, transportation and telecommunications).

In order to provide a sense of the magnitude of these investment requirements and relate them to the need for future international assistance and greater domestic saving, the estimates shown in Table 9 are provided. It was not possible to develop cost parameters on a country-by-country basis in preparing this report due to inadequate data. The investment requirements shown in Table 9 were calculated using parameters for the relevant costs from PADCO's recently completed National Urban Policy Study for Egypt.<sup>4</sup> Although the unit costs will obviously vary from country to country -- because of their differences in industry structure, levels of current deficits, standards of service delivery and the like -- the values from the Egypt study can probably be treated as representative of urban development costs in the NEB countries for the purpose of making general comparisons.<sup>5</sup>

The difference in years of 1980 Gross Domestic Investment and 1980 Gross Domestic Saving is an indicator of the degree to which these countries would need to delay their development if foreign development assistance is not continued. Viewed another way, it is an indicator of the degree of reliance on foreign assistance which would be required if urbanization continues at 1970-80 rates over the next two decades.

Another implication of these figures is the importance of increasing the rate of economic growth, domestic investment, and domestic saving in order to free up investment for purposes other than urban employment, housing and infrastructure during the next 20 years. In particular, levels of domestic saving in all countries (except Portugal, which has had a low level of urbanization) would have to be substantially increased to avoid even more reliance on foreign sources of capital or a failure to have sufficient investment funds to provide reasonable service levels in

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<sup>4</sup>See Annex A for details.

<sup>5</sup>See Annex A for more details on the NUPS cost parameters.

**TABLE 7**  
**1980 LEVELS OF EXTERNAL CAPITAL FLOWS**  
(In 1980 U.S. Dollars)

<u>Country</u>	<u>Net Inflow of Public Loans</u>		<u>Net Direct Foreign Private Investment</u>		<u>Total Net Inflow</u> (Millions)	<u>Net Inflow Per Capita</u> (Dollars)	<u>Net Inflow as Percent of GDP</u>	<u>Net Inflow as Percent of Domestic Investment</u>
	<u>Amount</u> (Millions)	<u>Percent of Total</u>	<u>Amount</u> (Millions)	<u>Percent of Total</u>				
Yemen AR	386	73	142	27	528	75.43	20	46
Egypt	1736	76	541	24	2277	57.21	10	32
Morocco	994	92	90	8	1084	53.65	6	29
Tunisia	209	47	234	53	443	69.22	6	22
Jordan	231	88	31	12	262	81.88	12	25
Lebanon	102	N/A	N/A	N/A	102	37.78	N/A	N/A
Turkey	1823	95	89	5	1912	42.58	4	13
Portugal	833	89	102	11	935	95.41	4	17
Israel	2475	104	-85	-4	2390	612.82	16	71

Source: World Development Report, 1982 and PADCO calculations.

**TABLE 8**  
**GROSS DOMESTIC INVESTMENT AND SAVING**  
**1980**

<u>Country</u>	<u>Total Gross Domestic Investment (In Millions of \$'s)</u>	<u>Per Capita Gross Domestic Investment (\$'s)</u>	<u>Total Gross Domestic Saving (In Millions of \$'s)</u>	<u>Per Capita Gross Domestic Saving (\$'s)</u>	<u>Total Difference (In Millions of \$'s)</u>	<u>Per Capita Difference (\$'s)</u>
Yemen AR	1148.4	164	-522.0	-75	1670.4	239
Egypt	7120.7	179	3675.2	92	3445.5	87
Morocco	3767.4	187	1973.4	98	1794.0	89
Tunisia	2044.0	319	1825.0	285	219.0	34
Jordan	1051.2	328	-591.3	-185	1642.5	513
Lebanon	N/A		N/A		N/A	
Turkey	14531.0	324	9687.6	216	5843.4	108
Portugal	5482.5	559	2412.3	246	3070.2	313
Israel	3374.8	865	1227.2	315	2147.6	550

Source: PADCO calculations from data in World Development Report, 1982.

**TABLE 9**  
**INVESTMENT REQUIREMENTS OF URBANIZATION**  
**BETWEEN 1980-2000**

<u>Country</u>	<u>Urban Population 1980 (Millions)</u>	<u>Projected Urban Population 2000 (Millions)</u>	<u>Change in Population (Millions)</u>	<u>Investment in Job Creation<sup>1</sup> (Millions of \$'s)</u>	<u>Investment in Housing and Infrastructure<sup>2</sup> (Millions of \$'s)</u>	<u>Total Cost (Millions of \$'s)</u>	<u># of Years of Investment at 1980 Levels of Gross Domestic Investment<sup>4</sup></u>	<u># of Years of Investment at 1980 Levels of Gross Domestic Saving<sup>5</sup></u>
Yemen AR	.7	3.4	2.7	8768.3	6207.8	14976	13.0	Indefinite <sup>3</sup>
Egypt	17.9	31.1	13.2	42867.0	56783.0	99650	14.0	27.1
Morocco	8.3	20.4	12.1	39295.0	37247.0	76542	20.3	38.8
Tunisia	3.3	7.2	3.9	12665.0	13146.0	25811	12.6	14.1
Jordan	1.8	4.5	2.7	8768.3	8216.3	16985	16.2	Indefinite <sup>3</sup>
Lebanon	2.1	3.6	1.5	4871.3	6573.0	11444	N/A	N/A
Turkey	21.1	50.9	29.8	96776.0	92935.0	189711	13.1	19.6
Portugal	3.0	5.4	2.4	7794.0	9859.5	17654	3.2	7.3
Israel	3.5	6.5	3.0	9742.5	11868.0	21610	6.4	17.6

<sup>1</sup> This figure is the investment required at an average cost per job of \$6,495 (1979 prices) for new employment in industry and services needed to provide employment for the urban population growth. Job requirements are estimated as 50 percent of the change in population between 1980-2000. See Annex A. The projected urban population in 2000 and urban population in 1980 are both shown because new job requirements are related to population growth.

<sup>2</sup> This figure is the investment required at a per capita cost for housing and infrastructure of \$1825 (1979 prices) to serve the 1980 population and the new urban population and urban system. The 2000 urban population is a projection based upon continuation of 1970-80 urban growth rates. The projected urban population in 2000, the urban population in 1980, and the change are all shown because the estimated costs apply to both the provision of new capacity and the rehabilitation of existing capacity.

<sup>3</sup> The figure is indefinite because Yemen AR and Jordan had negative private saving in 1980.

<sup>4</sup> This figure is the total cost divided by 1980 Domestic Investment as shown in Table 8.

<sup>5</sup> This figure is the total cost divided by 1980 Domestic Saving as shown in Table 8.

Source: World Development Report, 1982 for 1980 population. Remaining columns from PADCO calculations.

urban areas and other needed investments. Tables 7-9 provide a basis for indicating the relative position of NEB countries in terms of their domestic investment and domestic savings efforts, their degree of reliance on net capital inflows, and the adequacy of current domestic investment and saving levels in the face of expected increased urban requirements. This information is summarized for the reader's convenience in Table 10; the countries are ranked from lowest to highest on each criteria.

Yemen AR, Egypt and Morocco currently have the lowest levels of investment per capita and, with Jordan, the lowest levels of domestic saving per capita. These four countries also have the least adequate rates of domestic saving to support their expected urbanization and three of the four (Morocco, Jordan, and Egypt) the least adequate rates of domestic investment after taking the contribution of international assistance into account. These findings support the conclusion shown in Table I that these countries should be assigned a high priority for concern by international agencies dealing with urban issues. These findings suggest, also, that additional infusions of international assistance should be aimed at efforts to increase domestic saving at the same time that domestic investment is being pushed up. Otherwise the assistance is likely to lead to ever-increasing dependence on international assistance or persistent shortfalls in urban employment, housing and services.

Israel and Portugal present a different picture, they are among the highest of NEB countries in per capita domestic investment, domestic saving, and net capital inflow per capita and, on the face of it, the most adequate levels of domestic saving and investment to support their urbanization. It should be noticed, however, that they top the rankings in terms of the current dollar difference between their domestic investment and saving. This means that they are currently very dependent on external sources of funds to sustain their high investment levels. A slowing down of external assistance would create the necessity to raise their already high levels of per capita saving or reduce their investment programs.

**TABLE 10**  
**SUMMARY OF INVESTMENT, SAVING AND**  
**CAPITAL INFLOW CHARACTERISTICS<sup>1</sup>**

<u>Per Capita Gross Domestic Investment<sup>2</sup></u>	<u>Per Capita Gross Domestic Saving<sup>2</sup></u>	<u>Per Capita Difference Between Investment And Saving<sup>2</sup></u>	<u>Net Capital Inflow Per Capita<sup>3</sup></u>	<u>Adequacy of Domestic Investment To Support Urbanization<sup>4</sup></u>	<u>Adequacy of Domestic Saving To Support Urbanization<sup>4</sup></u>
Yemen AR	Jordan	Israel	Turkey	Morocco	Yemen AR
Egypt	Yemen AR	Jordan	Morocco	Jordan	Jordan
Morocco	Egypt	Portugal	Egypt	Egypt	Morocco
Tunisia	Morocco	Yemen AR	Tunisia	Turkey	Egypt
Turkey	Turkey	Turkey	Yemen AR	Yemen AR	Turkey
Jordan	Portugal	Morocco	Jordan	Tunisia	Israel
Portugal	Tunisia	Egypt	Portugal	Israel	Tunisia
Israel	Israel	Tunisia	Israel	Portugal	Portugal

<sup>1</sup>All rankings in this Table are from most severe to least severe problems.

<sup>2</sup>These rankings are from data in Table 8.

<sup>3</sup>This ranking is from data in Table 7.

<sup>4</sup>These rankings are from data in Table 9.

### III. NEB COUNTRY PROFILES AND INDICATOR COMPARISONS

#### A. Overview

The NEB countries which are the subject of this report do not form a contiguous region and, while all are urbanizing more rapidly than their population is growing, are dissimilar in many respects. This section is intended to provide country-specific information and comparisons to put both their similarities and differences into perspective.

Most of the countries are small. Only three (Egypt, Morocco and Turkey) have more than 10 million people. Their degree of urbanization<sup>6</sup> ranges from a low of 10 percent in Yemen AR to a high of 89 percent in Israel. The median value is 46 percent. Concentration in the primary city of each country ranges from a low of 24 percent of the urban population in Turkey to a high of 79 percent in Lebanon. The median is 33 percent. The level of GNP per capita, also, varies widely among these countries from a low of \$430 in Yemen AR to a high of \$4500 in Israel, with a median of \$1365. Most of these countries have been experiencing positive rates of increase in their growth of income per capita, from 1960-80, ranging from a low of 2.5 percent per year in Morocco to a 5.7 percent a year rate of growth in Jordan and a median of 4.1 percent. Yemen AR, Tunisia, Jordan and Portugal had growth rates of GNP per capita from 1960 to 1980 that exceeded middle income country averages.

Social performance is mixed, also. The group ranges from 21 percent to 70 percent adult literacy, for Yemen AR and Jordan respectively. Life expectancy varies from 42 years in Yemen AR to 72 years in Israel. The median is 60 years. The population per physician goes from over 11,000 in Yemen AR and Morocco to 310 in Israel with a median of 1860. Access to safe water ranged from a low of 4 percent in Yemen AR to 75 percent in Turkey. The median is 65 percent.

#### B. Indicator Profiles and Comparisons

Figure 1 provides detailed quantitative profiles of the NEB countries. In this table, the individual country values for each indicator are converted into an index to show how much different each country is from the middle income country

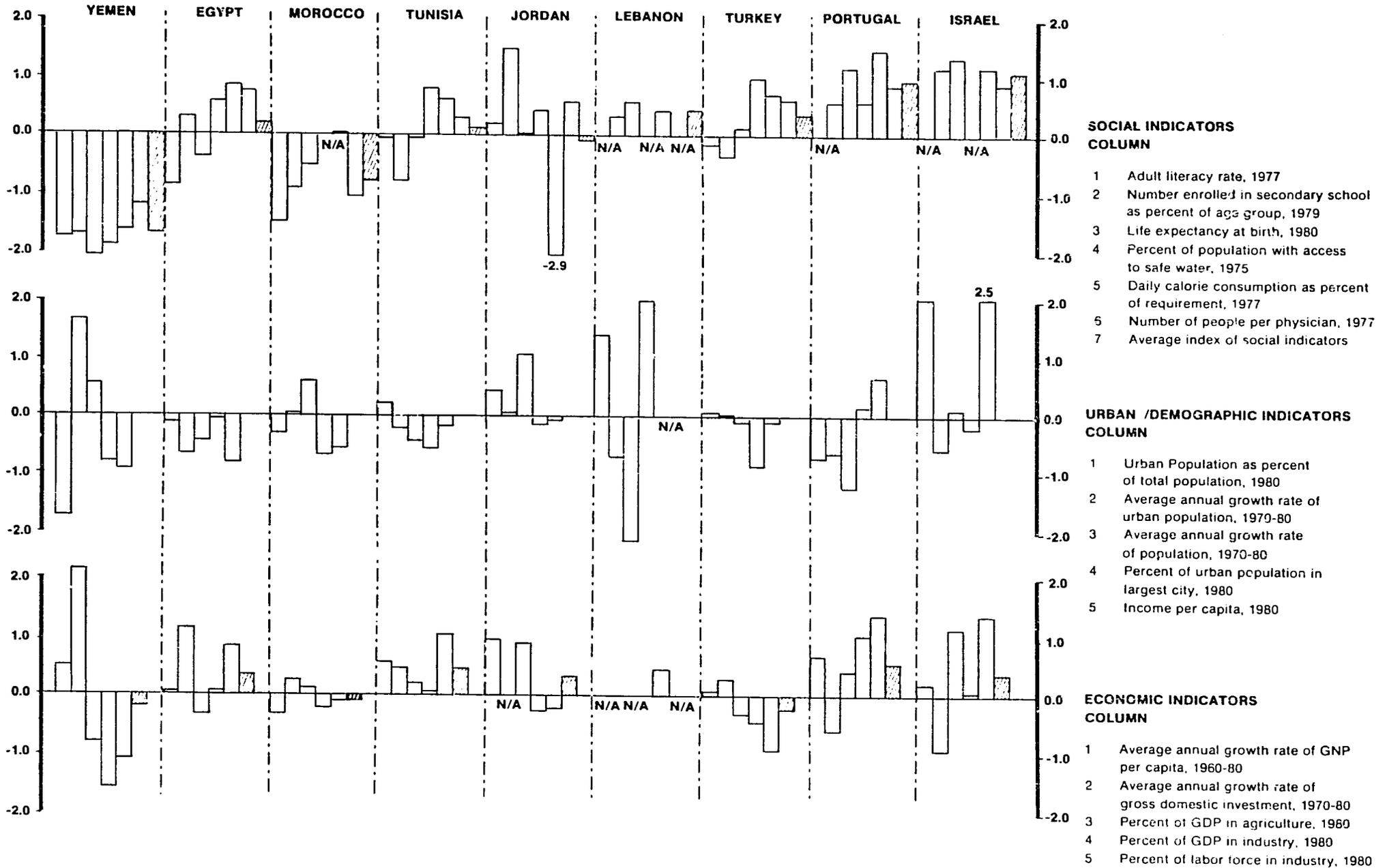
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<sup>6</sup>"Urbanization" is the percent of the total population residing in areas classified as urban.

<sup>7</sup>The above figures do not reflect the post-1980 population of Beirut and population change due to war damage.

FIGURE 1

NEAR EAST BUREAU COUNTRY INDICATOR PROFILES



average.<sup>8</sup> The individual country values can be seen by reading down the columns and cross-country comparisons can be made by reading across the columns. Yemen AR's relatively poor social performance, for example, can be seen by the negative values for all the social indicators. The numerical value of the indicator is the number of standard deviations above (+) or below (-) the middle income average the country's value is. Thus, it can be seen that Yemen AR not only has a substantially lower adult literacy rate than the average middle income country, but, also, a lower adult literacy rate than any of the other NEB countries.

The reader is encouraged to study Figure 1 and Tables C.1-C.3 in Annex C to obtain information on each country of interest. A brief summary of the most salient features of the profiles for several of the countries is provided here for the reader's convenience.

## **I. Yemen AR (overall priority ranking of 1)**

### **a. Urbanization Indicators**

Yemen AR is the least urbanized of the NEB countries, but experienced the highest average annual growth rate of urban population in the 1970-80 period. Its urban population is relatively decentralized with only 25 percent of its urban population in Sana'a, its largest city. Of the NEB countries, only Turkey has a smaller amount of its urban population in its largest city. Yemen AR has a larger growth rate in its total population than most NEB countries and its current urbanization level is below that which would be predicted on the basis of its GNP per capita. The combination of high population growth, rapid increases in urban population in the 1970-80 period, and the lag in urbanization point to accelerated growth in urban population in the 1980-2000 period.

### **b. Economic Indicators**

Yemen AR has the largest percentage of its output and employment in agriculture of all the NEB countries and the smallest percentages in industry. Thus, even though it has shown above average growth in its GNP per capita and a rapid increase in domestic investment in the 1970-80 period, additional industrial employment is probably needed to avoid excessive reliance on service employment for its growing urban population.

### **c. Social Indicators**

Social conditions in Yemen AR compare unfavorably with middle income countries generally, and with other NEB countries. It has the lowest levels of adult literacy, percentage of eligible age group enrolled in

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<sup>8</sup>The numerical results are shown in Annex C, Tables C.1-C.3.

secondary school, life expectancy and percent of population with access to safe water of any of the NEB countries. It has, also, the largest number of people per physician and the second lowest daily calorie consumption per capita of the NEB countries. The combination of low social conditions and increased urbanization means that Yemen AR will have very substantial requirements for investments in urban social services.

## **2. Jordan (overall priority ranking of 2)**

### **a. Urbanization Indicators**

Jordan had the largest rate of total population increase among NEB countries in the 1970-80 period and the second largest rate of growth in its urban population. By 1980, Jordan had over 50 percent of its population in urban areas; the third highest rate of urbanization among NEB countries. Amman, its largest city, had 37 percent of its urban population. Jordan is already more urbanized than would be predicted on the basis of its level of income, and its high rate of urban population growth strongly suggests that it will remain so over the 1980-2000 period.

### **b. Economic Indicators**

Overall, Jordan's economic performance places it near the middle of NEB countries. In the 1960-80 period, Jordan had the highest rate of growth in its average annual GNP per capita of NEB countries. Most of Jordan's output, however, comes from service employment and output. It had the second lowest level of agricultural output and third lowest of NEB countries. It is likely that further industrial expansion will be required to prevent the economy from becoming even more unbalanced in the direction of services as its urban population grows.

### **c. Social Indicators**

Overall, the indicators of social conditions place Jordan among the most in need of improvement. Only Yemen AR and Morocco rank above Jordan. In this case, however, the overall ranking is somewhat misleading because it is due primarily to an extremely low level of daily calorie consumption per capita -- the lowest of NEB countries. On other measures of social conditions, Jordan is above the middle income country averages, has the highest adult literacy rate, enrollment rate of eligible population in secondary schools, and above average among NEB countries in life expectancy and percentage of population with access to safe water. It has substantially fewer people per physician than the average of middle income and NEB countries. Maintaining this status in the face of increased urbanization will require additional income to supplement the low levels of agricultural output and the concentration of employment services.

### 3. Morocco (overall priority ranking of 3)

#### a. Urbanization Indicators

Morocco had the second highest rate of total population growth and the third highest rate of urban population growth among NEB countries in the 1970-80 period. Morocco is slightly more urbanized than would be predicted on the basis of its GNP per capita. However, Morocco still has the third lowest rate of urbanization of the NEB countries and the third lowest rate of concentration in the largest city.

#### b. Economic Indicators

Morocco, in spite of a relatively high rate of increase in its gross domestic investment in the 1970-80 period, has had the most difficulty of any of the NEB countries in sustaining growth in its income per capita, as its population growth almost equals its growth in GNP. Consequently, even though domestic investment has been growing, even greater needs for domestic investment are apparent.

#### c. Social Indicators

Morocco ranks second behind Yemen AR in the relative severity of its social conditions. It has the second lowest adult literacy rate, percent of eligible population enrolled in its secondary schools, life expectancy at birth. It has the second highest number of people per physician and the third lowest daily calorie consumption per capita. Morocco, thus, faces rapid urban and total population with a relatively weak economic performance and has a substantial deficiency in social conditions.

### 4. Egypt (overall priority ranking of 5)

#### a. Urbanization Indicators

Egypt is considerably more urbanized than would be predicted on the basis of its GNP per capita (45 percent urban compared to a predicted 30 percent). In 1976, Cairo and Alexandria together contained about a quarter of the total population of Egypt. In 1980, only Lebanon and Portugal had a larger percent of its urban population concentrated in its largest city.

In Egypt, as in all the NEB countries, urban population growth is higher than total population. Urban population grew by 2.8 percent a year from 1970-80 compared to a total population growth of 2.1 percent a year. Compared to other NEB countries, however, Egypt's urban population growth has not been startlingly high. Morocco and Turkey (the other two NEB relatively large countries) had urban population growth rates of 4.6 and 4.5 percent a year over the same period and roughly the same amount of urbanization as Egypt.

## b. Economic Indicators

Overall, Egypt ranks fourth out of the eight ranked NEB countries in economic capacity. Egypt had a growth rate of GNP per capita of 3.4 percent a year. The only NEB country with a slower rate of growth was Morocco, 2.5 percent a year. From 1970-80, gross domestic investment rose very rapidly -- at an average annual rate of 16.5 percent a year -- primarily as a result of increased external flow of capital. The external capital included substantial remittances from Egyptians working in other countries as well as international assistance. Domestic saving, however, has not matched the growth in domestic investment, thus making Egypt more reliant on external funds for its development effort.

Although major efforts have been made to industrialize, Egypt continues to have a larger proportion of its output in agriculture than all NEB countries except Yemen AR and Turkey (which, like Egypt, had 23 percent of its output in agriculture). As of 1980, Egypt's industries produced 36 percent of its output, a level exceeded only by Portugal and Israel and equalled by Tunisia.

## c. Social Indicators

Egypt ranks fifth out of the eight ranked NEB countries in terms of the social indicators presented in this paper. Yemen AR, Morocco, Jordan and Tunisia have more adverse overall rankings. Egypt has a relatively low level of adult literacy and life expectancy compared to all middle income countries and other NEB countries; at the same time, Egypt has more of the eligible population enrolled in secondary school, a larger percent of the population with access to safe water and fewer people per physician than middle income countries on average.

It is essential to emphasize, however, that in Egypt, as in all the NEB countries, there are severe deficiencies in social services, housing and infrastructure to serve the existing urban and rural populations, in addition to meeting the requirements for new population. In the detailed National Urban Policy Study for Egypt conducted by PADCO, for example, it was necessary to recommend substantial investments for rehabilitation and upgrading of all major services for the existing urban population. This was true for housing, education, health, urban circulation and transport systems, water, sewer, and other social services. To say that Egypt ranks roughly in the middle of NEB countries on social indicators or that Portugal ranks as the least serious, therefore, is not to suggest that concern for the well-being of the citizens of these countries is misplaced. They all have serious difficulties in meeting the needs of their people.

### C. Urbanization, Rural-Urban Migration and Poverty

The relationships between increased urbanization and poverty are complex. It has been demonstrated repeatedly that there is a positive relationship between urbanization and per capita income. In NEB countries, the correlation is .75 between urbanization and GNP per capita. From a causal point of view, this relationship exists in part because urban areas tend to be the location for relatively high productivity industry and services and because urban areas provide the possibility of locations for many complementary activities (economics of agglomeration). Thus, from the point of view of enhanced income earning possibilities, increased urbanization provides substantial opportunities as well as problems. Increased urbanization is correlated strongly and positively with improved social conditions. For NEB countries, the correlation between urbanization and indicators of social conditions is between .60 and .85, except for daily calorie consumption. In this latter case, the relationship is positive, but not as large (0.25).

The NEB countries share the general pattern of obtaining greater output per worker in industry than in agriculture. Industry is largely, but not exclusively, located in urban areas; while agriculture is largely, but not exclusively located in rural areas. The larger output per worker is partly a result of relative concentration of skilled workers in urban areas and partially explains the fact that urban wages tend to be higher than rural wages.

Table 11 shows agricultural and industry productivity for 1960 and 1980 in NEB countries. "Productivity" is measured by the amount of domestic output per agricultural and industrial worker.

As shown in Table 11, industrial productivity exceeds agricultural productivity in all of the NEB countries for both time periods. In all but one case (Israel) the output per worker in industry is more than double the output per worker in agriculture. (See the last two columns of Table 11 for the ratios). Table 11 also shows that both agricultural and industrial productivity is increasing in all the NEB countries. It is probable that increased urbanization of the population has contributed to productivity gains in both sectors, as rural to urban migration continues.

The rate of rural to urban migration and its absolute level are matters of concern, however, since new urban residents from rural areas require services and employment and some social adjustments to urban living.

Table 12 provides information on the amount of rural to urban migration from 1980 to 2000 implied by different projections of urban population in the year 2000.

**These figures show that on average about one in every four urban residents in NEB countries in the year 2000 will have migrated from a rural to urban area between 1980 and 2000 and that about half of the new urban residents between 1980 and 2000 will have originally been a rural resident, if the World Bank's estimates of**

TABLE II  
PRODUCTIVITY IN THE AGRICULTURAL  
AND INDUSTRIAL SECTORS<sup>1</sup>

	<u>Agricultural Productivity</u>			<u>Industry Productivity</u>			<u>Ratio of Industry to Agricultural Productivity</u>	
	<u>1960</u>	<u>1980</u>	<u>1980-60</u>	<u>1960</u>	<u>1980</u>	<u>Ratio 1980-60</u>	<u>1960</u>	<u>1980</u>
Yemen AR	N/A	277	N/A	N/A	1043	N/A	N/A	3.76
Egypt	140	465	3.32	542	1181	2.18	3.87	2.54
Morocco	122	603	4.94	634	2654	4.19	5.20	4.40
Tunisia	144	1037	7.18	337	2199	6.52	2.33	2.12
Jordan	N/A	537	N/A	N/A	2147	N/A	N/A	4.00
Turkey	305	912	.99	1106	4940	4.46	3.63	5.40
Portugal	240	1924	8.02	525	4539	8.64	2.19	2.36
Israel	1252	4762	3.80	1456	6666	4.58	1.16	1.40
Lebanon	144	N/A	N/A	713	N/A	N/A	2.75	N/A

<sup>1</sup> Productivity is defined as the agricultural or industrial GDP per agricultural or industrial worker, respectively.

Source: PADCO calculations from data in World Development Report, 1982.

TABLE 12  
URBAN POPULATION GROWTH  
AND RURAL TO URBAN MIGRATION

Country	Urban Population 1980	2000 Urban Population World Bank Estimate	2000 Urban Population At National Population Growth Rate <sup>1</sup>	Implied Migration Rural to Urban <sup>2</sup>	Migrants as Percent of 2000 Urban Population	Migrants as Percent of the Change in Urban Population	2000 Urban Population at 1970-80 Rates	Implied Migration Rural to Urban <sup>2</sup>	Migrants as Percent of 2000 Urban Population	Migrants as Percent of the Change in Urban Population
Yemen AR	0.7	2.0	1.1	0.9	45.0	69.2	3.4	2.3	67.6	85.2
Egypt	17.9	35.4	27.0	8.4	23.8	48.1	31.1	4.1	13.2	31.2
Morocco	8.3	18.7	14.8	3.9	20.9	37.6	20.4	5.6	27.5	46.3
Tunisia	3.3	5.9	5.2	0.7	12.6	28.6	7.2	2.0	28.4	52.4
Jordan	1.8	3.8	3.4	0.4	11.2	21.2	4.5	1.1	25.0	41.7
Lebanon	2.0	4.2	3.0	1.2	29.4	56.2	3.6	0.6	17.7	39.8
Turkey	21.1	41.0	31.5	9.5	23.2	47.8	50.9	19.4	38.1	65.1
Portugal	3.0	5.2	3.4	1.8	35.2	83.3	5.4	2.0	37.6	84.7
Israel	3.5	N/A	4.5	N/A	N/A	N/A	5.0	0.5	10.3	34.2
$\bar{x}$					24.4	48.99				

<sup>1</sup>The figures in this column are calculated to show how much increase in urban population there would be if there were no migration from rural to urban areas. The difference between projected population and the figures in this column, therefore, are an estimate of the amount of rural to urban migration.

<sup>2</sup>The implied migration is shown for two different estimates of 2000 urban population--a World Bank estimate and an estimate based upon continuation of 1970-80 rates of urban population growth.

urban population in 2000 are accurate.<sup>9</sup> The amount of migration will be even larger if the NEB countries experience urban growth from 1980 to 2000 at the rate that was experienced between 1970 and 1980. The relevant figures are that one of every three urban residents in 2000 would have migrated from a rural area in the 1980 to 2000 period and six of every ten new urban residents<sup>10</sup> between 1980 and 2000 would have migrated from a rural area over the period.

The major conclusion to draw from these figures is that NEB countries will need to pay special attention to the integration of recent rural migrants in the economic and social structures of the cities to which they go in order to prevent substantial social disruption and urban unemployment.

It is not necessarily the case that rural to urban migrants are more prone to suffer the problems of extreme poverty than longer-term urban residents. It is likely, however, that increased urbanization will be accompanied by a substantial increase in the number of poor in the cities relative to the number of poor in rural areas. The World Bank has estimated the change in the number of rural and urban households likely to be in poverty over the 1975-2000 period. These estimates are shown in Table 13.

The total increase in the number of urban households in poverty is estimated to be 40.7 million households. Of this total, the World Bank estimates the increase in Europe, the Middle East and North Africa to be 3.1 million households (7.6 percent) of the total. Rural poverty is estimated to decline by 26.8 million households. The decline of rural poverty for Europe, the Middle East and North Africa is 3.2 million households (11.9 percent of the decline).

Information on poverty in individual countries is spotty. Table 14, however, provides some information for the Middle East and North African countries.

#### D. The Primary City and Other Large Cities

The NEB countries had an average of 35 percent of their urban populations in the largest city of each country. This is considerably higher than the average of 28 percent in the middle income countries as a whole. The range, however, is large: Istanbul in Turkey had 24 percent of the urban population (5,060,000); Sana'a in Yemen AR had 25 percent of the urban population (180,000); while Beirut in 1980 had 79 percent of Lebanon's urban population (1,620,000). The largest cities in all the NEB countries, except in Turkey and Yemen AR, had more of the urban population than the middle income country average.

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<sup>9</sup>The weighted average of migrants as a percent of urban population in 2000 is 24.4 percent and the weighted average of migrants as a percent of the 1980-2000 change in urban population is 49.0 percent.

<sup>10</sup>The weighted average of migrants, under this assumption, as a percent of total population is 34.0 percent of new urban population, and the weighted average of migrants as a percent of the 1980-2000 change in urban population is 58.7 percent.

TABLE 13

PROJECTED GROWTH IN THE NUMBER OF HOUSEHOLDS  
IN POVERTY, RURAL AND URBAN, 1975-2000 @

REGION	1975	INCREASE OR DECREASE		1980	INCREASE OR DECREASE		1990	INCREASE OR DECREASE		2000	
Urban Poor Households (thousands)											
Eastern Africa	1,039	+330.5		1,369	+1,175		2,544.5	+2,158.5		4,703	6.2
Western Africa	1,072	+333		1,405	+861		2,266	+961		3,227	4.5
East Asia and the Pacific	2,664	+1,491		4,155	+956		5,111	+633		5,744	3.1
South Asia	10,213	+3,757		13,970	+7,235		21,255	+11,300		32,555	4.7
Europe, the Middle East, and North Africa	5,581	+699		6,250	+1,324		7,574	+1,169		8,743	1.8
Latin America and the Caribbean	12,945	+1,078		14,023	+2,775		16,798	+2,530		19,328	1.6
Total	33,514	+7,658.5		41,173	+14,376		55,548.5	+18,751.5		74,300	3.2
Rural Poor Households (thousands)											
Eastern Africa	5,902.5	+555.5		6,458	+1,100		7,558	+1,067		8,625	1.5
Western Africa	2,670	+268		2,938	-450		2,488	-250		2,238	-1.0
East Asia and the Pacific	14,327	-1,774		12,553	-834		11,719	-1,847		9,872	-1.5
South Asia	49,677	-878		48,799	-7,763		41,036	-8,327		32,709	-1.7
Europe, the Middle East and North Africa	4,563	-802		3,761	-1,428		2,333	-930		1,403	-4.6
Latin America and the Caribbean	6,040	-1,108		4,932	-1,904		3,028	-1,407		1,621	-5.1
Total	83,279.5	-3,738.5		79,441	-11,279		68,162	-11,694		56,468	-1.5

@ Based on estimates of real per capita incomes through the year 2000, using United Nations medium-variant rates of growth of population and World Bank projections of real growth of national income. Poor households in 1975 are here defined as those living in absolute poverty in 1975 in all rural areas except those in El Salvador and Jamaica and in all urban areas in East Asia, Malawi, Zambia, and Egypt. In all other instances the numbers of those in absolute poverty are small in comparison to the numbers of those in relative poverty, which indicates that the relatively poor are the appropriate target group. In determining movements in and out of poverty in the course of time, the thresholds of both absolute and relative poverty are held constant in 1975 dollars. The accuracy of the projected figures is dependent upon a fairly stable distribution of income.

Source: "Poverty." Poverty and Basic Needs Series, World Bank, September 1980, P.3.

Table 14  
URBAN POVERTY, HOUSING, and SERVICES/1

Country	GNP per Capita (US \$)	Urban Poverty Threshold (US \$)		Urban Population Below Absolute Urban Poverty Threshold (%)	Household Size (persons/family)		Dwelling Occupancy Rate (persons/room)		Access to Safe Water (% of population)		Access to Excrete Disposal (% of population)		Access to Electricity/r (% of dwellings)	
		Absolute	Relative		Total	Urban	Total	Urban	Total	Urban	Total	Urban	Total	Urban
Algeria	1260	475	227	20	n.a.	6.1/j	n.a.	3.9/j	77	80	67	60	60	100
Cyprus	2120	n.a.	747	0	3.9	n.a.	0.9	0.8	95	94	95	94	99	100
Egypt	390	120	163	21	5.8/h	5.6/h	1.8	2.4/d	66	88	25/l,q	50/d	38	62
Iraq	1860	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	62	90	47	75	n.a.	n.a.
Jordan	1050	235/d	192/e,f	18/d	6.6/i	6.6/i	n.a.	3.0/i	56	60	n.a.	10/o	43	71
Lebanon	1070/a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	92/g	95/g	n.a.	n.a.	98/g	n.a.
Morocco	670	389	242	28	5.5/g	4.9/g	2.4/g	2.1/g	55	100	29/g	75/g	28	60
Oman	2570	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	32	100	12	100	20	50
Portugal	1990	n.a.	480	n.a.	n.a.	n.a.	n.a.	n.a.	66/n	90/n	20/n	n.a.	95	100
Romania	1750	n.a.	394	0/c	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	100	100
Syria	930	227/f	278/f	13/f	5.9/g	5.9/g	n.a.	n.a.	75	80	n.a.	65/l,p	48	80
Tunisia	950	204	193	20	6.0	5.8	3.2/q	2.3/d	70	93/l,m	62/m,g	100/m,g	44	78
Turkey	1200	330/e,f	385/e,f	n.a.	n.a.	n.a.	n.a.	n.a.	75	70	8/l,m	20	72	95
Yemen AR	520	690/b	n.a.	33/b	5.0	4.2	2.8	1.8	4	30	n.a.	n.a.	9	62
Yemen PDR	420	n.a.	90	n.a.	n.a.	n.a.	n.a.	n.a.	24	30	n.a.	n.a.	22	45
Yugoslavia	2380	n.a.	n.a.	0/c	3.8	3.3	1.4/g	1.3/g	n.a.	100/k	n.a.	n.a.	90	100

/1 Unless noted otherwise, source is: World Bank, Updated Social Indicators Data Sheets, April 1980.

Similarly, unless noted otherwise, data are for 1978.

/a 1974 figure.

/b Source: World Bank; Yemen Arab Republic: Urban Sector Report, November 1979.

/c Source: Country Economist.

/d Source: World Bank. The Hashemite Kingdom of Jordan: Urban Development Project, Staff Appraisal Report, June 23, 1980.

/e Source: URBOR.

/f 1977 figure.

/g 1970 figure.

/h Source: World Bank; Egypt: Urban Sector Review; Working Papers of consultants.

/i Source: Halcrow Fox and Associates, Jouzy and Partners Jordan Urban Project, Interim Sector Report No. 2, Review of the Current Situation, April 1979.

/j For Annaba only.

/k Source: EMENA Water Supply and Sewerage Division estimate. 1975 figure.

/l Source: World Health Organization: Community Water Supply and Wastewater Disposal, Report by the Director General, March 29, 1976.

/m Source: World Bank: Lisbon Region Water Supply, Project Brief. House connections to sewerage system.

/n Source: World Bank; Water Supply and Sewerage Sector Study, 1977.

/o Source: World Health Organization; Water Supply and Sewerage Sector Study, 1977.

/p Source: World Bank, Energy Department: Power Sector Data for 1978.

Table 15 provides information on the largest city in each country for 1960, 1980 and 2000 population projected on the assumption that these large cities will grow at their 1960-1980 annual average growth rates.

The growth rates for these primary cities imply continued rural to urban migration and migration to the largest cities from other urban areas. There is insufficient data to estimate the relative importance of these two forms of migration. It is possible, however, to indicate the implied migration of both kinds by comparing estimated 2000 population at national population growth rates and at the estimated 2000 population using the largest city growth rates. This implied migration is shown in Table 16.

**Some of these figures are extremely high, such as the implied migration for Casablanca and Istanbul. What they suggest is the possibility of serious adjustment problems, due to both high rates of primary city growth and accommodating a very large number of migrants over the next two decades.** While projections based solely on past rates, which are clearly subject to future change, should not be treated as necessary future outcomes, the magnitudes of possible future migration to primary cities should clearly be a matter of country and AID concern.

Many of these countries have other sizeable cities. Comparable data for similar time periods or dates of the latest population figures were not possible to obtain for other major cities. Table 17 provides additional data for selected years for most of the NEB countries.

TABLE 15

URBAN CONCENTRATION IN LARGEST CITY <sup>1</sup>

<u>Country</u>	<u>Largest City</u>	<u>1960 Population</u>		<u>1980</u>		<u>2000</u>	
		<u>Number (000's)</u>	<u>Percent of Urban Population</u>	<u>Number (000's)</u>	<u>Percent of Urban Population</u>	<u>Number (000's)</u>	<u>Percent of Urban Population</u>
Yemen AR	Sana'a	N/A	N/A	180	25	577	29
Egypt	Cairo <sup>2</sup>	3760	38	6980	39	12960	37
Morocco	Casablanca	540	16	2150	26	8560	46
Tunisia	Tunis	620	40	1000	30	1610	27
Jordan	Amman	230	31	660	37	960	25
Lebanon	Beirut	540	64	1620	79	N/A	N/A
Turkey	Istanbul	1490	18	5060	24	17170	42
Portugal	Lisbon	950	47	1340	44	1890	36
Israel	Tel Aviv	770	46	1210	35	1900	38

<sup>1</sup> All data from World Bank, including projected 2000 total urban population, except for 2000 large city projections which are calculated from World Bank data.

<sup>2</sup> The figures for Cairo are for Cairo proper and do not include the contiguous areas of Giza and Shuba El Kheima.

TABLE 16  
2000 PRIMARY CITY POPULATION  
AND IMPLIED MIGRATION<sup>1</sup>

<u>Country</u>	<u>City</u>	<u>1980 Population (000's)</u>	<u>2000 Population at National Population Growth Rate (000's)</u>	<u>2000 Popula- tion at Primary City Growth Rate (000's)</u>	<u>Implied in Migration (000's)</u>	<u>Implied Natural Increase in Population (000's)</u>
Yemen AR	Sana'a	180	278	577	299	98
Egypt	Cairo	6980	10577	12960	2383	3597
Morocco	Casablanca	2150	3735	8560	4825	1585
Tunisia	Tunis	1000	1457	1610	153	457
Jordan	Amman	660	833	960	127	173
Lebanon	Beirut	1620	N/A	N/A	N/A	N/A
Turkey	Istanbul	5060	7519	17170	9651	2459
Portugal	Lisbon	1340	1572	1890	318	232
Israel	Tel Aviv	1210	1630	1900	270	420

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<sup>1</sup>Migration and natural increase are calculated in the same manner as described in footnote 1 to Table 12.

Table 17  
URBAN POPULATION DISTRIBUTION<sup>a</sup>

Year of Estimate	Country	Capital City Name	Population (thousands)	Most Populous Cities								No. of Other Cities with More Than 150,000 People	Population in Cities with More Than 150,000 People (thousands)	No. of Other Cities with 100,000 to 150,000 People	Population in Cities with 100,000 to 150,000 People (thousands)
				City Name	Population (thousands)	City Name	Population (thousands)	City Name	Population (thousands)	City Name	Population (thousands)				
1976	Egypt <sup>b</sup>	Cairo	5,074.0	Alexandria	2,317.7	Giza	1,230.4	Subra ElKhema	394.2	El Mahalla	292.1	8	1,751.6	7	1,073.7
1977	Jordan	Amman	732.6	Zarka	269.8	Irbid	139.8	—	—	—	—	—	—	—	—
1978	Lebanon	Beirut	702.0	Tripoli	175.0	Zahle	46.8	Saida	24.7	Tyre	14.0	—	—	—	—
1971	Morocco	Rabat	367.6	Casablanca	1,506.4	Marrakesh	332.7	Fez	325.3	Meknes	248.4	3	519.0	3	467.4
1980	Oman	Muskat	125.0 <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—
1970	Portugal	Lisbon	1,034.1	Porto	693.2	Amadora	66.2	Coimbra	56.6	Barreiro	53.2	—	—	—	—
1975	Tunisia	Tunis	505.4	Sfax	171.3	Souase	69.5	Bizerta	62.9	Djerba	70.2	—	—	—	—
1970	Turkey	Ankara	1,236.2	Istanbul	2,132.4	Izmir	520.8	Adana	347.5	Bursa	276.0	5	955.0	11	1,184.6
1975	Yemen AR <sup>d</sup>	Sana'a	138.6	Hodeida	82.7	Ta'iz	81.0	Dhamar	20.1	Ibb	19.5	—	—	—	—

<sup>a</sup> Unless noted otherwise, source is: The Statesman's Year-Book 1980/81, Mac Millan Press Ltd., London

<sup>b</sup> Source: World Bank; Egypt Urban Sector Review; Working Papers of Consultants

<sup>c</sup> Estimate for the Metropolitan area. Source: EMENA Water Supply and Sewerage Division

<sup>d</sup> Source: World Bank; Yemen Arab Republic: Urban Sector Report, November 1979

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**ANNEX A**  
**COST PARAMETERS**

### COST PARAMETERS FOR URBAN DEVELOPMENT

Cost data for urban development investment is not available in sufficient detail for each of the NEB countries to make country-specific estimates of per capita costs. As a means of providing some order-of-magnitude estimates of investment requirements associated with the growing urban populations in NEB countries, it was decided to use investment costs per job and per capita investment costs for housing and infrastructure developed in detail in the National Urban Policy Study for Egypt as described in the Final Report.

Table A.1 shows the specific costs on a per job and per capita basis developed for Egypt.

It is recognized that the structure of the investment requirements, the amount of rehabilitation relative to new capacity, and the standards used vary among the the NEB countries and are not likely to be identical to the situation in Egypt. However, it was felt that using these overall values could provide an order-of-magnitude estimate of the investment needs of NEB countries, given their current urban populations and their expected urban population growth.

Table A.2 shows the most recent data, where available, on the patterns of government expenditure in the NEB countries. These distributions provide some clues about current government priorities among expenditure elements and how they differ among NEB countries.

To the extent that these distributions represent sectoral priorities between urban and inter-urban infrastructure spending, they do not suggest substantial differences from the overall costs for Egypt. In Egypt's case the overall per capita cost for urban housing, physical and social infrastructure is \$986 and for intra-urban infrastructure a cost of \$840. The total per capita cost is \$1826. A rough allocation of country expenditures between housing, physical and social infrastructure in settlements and intra-urban infrastructure yields the following ratios to Egypt's costs:

Israel	1.00
Jordan	.96
Morocco	.98
Turkey	.98
Yemen	.98

This supports the use of estimated per capita costs for Egypt to provide order-of-magnitude estimates for the other NEB countries.

TABLE A.I  
PER JOB AND PER CAPITA COSTS

<u>Element</u>	<u>Estimated Cost (in 1979 U.S. dollars)</u>
<u>Employment</u>	\$6495.00 per job
	<u>Cost per urban resident in the year 2000</u>
<u>Housing</u> <sup>1</sup>	<u>297.53</u>
<u>Urban Physical Infrastructure</u> <sup>1</sup>	<u>302.19</u>
Potable water	77.34
Sanitation	83.03
Circulation	48.97
Transport	34.80
Other Physical	58.05
<u>Social Infrastructure</u> <sup>1</sup>	<u>385.79</u>
Education	104.85
Health	218.04
Other Social	62.90
<u>Inter-Urban Infrastructure</u> <sup>1</sup>	<u>840.39</u>
Transport	185.98
Telecommunications	306.59
Electrical Power	346.91
Bulk Water	0.91
<u>Total</u>	<u>1825.8</u>

<sup>1</sup> Where relevant, the cost includes both rehabilitation of existing units and providing new units or capacity.

**Source:** Figure I-7, National Urban Policy Study for Egypt, p.27, for housing and infrastructure costs and Table I-3, p.38, for investment costs per job.

TABLE A.2

**GOVERNMENT EXPENDITURE PATTERNS**  
(Percent of Government Expenditures)

<u>Function</u>	<u>Egypt<sup>1</sup></u>	<u>Israel<sup>2</sup></u>	<u>Jordan<sup>1</sup></u>	<u>Lebanon</u>	<u>Morocco<sup>2</sup></u>	<u>Oman<sup>2</sup></u>	<u>Portugal</u>	<u>Turkey<sup>2</sup></u>	<u>Yemen AR<sup>2</sup></u>
General Public Services	5.74	3.65	14.06	N/A	18.78	17.41	N/A	26.66	20.89
Defense	7.35	39.82	25.51	N/A	17.94	51.20	N/A	15.25	33.21
Education	9.88	9.42	9.67	N/A	17.30	4.76	N/A	14.20	12.61
Health	3.02	3.54	4.10	N/A	3.38	2.92	N/A	3.59	3.99
Social Security/Welfare	7.60	19.01	14.77	N/A	5.15	0.0	N/A	2.69	0.0
Housing and Community Amenities	3.66	0.22	1.01	N/A	1.39	1.98	N/A	3.37	0.0
Other Community and Social Services	5.47	0.67	1.63	N/A	1.13	0.73	N/A	0.11	3.42
Agriculture	5.46	0.69	1.41	N/A	6.46	1.85	N/A	1.90	1.37
Mining, Manufacturing and Construction	0.18	1.28	6.38	N/A	1.89	0.0	N/A	4.87	0.0
Electricity, Gas, and Water	2.23	0.49	1.45	N/A	0.0	5.48	N/A	4.32	0.0
Roads	0.39	0.18	2.36	N/A	1.68	6.26	N/A	7.09	5.67
Other Transportation and Community	0.67	1.60	21.85	N/A	14.14	2.93	N/A	1.89	5.43
Other Economic	40.71	19.03	5.30	N/A	17.52	4.48	N/A	14.96	1.02

<sup>1</sup> 1979 Data

<sup>2</sup> 1980 Data

Source: ESDS Data Abstract

ANNEX B

BASIC INDICATOR SETS  
BY COUNTRY

All reported data is from  
World Development Report  
1982

**Basic Indicators  
Yemen AR**

Land Area: 195,000 square kilometers

Population: 7.0 million (1980)

Average Annual Growth of Population: 2.9% (1970-80)

Urban Population: 0.7 million (1980)

Average Annual Growth of Urban Population: 8.3% (1970-80)

GNP per capita: \$430 (1980)

Average annual growth of GNP per capita: 4.5% (1960-80)

Gross Domestic Product: \$2,610 million (1980)

Average annual growth of GDP: 9.2% (1970-80)

Agricultural Share of GDP: 29% (1980)

Average annual growth of Agricultural GDP: 3.7% (1970-80)

Industrial Share of GDP: 16% (1980)

Average annual growth of Industrial GDP: 14.7% (1970-80)

Service Sector Share of GDP: 55% (1980)

Average annual growth of Service GDP: 12.5% (1970-80)

Gross Domestic Investment: 44% of GDP (1980)

Gross Domestic Saving: -20% of GDP (1980)

Adult literacy: 21% (1977)

Number enrolled in secondary school as percent of age group: 4% (1979)

Life expectancy at birth: 42 years (1980)

Infant mortality rate: 190 (1980)

Population per physician: 11,670 (1977)

Percent of population with access to safe water: 4% (1975)

**Basic Indicators  
Egypt**

Land Area: 1,001,000 square kilometers

Population: 39.8 million (1980)

Average annual growth of population: 2.1% (1970-80)

Urban Population: 17.9 million (1980)

Average annual growth of urban population: 2.8% (1970-80)

GNP per capita: \$580 (1980)

Average annual growth of GNP per capita: 3.4% (1960-80)

Gross Domestic Product: \$22,970 million (1980)

Average annual growth of GDP: 7.4% (1970-80)

Agricultural Share of GDP: 23% (1980)

Average annual growth of Agricultural GDP: 2.7% (1970-80)

Industrial Share of GDP: 35% (1980)

Average annual growth of Industrial GDP: 6.8% (1970-80)

Service Sector Share of GDP: 42% (1980)

Average annual growth of Service GDP: 11.0% (1970-80)

Gross Domestic Investment: 31% of GDP (1980)

Gross Domestic Saving: 16% of GDP (1980)

Adult Literacy: 44% (1977)

Number enrolled in secondary school as percentage of age group: 48% (1979)

Life expectancy at birth: 57 years (1980)

Infant mortality rate: 103 (1980)

Population per physician: 1,050 (1977)

Percent of population with access to safe water: 66% (1975)

**Basic Indicators  
Morocco**

Land Area: 447,000 square kilometers

Population: 20.2 million (1980)

Average annual growth of population: 3.0% (1970-80)

Urban Population: 8.3 million (1980)

Average annual growth of urban population: 4.6% (1970-80)

GNP per capita: \$900 (1980)

Average annual growth of GNP per capita: 2.5% (1960-80)

Gross Domestic Product: \$17,940 million (1980)

Average annual growth of GDP: 5.6% (1970-80)

Agricultural Share of GDP: 18% (1980)

Average annual growth of Agricultural GDP: 0.8% (1970-80)

Industrial Share of GDP: 32% (1980)

Average annual growth of Industrial GDP: 6.6% (1970-80)

Service Sector Share of GDP: 50% (1980)

Average annual growth of Service GDP: 6.6% (1970-80)

Gross Domestic Investment: 21% of GDP (1980)

Gross Domestic Saving: 11% of GDP (1980)

Adult Literacy: 28% (1977)

Number enrolled in secondary school as percentage of age group: 22% (1979)

Life expectancy at birth: 56 years (1980)

Infant mortality rate: 107 (1980)

Population per physician: 11,040 (1977)

Percent of population with access to safe water: N/A

**Basic Indicators  
Tunisia**

Land Area: 164,000 square kilometers

Population: 6.4 million (1980)

Average annual growth of population: 2.1% (1970-80)

Urban Population: 3.3 million (date) (1980)

Average annual growth of urban population: 3.9% (1970-80)

GNP per capita: \$1,310 (1980)

Average annual growth of GNP per capita: 4.8% (1960-80)

Gross Domestic Product: \$7,300 million (1980)

Average annual growth of GDP: 7.5% (1970-80)

Agricultural Share of GDP: 17% (1980)

Average annual growth of Agricultural GDP: 4.9% (1970-80)

Industrial Share of GDP: 35% (1980)

Average annual growth of Industrial GDP: 9.0% (1970-80)

Service Sector Share of GDP: 48% (1980)

Average annual growth of Service GDP: 7.8% (1970-80)

Gross Domestic Investment: 28% of GDP (1980)

Gross Domestic Saving: 25% of GDP (1980)

Adult Literacy: 62% (1977)

Number enrolled in secondary school as percentage of age group: 25% (1979)

Life expectancy at birth: 60 years (1980)

Infant mortality rate: 90 (1980)

Population per physician: 3,580 (1977)

Percent of population with access to safe water: 70% (1975)

**Basic Indicators  
Jordan**

Land Area: 98,000 square kilometers

Population: 3.2 million (1980)

Average annual growth of population: 3.4% (1970-80)

Urban Population: 1.3 million (1980)

Average annual growth of urban population: 4.7% (1970-80)

GNP per capita: \$1,420 (1980)

Average annual growth of GNP per capita: 5.7% (1970-80)

Gross Domestic Product: \$2,190 million (1980)

Average annual growth of GDP: N/A

Agricultural Share of GDP: 8% (1980)

Average annual growth of Agricultural GDP: N/A

Industrial Share of GDP: 32% (1980)

Average annual growth of Industrial GDP: N/A

Service Sector Share of GDP: 60% (1980)

Average annual growth of Service GDP: N/A

Gross Domestic Investment: 48% of GDP (1980)

Gross Domestic Saving: -27% of GDP (1980)

Adult Literacy: 70% (1977)

Number enrolled in secondary school as percentage of age group: 74% (1979)

Life expectancy at birth: 61 years (1980)

Infant mortality rate: 69 (1980)

Population per physician: 1,960 (1977)

Percent of population with access to safe water: 61% (1975)

**Basic Indicators  
Lebanon**

Land Area: 10,000 square kilometers

Population: 2.7 million (1980)

Average annual growth of population: 0.7% (1970-80)

Urban Population: 2.1 million (1980)

Average annual growth of urban population: 2.8% (1970-80)

GNP per capita: N/A

Average annual growth of GNP per capita: N/A

Gross Domestic Product: N/A

Average annual growth of GDP: N/A

Agricultural Share of GDP: N/A

Average annual growth of Agricultural GDP: N/A

Industrial Share of GDP: N/A

Average annual growth of Industrial GDP: N/A

Service Sector Share of GDP: N/A

Average annual growth of Service GDP: N/A

Gross Domestic Investment: N/A

Gross Domestic Saving: N/A

Adult Literacy: N/A

Number enrolled in secondary school as percentage of age group: 50% (1979)

Life expectancy at birth: 66 years (1980)

Infant mortality rate: 41 (1980)

Population per physician: 1,210 (1977)

Percent of population with access to safe water: N/A

**Basic Indicators  
Turkey**

Land Area: 781,000 square kilometers

Population: 44.9 million (1980)

Average annual growth of population: 2.4% (1970-80)

Urban Population: 21.1 million (1980)

Average annual growth of urban population: 4.5% (1970-80)

GNP per capita: \$1,470 (1980)

Average annual growth of GNP per capita: 3.6% (1960-80)

Gross Domestic Product: \$53,820 million (1980)

Average annual growth of GDP: 5.9% (1970-80)

Agricultural Share of GDP: 23% (1980)

Average annual growth of Agricultural GDP: 3.9% (1970-80)

Industrial Share of GDP: 30% (1980)

Average annual growth of Industrial GDP: 6.6% (1970-80)

Service Sector Share of GDP: 47% (1980)

Average annual growth of Service GDP: 6.8% (1970-80)

Gross Domestic Investment: 27% of GDP (1980)

Gross Domestic Saving: 18% of GDP (1980)

Adult Literacy: 60% (1977)

Number enrolled in secondary school as percentage of age group: 34% (1979)

Life expectancy at birth: 62 years (1980)

Infant mortality rate: 123 (1980)

Population per physician: 1,700 (1977)

Percent of population with access to safe water: 75% (1975)

**Basic Indicators  
Portugal**

Land Area: 92,000 square kilometers

Population: 9.8 million (1980)

Average annual growth of population: 1.3% (1970-80)

Urban Population: 3.0 million (1980)

Average annual growth of urban population: 2.9% (1970-80)

GNP per capita: \$2,370 (1980)

Average annual growth of GNP per capita: 5.0% (1970-80)

Gross Domestic Product: \$21,930 million (1980)

Average annual growth of GDP: 4.5% (1970-80)

Agricultural Share of GDP: 13% (1980)

Average annual growth of Agricultural GDP: -0.9% (1970-80)

Industrial Share of GDP: 46% (1980)

Average annual growth of Industrial GDP: 4.5% (1970-80)

Service Sector Share of GDP: 41% (1980)

Average annual growth of Service GDP: 6.2% (1970-80)

Gross Domestic Investment: 25% of GDP (1980)

Gross Domestic Saving: 11% of GDP (1980)

Adult Literacy: N/A

Number enrolled in secondary school as percentage of age group: 55% (1979)

Life expectancy at birth: 71 years (1980)

Infant mortality rate: 35 (1980)

Population per physician: 1,250 (1977)

Percent of population with access to safe water: 65% (1975)

### Basic Indicators Israel

Land Area: 21,000 square kilometers

Population: 3.9 million (1980)

Average annual growth of population: 2.6% (1970-80)

Urban Population: 3.5 million (1980)

Average annual growth of urban population: 3.2% (1970-80)

GNP per capita: \$4,500 (1980)

Average annual growth of GNP per capita: 3.8% (1960-80)

Gross Domestic Product: \$15,340 million (1980)

Average annual growth of GDP: 4.1% (1970-80)

Agricultural Share of GDP: 5% (1980)

Average annual growth of Agricultural GDP: N/A

Industrial Share of GDP: 36% (1980)

Average annual growth of Industrial GDP: N/A

Service Sector Share of GDP: 59% (1980)

Average annual growth of Service GDP: N/A

Gross Domestic Investment: 22% of GDP (1980)

Gross Domestic Saving: 8% of GDP (1980)

Adult Literacy: N/A

Number enrolled in secondary school as percentage of age group: 68% (1979)

Life expectancy at birth: 72 years (1980)

Infant mortality rate: 14 (1980)

Population per physician: 400 (1977)

Percent of population with access to safe water: N/A

**ANNEX C**  
**NEB COUNTRIES**  
**INDICATOR PROFILES**

## NEB COUNTRIES INDICATOR PROFILES

The numerical values of the indicators (urbanization, economic and social performance for each country), the average for all NEB countries, and the average for all middle income countries are shown in Tables C.1 - C.3. Also shown is the standard deviation from the mean for middle income countries. The significance of the number is that it measures roughly an equivalent difference from the mean for each indicator variable. Thus, although the actual value for two indicators may be in different units, an index of, say, 1.00 for average annual growth of population and 1.00 for average GNP per capita would represent roughly an equally significant difference. An index of 1.00 for average annual growth of population would be a value equal to the mean + one standard deviation (2.48 + 0.83) or a population growth rate of 3.31 percent a year. Similarly, an index of 1.00 for GNP per capita would be a value of \$2692 (1529.1 + 1173.0). That is a difference of \$1173 in GNP per capita (the standard deviation) is roughly equal in significance to a difference of 0.83 percent (the standard deviation) in average annual growth of urban population when making comparisons.

The average index, therefore, for a country over the various economic and social indicators provides a rough means of ranking the countries on their economic capability of coping with urbanization and the status of their social conditions. These values and ranks are shown below:

<u>Country</u>	<u>Economic Capacity</u>		<u>Social Conditions</u>	
	<u>Average Index</u>	<u>Rank<sup>1</sup></u>	<u>Average Index</u>	<u>Rank<sup>1</sup></u>
Yemen AR	-0.469	1	-1.692	1
Egypt	0.041	4	0.221	5
Morocco	-0.164	3	-0.761	2
Tunisia	0.409	7	0.139	4
Jordan	0.181	5	-0.030	3
Turkey	-0.263	2	0.332	6
Portugal	0.612	8	0.929	8
Israel	0.331	6	0.353	7

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<sup>1</sup>The countries are ranked from 1 = most serious problem to 8 = least serious problem.

When combined with the rankings shown in Tables 3 and 4, these results suggest an overall priority need for assistance in the following order from highest to lowest priorities.

Yeman AR  
Jordan  
Turkey  
Morocco  
Egypt  
Tunisia  
Israel  
Portugal

Lebanon is not ranked because of the absence of data; however, it is recognized that Lebanon has a very great need for assistance in its reconstruction.

TABLE C.1  
NEB COUNTRIES  
URBANIZATION INDICATORS

Country	Average Annual Growth of Population 1970-80		Urban Population as Percent of Total 1980		Average Annual Growth of Urban Population 1970-80		Percent of Urban Population in Largest City		GNP Per Capita	
	Percent	Index	Percent	Index	Percent	Index	Percent	Index	Dollars 1980	Index
Yemen AR	2.9	0.503	10	-1.737	8.3	1.647	25	-0.768	480	-0.537
Egypt	2.1	-0.464	45	-0.083	2.8	-0.705	39	-0.057	580	-0.809
Morocco	3.0	0.624	41	-0.272	4.6	0.064	26	-0.716	900	-0.536
Tunisia	2.1	-0.464	52	0.247	3.9	-0.235	30	-0.514	1310	-0.187
Jordan	3.4	1.108	56	0.436	4.7	0.107	37	-0.158	1420	-0.093
Lebanon	0.7	-2.157	76	1.381	2.8	-0.705	79	1.975	N/A	N/A
Turkey	2.4	-0.102	47	0.011	4.5	0.022	24	-0.818	1470	-0.050
Portugal	1.3	-1.432	31	-0.745	2.9	-0.662	44	0.197	2370	0.717
Israel	2.6	0.140	89	1.996	3.2	-0.534	36	-0.209	4500	2.532
NEB Mean	2.28	-0.241	49.67	0.137	4.19	-0.111	37.78	-0.119	1622.5	0.796
Middle Income Country Mean	2.48	0.000	46.76	0.000	4.45	0.000	40.12	0.000	1529.1	0.000
Standard Deviation	0.83	±1.000	21.17	±1.000	2.34	±1.000	19.69	±1.000	1173.0	±1.000

TABLE C.2  
NEB COUNTRIES  
SOCIAL INDICATORS

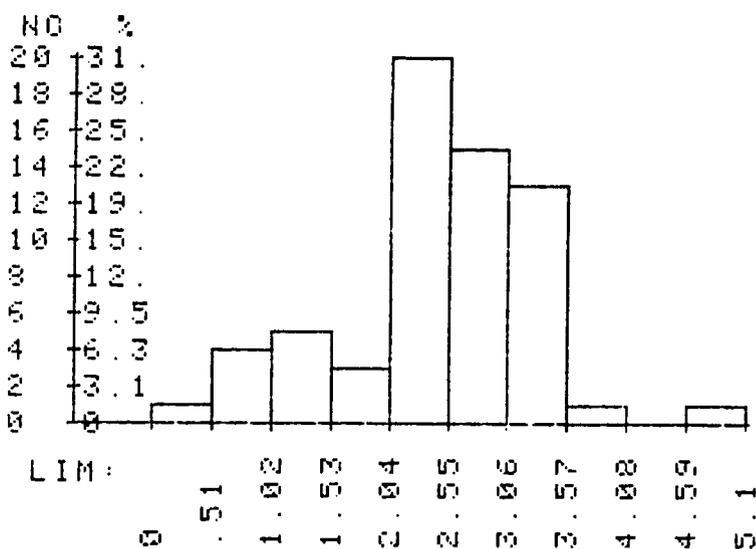
Country	Adult Literacy 1977		Number Enrolled Secondary School as Percent of Age Group 1979		Life Expectancy at Birth 1980		Number of People Per Physician 1977		Calorie Consumption as Percent of Requirement 1977		Population with Access to Safe Water	
	Percent	Index	Percent	Index	Years	Index	Number	Index	Percent	Index	Percent	Index
Yemen AR	21	-1.728	4	-1.702	42	-2.059	11,670	-1.186	82	-1.605	4	-1.872
Egypt	44	-0.803	48	0.292	57	-0.380	1,050	0.746	118	0.8413	66	0.627
Morocco	28	-1.446	22	-0.886	56	-0.492	11,040	-1.076	107	0.094	N/A	N/A
Tunisia	62	-0.079	25	-0.750	60	-0.044	3,580	0.285	115	0.637	70	0.788
Jordan	70	0.243	74	1.470	61	0.068	1960	0.580	62	-2.964	61	0.425
Lebanon	N/A	N/A	50	0.382	66	0.627	N/A	N/A	112	0.434	N/A	N/A
Turkey	60	-0.159	34	-0.343	62	0.179	1760	0.617	116	0.705	75	0.990
Portugal	N/A	N/A	55	0.609	71	1.186	700	0.810	127	1.453	65	0.587
Israel	N/A	N/A	68	1.198	72	1.298	310	0.881	123	1.181	N/A	N/A
NEB Mean	49.67	0.137	42.22	0.030	60.78	0.043	4008	-0.206	106.89	0.086	56.83	0.258
Middle Income Mean	46.76	0.000	41.56	0.000	60.40	0.000	5140	0.000	105.62	0.000	50.44	
Standard Division	21.17	±1.000	22.07	±1.000	8.94	±1.000	5483	±1.000	14.72	±1.000	24.808	±1.000

TABLE C.3  
NEB COUNTRIES  
ECONOMIC INDICATORS

Country	Average Annual Growth of GNP Per Capita 1960-80		Average Annual Growth of Gross Domestic Investment 1970-80		Distribution of GDP						Distribution of Employment			
	Percent	Index	Percent	Index	Agriculture		Industry		Services		Agriculture		Industry	
					Percent	Index	Percent	Index	Percent	Index	Percent	Index	Percent	Index
Yemen AR	4.5	0.498	24.6	2.195	29	0.774	16	-1.684	55	0.974	75	1.425	11	-1.111
Egypt	3.4	0.042	16.5	1.176	23	0.282	35	0.023	42	-0.343	50	0.287	30	0.789
Morocco	2.5	-0.332	9.2	0.258	18	-0.128	32	-0.247	50	0.468	52	0.378	21	-0.111
Tunisia	4.8	0.623	11.0	0.485	17	-0.210	35	0.229	48	0.265	34	-0.467	33	1.089
Jordan	5.7	0.997	N/A	N/A	8	-0.949	32	-0.247	60	1.480	20	-1.079	20	-0.211
Lebanon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11	-1.489	27	0.489
Turkey	3.6	0.125	9.4	0.284	23	0.282	30	-0.426	47	0.164	54	0.469	13	-0.911
Portugal	5.0	0.706	1.6	-0.698	13	-0.539	46	1.011	41	-0.444	24	-0.897	36	1.389
Israel	3.8	0.208	0.1	-0.88	5	-1.195	36	0.113	59	1.379	7	-1.671	36	1.389
NEB Mean	4.16	0.357	10.34	0.401	17.00	-0.211	32.75	-0.179	50.25	0.493	36.33	-0.336	25.22	0.311
Middle Income Mean	3.3	0.000	7.15	0.000	19.57	0.000	34.74	0.000	45.38	0.000	43.70	0.000	22.11	0.000
Standard Deviation	2.41	±1.000	7.95	±1.000	12.19	±1.000	11.13	±1.000	9.87	±1.000	21.97	±1.000	10.00	±1.000

AVERAGE ANNUAL GROWTH OF  
POPULATION 1970-80

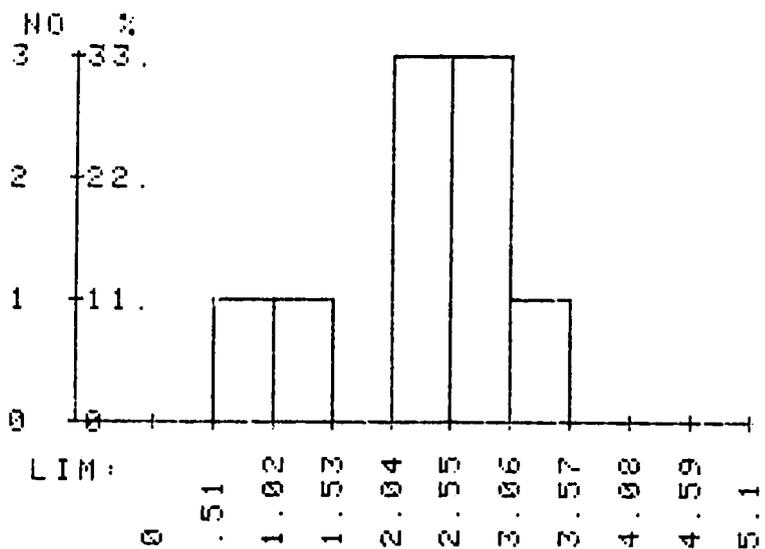
Middle Income Countries



CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	0.00	1	1.59
2	.51	4	6.39
3	1.02	5	7.94
4	1.53	3	4.76
5	2.04	20	31.75
6	2.55	15	23.81
7	3.06	13	20.63
8	3.57	1	1.59
10	4.59	1	1.59

NEB Countries

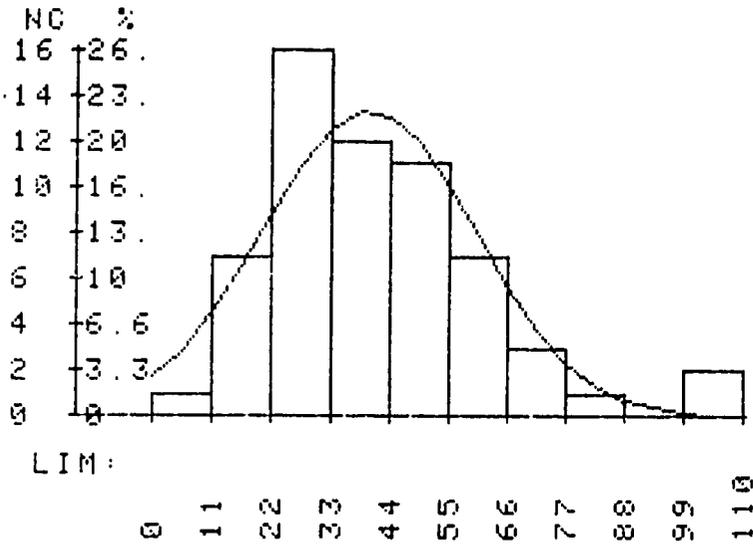


CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
2	.51	1	11.11
3	1.02	1	11.11
5	2.04	3	33.33
6	2.55	3	33.33
7	3.06	1	11.11

PERCENT OF URBAN POPULATION  
IN LARGEST CITY

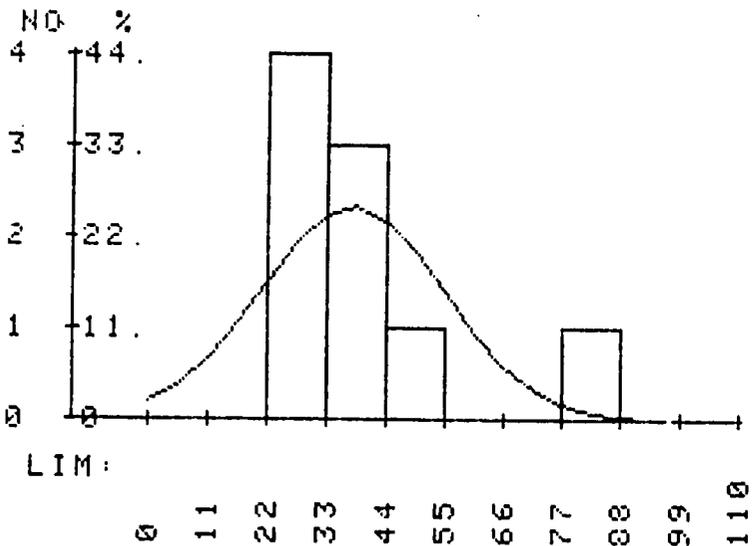
Middle Income Countries



CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	0.00	1	1.67
2	11.00	7	11.67
3	22.00	16	26.67
4	33.00	12	20.00
5	44.00	11	18.33
6	55.00	7	11.67
7	66.00	3	5.00
8	77.00	1	1.67
10	99.00	2	3.33

NEB Countries

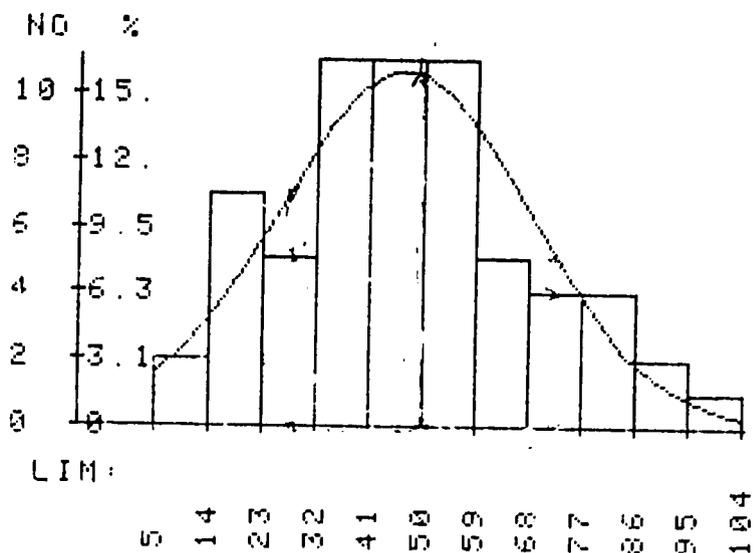


CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
3	22.00	4	44.44
4	33.00	3	33.33
5	44.00	1	11.11
8	77.00	1	11.11

URBAN PERCENT OF TOTAL POPULATION, 1980

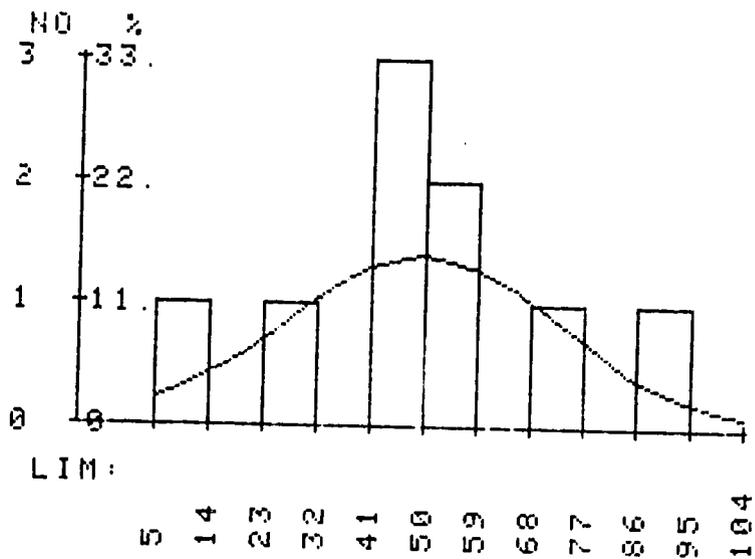
Middle Income Countries



CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	5.00	2	3.17
2	14.00	7	9.11
3	23.00	5	6.24
4	32.00	11	13.66
5	41.00	11	13.66
6	50.00	11	13.66
7	59.00	5	6.24
8	68.00	4	5.00
9	77.00	4	5.00
10	86.00	2	2.50
11	95.00	1	1.25

NEB Countries

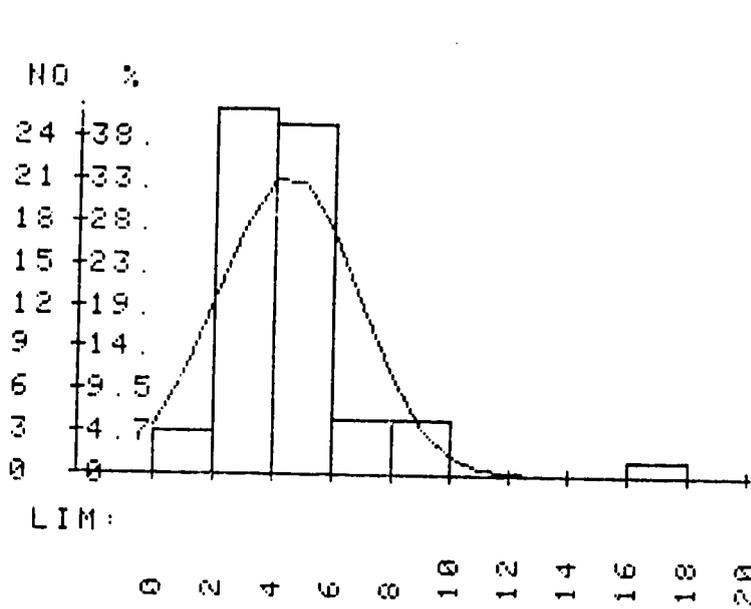


CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	5.00	1	11.11
3	23.00	1	11.11
5	41.00	3	33.33
6	50.00	2	22.22
8	68.00	1	11.11
10	86.00	1	11.11

AVERAGE ANNUAL GROWTH  
OF URBAN POPULATION  
1970-80

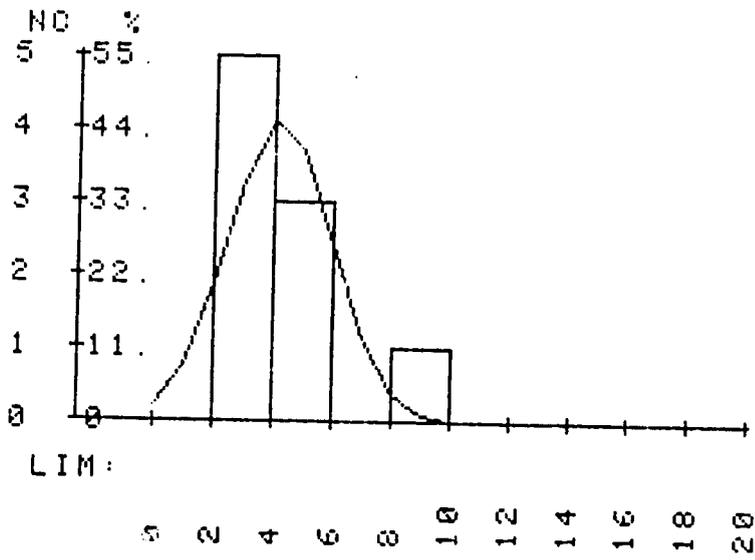
Middle Income Countries



CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	0.00	3	4.76
2	2.00	26	41.27
3	4.00	25	39.69
4	6.00	4	6.35
5	8.00	4	6.35
6	10.00	1	1.59

NEB Countries

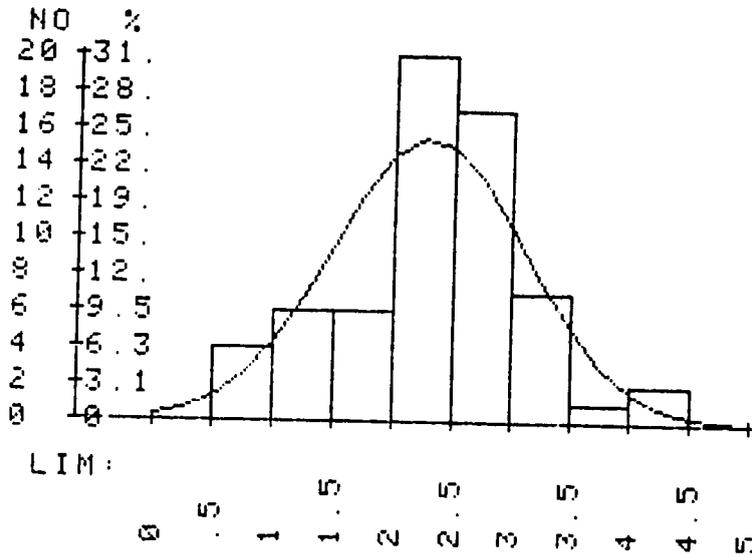


CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
2	2.00	5	55.56
3	4.00	3	33.33
5	8.00	1	11.11

EXPECTED POPULATION GROWTH  
1980-2000

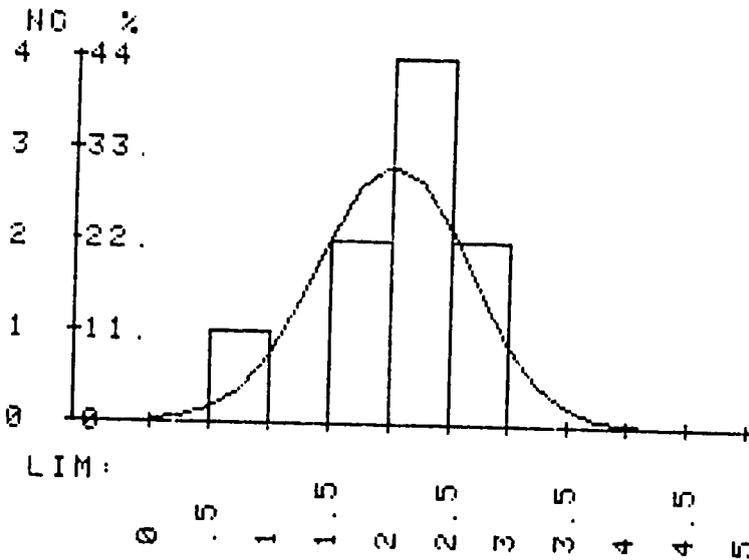
Middle Income Countries



CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
2	.50	4	6.35
3	1.00	6	9.52
4	1.50	6	9.52
5	2.00	20	31.75
6	2.50	17	26.98
7	3.00	7	11.11
8	3.50	1	1.59
9	4.00	2	3.17

NEB Countries

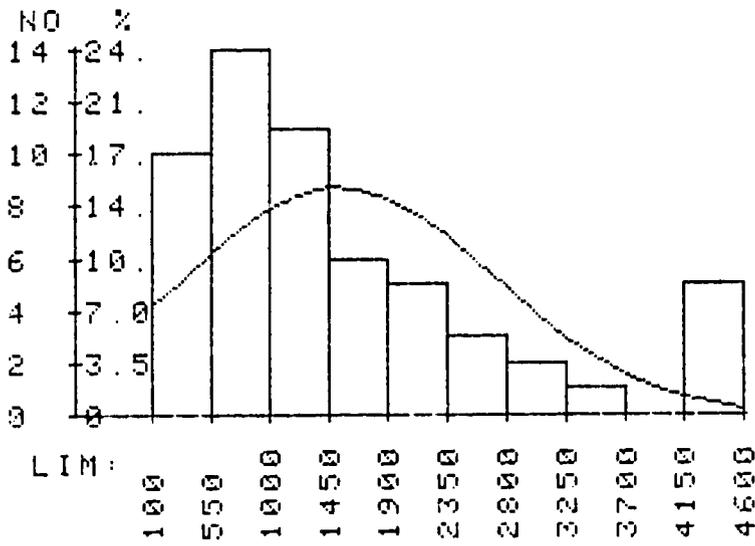


CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
2	.50	1	11.11
4	1.50	2	22.22
5	2.00	4	44.44
6	2.50	2	22.22

GNP PER CAPITA  
1980

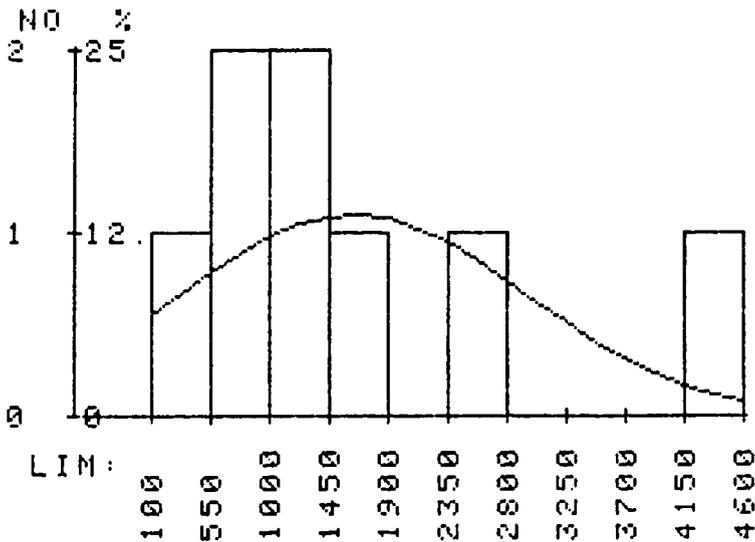
Middle Income Countries



CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	100.00	10	17.54
2	550.00	14	24.56
3	1000.00	11	19.30
4	1450.00	6	10.53
5	1900.00	5	8.77
6	2350.00	3	5.26
7	2800.00	2	3.51
8	3250.00	1	1.75
10	4150.00	5	8.77

NEB Countries

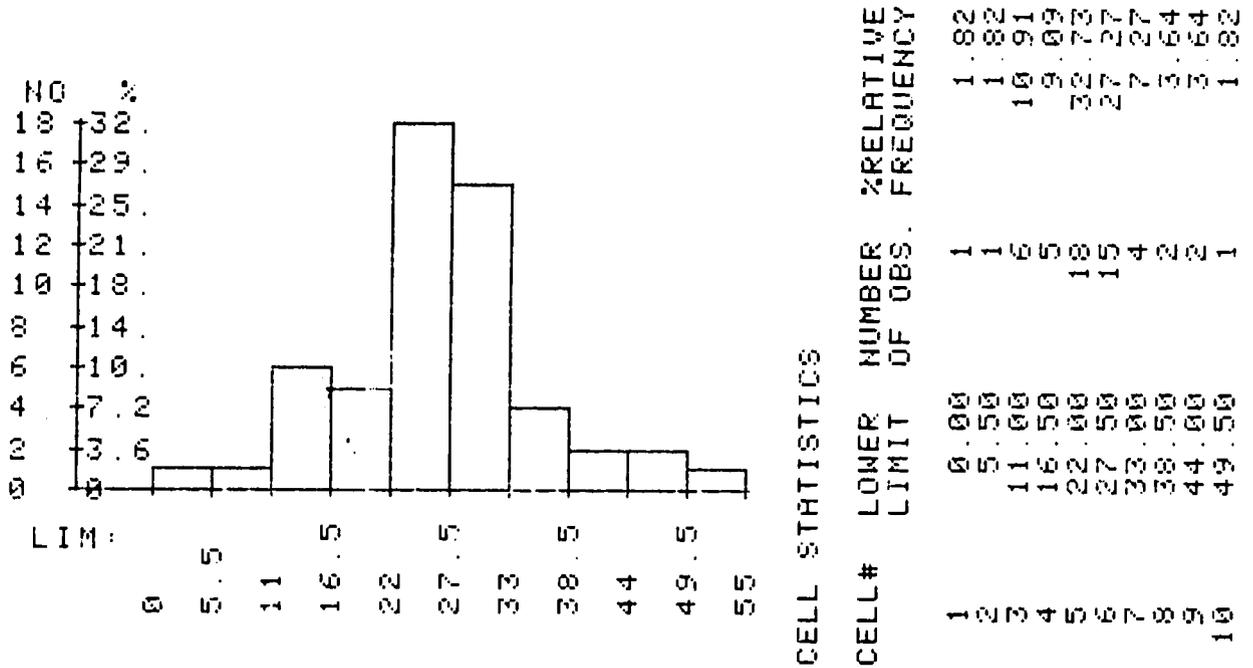


CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	100.00	1	12.50
2	550.00	2	25.00
3	1000.00	2	25.00
4	1450.00	1	12.50
6	2350.00	1	12.50
10	4150.00	1	12.50

GROSS DOMESTIC INVESTMENT  
AS PERCENT OF GDP  
1980

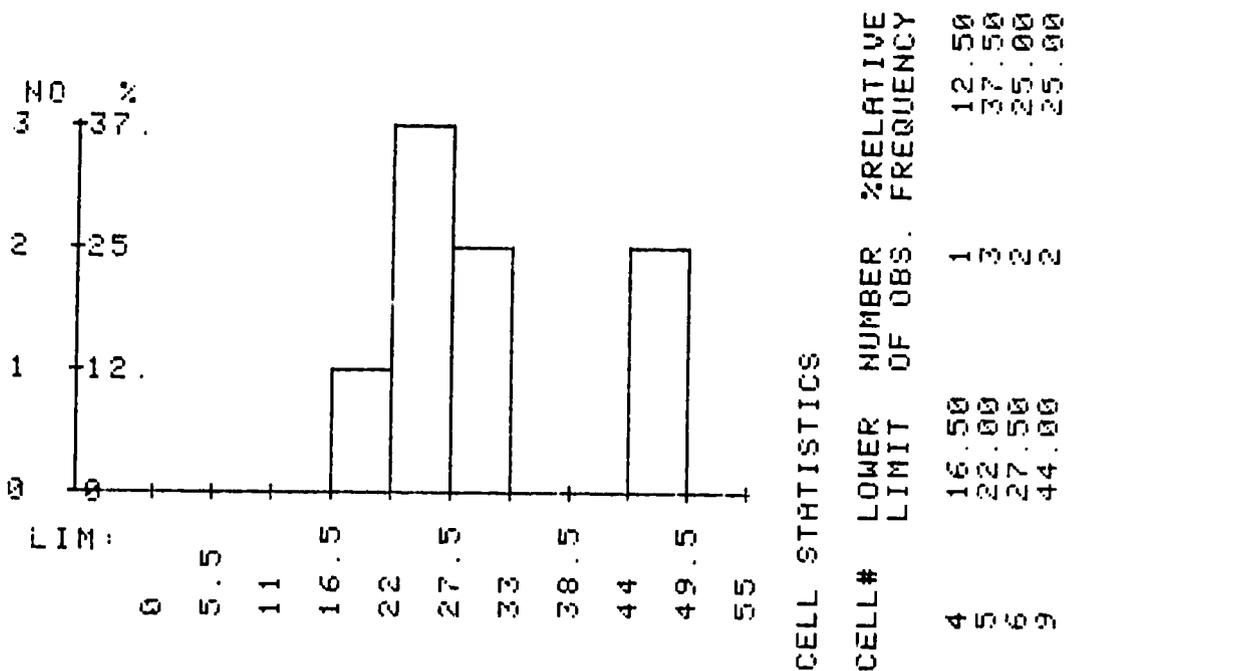
Middle Income Countries



CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	0.00	1	1.82
2	5.50	1	1.82
3	11.00	6	10.91
4	16.50	5	9.09
5	22.00	18	32.73
6	27.50	15	27.27
7	33.00	4	7.27
8	38.50	2	3.64
9	44.00	2	3.64
10	49.50	1	1.82

NEB Countries

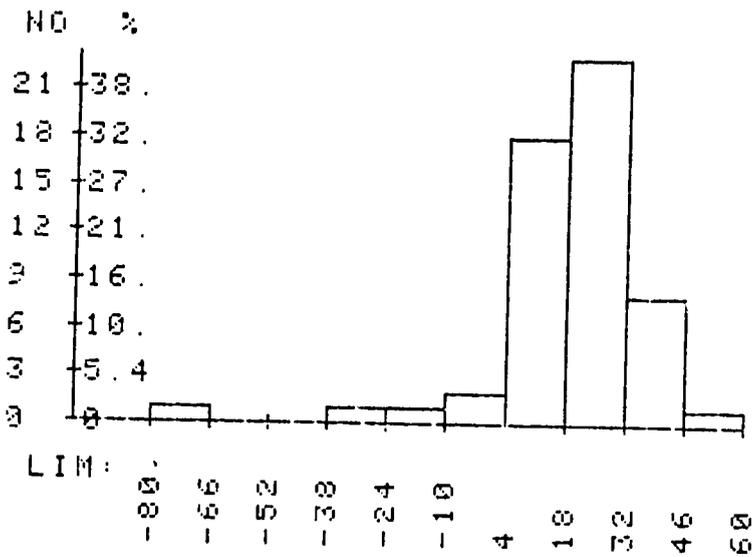


CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
4	16.50	1	12.50
5	22.00	3	37.50
6	27.50	2	25.00
9	44.00	2	25.00

GROSS DOMESTIC SAVING AS  
PERCENT OF GDP  
1980

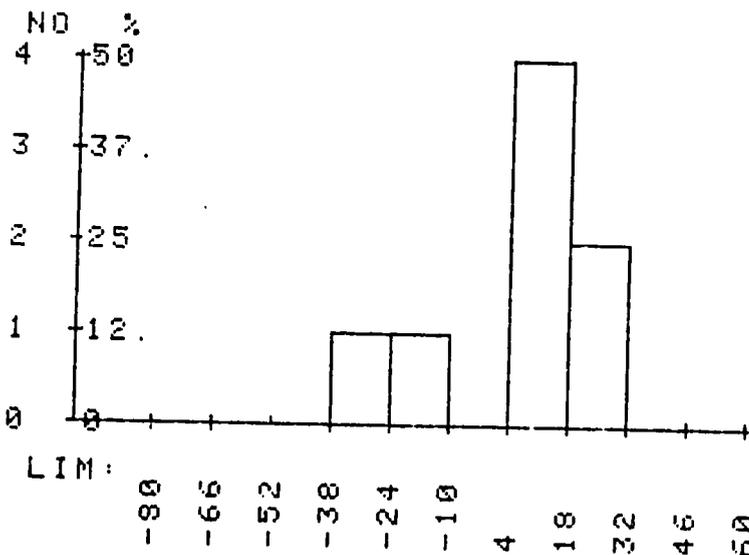
Middle Income Countries



CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	-80.00	1	1.82
4	-38.00	1	1.82
5	-24.00	1	1.82
6	-10.00	2	3.64
7	4.00	18	32.73
8	18.00	21	41.82
9	32.00	7	14.55
10	46.00	1	1.82

NEB Countries

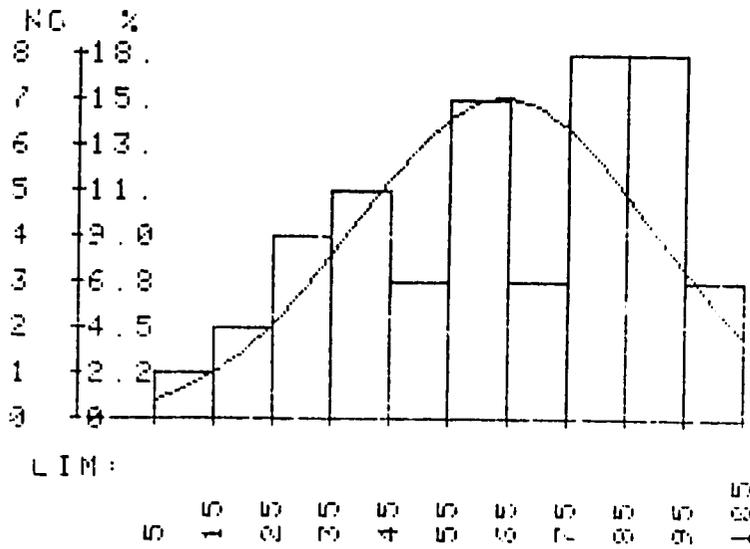


CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
4	-38.00	1	12.50
5	-24.00	1	12.50
7	4.00	4	50.00
8	18.00	2	25.00

ADULT LITERACY  
1977

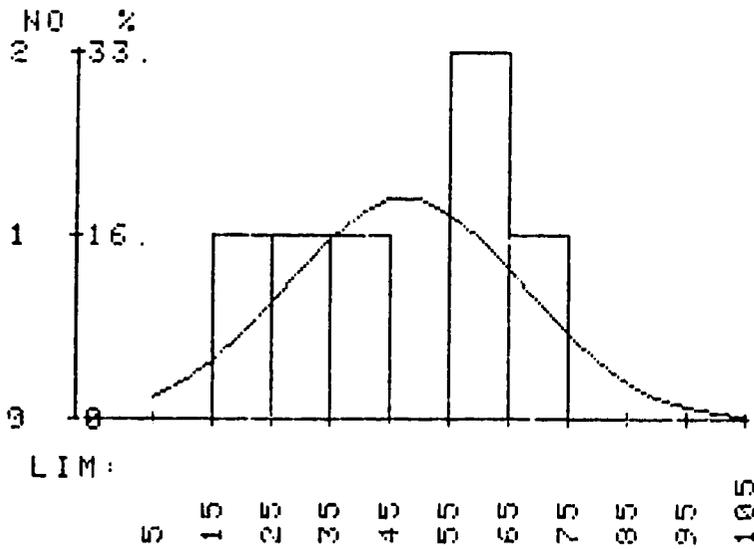
Middle Income Countries



CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	5.00	2	2.27
2	15.00	4	4.55
3	25.00	9	9.09
4	35.00	11	11.36
5	45.00	6	6.02
6	55.00	15	15.91
7	65.00	15	15.91
8	75.00	8	8.18
9	85.00	8	8.18
10	95.00	5	5.00

NEB Countries

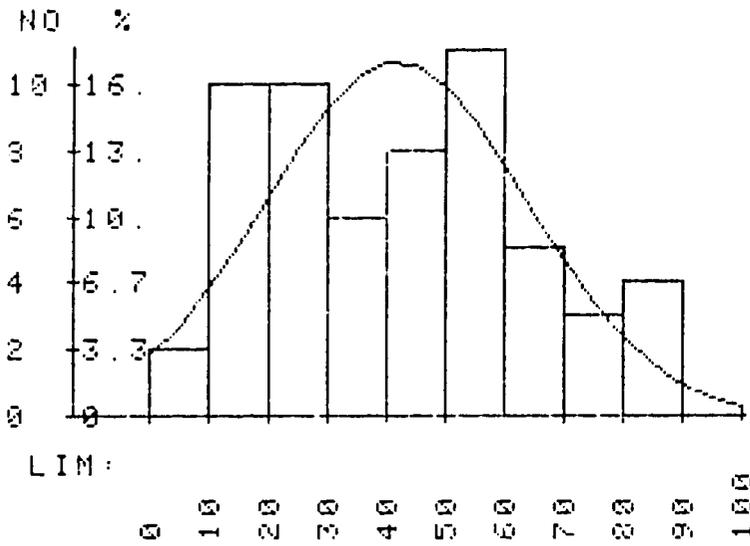


CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
2	15.00	1	16.67
3	25.00	1	16.67
4	35.00	1	16.67
6	55.00	2	33.33
7	65.00	1	16.67

PERCENT IN SECONDARY SCHOOL  
1979

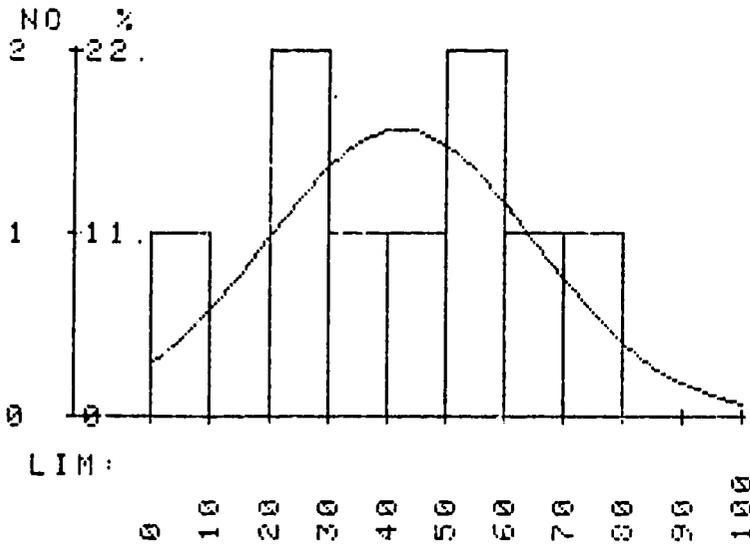
Middle Income Countries



CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	0.00	2	3.39
2	10.00	10	16.95
3	20.00	10	16.95
4	30.00	6	10.17
5	40.00	8	13.56
6	50.00	11	18.64
7	60.00	5	8.47
8	70.00	3	5.08
9	80.00	4	6.78

NEB Countries

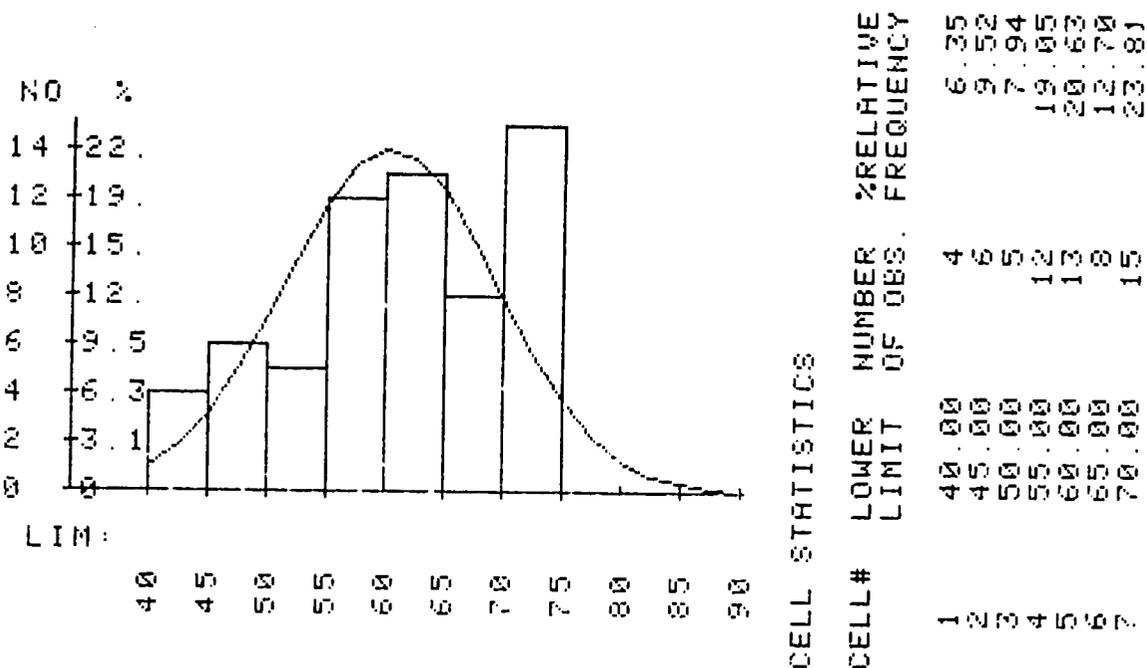


CELL STATISTICS

CELL#	LOWER LIMIT	NUMBER OF OBS.	%RELATIVE FREQUENCY
1	0.00	1	11.11
3	20.00	2	22.22
4	30.00	1	11.11
5	40.00	1	11.11
6	50.00	2	22.22
7	60.00	1	11.11
8	70.00	1	11.11

LIFE EXPECTANCY  
1980

Middle Income Countries



NEB Countries

