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CRITERIA FOR ASSESSING BASIC HUMAN NEEDS,  
PERFORMANCE AND COMMITMENT IN EGYPT

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## INTRODUCTION

Section 102(d) of The Foreign Assistance Act calls for the increasing concentration of development assistance by AID in countries which (1) suffer the worst and most widespread poverty and are thus in greatest need of outside assistance, and (2) will make the most effective use of such assistance to help their poor achieve better living standards. Furthermore, the sub-section requires that appropriate criteria be developed for measuring and assessing recipient countries' status, progress and commitment in meeting the needs of their poor. These indicators are then to be used as a basis for decisions regarding allocation of AID assistance.

The purpose of this paper is to examine selected data from developing countries in order to evaluate them in light of the Section 102(d) criteria. This report is one of a series of country case studies. The focus of this case study will be Egypt, although data from other developing countries are also used in the analysis for comparative purposes. A number of generally available, quantitative indicators of development are selected to give insights into Egypt's poverty situation and areas of greatest need, and into its performance and commitment towards meeting development objectives in areas stressed by AID.

There is a reasonable concensus within the Agency regarding what constitutes our major development concerns or goals under the New Mandate. In this report, the categorization of development objectives to be examined will follow the seven groupings listed in AID's Report to Congress on Section 102(d).<sup>1/</sup> These include:

- A. Improve participation and living standards of underprivileged groups.
- B. Achieve sustainable economic growth.
- C. Provide employment opportunities and fuller utilization of labor.
- D. Improve agricultural productivity, especially of small farmers.
- E. Improve health and nutrition conditions.
- F. Limit population growth via fertility decline.
- G. Expand basic education opportunities.

Indicators are chosen, under each of these headings, that appear helpful for assessing Egypt's current status and for evaluating its performance and commitment towards achieving the goal in question. The approach taken here is strictly quantitative; more qualitative, in-depth analyses of Section 102(d) concerns have been requested of the USAID Missions.<sup>2/</sup>

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<sup>1/</sup> See Airgram AIDTC Circular A-6x 35.

<sup>2/</sup> See STATE 194133.

One potential use for country case-studies of this type is to help guide (in addition to the Mission's qualitative analyses) Agency decisions regarding the allocations of assistance in accordance with objective Section 102(d) criteria and to help justify these decisions to Congress. This type of analysis has some other useful, operational payoffs beyond strict persuance of Section 102(d). For example, the information may be useful to the Mission for clarifying the nature and extent of Egypt's poverty problems and thus contribute towards development of their AID strategy to assist the poor. Also, data on Egypt's progress and commitment in meeting basic human needs, relative to the progress of similar developing countries, might be used in AID/host government dialogues to help influence public program and policy decisions.

This paper has three major sections. The first section presents available indicators that may be used to measure or describe the severity of poverty in Egypt. Indicator estimates from Egypt are compared to AID targets and also relative to other developing countries in an effort to clarify Egypt's development status. The second section looks at methods for evaluating country performance in pursuing development objectives. Performance implies a measurement of improvement over time, or progress at a relatively reasonable rate. Measurement of performance also raises the issue of fairness; consideration must be given in judging performance to the country's stage of development or resource availability. The final section examines indicators of commitment to specific development objectives, such as allocations of government financial resources and personnel to critical sectors.

One of the limitations of a quantitative approach such as this is the problem of poor data bases. Often needed data is simply not available, or if estimates are available, they may be of poor reliability. Another problem is that the indicators may not be strictly comparable across countries, due to differences in definitions and base years. Furthermore, data which is easily quantifiable and generally available in many countries may not be the most appropriate, pertinent measures of the development concept or objective at issue. Despite these serious shortcomings in the data base, some rough indications or insights into the relative poverty situation, progress and commitment of developing countries can be discerned from this method. This study uses numerous indicators, with the hope that some of the inaccuracies (resulting from poor reliability, comparability and pertinence) will cancel each other out, so that the general conclusions will represent the actual situation.<sup>1/</sup> The data sources used are mainly from international organizations, such as the World Bank, IMF, UNESCO, WHO and ILO.

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<sup>1/</sup> Furthermore, the methodology provides a "norm" or expected level of performance based upon data from as many as 92 countries, so that inaccuracies in a few of these are not critical.

## INDICATORS OF POVERTY

The first criteria of Section 102(d) calls for measurement of the severity of poverty in recipient countries. This report examines two possible approaches to assessing the degree of poverty in Egypt. First, one can compare indicators of levels of poverty to some absolute targets set as goals by AID and other development organizations. A second approach would be to compare poverty indicators of Egypt not to a "target" but to indicator levels in other developing countries to determine relative conditions of poverty.

### A. Absolute Targets

One way of examining the degree of poverty in Egypt is to compare estimates of their poverty indicators relative to some standard or target. One problem is that there are as yet no internationally accepted targets for a minimum set of basic human needs. Nevertheless, a few groups have attempted to set targets for the elimination of the worst aspects of poverty, usually within a timeframe of doing this by the end of the century.

For example, the Tinbergen Group in their RIO Report set the following targets for developing countries by the year 2000.<sup>1/</sup>

- life expectancy at birth of 65 years or more
- infant mortality rate of 50 or less
- literacy rate of 75% or more
- crude birth rate of 25 or less per 1,000 population

AID in a recent strategy document has adopted similar and additional minimal targets for development to be achieved by the end of the century.<sup>2/</sup>

- crude birth rate of 25 or less per 1,000 population
- life expectancy at birth of 65 years or more
- infant mortality of 50 or less per 1,000 live births
- meeting 100% of minimum per capita nutrition requirements
- adult literacy rate of 75% or more
- educational facilities adequate to enroll 98% of the primary age group

The following table compares the most recent estimates of these indicators for Egypt with the target set by AID for the year 2000. From this table we see that of these, the only objective already met is the per capita calorie requirements. Disparities between current indicator levels and targets are especially great with regard to infant mortality rates and literacy rates.

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<sup>1/</sup> Club of Rome, Reshaping the International Order, 1976.

<sup>2/</sup> AID, "A Strategy for a More Effective Bilateral Development Assistance Program", AA/PPC, Oct. 1977, p. 4.

Table 1: INDICATORS OF POVERTY IN EGYPT RELATIVE TO TARGETS

	<u>Observed Level in Egypt</u>	<u>Year 2000 Target</u>	<u>Disparity Gap</u>
Crude birth rate	35	25 or less	+10
Life expectancy at birth (years)	52	65 or more	-13
Infant mortality rate	101	50 or less	+51
Per capita calorie requirements (%)	113	100 or more	no gap
Per capita protein requirements (grams/day)	71	75 or more	-4
Adult literacy rate (%)	40	75 or more	-35
Primary enrollment ratio (%)	72	98 or more	-26

One of the problems with this approach, of course, is that the data is for national averages and does not provide information regarding disadvantaged sub-groups of the population. Such sub-national breakdowns are generally not available from international sources, however, and this paper will not deal in much depth with those distributional aspects.

However, one powerful indicator which does lend insights into how widespread poverty is within a country, is the percent of the population living below an absolute poverty line. The World Bank has been active in targeting the elimination of absolute poverty by the year 2000. One World Bank definition of absolute poor are those that have an income which is below US \$250 measured in "Kravis dollars" (or about IJS \$80 at official exchange rates).<sup>1/</sup> In Egypt it is estimated that 17% of the population, or about 6.5 million people live in absolute poverty according to this definition.

Meeting such minimum basic needs targets defined by various institutions may be relatively long-term objectives for some poor countries. Most groups call for achievement of the targets by all countries by the year 2000. While such absolute targets have their merits, they may not be very useful for directing assistance to the poorest countries since most of the developing countries may be "poor" relative to the high targets.<sup>2/</sup> Another approach might be to compare

<sup>1/</sup> This international standard of poverty income level is equivalent to the purchasing power of the 40th percentile of India's income recipients in 1975. These estimates are based on World Bank analysis of income distribution applied to real GDP measured in terms of dollars of uniform purchasing power. See M.S. Ahluwalia, N.G. Carter and H.B. Chenery, "Growth and Poverty in Developing Countries", World Bank Staff Working Paper No. 309, December 1978.

<sup>2/</sup> Conceivably, one might project cost estimates required to achieve these basic needs by 2000, but this is beyond the scope of this paper. Rather than project "need" for assistance (which is most likely much greater than available assistance at any rate) the issue dealt with here is, given a specific level of assistance, how can it best be allocated according to relative needs.

a country's current status not to a "target" but to that of other developing countries to determine relative conditions of poverty.

B. Relative Conditions of Poverty

One way of determining a country's relative poverty status and need for assistance might be to rank all developing countries according to the value of their estimates for each poverty indicator. For example, all developing countries for which data are available on life expectancy might be ranked from the lowest or worst value to the highest. The countries with the worst health situation and requiring the most assistance in the health field might then be defined as those with life expectancies falling among the worst quartile (25%) of countries. The "best" quartile of countries might then be defined as the 25% of all countries with the highest life expectancies.

The table below gives the estimated value for selected indicators of the poverty situation in Egypt, and also states in which quartile Egypt falls in regard to that indicator. The quartiles are numbered from 1 to 4, with 1 always representing the "worst" or "poorest" 25% and, at the other end of the scale, 4 representing the "best" quartile of countries. From this, one can examine how Egypt ranks in terms of living standards or poverty situation, relative to other developing countries.<sup>1/</sup>

Table 2: ESTIMATES OF POVERTY STATUS INDICATORS AND THEIR QUARTILE RANKINGS FOR Egypt

<u>Indicator Definition</u>	<u>Indicator Value</u>	<u>Quartile Ranking</u>
% of population in absolute poverty	17	3
Per capita GNP (1977 US \$)	296	2
Rate of unemployment	2	4
Life expectancy at birth (years)	52	3
Infant mortality rate	101	2
Per capita calorie supply as % of requirements	113	4
Per capita protein supply (grams/day)	71	4
% of population with access to safe water supply	93	4
Total fertility rate	5	4
% of population under age 15	41	3
Adult literacy rate (%)	40	2
Primary enrollment ratio (%)	72	2
Female primary enrollment ratio (%)	55	2

<sup>1/</sup> Up to 92 developing countries (with per capita incomes below \$4,000) are included in this ranking procedure.

It is rather surprising to note that although among the lowest 50% of developing countries with regard to per capita GNP level, Egypt ranks relatively high among countries with regard to many basic human needs indicators. For example, Egypt ranks among the best quartile of countries with regard to high nutrition intake and access to safe water supply, low unemployment and low fertility levels. However, with regard to infant mortality rates, education indicators and per capita GNP levels, Egypt falls among the poorest half of the developing world.

It should be reemphasized that these poverty indicators do not attempt to evaluate country performance in reducing their poverty situation nor to attempt to judge a government's commitment towards achieving basic needs. These aspects are dealt with in the next two sections.

INDICATORS OF PERFORMANCE

The development of criteria that measure country performance and government commitment is more difficult and complex than indicators that simply compare relative poverty situations and point out greatest needs. Performance and commitment criteria imply an assessment of the dedication of government and of the effectiveness of government programs and policies in achieving progress towards development objectives. A distinction is made in this paper between (a) performance indicators, which attempt to assess actual long-term results of development attributable to government efforts, and (b) commitment indicators, which examine government commitment in terms of policies, programs, resources and other inputs aimed at achieving these goals. This section deals with the first type--performance indicators.

A. Trend Data

One simple approach to assessing country performance would be to examine time-series data for indicators such as fertility, infant mortality, literacy, economic production, etc., to check whether reasonable rates of progress have been made.

Such time-series data is frequently lacking or of poor reliability and comparability. However, trend data for Egypt which is readily available is presented below:

Table 3: TREND DATA FOR MAJOR PERFORMANCE INDICATORS - EGYPT

<u>Indicator</u>	<u>1960</u>	<u>1970</u>	<u>Most Recent Estimate</u>
Per capita GNP (in constant 1976 US\$)	192	230	296
Per capita energy consumption	298	275	405
% unemployment	4.8	2.4	2.3
% of labor force in industry	12.2	18.8	--
% of labor force, female	7.3	7.2	7.6
Agricultural production index (1952/56=100)	95	123	130
Index of per capita food production (1965/67=100)	109	119	122
Life expectancy at birth (years)	45	50	52
Infant mortality rate	109	103	101
Per capita calorie supply as % of requirements	88	106	113
Per capita protein supply (grams/day)	66	66	71
Crude birth rate	44	--	35
% of population under age 15 years	42	--	41
Adult literacy rate (%)	20	--	40
Primary enrollment ratio (%)	66	69	72
Female primary enrollment ratio (%)	52	53	55

From this time-series of indicators, it can be seen that in all cases the direction of indicator trends have been desirable in Egypt. However, examining trends still does not answer the question of what might be considered "reasonable" amounts of progress. For such an assessment, a comparative approach is useful, one which compares Egypt's performance with achievements in other developing countries.

B. A Methodology for Assessing Performance that Accounts for a Country's Stage of Development

Use of time-series data alone to indicate progress would be very limiting because frequently data is only available for ~~one~~ point in time. Therefore, a way of evaluating performance from a ~~single~~ year indicator would be useful. One might say, why not use the same set of indicators used to denote poverty levels and now interpret poor rankings, such as comparatively high levels of infant mortality, low levels of life expectancy, etc., to be signs of poor performance in the health field. The fault in this would be in expecting equal results or performance from all developing countries despite widely varying levels of development and resources available to solve poverty problems. Unqualified use of these poverty status indicators as measures of "performance" would lead to excluding the most severely poor countries from AID assistance due to "poor" performance.

Here many of the indicators used to measure performance will be the same as the poverty indicators used in the first section. However, now their interpretation will be very different. Rather than comparing Egypt's indicator values to absolute targets or relative to a simple ranking of all developing countries, now they will be compared only to the expected value for a country at Egypt's level of development.

The approach used is to regress indicator values for all developing countries against their per capita GNP levels, as proxies for level of development or per capita resources available to pursue development objectives. Countries receive a performance rating with respect to each indicator depending upon the position of the country's observed indicator value relative to its "expected" value, given its per capita GNP (i.e., relative to the regression line). Performance ratings are categorized into three groups: below average, average, and above average. An above average performance rating always indicates that the country performed better than expected while a below average performance rating means that actual performance was worse than predicted.<sup>1/</sup>

In the following table, the results of this analysis are presented for Egypt.

<sup>1/</sup> Performance is considered "average" if the country's observed indicator value was within .68 standard errors from the expected value (i.e., from the regression line). Performance is considered "above average" or "below average" if the country's actual, observed level falls outside of .68 standard errors from the expected level. In this way, for each indicator 25% of all countries will receive "above average" ratings, 25% will receive "below average" ratings and 50% would receive "average" ratings.

Table 4: INDICATORS OF EGYPT'S PERFORMANCE IN ACHIEVING DEVELOPMENT OBJECTIVES

<u>Goals</u>	<u>Indicators</u>	<u>Egypt's Observed Performance</u>	<u>Expected Performance</u>	<u>Performance Rating</u>
A. Improve Living Conditions	% of income received by lowest 40% of households	14	13	average
	% of population living below poverty level	17	42	above average
	% of population with access to water	93	34	above average
B. Achieve Sustainable Economic Growth	Rate of growth of GNP	7.6	4.6	above average
C. Provide Employment Opportunities	Unemployment rate	2.0	8.7	above average
	% of labor force female	8	30	below average
D. Improve Agricultural Productivity	Rate of growth of agricultural production	3.0	3.3	average
	Index of food production	104	97	average
	Agricultural production per rural person	154	114	average
E. Improve Health and Nutrition	Life expectancy at birth	52	47	average
	Infant mortality rate	101	95	average

Table 4: (continued)

<u>Goals</u>	<u>Indicators</u>	<u>Egypt's Observed Performance</u>	<u>Expected Performance</u>	<u>Performance Rating</u>
E. (con't.)	Per capita calorie supply as % of requirements	113	93	above average
	Per capita protein supply (grams/day)	71	56	above average
F. Limit Population Growth Via Fertility Decline	Population growth rate	2.2	2.5	average
	% of population under age 15	41	44	average
	Total fertility rate	5.2	6.2	above average
G. Expand Basic Education	Adult literacy rate	40	39	average
	Primary enrollment ratio	72	67	average
	Female primary enrollment rate	55	58	average

1. Improve Living Conditions: The first criterion listed in the Report to Congress on Section 102(d) is concerned with measuring performance towards the objective of promoting equitable distribution of development's benefits among the population. It is concerned with improving participation, incomes, living conditions and access to basic services by underprivileged groups.

Three indicators have been chosen to assess performance under this first criterion, (a) percent of income received by lowest 40% of households, (b) percent of population living below poverty level, and (c) percent of population with access to safe water. Egypt's performance ratings, for two of these three indicators, are above average.

2. Achieve Sustainable Economic Growth: The second criterion discussed in the Report to Congress on Section 102(d) seeks to measure the maintainance of a reasonable rate of economic growth, an essential element of a balanced development strategy. Attainment of this objective is most obviously measured by looking at recent growth rates in GNP. For this indicator Egypt's performance is above average, or better than would be predicted for a country at Egypt's level of development

3. Provide Employment Opportunities: This criterion is concerned with the provision of employment opportunities, utilization of the generally abundant labor resource, and development of skills. There are few really adequate indicators to measure country performance under this criterion. The rate of unemployment is not as significant an indicator in developing countries as in developed countries. In a poor country, open unemployment is a luxury few can afford if they are to stay alive. Thus Egypt's above average performance regarding unemployment may not be an accurate description of the situation. The real issue is the amount of underemployment or low-productivity employment in traditional sectors, but unfortunately no good indicators are available. Percent of the labor force who are female is used as an indicator of participation opportunities for women. Egypt's performance in terms of providing work opportunities for women is below average.

4. Improve Agricultural Productivity: This criterion seeks to examine performance in the agricultural sector. AID has special concern for this sector because production of food is vital to achieving adequate nutrition standards and also because typically the rural majority must seek a living in this sector. Therefore, there is emphasis upon distributional aspects within this sector and upon small-farmer productivity. The indicators used under this criterion include (a) rate of growth of agricultural production, (b) an index of food production (average per capita food production during 1974-76 as a percentage of the average produced in 1965-67), and (c) the agricultural production per rural person (indicates something about farmer's average welfare and productivity).

The data reveals that Egypt's performance in terms of overall agricultural production and food production is about average.

5. Improve Health and Nutrition: This criterion examines the health and nutrition status of the population. Life expectancy at birth is a general indicator of life span -- the result of health standards. The infant mortality rate gives insights into the health situation of young age groups, which are the most susceptible to diseases caused by malnutrition. There are no generally available indicators of morbidity, amount of sickness or causes of sickness. The last two indicators relate to the adequacy of diets: per capita calorie intake as percent of minimum requirements and per capita protein intake.

Egypt's performance in the mortality indicators is close to the norm expected for its level of development. In the nutrition indicators, Egypt's performance is definitely above average.

6. Limit Population Growth Via Fertility Decline: The first indicator is rate of population growth. Rapid population growth, while generally the result of desirable trends of lengthening life expectancy, may have some negative consequences for development. Rapid growth of the population and labor force, unless matched or surpassed by more rapid growth of other factors of production, implies a slow-down in returns to labor and per capita incomes. Another aspect of the population problem is changes in its age structure. As the proportion of the population under age 15 years increases, the "dependency burden" upon workers to support non-productive age-groups increases. There are theories that this negatively affects families ability to save, thus reducing investment, capital formation and economic growth. Furthermore, the larger young-age groups tend to require increased government expenditures on social services, especially on education, which may reduce public resources available for directly productive investments. Because of these negative implications of rapid population growth, it is desirable that fertility rates can be made to decline as rapidly and as early in the development process as possible. The last indicator, total fertility rate, measures fertility levels (the average number of children born per woman by the end of her child-bearing years).

Egypt's relative performance in this area has been generally good. However, high population density in Egypt still makes this an area of concern.

7. Expand Basic Education: This last criterion examines performance in spreading and improving the basic education of the population. The first indicator is percent of the adult population age 15 years and above who are literate. The second and third indicators, which relate more to current efforts, are primary enrollment ratios (primary enrollment as percentage of the primary school-

age population). The primary enrollment ratio for the female population is considered separately as an indicator of country performance in encouraging women to participate in educational opportunities.

An examination of Egypt's education indicators versus the expected values reveals that Egypt is close to the norm in basic education performance.

## INDICATORS OF COMMITMENT

So far the approach has been to examine benchmarks that indicate results, or performance in attaining development goals. Now attention will be turned to government commitment, in terms of policies, programs and resources aimed at achieving goals.

Performance and commitment indicators each have separate shortcomings and strengths which make distinctions in interpretation useful. However, both sets of indicator types enhance the analysis, especially when considered side-by-side. The performance or result indicators have a number of shortcomings as criteria for judging governments of developing countries. First of all, it is fairly clear that such "performance" is influenced by many factors outside of governments' control. While the more important of these factors can be "controlled" or accounted for (e.g., per capita resource availability), it may still be difficult to attribute results clearly to government actions. A related problem is that there may well be a long time-lag between government efforts and results measured in performance level indicators. In other words, performance indicators may reflect the efforts or commitments of past governments during the last decade or two. AID needs to consider whether governments who are currently committed to equity-oriented strategies should be judged on results that require a possibly long time-lag to achieve.

Because of their more immediate nature, commitment indicators appear to be better measures for evaluating current government commitment to specific development objectives. On the other hand, commitment indicators have their own set of problems and shortcomings. Alone, they represent only policies and resources allocated, which may show good intentions but says little about ultimate impact. Another problem is that relevant policies may be more difficult to quantify as well as require greater subjectivity regarding what is "appropriate" policy.<sup>1/</sup>

### A. Trend Data

Country commitment to an equity-oriented or basic human needs development strategy might be examined by looking at time-series data for input indicators such as population/physician ratios, student/teacher ratios, etc. Such trend data for Egypt is presented below:

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<sup>1/</sup> Here the concept of commitment is limited to what is easily quantifiable, such as allocation of resources (money and man-power) to various sectors of concern.

Table 5: TREND DATA FOR MAJOR COMMITMENT INDICATORS - EGYPT

<u>Indicators</u>	<u>1960</u>	<u>1970</u>	<u>Most Recent Estimate</u>
Gross domestic investment as % of GNP	13	--	24
Population per physician	2600	--	2340
Population per hospital bed	480	460	470
% of eligible women using family planning	--	9	21
Student/teacher ratio at primary level	39	38	40
% of central government current expenditures allocated to:			
education	18	21	20
health	3	7	7
all social services	22	30	30
agriculture	4	7	5

B. A Methodology for Assessing Commitment that Accounts for a Country's Stage of Development

As with the performance indicators, observed commitment levels may be compared to expected commitment levels for a given per capita GNP level. Table 6 presents the results for Egypt.

1. Improve Living Conditions: There are no really good indicators for measuring government commitment to the goal of more equitable distribution and improving living conditions for the poor. Data is not readily available regarding the income status of recipients of government service expenditures. Furthermore, the type of policies undertaken by governments to influence distributional issues do not lend themselves to easy quantification. As a proxy indicator, the percent of government expenditures allocated to social services is used.

Egypt's commitment rating, according to this one indicator, is satisfactory.

2. Achieve Sustainable Economic Growth: A number of indicators suggest commitment to rapid economic growth by measuring the amount of resources channeled into investment purposes. These include growth rate of investment, and percent of government expenditures allocated to capital expenditures. For these indicators, Egypt's commitment rating is in the "above average" category, so it is understandable that her economic growth performance was also above average.

Table 6: INDICATORS OF EGYPT'S COMMITMENT TOWARDS DEVELOPMENT OBJECTIVES

<u>Goals</u>	<u>Indicators</u>	<u>Egypt's Observed Level</u>	<u>Expected Commitment Level</u>	<u>Commitment Rating</u>
A. Improve Living Conditions	% of government expenditures allocated to social services (1974-76 average)	23	28	average
B. Achieve Sustainable Economic Growth	Growth rate of investment	24	6	above average
	% of government expenditures allocated to capital expenditures (1974-76 average)	52	26	above average
C. Provide Employment Opportunities	Incremental capital output ratio	3.4	4.4	average
D. Improve Agricultural Productivity	% of government expenditure allocated to agriculture sector (1974-76 average)	6	9	average
E. Improve Health and Nutrition	Population per physician	2,340	17,416	above average
	Population per nursing person	4,420	6,585	average
	Population per primary health worker	2,130	17,619	above average
	Population per hospital bed	470	1,105	average
	% of government expenditures allocated to health (1974-76 average)	5	6	average

Table 6: (continued)

<u>Goals</u>	<u>Indicators</u>	<u>Egypt's Observed Level</u>	<u>Expected Commitment Level</u>	<u>Commitment Rating</u>
E. (con't)	Government health expenditures as % of GNP (1976)	1.5	1.1	average
	Government health expenditures per capita (US \$ 1976)	6	2	average
F. Limit Population Growth Via Fertility Decline	% of married women using family planning	21	16	average
G. Expand Basic Education	Student/teacher ratio at primary level	40	42	average
	% of government expenditures allocated to education (1974-76 average)	12	14	average
	Government education as % of GNP (1976)	5.0	3.0	above average
	Per capita education expenditures (US \$ 1976)	19	8	above average
	Current expenditures per primary student (US \$ 1970)	60	29	average

While Egypt's recent performance and commitment to rapid economic growth is undoubtedly high, ability to sustain rapid growth in the future is more doubtful. Indicators of Egypt's foreign debt situation and adequacy of foreign reserves reveal a significant problem. Much of the investment has been from foreign rather than domestic sources, which has led to a heavy debt service problem. Also, Egypt's export growth has been poor, aggravating a foreign exchange shortage.<sup>1/</sup>

3. Provide Employment Opportunities: This is another criterion where there are few adequate quantitative indicators. It is generally government policies, more than public expenditures, that influence employment opportunities. For example, the extent to which policies promote labor versus capital-intensive production structures can be critical for the creation of employment. One proxy indicator which may suggest whether an economy is too capital-intensive is the incremental capital-output ratio. The data indicated that Egypt policies in this respect are about average.

4. Improve Agricultural Productivity: One available indicator that might give insights into government commitment to increased domestic agricultural productivity is the percent of government expenditures allocated to agriculture (suggests the amount of public investment priority given to agriculture).

In this case, Egypt's observed levels are somewhat lower than average. However, despite the fact that AID has tended to encourage greater emphasis upon the rural, agricultural sector, one must question whether in the Egyptian case this is the best strategy. In Egypt, agricultural land and water resources are very scarce and other economic sectors may have better comparative advantage.

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<sup>1/</sup> For example:

<u>Indicator</u>	<u>Egypt's Observed Level</u>	<u>Expected Level</u>
Debt service as % of exports	18	9
External public debt as % of GNP	48	26
Gross international reserves in months of import coverage	0.8	3.0
Rate of growth of exports (1970-76)	-6.6	1.7

5. Improve Health and Nutrition: There are a number of commitment indicators for the better health and nutrition criterion. The first four relate to the number of health personnel and facilities available relative to the size of the population being serviced; that is, the ratios of population per physician, population per nurse, population per primary health worker and population per hospital bed. The next three indicators, (a) percent of the government's expenditures allocated to health, (b) health expenditures as a percent of GNP and (c) per capita health expenditures, suggest how much priority and resources the government is willing to put into improving national health care relative to the population's size and relative to resources available.

Egypt's health commitment ratings fall in the "average" and "above average" categories. The access of the Egyptian population to health personnel appears particularly good for a country at Egypt's level of development, and per capita public health expenditures are also relatively high.

6. Limit Population Growth Via Fertility Decline: One indicator of government commitment to the objective of fertility decline is the percent of married women that have been brought into the national family planning program.

Egypt's commitment in this field, according to this single indicator, is satisfactory.

7. Expand Basic Education: The first indicator, the primary level student/teacher ratio, suggests the adequacy of teaching staff relative to the number of students enrolled at the primary level. The next three deal with government expenditures on education, which reflects relative emphasis or concern with education. These include (a) percent of government expenditures allocated to education, (b) government education as a percent of GNP, and (c) per capita education expenditures, and (d) expenditures per primary student.

The commitment indicators for Egypt reveal a high level of commitment to education.

## SUMMARY

This paper has examined a number of quantitative indicators of social and economic development in Egypt. A comparative analysis was made with data from other developing countries in an attempt to assess Egypt's relative poverty situation, performance and commitment to development objectives of concern to AID (in light of Section 102(d) of The Foreign Assistance Act).

In the first section on poverty indicators, the analysis revealed that Egypt has by no means attained the basic human needs targets set by international organizations for the year 2000. The disparity between Egypt's current status and desired target levels are still quite wide in areas such as fertility reduction, improving survival rates, and extending adult literacy. Absolute poverty in Egypt has not yet been eliminated: an estimated 6.5 million people, or 17% of the population currently live below the poverty level (\$250 per capita income measured by Kravis method). In a relative sense, Egypt ranks high among countries with regard to many basic needs indicators. For example, Egypt ranks among the best quartile with regard to nutrition intake and access to safe water supply, low unemployment and low fertility levels. However, with regard to infant mortality rates, education indicators and per capita GNP levels, Egypt falls among the poorest half of the developing world.

The second section attempted the difficult task of evaluating country performance in progressing towards long-term development objectives. An examination of time-series data indicated that trends in socio-economic indicators of development were generally in a favorable direction in Egypt.

Another approach to assessing Egypt's performance was made by comparing observed indicator levels with a theoretically "expected" or predicted performance level, given Egypt's stage of development.<sup>1/</sup>

Egypt's performance in the areas of education and agricultural productivity are generally close to the norm, or "average" performance. For the objectives of improving health and nutrition, limiting population growth, and generally improving living conditions, Egypt's performance indicators rated "average" to "above average". With regard to the goal of achieving sustainable economic growth, GNP growth was

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<sup>1/</sup> It was considered desirable to adjust the expected norm for performance according to a country's per capita GNP level, on the theory that it would be unfair to expect equal results or performance from all countries regardless of widely varying levels of development and resources available to solve poverty problems.

"above average". Indicators for performance in providing employment opportunities had mixed results. General unemployment was lower than expected, yet women's participation in the labor force was also very low.

A similar assessment was carried out for commitment indicators; i.e., indicators of recent government inputs of financial and human resources towards attaining development objectives. The results showed an "average" to "above average" commitment of resources to education, health, and family planning and other social service programs.

Indicators of commitment to improving agricultural productivity showed a relatively low rating, although given Egypt's probable low comparative advantage in this sector, a development strategy emphasizing non-agricultural sectors may be most appropriate for Egypt.

Egypt's commitment ratings in terms of investment resources devoted to overall economic growth were high. Thus, it is not surprising that recent economic growth performance has also been high. However, a number of indicators related to the "sustainability" issue casts doubt upon Egypt's ability to maintain this high growth over the long-term. Much of the investment resources are from foreign sources and a serious debt service problem, aggravated by poor export performance, threatens future foreign exchange needs and long-term growth, unless continuing, large-scale sources of foreign capital are forthcoming.