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**AGENCY FOR
INTERNATIONAL
DEVELOPMENT**



EGYPT

**COUNTRY DEVELOPMENT
STRATEGY STATEMENT**

FY 83

January 1981

**UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
WASHINGTON, D.C. 20523**

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UNITED STATES AGENCY for INTERNATIONAL DEVELOPMENT

CAIRO, EGYPT

COUNTRY DEVELOPMENT STRATEGY STATEMENT

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The CDSS submitted in January of 1980 has not been rewritten for the 1981 submission. Rather, seven additional technical annexes have been prepared by the USAID Mission in Cairo. These documents are not printed with the CDSS, but may be obtained from the Egypt Desk, Room 5318, New State Department Building (Phone: 632-9048). The only change in this document from the 1980 version is that the Obligations Table (Table 1) at the end of the paper has been advanced one year to 1987.

The following annexes are not printed with the FY 1982 CDSS for Egypt but may be obtained, individually, from the Egypt Desk, Room 5318, New State Department Building, phone 632-9048.

1980 Annexes

- Annex I Egypt's Approach to Equity
- Annex II Balance of Payments (withdrawn, cf Annex XVI)
- Annex III Macro Economic and Sector Analyses (withdrawn and replaced by Annex XVI)
- Annex IV Agricultural Sector Strategy Update (read in conjunction with Annex XII)
- Annex V Labor Force and Employment (withdrawn and replaced by Annex XV)
- Annex VI A Summary History of U.S. Assistance to Egypt
- Annex VII Donor Assistance Annex (withdrawn, cf Annex XVI)
- Annex VIII The Private Sector
- Annex IX Population Strategy Update (revised version dated January 1981)
- Annex X PL 480 as a Development Resource

1981 Annexes

- Annex XI Technology Choice in Egypt
- Annex XII Agricultural Prices in Egypt
- Annex XIII Egypt's Food and Energy Subsidies
- Annex XIV Urban Egypt
- Annex XV Manpower and Employment
- Annex XVI Macro Economic Analysis

The annex and excerpts from annexes listed below are included in this document:

- Annex XI Technology Choice in Egypt (PP. 44-49)
- Annex XII Agricultural Prices in Egypt (PP. 24-26)
- Annex XIII Egypt's Food and Energy Subsidies (PP. 1-18)
- Annex XIV Urban Egypt (PP. 60-83)
- Annex XV Manpower and Employment *(PP. 31-88)
- Annex XVI Macro Economic Analysis (Entire Annex)

***Important** - Because this Annex draws upon draft ILO documents that are not yet publicly available, distribution should be limited to U.S. Government Agencies and Multilateral Donor Agencies to which the U.S. Government contributes. When providing the CDSS to other than these organizations, the excerpts included here should be removed.

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I. ANALYSIS

A. Foreward

1.01 The following presentation represents an evolutionary step in strategy development which clarifies and expands upon last year's CDSS. It seeks to delineate more clearly overall program objectives; the conditions, assumptions and rationale which underlie these objectives; and the program implications of the approach.

1.02 It has not been possible to be completely faithful to the standard CDSS format. This presentation differs from that in two important respects. First, because of the breadth, magnitude and scope of AID's program in Egypt it has not been possible to cover all program issues in sixty scant pages. Therefore, while the CDSS is intended to be self contained, the reader will greatly benefit from a review of the ten attached annexes, particularly Annex I (Egypt's Approach to Equity) and III (A Macro and Sectoral Review of Egypt's Economy). Secondly, because of the overriding political objectives of the program, we have not sought to make an analysis of the poor the centerpiece of our strategy statement, but have instead attempted to reflect the concerns of Egypt's poor within the context of these objectives.

B. The Political and Economic Base for AID's Program

1. Political

1.03 The overriding U.S. foreign policy objective in the Middle East is the achievement of a comprehensive peace settlement between the Israelis and frontline Arab states. Over the longer

term our policy aims at a satisfactory evolution of political and economic relations in the area which, inter alia, will permit the U.S. continued access to commercial markets and petroleum supplies in the area.

1.04 Given its strategic location, size and historical importance, Egypt is critical to achieving this objective. It contains a major portion of the population of the Arab world. Its relations with other Arab countries heavily influence the stability of the area and access to vital oil supplies. Egypt's voice carries weight in Arab and Third World Forums. Finally, Egypt offers a potential market for U.S. exports, services and investment.

1.05 Thus, Egypt is essential to U.S. objectives, particularly during the next one to two years as a comprehensive settlement is developed, but also beyond this critical period when continued stability will be important to a strengthening of the peace climate.

1.06 The context within which the magnitude and composition of U.S. economic assistance to Egypt are arrived at is obviously directly related to its political objectives. U.S. economic assistance is predicated upon the belief that Egypt's continued participation in the peace process is closely linked to continued economic growth, social progress and prosperity at home. Domestic stability in Egypt is essential to its continued moderate role in the Middle East - and stability is dependent to a large degree upon continued economic progress. Conversely, Egypt is likely to be able

to sustain continued economic progress only if it can avoid major confrontation in the area.

1.07 Traditionally in tracing the relationships between economic assistance to Egypt and U.S. foreign policy objectives it has been useful to separate these into the short and longer term. Short and long term objectives, however, frequently overlap. At the same time, there may well be tensions, if not incompatibility, between actions taken to meet short term as contrasted with long term objectives. It is essential that these tensions be recognized and minimized. Thus, while short term stability is of paramount importance to the Egyptian government and the peace process, actions to promote stability and the peace process but which can seriously impede attainment of longer term economic objectives should be avoided. Similarly, while economic development over the longer term must involve both rural and urban populations, and must give particular concern to the poor in all parts of the country, in the shorter term political stability is determined in the cities where nearly half of Egypt's population lives - and particular attention must be given to targeting development programs in a manner which meets the desires and expectations of urban middle classes and poorer groups. In this context, government workers (including the civil services), public sector and military, the emerging private sector, urban workers and intellectuals, students are particularly important to stability.

2. Economic

1.08 In general terms the nature of the economic and social conditions necessary to sustain and support U.S. political objectives in Egypt are: growth in real income, improved quality of life containment of population pressures, and positive future outlook. While these conditions are generally applicable to almost any developing country setting it is perhaps useful to place these in the Egyptian context.

(i) Growth in Real Income - In the short term what is required at a minimum is no significant deterioration in standards of living of the population - particularly those of the urban groups referred to above. This means wages or access to income should keep reasonably in pace with prices and that jobs increase consistent with growth in the labor force. It also means that government support to income in the form of subsidies, public sector employment, etc., should be rationalized in time phase with general improvements in economic conditions. In the longer term standards of living will have to increase. While foreign assistance can help promote raised standards of living, significant improvement can only be realized through further economic growth which, in turn, will require substantial capital expansion and improved productivity. This implies more effective economic management, a much greater concern about the productive impact of investment decisions, improved mobilization of savings, rationalization of prices and interest rates to permit a greater movement towards a market oriented economy, and continued improvement of the balance of

payments through increased foreign exchange earnings, expanded exports, and reduction in the growth of imports.

(ii) Improved Quality of Life - The Egyptian Government has assumed substantial responsibilities for the provision of such basic needs as food, clothing, health care, education, shelter, transportation and other social services to a substantial portion of the population, either directly in the form of budget allocations or indirectly in the form of subsidies and price controls. While this has given substantial protection to the welfare of the poor, the cost to the economy in terms of budget deficits and inflationary pressures has become increasingly hard to bear. Thus the value of this approach to equity is being increasingly eroded. While an abrupt change could not be brought about without major political and welfare repercussions, the real interests of the poor over time may well be better served by a gradual transformation of the system.

(iii) Containment of Population Pressures - The growth of population - now increasing at 2.8% per year - is a critical constraint on the longer term hopes of the Egyptian people to achieve economic betterment. Without a change in population growth patterns, the volume of resources required for education, social services and welfare will deeply inhibit progress towards greater productive economic activity and overall growth in national income. Equally, the inadequacy of family planning services, particularly in rural areas, robs individual families of personal choice about

family size and the health of mothers and children. For these reasons, a far more pervasive concern with population issues and a far more effective family planning program must be imbued in thinking about all economic decisions. In the longer term, the rate of population increase will be determined by a combination of family planning and social and economic development. To be effective in the longer term, however, a far more vigorous family planning effort has to be mounted now.

(iv) Positive Future Outlook - Short term dislocations are inevitable in a period of economic growth and transition. These dislocations are frequently more endurable if there is a general perception that the future economic outlook is promising and there are tangible signs that progress is being made. Ideally progress should be detectable in growth of real income, improvement of the quality of life, and reduction of population pressures; however, in the shorter term perceptions often have to be based on less tangible evidence. In 1980, AID programs have progressed to the point where their visibility, both in terms of completed activities as well as in the progress of those underway, is increasingly helpful to this end. Considerably more needs to be done to expedite implementation of program activities, and to bring about effective public knowledge of these accomplishments, which can enhance perceptions of progress. But in the last analysis the most important factor is that the Egyptian Government is perceived to be at least moderately successful in recognizing and efficiently dealing with its problems.

C. The Nature of Egypt's Economic Problems

1. Egypt's Past Economic Policy

1.09 The genesis of Egypt's present economic condition is traceable to policies brought about following the revolution of 1952. The leaders who came to power at that time had no fixed economic philosophy but were determined to rid Egypt of foreign domination and reduce economic power of the land owner class. Their nationalism prompted measures to achieve rapid economic growth and development and their sense of social justice led to measures to improve the life of the average Egyptian.

1.10 Gradually and pragmatically the Government moved into a series of economic interventions. The first step was land reform. Foreign exchange difficulties caused by an overvalued exchange led to Government financial controls. Nationalism motivated the takeover of the Suez Canal and sequestration of French and British property after the 1956 war. Further nationalization of Egyptian-owned firms from 1960-63 represented a move on the part of the Government to consolidate power over the urban business community.

1.11 By 1964 the public sector included all mining, utilities, communications and finance, most manufacturing, transportation, wholesale and foreign trade and large construction firms. The private sector was subject to extensive Government regulation that included fixed prices, supplying raw materials and capital inputs.

1.12 Initial gains for the average Egyptian in this era were

substantial. There was greater equity in the distribution of income and wealth, and increased consumption of a number of goods and services. A major measure for attaining the former was land reform. Before land reform, about 2,000 owners (out of a total of about 2.8 million) held about 20% of the land. After reform, at the highest end of the scale, about 4,000 owners (out of 3.2 million) held just 7% of the land.

1.13 Another major factor was nationalization of large industrial enterprises which reduced the concentration of wealth at the upper end of the spectrum, and opened up opportunities for promotion and wider participation by those who had hitherto been excluded. Moreover, nationalization enabled the Government to legislate and police a number of laws which granted substantial benefits to workers.

1.14 The other reforms of the Government covered the fields of labor legislation, education, health and employment. The minimum wage in industry was raised. The condition of labor was improved by the introduction of an insurance scheme for industrial workers, increased sickness leave and higher sick pay, and effective constraints to the employer's ability to dismiss workers.

1.15 Public education was expanded rapidly. Government expenditure on education rose from about 3% of GDP in 1951-52 to about 5% in 1969-70. These increased expenditures enabled a sharp rise in the number of students to take place. 20 years after the revolution, the number of primary and preparatory students had

tripled, and secondary students had increased by about 165%. The number of university students quadrupled. Increasingly numbers of persons with rural and poor urban backgrounds were provided university education and moved onto governmental, industrial and professional positions which were previously dominated by members of a wealthy elite.

1.16 The Government's policies were also extended to health services. Health expenditures rose from about one-half of one percent of the GDP in 1952-53 to about 1.9% in 1975. The number of hospital beds more than doubled, from less than 36,000 in 1952 to about 77,000 in 1975; the ratio of beds to 1,000 of the population thus increased from about 1.7 to nearly 2.1 over the period. An elaborate rural health clinic network was established and professionally staffed which brought virtually every Egyptian physically within reach of at least minimal health services. There were also steady rises in availability of medicines at subsidized prices. In the area of nutrition per capita consumption increased from about 2,300 calories per day in 1952 to nearly 2,600 twenty years later; and that of protein from 35 to 45 grams per day.

1.17 Programs for subsidization of basic commodities had a major impact on sheltering the poor from international inflation and assuring the availability of key food stuffs and clothing at reasonable prices. But the program embraced virtually all of Egypt's population and not just the poor. As costs of the program mounted in response to population growth and increases in world

market prices and budget deficits became increasingly burdensome.

1.18 As a result of these various programs a high degree of equity had been achieved but at great cost to the economy. Economic growth was less substantial than equity gains. During the last of the 50's and early 60's growth rates, although uneven, averaged about six percent, fueled in large part by foreign assistance from the U.S. and Soviet Union. By the late 1960's, however, economic and social progress began to decline rapidly.

1.19 Following the 1967 war, Egypt's economy reached a virtual standstill. It was heavily in debt and a balance of payment crisis was developing. Its industry and infrastructure were badly deteriorated. Growth rates fell to below 3%. Social gains made earlier began to erode. By the early 70's Egypt had achieved a physical quality of life index of 43 - an impressive accomplishment for a country of its state of development; however, its disparity reduction ratio had sunk to 1.2%, indicating that little new progress was being made to improve quality of life factors.

1.20 Economic and social stagnation was caused by several factors. Foreign assistance had dropped off. A crushing defense burden, decisions to use investment resources for heavy industrial and land reclamation activities of questionable economic value and, an increasingly heavy subsidy bill, diverted funds from needed productive investment in capital plant and supporting infrastructure. But, beyond these factors, the cumbersome nature of the Government's economic policy structure was in good part

responsible for lack of progress. The role of Government was all pervasive. The public sector was dominant representing 65% of value added in manufacturing and about 50% of total employment in industry. Decision-making was increasingly centralized and individual initiative and incentives de-emphasized. A range of subsidies, cost and price controls were layered throughout the economy. Resource allocations were made by the state rather than by the market. Policies favored consumption rather than investment.

1.21 Another important influence was the pressure of Egypt's growing population. By 1978 the Egyptian population had reached close to 40 million (growing by 2.8% annually or 1 million) and was heavily concentrated in the 4% of the country's land area which is cultivated. Density of population in this area has now reached 1,030 people per square kilometer. Urban growth in several areas is on the order of 4% a year. Increasing urbanization -- in part, representing a migration of the rural poor and landless -- has put tremendous strains on urban infrastructure and social services. Housing shortages are now estimated to be about 1.5 million units. Population increase has become one of Egypt's most important problems.

1.22 Following the death of President Nasser, the specter of Egypt's increasing debt, its stagnating economy, and lack of success in its confrontation with Israel, led the Government to formulate a new set of policies. In 1974 President Sadat initiated the infitah or "openness" policy. Externally, infitah led to a new approach to

foreign affairs - to reduce ties with the Eastern bloc, increased relations with the West and a peace initiative with Israel.

Domestically, the policy called for a liberalization of the economy and governmental structure in particular encouragement of foreign investment, increased support to the domestic private sector and decentralization of economic decision making.

1.23 Initially, response of the economy was slow, however, by the mid-70's it began to pick up with increased foreign exchange made available from the return of the Suez Canal and some of Egypt's oil fields, expatriate worker earnings, the growing tourism industry and substantial foreign assistance from the U.S., Arab States, the EEC, Japan, and international donors. While increased financial flows have spurred growth and have eased some of the symptoms of economic malaise, as Egypt enters a new decade most of the structural problems of its economy remain unchanged. (For a more complete description of macro-economic developments since 1975 see the next section on Egypt's Plans, Progress and Commitment).

2. The Future Direction of Egypt's Economy

1.24 Many of Egypt's more important economic problems stem from a set of past policies which have resulted in uneconomic resource allocations, lack of production incentives, consumption at the expense of investment, large budget deficits, balance of payments problems and a continued high rate of inflation. These problems are compounded further by a rapid growth of population and an unfavorable ratio of resources to population.

1.25 Despite recent economic gains Egypt remains fundamentally a poor country. Its leadership has a historic commitment to economic and social justice. Through past efforts the Government has managed to bring about a relative measure of well being to the Egyptian people but presently lacks the economic and structural base to support sustained economic progress. While further economic growth is possible through a continued high level foreign exchange earnings and foreign assistance, it is likely that sustained improvement in standards of living and in quality of life can only be brought about through increased productivity and reduced population growth. A structural reform is required which pushes to the forefront policies and programs which inhibit population growth and increase productivity. But any reform of the economy will be inevitably destabilizing and will have potential for weakening Egypt's equity base initially, even as it establishes the longer term conditions needed to preserve that base - thus care needs to be exercised during the transitional phase in order to minimize destabilization and to safeguard equity to the maximum extent feasible.

1.26 The key structural reforms which are required in our view - and which are generally being pursued at this time by the Egyptian Government - are: reduction of population growth; movement towards a market-oriented economy; decentralization of decision-making both in political and in economic terms, rehabilitation and expansion of the capital plant; a restructuring of approaches to equity which protect

the interests of the poor; and macro and micro policy changes.

(i) Population - While Egypt has a population policy and a long-term family planning program, its overall effort lacks adequate commitment, cohesive direction and effective coordination. There is need for a broad based recognition that population increase is the priority problem facing Egypt today. A strong program with a broad based family planning component should be mounted which offers positive incentives and material penalties to constrain family size.

(ii) Development of a Market Economy - Egypt has had a heavily, centrally-controlled economy which has sheltered the domestic economy from the effects of international prices by price controls and by a range of subsidies. As Egypt today seeks to move its economy more in line with the international economy, existing distortions make rational economic decision-making extremely difficult. Only through moving towards a more market-oriented economy with higher productivity can present distortions be overcome and more rational economic decisions be made. The promise of infitah is a liberalization of the economy and an effort to substitute market terms for central direction. While the open door policy has been in existence since 1974, much of it still remains to be translated into action. For foreign investment, this means a better stimulation program, clarification of investment policies and a more efficient and equitable execution of existing rules and regulations by all branches of government. For the domestic private sector this means more financial and administrative incentives,

improved and more effective credit mechanisms, access to improved technology, and reform of existing tax laws. For the public sector, this may mean selected transfer of some public sector industries into the private sector - but, more importantly, it means a transformation from a sheltered and centrally controlled climate into a more competitive situation. The transition both in the private and public sector - involves risk. Indeed there is no Egyptian Government policy which is viewed with more hesitation and suspicion than that of infitah. Great care must be taken in directing the transformation, therefore, since failure would endanger the broader policies which infitah represents and potentially the peace process itself.

(iii) Decentralization - Closely aligned with development of a market economy is the process of decentralization which is aimed at fostering local administrative initiatives in the interest of greater operational efficiency and at broadening the role and responsibilities of managers throughout the structure of the public sector. In an economy and society as wide ranging and diverse as that of Egypt, it has become clear that effective economic decision-making can take place only if those directly effected by decisions have an increasing role in the decisions themselves. Central imposition of agricultural policy has inhibited the natural inclination of Egyptian farmers to find the best economic approach to farming. Central direction of public sector industry has caused inefficiencies, lack of responsibility, and ineffective pricing

policies. Central planning of local governmental activities has meant that the people concerned have had little voice in determining what kinds of social and other governmental services are most important to them and how they can best be enhanced. While the process of decentralization of decision-making, which has been initiated somewhat hesitantly and tentatively by the Egyptian Government, holds considerable promise for enhancing economic development and the perceptions of the Egyptian people about their role in that development, care must also be exercised to assure that sufficient technical and administrative capabilities exist at various levels of government and the public sector to permit effective movement in this direction.

(iv) Macro and Micro Policy Changes - To promote necessary productivity and mobilization of savings a variety of macro and micro policy changes will be required over a period of time. These include, inter alia, liberalization of exchange and interest rates, reconsideration of the structure of consumer subsidies, tax reform, adjustment of agricultural input and output prices; restructuring of infrastructural rates for energy, water, etc. and rationalization of industrial pricing. Potentially, policy changes are fraught with the greatest danger for potential destabilization and dislocation. These must therefore be handled with extreme care with the tradeoffs between short and longer term effects of changes carefully assessed.

(v) Rehabilitation and Expansion of Capital Plant - Large segments of public and private sector industry and infrastructure

have outmoded and worn out equipment which must be replaced. Expansion, particularly of private sector industry and social and economic infrastructure, will also be important to increased productivity. A significant portion of public sector industry, however, may not offer positive economic rates of return on future investment. In addition, rehabilitation and expansion of infrastructure must be made in a framework of economic rationalization to reflect real costs, particularly those of energy.

(vi) Economic Stabilization Measures - Inflation which is now running in the order of 25% a year represents the greatest danger to stabilization. While some of Egypt's inflation has been imported in the form of increased international prices (energy costs being an exception) more and more it is traceable to government's fiscal and monetary policies. With respect to government outlays, it is unlikely that defense spending can be lowered appreciably in the near term; and investment can be reduced only at the expense of growth. Subsidies therefore become logical targets for reduction of expenditures. Revenues need also to be raised. Tax evasion can be reduced and increased revenues collected on a variety of luxury and semi-luxury goods. With the exception of the Suez Canal and petroleum industries, most of Egypt's public sector produces little in the way of transferable profits owing to price controls as well as employment and wage policies. In another area, the government needs to offer greater incentives to channel foreign expatriate earnings into more productive sectors of the economy rather than in

real estate where much expatriate worker investment now flows.

(vii) Restructuring the Equity Base - Egypt's approach to equity has been one of income supports (in the form of subsidies, price controls, etc.), public services, such as health, education and forced employment policies. Increasingly these have been paid for by "non real" budget deficits. It follows that if Egypt is to move increasingly to a market-oriented economy, these same distortions cannot continue as the primary base of the Egyptian Government's equity strategy. A restructuring of the equity base will be essential, in which increased productivity is the key - a productivity which provides "real" resources in the form of increased income in place of budget deficits and a productivity which provides more efficient social services.

D. Egypt's Plans, Progress and Commitment

1. Egypt's Development Perspective

1.27 The Government of Egypt's official development strategy is set forth in its five-year plan which was first prepared for the period 1978-1982. That plan presented broad development objectives, described major obstacles to development and outlined the general path development was to take. However, the plan's projected annual growth rate (10% - 12%) and general macro framework were over-optimistic and internally inconsistent. The plan also failed to establish priorities among objectives nor did it set any particular criteria by which priorities might be established.

1.28 The revised 1980-84 development plan has recently been

presented to and approved by the People's Assembly. Although the details of the new plan are not presently available, its general strategy and objectives were presented in a GOE paper presented at the December 1979 Consultative Group Meeting. In comparison with the original 1978-82 Plan, that paper calls for an appreciably lower but still optimistic 10% growth rate. In real terms the investment targets in the paper are about the same. The new paper envisages a less rapid increase in domestic savings and a higher inflow of net foreign financing than we have provided in the CDSS. It makes some changes in investment priorities, placing increased emphasis on economic and social infrastructure in order to reduce constraints to increased productivity and in the case of social infrastructure to improve quality of life. Significant increases are also called for in agriculture,, irrigation and construction with reductions made in the industrial, petroleum and Suez Canal sectors.

1.29 Although the plan continues to be overly ambitious and does not attempt to order among priorities, it nonetheless represents a considerable improvement over the previous effort. Overall, it assesses fairly realistically the major constraints facing the economy and attempts to address these. It recognizes population growth as one of the key constraints to continued progress. It places new emphasis on rural development. The paper calls for a re-examination of the system of subsidies, but evidences a concern for avoiding social dislocations brought about by a reduction in such income support measures as well as the effects of greater

reliance upon a market-type economy. Finally, the paper also places considerable emphasis on better economic and financial management within the government.

1.30 In general, Egypt's five-year plan represents a good analysis of Egypt's constraints and a fair strategy for addressing them. It would be misleading, however, to suggest that the plan represents unanimity of purpose within the government or a full consensus on development approaches. There remain considerable difference of views among the various ministries of the government on such key issues as: the nature and degree of subsidy and price rationalization and the pace at which these steps should occur; the depth and breadth of the open door policy; the approach to the problem of population growth; the public and private sector role in expansion of industry, infrastructure, and housing; and the relative emphasis of agricultural investment on new lands/old lands. Moreover, at this time there exist few mechanisms within the government for resolving development issues and coordinating approaches to these. Understandably, Egypt's top leadership is frequently preoccupied with foreign policy considerations. Among the economic and line ministries concerned with the economy there has been inadequate concerted effort to coordinate views and activities. While some interministerial bodies such as the Supreme Council for Population have recently begun to function more effectively, there is an increasing need for coordination of planning and programs within the government.

1.31 In conclusion, the Egyptian Government has a good appreciation of the economic and developmental problems it faces and is developing a consensus on approaches to these constraints. It has a strong commitment to further development and to equity, but its leadership differs to a degree on how the two goals are to be achieved.

2. Recent Economic and Social Performance (1974-79)

1.32 The declaration of the "open door" policy in 1974 formally announced the process of transition toward economic liberalization. Exchange rate adjustments, encouragement of foreign investment, and institutional decentralization have contributed to the creation of a new economic environment. At the same time, Egypt's foreign exchange position has improved due to increased exports of goods and services as well as large inflows of foreign assistance. These developments have led to a period of rapid economic growth. The prospect for sustaining this rapid progress in the 1980s is good provided that the GOE continues to address the remaining issues of structural and policy reform and economic management. However, many difficult decisions remain to be undertaken. The continuing large fiscal deficit in the public sector and significant price distortions are the paramount macro-economic issues in the short run. Low levels of domestic saving require special attention of the policy makers over the medium term.

a. Economic Growth, Investment, and Saving

1.33 Gross domestic product (GDP) at factor cost grew in real

terms at about 9.0 percent per year during the period 1975-79. This rate is more than twice the estimated GDP growth rate of 3.9 percent during 1967-73. A closer look at sectoral growth rates reveals that the distribution sector grew at an average yearly rate of 15.5 percent as compared to 7.4 percent for the commodity sector and 7.9 percent for services. Much of the distribution sector growth is accounted for by the rapidly growing Suez Canal and Transport, Communications and Storage sectors. The slow overall growth in the commodity sector mainly reflects the size and slow growth of the agricultural sector. Although agriculture grew by about 3 percent in 1978, the long term growth trend of agricultural production has been about 1.5 percent per annum. Industrial sector growth (excluding petroleum) peaked at about 9 percent in 1977 (up sharply from below 4 percent in 1974), but fell back to about 6 percent in 1978 and 1979. The major growth performer in the commodity sector is, of course, the petroleum industry, which has exhibited an annual growth rate of more than 33.7 percent during 1976-79.

1.34 During 1975-79, the level of national investment averaged about 25 percent of GNP - up sharply from the average of about 14 percent that existed during the previous five year period. Much of this higher level of investment was financed through savings of Egyptians working abroad and foreign assistance. Estimated domestic saving for 1979 is only about 8 percent of GDP - not significantly different from the level of the early 1970s. Although prospects for continued (if not rapidly increasing) inflows of workers'

remittances and foreign assistance in the near future are good, medium to long term growth depends on achieving larger domestic savings.

b. Public Finance, Monetary Growth, and Inflation

1.35 Public finance is one of the most urgent concerns in the Egyptian economy. Total revenue falls short of total expenditures by a large margin. Table 3 at the end of this paper shows the magnitude of overall deficits. Although the apparent 1979 deficit was aggravated in part due to the budgetary impact of moving all imports and exports to the unified exchange rate adopted in January, 1979, there can be no doubt that the large public sector deficits exert severe inflationary pressure on the economy through large money supply increases resulted from extensive bank financing of the deficit.

1.36 Two main reasons for deficits are the subsidy payments and the shortfall between the surplus generated by the public economic enterprises and public investment expenditures. The GOE has taken some steps to keep the subsidy bill from increasing further - in part by restricting eligibility for rationed commodities. Current projections are for a subsidy bill in 1980 at about the same level as in 1979.

1.37 Statistics show that two companies, EGPC and Suez Canal Authority, account for 68 percent and 70 percent of all transferred profits in 1978 and 1979 respectively. The balance of transferred profits were approximately equal to the deficits of other public

enterprises. The GOE has begun to address this problem. In the presentation of the 1980 budget, the GOE set aside the public enterprises budget from the general budget to separate out the performance of the public enterprises. More importantly, GOE officials have indicated the government plans to require all public enterprises to have pricing policies that permit them to cover costs and earn a profit.

1.38 The Egyptian Government also is in the process of increasing revenues. A new sales tax on manufactures was announced in late 1979. A reform of customs tariffs is to be undertaken. In addition, prices of some goods have been increased recently -- gasoline, cigarettes, electricity, soft drinks, unrationed sugar, etc. The Government is seeking to improve its tax administration as well including the collection of customs duties and direct taxes. In the latter category emphasis is being placed on reaching groups that heretofore have been able to evade the tax system.

c. Balance of Payments

1.39 The balance of payments situation has improved markedly in recent years. Egypt's foreign exchange earnings increased from about \$2.6 billion in 1975 to an estimated \$6.9 billion in 1979. Much of the increase comes from four major sources -- workers' remittances, Suez Canal dues, tourism receipts and petroleum exports. During 1979 the four sources accounted for more than 65 percent of total foreign exchange earned in that year. As exports of goods and services rose, so did imports. Overall imports,

including estimated unofficial imports through free zone areas, increased from about \$5.1 billion in 1975 to an estimated \$8.5 billion in 1979.

1.40 While trade balance deficits grew at the annual rate of 12.1 percent during 1975-79, the services balance surplus registered a faster growth rate of 35.9 percent annually during 1976-79 (1975 was excluded due to the unusually low service balance surplus in that year). The net result has been that the deficit on current account declined at the annual rate of 10.6 percent. In real terms, the current account deficit declined even faster. (A more detailed description of the balance of payments situation appears in Annex II).

d. Social Performance

1.41 Recent social performance is difficult to assess with any great degree of accuracy due in large part to lack of available social indices since 1975. Recent improvements in economic performance, however, have been accompanied by social changes which provide at least modest cause for optimism. Real wages in several important employment areas (urban construction, rural migrant labor, for example) have increased significantly in the second half of the 1970s. Employment appears to have grown faster than the growth in the labor force - implying improvements in net employment levels. Limited urban income data suggests that although inflation has been a problem in the 1970s, the incomes of the urban poor have been sufficiently elastic to keep pace with or exceed inflation.

1.42 On the other hand, there has been noticeable decline in the access of the poor to social services. First, recent social investment policy has done little to alleviate the basic gap between rural and urban income levels and economic policies have positively reinforced the intersectoral differences. Second, declining levels of social investment coupled with high population growth have begun to erode the social base laid in the 1950s and 1960s. Literacy and school enrollment appear to be declining from peaks in the early 70s. Infant mortality has not declined in recent years and may be rising slightly. Third, allocative inefficiencies at all levels of the economy have limited growth and productivity. As a consequence, Egypt's relative place among LDCs has decline and by inference the relative well being of Egyptians has similarly declined.

E. Donor Assistance

1. Growth and Structure of Donor Assistance

1.42 The level, structure and role of donor assistance in Egypt's development process can be readily disaggregated into three distinct phases during the Seventies. During the early Seventies, donor assistance flows were very modest in magnitude, of limited significance as a development tool, and mainly from Bloc countries.

1.43 The importance of donor assistance as a development tool increased strikingly during the second phase, from 1973 to 1977. Table I in Annex VII points out that disbursements from foreign assistance which had been less than \$100 million per annum in the first three years of the decade jumped sharply to \$800 million in

1973. Over the next several years assistance flows moved sharply but erratically upward to a \$2.9 billion peak in 1977. During this phase assistance as a share of imports ranged between 30 percent and 56 percent. The growth and fluctuation of assistance during much of the Seventies reflected two basic trends: (1) wide swings in the level of Arab donor assistance; (2) steady annual increases in assistance from other Non-Bloc donor sources.

1.44 After peaking at \$2.9 billion in 1977, disbursement levels dropped sharply to \$1.7 billion in 1978 and roughly \$1.2 billion in 1979. This sharp downturn reflects a drying up of assistance from Arab donors but masks the strong underlying upward trend in other donor assistance. Overall foreign exchange availability remained favorable because of the emergence of several positive developments. Assistance from Non-Bloc western donors doubled from the 1976 level of \$540 million to an estimated \$1.135 billion in 1979. Worker remittances and petroleum exports were up dramatically as were Suez Canal earnings. Foreign direct investment expenditures negligible in the early Seventies, reached an estimated \$500 million in 1979. Foreign oil companies are believed to account for roughly 50 percent of this total. The spread of non-petroleum direct investment was quite wide.

1.45 Table II, in Annex VII, survey in detail the third phase decline in assistance on a commitments basis. Commitments fell off marginally in 1978. This reflected the net effect of a \$300 million decline in commitments of international financial institutions,

mainly the IBRD, and a \$127 million decline in OPEC commitments. A \$229 million recovery in the commitments level of the international institutions in 1979 (\$229 million) was offset by declines in non-US DAC Donor commitments (\$214 million) and OPEC commitments (\$38 million). The sharpest drop in OPEC commitments were in 1977 since GODE and other Arab donor commitments were sizeable in 1976. It should be noted that sharp shifts in non-US DAC donor commitments in large part reflect the rigidity of the programmatic timing cycle as is the case with the U.K., i.e., a triennial commitments cycle.

2. Assistance as a Development Catalyst

1.46 The sizeable and continuing influx of foreign assistance since 1973 has set into motion and later accelerated recent development gains. These flows continue to be critical to the GOE's ongoing effort to modernize, revitalize and rationalize the economy's infrastructure, productive capacity and economic management skills. Initially, foreign assistance injected a new robustness into a stagnating economy sapped by war preparedness expenditures and an ineffective economic policy structure. Assistance flows have helped assure the availability of imports critical to the production process. Renewed exposure to western economic analysis, technical skills and methodologies have also provided development planners with fresh thinking and alternative formulations for improving the efficiency and performance of the economy. This process continues.

1.47 Assistance flows have continued to be required to advance

the process of rehabilitation and expansion of the country's basic infrastructure and productive capacity, preconditions for raising productivity and output. The importance of this effort is reflected in the still heavy commitment of major donors to telecommunications, power and railroad. Table III in Annex VII indicates that approximately 60 percent of non-U.S. donor assistance in 1979 was directed to projects in the energy, power, transportation and communications areas. The French have focused their 1979 commitments on transportation and communications as have the Japanese. World Bank commitments to increasing energy availabilities have been quite heavy in 1979. Education and population programs also accounted for a considerable share of World Bank resources. German commitments have favored in roughly equivalent amounts project activities designed to increase energy availability, food availability and manufacturing capacity. Commitments in 1979 to human resources improvement, or basic human needs, apart from the U.S. have been mostly in the form of technical assistance. Japanese and U.K. commitments in these areas were relatively sizeable in 1978. Japan and West Germany also made CIP type commitments of roughly \$70 million in 1979.

3. GOE Perspectives on Donor Assistance

1.48 The GOE perspective regarding the optimal utilization of assistance has changed with the regularization and expansion of these flows and with improved priority assessment by the GOE. During the mid-70s the GOE primarily concerned itself with the

"capture" of assistance. Consequently, domestic resource flows favored the support of foreign assistance financed projects. Relating assistance flows to Egyptian priority investment activities has become an increasingly important concern to the GOE. And with donor encouragement the government is making a more concerted effort to determine its priorities. Increasingly, national investment patterns will tend to be more consistent with development priorities and less the consequence of ad-hoc funded activities and interest.

II. STRATEGY

A. Objectives

2.01 As it enters the decade of the 1980s, Egypt is part way in a transitional move towards greater liberalization of its economy and governmental structure. This CDSS address U.S. strategy for assistance to the Egyptian economy for a five-year period during which the policies of liberalization will be put to critical test. Our strategy for the 1982-1986 period will be aimed not at the totality of the economic transformation (for despite the size of the U.S. program proposed for the FY 82-86 period, U.S. project assistance will represent less than 10 percent of total GOE investment during this period) but at the more vulnerable and critical sectors of the economy during the transition.

2.02 Our strategy recognizes that there has been a major rundown in Egypt's capital stock which must be remedied if growth is to take place. It recognizes that Egypt has achieved considerable progress in equitable distribution of national output but that to maintain

and reinforce equity considerations will require new approaches. It also recognizes that Egypt needs to reintegrate its domestic economy with that of the world rather than sheltering itself from these forces. It is based on an assumption that Egyptian leadership is serious in its desire to establish a market-oriented economy and in its efforts to decentralize decision making more broadly in the political and economic spheres.

2.03 During the period of the CDSS the primary criteria for our strategy will be the concerns of stability, productivity and equity. Each of those criteria, if pursued independently, would lead to a substantially different strategy. It is clear, however, that under almost any foreseeable circumstances U.S. strategy will be based on a mix of these considerations - although each criterion will not necessarily have equal weight at all times during the next five year period.

2.04 During the last part of the 1970s while Egypt's important peace overture was being made and its economy beginning to recover from earlier stagnation, economic stability was at the forefront of U.S. assistance strategy. Also, for the critical next one to two year period, as a Middle East peace settlement is being negotiated, we expect that stability considerations will continue to be of overriding importance to U.S. objectives. To this end, U.S. balance of payments assistance and the increasing weight of program accomplishments flowing from prior year efforts will be primary action elements for stability. In addition to these efforts,

however, it is unlikely that any new program initiatives (beyond additional balance of payments assistance) could be mounted in sufficient time to affect stability objectives more than marginally in the next two years.

2.05 As a peace settlement is realized, and assuming the economy continues to improve in reasonable measure, economic stabilization will likely diminish as the central U.S. concern. Increasingly, in the next two years, the concerns of productivity and equity should move to the center stage of our strategy. Nonetheless, stability will continue to be a program concern and the U.S. must be prepared, as it has in the past, to be responsive to changing economic and political circumstances with flexibility.

2.06 The issue of productivity is at the very core of the liberalization of the Egyptian economy. Our investments will be made where impact on productivity (i.e., improved returns to all factors: capital, labor, management, and land) will be greatest. Considerable investments will continue to be required to rehabilitate and expand the industrial, infrastructural, and agricultural base in Egypt. At the same time, however, our strategy will look at the context in which investments are being made in order to emphasize the most efficient use of resources. Thus, an emphasis on management, planning and attention to key issues associated with productivity will also be an important element of our strategy.

2.07 A structural change in the productive elements of the

Egyptian economy will require a reorientation of social policy. The productivity of social investments will need to increase in tandem with productivity of economic investments. In addition, the foundations of current Egyptian equity policy: free access to social services, direct consumer subsidies, and mandated public sector employment, will require revision to insure that favorable distributional features of the economy are sustained without inhibiting greater productivity in the economy. Our strategy calls for continued investment in social infrastructure, but also stresses the productivity of social systems as well, particularly those associated with health.

2.08 While the dominant themes in our strategy for FY 82-86 are productivity and the preservation of social equity, our approach to social services is informed by an even more basic principle.

Recognizing that gains in the Physical Quality of Life Index in Egypt have come very slowly since the late 1960's and that the Disparity Reduction Rate (DRR) in the key indicators of infant mortality and literacy has dwindled to about 1% per year, our program strategy in these areas will concentrate on a direct, explicit effort to secure gains in PQLI and especially an improvement in the DRR's for infant death and literacy. The data and analysis underlying this strategic choice are developed in the Annex on equity. While this focus does not preclude other kinds of investments in the social sector, it is our intent to concentrate the overwhelming majority of our program effort in the social

services area in programs which combine:

- Direct impact on literacy or infant mortality levels
- National level focus
- Promise of measureable effect on PQLI and DRR rates during the 1980's
- Low unit costs and maximum population coverage
- Application of proven technology rather than research and development or gradual institutional development

It is our intent to have in place by the midpoint of the CDSS period (about 1984) a set of national level programs in the areas of primary school access, control of infant diarrhea and fertility limitation which have a high probability of producing major measurable gains in PQLI and DRR performance over the five year period.

2.09 In terms of program targets, our strategy will key to those selected indices of GOE performance which are closely related to productivity and equity considerations. While it will not be possible (given the size of our program relative to overall investment demands) to link program outputs directly with target results, we believe the combination of our selected investments and U.S. influenced policy changes should make a strong and probably decisive contribution to the following accomplishments during the period of the CDSS.

- i. Growth - GOE plans have generally called for an average growth rate of over 10 percent. We believe a more realistic target

would be 7-8 percent.

ii. Growth in National Savings - Increases in national savings should be a reasonable measure of increased productivity brought about by improved management, interest rate adjustments, and revised factor prices. A reasonable target would be to increase substantially the present national savings rate from 14 percent to 21 percent and within this target to increase the portion of investment financed internally to that financed by foreign inflows.

iii. Public Sector Industry - With the exception of the petroleum and Suez Canal sectors, the balance of public sector industry provides almost no transferable profits to the GOE budget. Over the period of the CDSS, our strategy will seek to identify specific public sector industries with economic potential and place these on self-sustaining profit making basis.

iv. Productive and Social Infrastructure - Through adjustments on rates and tariffs, management techniques, and continued investment, we will put the power, telecommunications, ports, water and sewage subsectors in a position where their rates will fully cover operating expenses, retire debt and finance an increasing portion of plant expansion.

v. Agriculture - Through a combination of institution building, improved technology and revised incentives, we will assist the GOE to maintain the recent average annual growth rate of 3 percent and lay the basis for an increase to 4 percent by 1986.

vi. Education - Our strategy will seek to improve access to primary schools with an emphasis on enrollment of females

in rural areas. The national average for female enrollments is between 45% and 50%. There are nine governorates, largely rural and located in Upper Egypt where female enrollments fall below the national average. A reasonable target would be to raise female enrollment in these governorates to the national average and to move national primary enrollment levels from the 65% range to the 75% - 80% range.

vii. Population - With population now increasing at the rate of 2.8 percent per annum, a dramatic change is not likely by 1986; however, we would hope to lower the rate to 2.3 percent by this time.

viii. Health - Our program concentration will be a lowered infant mortality. With a concentrated campaign, which we believe possible by 1982, we would hope to reduce the present rate from 116 to 80 by 1986.

B. Approaches to GOE Policy: Economic Policy and Equity Policies

1. Overview

2.10 Experience during the past five years has underscored two key issues in setting the agenda for an effective USAID/GOE policy dialogue. First, the policy agenda must be selective, short and well-focused. Economic policy is not centrally established and managed in the GOE and it is usually the case that different agencies of the GOE have different and often conflicting policy objectives and policy responsibilities. Engaging all of the agencies and organizations on a wide range of issues is both unrealistic and infeasible. For USAID to be effective in pursuing important policy revisions on the part of the GOE we have to

define our own priorities and target our policy efforts clearly. Second, it is essential to make strategic choices about the level at which we seek to bring about policy change. Some policy adjustments must perforce be sought at the macro level, but in many cases it is more appropriate and more effective to aim for policy changes at mid or micro levels. For example, there is little immediate prospect for success in securing an overall GOE policy shift with respect to realistic energy pricing, but in the context of our electric power investments we have laid the basis for an input into electricity pricing. Similarly, the organizational complexities of an integrated policy approach to improving the terms of trade for the agricultural sector are forbidding, but specific crops are potentially tractable elements of a USAID/GOE policy dialogue.

2. Economic Policy Objectives

2.11 During the 1982-86 period we will be focusing our program on goals of improved productivity and growth in the context of general economic liberalization. Distortions in commodity and factor prices have been central to the problem of low productivity in Egypt and substantial efforts to rectify those distortions will be our central policy concern. Egypt's inherent factor endowments reflect a considerable bias towards labor. Land is limited and capital relatively scarce. By comparison Egypt has a large and relatively well-educated manpower base. Yet present factor prices, particularly the tendency of government to subsidize capital for public sector investment, has limited returns to labor and

contributed to the low efficiency of the industrial sector. Price controls in the agricultural sector (both on the input and output side) have had considerable effect on the overall efficiency of that sector. At the same time, the scarcity of capital for new investment has been augmented by government banking policies which tend to discourage savings and to keep capital outside of the formal finance channels. At the macro level our basic policy agenda is centered on three issues:

- (a) Return to market-based factor prices;
- (b) Policies which increase savings and bring capital into the formal financial markets;
- (c) Relaxation of both input and output price controls in the productive sectors (esp. industry and agriculture).

Through sectoral programming and, at times, through individual projects, we will select precise policy objectives which relate to these goals. These objectives will be incorporated into our overall sectoral discussions with the GOE and directly into project design when appropriate. It would not be realistic to catalogue an anticipated agenda of mid or micro policy level issues for a period extending out to 1986. This agenda will be the product of the development of new sectoral programs and will clearly change over time. If, for example, major gains are made on rationing the price for cash sales of fertilizer, our attention will move towards similar adjustments in the (heavily subsidized) credit sales of

fertilizer. Similarly, progress in moving the interest rates paid on savings accounts and other savings instruments will result in our directing attention more directly towards interest policies on the lending side.

3. Equity Policy Objectives

2.12 Any AID program of the magnitude of U.S. bilateral assistance to Egypt inevitably has multiple objectives: economic, political and developmental. A concern with equity, social welfare and the quality of life in Egypt derives from and must be encouraged by all of these objectives. Even more importantly, the Government of Egypt continues to place major (if not, indeed, paramount) importance on equitable social development.

2.13 The task for USAID strategy in Egypt is not then one of deciding whether to concern itself with equity (the answer to that question is implicit in both U.S. and Egyptian objectives), nor is the question how much to concern ourselves with equity (for equity is of intrinsic concern in every aspect of our program). Rather, the issue is in what ways shall USAID be concerned with equity?

2.14 Three major areas or modes of involvement are suggested by the examination of the history and status of equity and equity policy in Egypt:

- Equity in the context of economic liberalization
- Equity with Productivity
- Intersectoral equity: Improving life of the rural poor
- PQLI/BHN: Especially reducing the threat of deteriora-

tion in literacy and infant mortality indicators

4. Equity with Productivity

2.15 Many of the most important equity issues in USAID's programming in 1982-86 will arise in areas not conventionally associated with equity-oriented programming: industrial investment, private sector promotion, power and utility policy, and macro-economic policy. In the past, Egypt relied on policy tools in the equity area which were consistent with central planning and associated with low overall economic growth. These policies have already begun to show signs of weakness in the early years of the liberalization of the economy and are going to face even more severe challenge. We can and should plan an active role in assisting the GOE to evolve a policy structure which promotes equity without introducing the economic distortions which have crippled Egyptian productivity and promoted sub-optimal resource allocations. These include:

- Careful attention to factor pricing. Avoidance of biasing factor prices in favor of capital and preventing the market from allocating fair returns to labor.
- Improved Egyptian tax policy. Seek effective balance between income transfer objectives and growth objectives in tax structure.
- Revised and targeted subsidy policy. Use subsidies where they offer real efficiencies over other income

transfer devices, but insure that benefits are effectively targeted on the poor.

- Investment incentives which encourage productive, job creating investments rather than short term, quick return speculation.
- Policies which encourage the mobilization of private capital for responding to demands for social infrastructure - especially housing.

5. Intersectoral Equity

The dominant structural feature of the Egyptian economy with respect to equity is the institutionalization of unfavorable terms of trade against the rural sector. While slight imbalance in the urban/rural terms of trade may (a la John Mellor) promote high employment (and thereby equity), the persistent and severe imbalance which characterizes the Egyptian economy is inconsistent with equity objectives. USAID strategy in this area will be to work at both the macro and mid-levels of the economic policy framework of the GOE to move for a softening in these terms of trade. This includes a direct concern with the freeing-up of agricultural prices, reduction or elimination of acreage controls and liberalization of the marketing process both with respect to agricultural inputs and outputs. Changes in agricultural policy, although important, are only a part of the problem of the urban/rural gap. Even under the freest market situation agriculture can only grow at one-third to one-half the rate of the economy at large in Egypt. Growth in

non-farm economic activity in the rural sector will be an absolute necessity to an overall improvement in the relative position of the rural population. Present GOE policy implicitly and explicitly works to the disadvantage of the growth of non-farm rural employment. Productive infrastructure and financial markets have been consciously concentrated in a few urban areas. USAID will pursue a wide variety of avenues to insure that the prerequisites to non-farm urban sector growth are more effectively met by the Government of Egypt in the areas of credit, power, marketing, infrastructure, etc. At the same time, USAID will make major investments in rural social infrastructure through the decentralized structures of local government.

6. BHN/PQLI

2.17 Over and above the broad strategy of the CDSS to pursue growth and equity in the context of economic liberalization and an emphasis on improved productivity there is an important and inescapable imperative for the U.S. assistance program in Egypt to confront the fundamental elements of the quality of life for Egypt's poor. While there are needs in a wide range of areas, three facets of the PQLI situation in Egypt are beginning to sound serious alarm signals:

- Infant mortality levels are far too high for a country with Egypt's health infrastructure and medical human resource and may actually be increasing.
- Primary school enrollment levels (percent of school-age

children enrolled) are decreasing after years of sustained expansion and more than 30% of Egypt's children are not attending school. Already there are signs that this trend is impacting on overall national literacy levels. Egypt cannot afford to permit this backslide.

- Despite worldwide trends towards levelling or declining fertility in a large number of LDCs, Egypt's population growth rate seems to be on an upward curve. Both the infant mortality and school enrollment problems above are probably directly related (both as causes and consequences) to this demographic fact.

2.18 AID's primary BHN/PQLI strategy for the FY 82-86 period will be to work with the GOE to better use its social infrastructure base in these three key areas of infant mortality, primary school enrollment and fertility. While we will continue to do some broader programming in the health, education and population sectors, our basic strategic emphasis will focus on making a sizeable impact in these three areas. In the case of school enrollment it is clear that physical access is one of the key constraints and AID anticipates a major investment in primary school classrooms - especially in rural areas. In the case of infant mortality we have identified infant diarrhea as important causal factor and plan to move to a national and sustained infant rehydration program during the CDSS period. In the fertility area USAID strategy has been

frustrated by a considerable ambivalence on the part of elements of the GOE towards an active government role in family planning. Evidence of far stronger support for family planning at the provincial level points to a multi-pronged fertility strategy with growing emphasis on community based delivery of services and information executed less through central ministries and increasingly through governorates and local authorities. It is fair to point out that success on other USAID equity targets whether BHN issues or broader equity and growth issues will be in no small measure contingent upon success in coming to grips with fertility levels in Egypt. If money alone could alter population growth rates, population programming would have a far larger share of the total of our investment. Indeed, if fertility programs begin to show real promise in the early part of the CDSS period the analytic priority USAID attaches to population would be reflected in revised budget levels for population.

C. Areas of Program Concentration

2.19 The analysis in Part I presented a summary of the major development issues facing the Egyptian economy during this period, underscoring those we see as salient to our development strategy. The preceding section developed policy concerns and central themes which govern the identification of specific development objectives at both the macro and sectoral levels. This section moves from analysis and broad policy concerns to outline the essential strategic criteria which will form our investment policy in specific

sectors of the Egyptian economy. Because of obvious clusterings of strategic concerns the strategy criteria have been grouped under the following headings:

1. stability
2. production and productive infrastructure
3. management and manpower
4. social infrastructure and decentraliation
5. health and population

Recognizing that there is both a need and value to have some flexibility to respond to very specific development requirements in Egypt, a sixth category of investments are those which are not directly related to the CDSS strategy.

1. Stability

2.20 As noted earlier, once a peace settlement is achieved and assuming a reasonable degree of continued economic progress, economic stabilization measures should place less claim on U.S. resources than has been the case in the past. The PL 480 program and the Commodity Import Program will continue to be the primary vehicles for U.S. contributions to economic stabilization, mainly through the provision of consumer items, raw materials and intermediate goods. Continued economic stability will also depend on the Egyptian Government's effective use of macro policy instruments. Generally, we will look to the IMF and IBRD to take the lead on macro policy considerations as they relate to economic stabilization; however, we should also be prepared to assist the

deliberations in ways consistent with our foreign policy objectives.

2.21 We foresee a continued high level of PL 480 wheat during the period of CDSS, because of its effective use as a tool for stability, because of its importance to the diets of the poor and because Egypt will continue to need some level of balance of payments support throughout the CDSS period. We plan to phase out the CIP as a stabilization tool by the end of 1982, assuming Egypt's balance of payments position continues to improve. As in the past, however, the U.S. must be prepared to increase CIP levels for stabilization purposes if conditions warrant. In this context, as will be noted farther on, we plan to continue the CIP as an implementation mechanism for rehabilitation and expansion of productive sector and productive infrastructure once the CIP is phased out as a stabilization mechanism. In the event of a rapid downturn in the economy, this element of the CIP could readily be converted to stability purposes. Thus, the continuation of the CIP will afford the U.S. a degree of needed flexibility.

2. Production and Productive Infrastructure (Agricultural & Industrial)

2.22 A key element of our strategy during the 1982-86 period will be to improve overall productivity within Egypt's economy, particularly that of the industrial, agricultural and infrastructure sectors. The sector which offers the greatest potential for productivity gains, total contribution to growth, and increase in employment is the industrial sector.

2.23 The largest component of the Egyptian economy is the agricultural sector; however, growth potential in this sector is limited and even under the most optimistic assumptions it will continue to lag far behind the industrial and services sector in growth performance. Our investment in direct production capacity therefore has to balance the concerns of growth potential versus scale. On this basis we have weighted the industrial and agricultural investment in the approximate ratio of 7:2 over the CDSS period. An equally complex balancing problem is posed by the issue of the proper mix of productive infrastructure investment versus direct production capacity investment. The backlog of deferred investment in agriculture infrastructure (largely the irrigation system) is proportionately larger than in the industrial sector and so the productive infrastructure element of our investment plan is weighted considerably more heavily towards agriculture than the direct production element.

2.24 Under assumptions of steady progress in economic liberalization we have a strategic preference for investment in new plant or plant upgrade over supporting infrastructure investments, because we see quicker and more substantial growth impact from direct production investments. The relation between production and infrastructure is, however, a dynamic one, and we will monitor closely the growth in demand for economic infrastructure (especially power and transport requirements) to insure that industrial demand does not outstrip supply. This CDSS proposes an investment mix

which is weighted towards production capacity as against new infrastructure, reflecting our judgment that the 1982-86 period will witness considerable progress in the liberalization of the Egyptian economy. Were this assumption to prove over-optimistic there might be a limit to the number of financially and economically justifiable production investments available and we would alter the balance towards economic infrastructure. In short, the dynamic relationship between the sectors argues for a posture of flexibility which permits us to be responsive to the pattern and pace of economic liberalization over the first half of the 1980s.

2.25 As a corollary to a strategic emphasis on productivity and growth increases, our investment strategy in production will be geared to promotion of economic liberalization (both expansion of the private sector and increasing the shift of the public sector towards a market-oriented, competitive basis). This concern with liberalization in conjunction with productivity translates into two sets of investment criteria for production investment, one relating to rehabilitation of existing plant and one for new plant investment.

(i) Existing production capacity in industry includes considerable numbers of public sector facilities. Our policy will be to invest selectively in rehabilitation of existing plants where there is clear evidence of a potential for gains in productivity (not simply gains in output) and where such investments will not thwart the emergence of more competitive or productive private enterprises. In general, we will not aim to add significant new

plant capacity to public enterprises but rather to restore or upgrade existing plants to obtain the maximum value out of past sunk investment. We anticipate considerable selectivity on both financial and economic grounds to avoid financing in facilities or production areas with either a poor historical record in Egypt or with only limited future potential.

(ii) Our strategy for investment in new capital plant will begin with a bias towards private sector enterprises. In areas of traditional private sector operation and in new production areas we intend to restrict financing of new plant exclusively to private sector enterprises. In some areas of basic industry where there is little record or private sector performance or little GOE willingness to bring in the private sector we will consider investment in public sector new plant. Our strategy in this sector emphasizes the necessity for rigorous application of both economic and financial criteria to investment selection to insure that new plants will (a) be viable within the framework of severe price distortions in Egypt, and (b) be both economically and financially viable under conditions of real pricing so that they will not be hostages to present GOE economic policy. At this time we do not plan to give investment preference to either export or import substitution industries. In view of the current process of economic transition in Egypt and given the reasonable size of the internal market we anticipate that some industrial investments of both types may be warranted and that issues of efficiency, productivity and

economic/financial returns will provide the proper yardsticks for investment selection.

a. Public Sector Strategy

2.26 There remains considerable potential within the public sector for productivity gains in selected industries. In accordance with the criteria outlined above, our strategy will seek to rehabilitate existing plant facilities rather than embark upon new ventures in the public sector. Our approach will be to couple investment in rehabilitation or expansion of plants with planning and management improvements, emphasis on revised factor prices and new technology. We will also continue efforts to improve the impact of public sector industries on the environment. Another important element of our strategy will be to emphasize decentralized management, thereby permitting public sector enterprises to have more direct voice in purchase of raw materials, hiring and firing and other management prerogatives common to the private sector. Our objective will be to identify and assist public sector industries with the greatest economic potential to place themselves in a profit-making position by 1986.

b. Private Sector Strategy

2.27 We have multiple strategic objectives with respect to the private sector in Egypt. We start from the premise that gains in productivity and growth in the industrial and service sectors will depend in large measure on the overall expansion of the private sector. We see a need for expansion along a number of axes:

- i. geographic - private sector development outside the primary cities
- ii. expansion of scale - movement of the private sector back into enterprises which have in recent decades been the preserve of the public sector.
- iii. size - encouragement of smaller sized enterprises which have been constrained by lack of access to credit, raw materials, etc.
- iv. diversification - movement of private entrepreneurs into new products and services.
- v. numerical expansion - significant numbers of new firms in the private sector at all scales of operation
- vi. rural industrial growth - a special strategic concern with the growth of private sector off-farm enterprises in the rural sector
- vii. expansion of private sector employment

In terms of priorities, we have pursued a general strategic approach of beginning with the larger and better established private sector firms whose primary requirements are capital and commercial credits. From this beginning, during 1978 we moved towards institutional development programs which aimed at improving financial services, feasibility studies, and financial markets as well as simply expanding the availability of FX to private businesses. This extended our programmatic reach to medium-sized

private sector enterprises. During the CDSS period of 1982-86 we anticipate maintaining and augmenting these programs but broadening our private sector strategy to reach smaller and less sophisticated enterprises, particularly because these firms represent one means of more equitable distribution of AID financed resources. We expect the CIP private sector program to work in close tandem with our project activities in meeting sector objectives.

2.28 We also plan to devote additional attention to creating a more favorable business environment by working with the GOE to strengthen incentives and thereby encourage the undertaking of new investments by domestic and foreign firms. This will include efforts which will assist the GOE to identify and remove anachronisms and anomalies in existing business laws and regulations. We also plan to consider ways which will encourage more labor intensive investments. A final area of concentration will be aimed at upgrading business and labor skills. (For additional discussion of the private sector see Annex VIII.)

c. Agricultural Strategy

2.29 Overall, our agricultural sector strategy is directed toward generating growth in production and in labor productivity. This is to be achieved through simultaneous, though not precisely parallel, activities in agricultural technology, institutional development and agricultural policy. By 1982 we expect that ongoing project activity will provide a technical base for farmers to begin to raise production of all major crops. Institutional development

projects now underway should result in self-sustaining organizations capable of transmitting technology and inputs to farmers. In addition, the analytic base should be laid for informal changes in agricultural policies to be made by Egyptian planners. The gross effect of ongoing projects by 1982 will be to establish a technological and institutional basis for greater efforts aimed directly at production.

2.30 We anticipate that the 1982-86 strategy will continue to emphasize policy and planning technology and institutional development. Within these three areas, however, there will be a shift forward to emphasize the planning of specific action programs to provide the production factors needed to implement the new technologies (particularly inputs such as fertilizer and water) and to develop the institutions, both public and private that provide these factors. We plan to provide the GOE with further assistance which will be directed at providing additional information on such policy areas as input output pricing, alternative investments in agriculture, land development options and the like. Two additional areas are likely investments for our strategy. We are now looking at the agricultural inputs area with an expectation that additional resources coupled with market changes might lead to relatively quick production gains. The other area which is likely to receive increased attention is the water delivery and drainage system with involvement likely at all levels from primary to on-farm systems.

2.31 In terms of objectives, we believe that some revision

of last year's targets may be in order. In last year's CDSS we projected a growth rate of 4 percent. This target was based upon GOE plans and estimates of the land required to feed a growing population. It was recognized that this rate was above historical trends. In fact, despite two years of favorable weather, higher output prices and greater input utilization overall growth has not reached 4 percent. In addition, higher output was expected from new lands and export of high value crops. With new analysis now available, that prospect appears less likely. Our conclusion is that while a 4 percent growth rate is desirable and may be obtainable by the end of the CDSS period, a 3 percent level is probably more realistic.

2.32 It also appears probable that earlier estimates of agricultural employment gains should be scaled downward, in part because of lowered estimates for growth in the sector. Secondly, the continued rise in agricultural wages relative to subsidized capital keeps labor substitution unattractive. Finally, the amount of employment expected to be created by land reclamation now appears lower in light of rising costs of energy and water which have raised substantial questions about the future economic viability of reclamation activities. In sum, we believe that agriculture is even less likely than was thought previously to be a source of significant numbers of new jobs. Off-farm employment, agriculture-related and otherwise, offers better promise for real employment growth. (For additional discussion of agriculture, see

Annex IV.)

d. Infrastructural Strategy

2.33 Exclusive of agriculture, the key investment areas in the productive infrastructure sector fall into four groupings:

- 1) electric power generation/transmission/distribution
- 2) telecommunications
- 3) transport: road, rail, river
- 4) ports, harbors, and port facilities

Our strategic posture with respect to each of these categories of investment is a flexible one, but our experience and knowledge varies considerably among the subsectors.

1) Electric Power

2.34 With almost half a billion dollars of USAID investment already in electric power, we believe we do not have a major strategic interest in further heavy investments in generation and transmission during the first half of the CDSS period (i.e., through 1984). By the latter third of the CDSS period, however, it may be that overall economic and industrial growth will have been sufficient to warrant a follow-on round of investment in new capacity. We foresee considerable possibilities for investments in distribution of electric power both in provincial cities (where growth rates are fastest in Egypt) and to rural areas (if sufficient productive demand can be identified in the rural sector).

2) Telecommunications

2.35 During the 1975-82 period our investment has concentrated

on rehabilitation of the existing telecommunications plant in Cairo, combining technical upgrading of the switching system with modest extensions of service. It appears that the European telecommunications consortium will be providing most of the remaining priority needs within Cairo and Alexandria over the CDSS period and as a consequence our interest in this sector will be confined to possible investments in upgrading some provincial links to the central system and possible investments in rehab/upgrade of intra-city telecommunications plant in selected provincial municipalities.

3) Transport

2.36 Our experience in the transport sector has been limited to date. We have made some investments in rolling stock (railroad bogies, trucks, inter-city buses, intra-city buses) but almost no direct investment in basic transport infrastructure (roadbed in the rail area, highways, etc.). In part, we have elected to leave these investments to other major donors, especially the IBRD. In part, our caution has stemmed from a concern that some of the costly primary investments may not offer especially high returns. There is evidence, however, that the highest returns may lie in the area of tertiary and secondary roads linking agricultural areas to major road and rail trunks. No major transport investments are anticipated without careful analysis of real needs, but it is this area of farm to market roads which stands out as an important potential investment area. In the urban sector we may also want to

re-examine options in the area of mass transit in Cairo. There is increasing evidence that inter-city transport in Cairo is one of the bottlenecks to gains in productivity and economic growth in the region. Our interest in Cairo mass transit is a tentative one, however, as there are major managerial and policy obstacles to identifying an economically sound and efficient investment choice. We anticipate working with the Cairo authorities on exploring possible programs in this area. River transport remains another area which may offer some potential. Rising energy costs increase the attractiveness of barge transport for bulk commodities.

4) Ports and Harbors

2.37 Over the 1975-82 period we have made substantial investments in the port cities of Egypt and in upgrading the navigational facilities for the Suez Canal. While additional investment opportunities exist in this subsector, we do not see it as a priority candidate for U.S. resources during the FY 82-86 period.

3. Management and Manpower

2.38 Improved management, particularly in the public sector, and effective use of manpower resources are critically important elements of improved productivity. During fiscal years 1980 and 81 we plan to invest a total of \$34 million in a variety of management areas including such categories as middle management training in the public and private sectors, management of infrastructure, the agricultural sector, provincial government, etc. This has been the

subject of discrete project undertakings in management, but also an important element of almost all of our project undertakings. Our approach has been to provide middle level and above managers in the government and public sector plants with relatively short term technical and administrative courses. We recognize other factors such as incentives, decentralization, etc., are also important elements of management, but unlike training, these elements have to be supplied by the Egyptian Government, albeit with our encouragement. We plan shortly to undertake a more comprehensive review of approaches to management and expect by the beginning of FY 82 to narrow the focus of our investments in this area so as to concentrate on a relatively fewer number of management constraints.

2.39 In terms of manpower considerations, the question arises as to the need for increased training to meet demand for skills. Government vocational training programs run by both educational and industrial agencies have demonstrated little relevance to the demand side of the labor market. Out-migration to the Arab states had a seriously disruptive effect on the supply of some key skills through the mid-70s, although evidence suggests that these distortions in manpower supply have largely been offset by the capacity of local enterprises to recruit and train replacement cadres internally. It remains to be verified that there is a continuing need for skills in areas which cannot be met by in-house training on the part of employers, but it is clear that public investment in skills training has had little, if any, impact on the

quality of the manpower base in Egypt. Improvements in industry-based technical training may represent an area for potential investment. The World Bank has been very active in the area of public sector vocational training - and evaluation is needed of the real impact of the bank's interventions to date. We plan to make a limited investment to orientate vocational training to market demands whereby the user industry would finance the training it has a need for.

4. Social Infrastructure and Decentralization

2.40 For the purpose of this discussion, social infrastructure consists of the shelter, water, and sewerage systems and the educational sector. While the productivity focus of the CDSS places strong emphasis on investments in the productive sectors of Egypt's economy, we continue to attach major importance to certain categories of social infrastructure investment. The social sectors have also evidenced declining productivity in Egypt and, as in the case of agriculture and industry, constraints to productivity lie both in the areas of management and capital plant. The central management concerns in all social sectors relates to overcentralization of the planning, design and delivery of social services area is to support and accelerate GOE efforts to decentralize both the technical and financial management of service delivery. At the same time we are planning selected capital investments in basic areas of social infrastructure, particularly potable water, sewerage - primarily in rural areas and secondary

urban centers in Egypt. We anticipate considerable complementarity between our programming for new and upgraded capital plant on the one hand and improved management on the other. Our strategic criteria for social investment during the FY 82 to FY 86 are considered below:

a) Locational Strategy: Provincial and Rural

2.41 Over the FY 82-86 period we anticipate a basic shift in the focus of our social infrastructure investments away from the primary cities and towards a new range of targets including secondary cities in the rural governorates, district towns and villages. In part, this shift is a natural sequel to very substantial investments in water, sewerage and shelter which are being and will be made in Cairo and Alexandria during the FY 75 to FY 81 period. It is also a natural outgrowth of our strategy regarding decentralization. Finally, it is motivated by a recognition that considerations of social and economic equity warrant particular attention to social investment in those areas which have been under-represented in GOE investment allocations.

2.42 We anticipate some modest investments in service delivery capacity and have identified a special need with respect to primary school capacity (discussed below); however, our primary concerns in the area of social infrastructure are in the areas of public utilities and environmental sanitation.

2.43 Factors of scale and features of the Egyptian administrative structure both support our pursuit of a two-pronged

investment strategy in social infrastructure. One element of this strategy aims at providing very low cost services at the village level and improving the capacity of village government to finance and administer basic services. The other element of our strategy in this area relates to working with governorates and selected secondary cities to improve overall capacity at these levels with respect to planning, technical skills, revenue collection, and other management of urban services.

b) Shelter Sector Objectives

2.44 We have two broad strategic objectives in the shelter area. First, we are interested in assisting the GOE in developing shelter policies which demarcate public and private sector responsibilities in ways which improve overall sectoral efficiency. Second, we are concerned with promoting both policies and institutional changes which insure that overall patterns of shelter investment are not biased against the poorer elements of the population. During the period of the CDSS we expect some shift away from direct AID investment in residential construction towards investments which facilitate the improved performance of the formal and informal private sector in the provision of shelter. These investments may be in the area of construction lending, mortgage lending, improved land service and/or upgraded local urban planning capacities. Two important studies, one an intensive examination of national urban policy and the other an analysis of the informal housing sector will provide empirical basis for selection of shelter

investments during FY 82 - 86.

c) Decentralization

2.45 Productivity in the area of social services and public utilities is disastrously low in Egypt. Major legal and institutional changes are needed at all levels to achieve the social returns which should be realized from both the capital and manpower investments which Egypt has made in the social sector.

2.45 While past USAID programming has included some specific efforts to provide technical assistance to ministries and agencies in the social sector in the area of management, logistics and performance evaluation, our strategy over the period of this CDSS will be to look at the use of broader instruments to improve overall management in the sector. The most important of these relates to budgetary and administrative decentralization. Efforts to shorten logistical lines of social services delivery and narrow the span of control for managers in the social sector have already begun to pay dividends in improved productivity. Our policy will be to work for substantial decentralization of both finance and administration in all of our social sectoral programming. (As noted earlier, decentralization will be a major component of our industrial strategy.)

2.47 In tandem with investment in physical plant expansion, we plan to emphasize the importance of raising both utility rates and maintenance performance in order to underpin investments properly. Our social infrastructure efforts will aim at leaving in place

governorate and municipal utilities organizations which are administratively and fiscally competent to finance and manage current operations, rehabilitation and replacement of capital plant and gradual extension of the capital plant. Without major progress on this front our investment in new infrastructure would face the same certain fate of unfunded depreciation which has undermined the major share of past social investment in Egypt.

d) Special Strategy for Primary Education

2.48 The education sector, excluding the universities, has been marked by surprisingly high levels of productivity in terms of remarkably low unit costs. By the mid-1970s, for example, primary education was reaching more than two-thirds of the school-age population at an annual recurring cost of about \$20 per pupil. In contrast to areas like environmental sanitation and public shelter investment, it is not sector productivity concerns which inform our investment strategy in primary education. (That is productivity in terms of per unit cost, not necessarily the efficiency of the system for providing an appropriate education.) Our strategy in education derives in greater part from direct Basic Human Needs/PQLI concerns. Population growth is outstripping institutional capacity in primary education in Egypt. While absolute enrollments have continued to grow at marginal rates, the percentage of school-age children entering primary school in Egypt has begun to decline. More seriously, the percentage of female enrollments (especially in rural areas) has begun to decline steeply. Much of the enrollment

growth of the 1960s and 1970s was achieved by increased intensity in the utilization of capital plant (double and triple shifts became commonplace in primary schools). This increase in facility usage was the key in holding costs down in the sector and was a vital element in overall sectoral productivity. It appears, however, that the return to increasing utilization rates have been largely exhausted. Class sizes are growing rapidly (with the probability of diminishing returns in educational quality) and sheer access to schooling appears to be increasingly difficult. Recognizing that both economic and social factors account for some of the enrollment gap, nonetheless we intend to make a frontal assault on the problem of physical access. Our strategy in this regard will be to invest in new primary classroom capacity (school expansions and new facilities) in areas where the enrollment gap is greatest. In those parts of Egypt where separate classrooms are required for female students, these will be our number one priority. Our strategic criteria will be essentially beneficiary criteria (i.e., access both in the physical terms and the policies associated with access) and will tend to be biased towards girl students, rural students and upper Egyptian students, all of whom face greater problems of access to primary schooling.

2.49 As in the case of other social infrastructure investment, we anticipate investment through decentralized financial channels, with governorates as the key administrative counterparts in the primary school programs.

5. Health and Population

2.50 Health and population issues have a direct relevance to improvement of the quality of life of Egypt's poor and are closely connected with an improved status of Egypt's physical quality of life index (PQLI). As noted above, population increase is in large part responsible for Egypt's relatively poor performance in improving its PQLI position in recent years. As in the case of educational infrastructure, Egypt's health infrastructure has been outstripped by population increase. More directly, health concerns are reflected in two of the three components making up the PQLI - infant mortality and life expectancy. Life expectancy in Egypt, at birth, while far below the industrialized Western world, is better than many developing countries at comparative stages of development, in large part a reflection of Egypt's widespread health network and relatively good nutritional status. On the other hand, Egypt's infant mortality rate is unacceptably high by developing country norms. The focus of our strategy for the period of the CDSS will be targeted against the interrelated objectives of reducing infant mortality and population growth. In the case of population the mainstay of our efforts will be an emphasis on strengthening the delivery system for family planning services, balanced with supportive information, education and communication services to promote awareness and stimulate demand. It is our belief that the Egyptian Government is increasingly sensitive to the dimensions of its population problem, and is much more willing to pursue new

approaches to contraceptive prevalence. During the period of the CDSS it is likely that a variety of community level family planning/village development projects now underway will result in a general model being developed which, with our support, can be replicated in rural areas. In addition, in urban areas an expanded retail sales program for contraceptives could prove to be a strong complement to the existing delivery system.

2.51 In health we plan a three-part approach to reduction of infant mortality. First, we plan to continue efforts to improve the institutional framework for the delivery of health services both in rural and urban areas. Infant care will be a prominent part of this effort. Secondly, we also will continue with measures to improve sanitation by expanding the upgrading of water and sewage facilities from the primary cities to provincial and rural areas by the end of the five-year period. These efforts will be strengthened by information activities aimed at better sanitation practices. Third, we plan a frontal attack on the root cause of infant mortality, diarrheal diseases through a widespread program of oral rehydration throughout Egypt.

6. Other Non-Strategy Activities

2.52 Given the size of AID's program in Egypt, the variety of interests which surround it, and its overall political objectives, there will continue to be a variety of activities carried out under the program which are not central to this strategy. These will often be of a political nature in which visibility and/or quick

impact are the primary criteria and not longer term economic rationale. Examples of this are the Peace Fellowship program and perhaps some (but not necessarily all) activities associated with the Sinai. Others may be at the periphery of the strategy but of real substantive concern to AID as an agency, for example, renewable energy. Finally, other activities, while not directly related to the central strategy may well have spin-offs which will be of importance to increased productivity and/or equity such as science and technology activities, mineral, petroleum and groundwater assessments, etc. As in the past, we should be prepared to continue a number of these activities. But these activities, while important, should be viewed as discrete, and in most instances, will not represent initial steps to wider investment.

III. ASSISTANCE PLANNING LEVEL

A. Political Considerations

3.01 In Egypt more than in most countries, the level and composition of U.S. assistance is directly related to underlying U.S. political objectives, as well as to development objectives. The primary political considerations are twofold.

3.02 First, the level of U.S. assistance (or more precisely changes in the level) have major political significance. Changes (particularly relative to that for Israel) would be interpreted as reflecting a change in U.S. political support to Egypt. As previously stated in the FY 1981 CDSS, we conclude that during the period when active and delicate negotiations are underway, the U.S.

must be perceived by all the negotiants in the Middle East as being fully-supportive of Egypt. Although a precise determination of this period is not possible, we believe maintaining the current level of U.S. assistance commitments will be required at least through FY 1982. If the peace process proceeds satisfactorily, it may be possible in FY 1983 to begin the process of reducing AID financial support. We have assumed in our analyses as we did in last year's CDSS, that political relationships will, in fact, permit this change to begin in FY 1983 but obviously that assumption will require constant re-analysis. Because of the particularly great political importance of wheat in Egypt and the continuing need for large wheat imports, we also conclude that the annual PL 480 Title I program cannot be reduced below 1.5 million tons of wheat during the entire period of the CDSS without running unacceptable political risks.

3.03 The second political consideration is the requirement that internal Egyptian economic (and hence political) stability be maintained while delicate and potentially controversial negotiations are underway and fundamentally different regional relationships are developing. This requirement has become even more important given the new tensions that have developed in the Middle East. In effect, domestic political stability is essential for Egypt to have the internal strength and flexibility necessary to carry out her foreign policy. We believe the key requirement here is, at a minimum, to maintain existing levels of well-being for key elements of the population. As has been described elsewhere, the commitment of \$2.3

billion in U.S. CIP and PL 480 Title I program financing has successfully assisted the Egyptian economy to move forward in the short-term through ensuring an adequate availability of key consumer and industrial commodities. Anticipated progress in developing the economy's own productive and foreign exchange earning capabilities is such that a phase-out of the CIP program for stabilization purposes should be possible during the period of the CDSS. However, it is essential that domestic stability be maintained. Given the potential volatility of Egypt's own export earnings (tourism and workers' remittances), we must constantly be prepared to adjust the size of the CIP program within the overall AID level in response to unexpected short-term developments.

B. Relationship to Development Objectives

3.04 As discussed in the macro-economic annex we project a decrease in real terms of Egypt's gross need for foreign financing for the latter part of the CDSS planning period. Given continued inflation, however, the nominal need for foreign financing is likely to increase slightly. During the same period, there will be a major growth in disbursements under foreign project financing and CIP financing that is targeted toward specific sectoral objectives. As a result, the need for foreign donor and generalized balance of payments financing should drop significantly, as shown in Annex II. In keeping with this, we have projected a total of \$1,350 million in CIP and PL 480 for the FY 1982-86 period.

3.05 Although the overall level of U.S. assistance is projected

to drop appreciably during the 1982-86 period, we are assuming that the GOE's need for increased foreign financing will be met by the IBRD and other donors. Within the context of U.S. assistance itself, however, it should be pointed out that the real level of resources provided during the 1982-86 period will be greatly diminished over previous years. In Table II at the back of this paper an effort has been made to assess the impact of U.S. inflation on the real value of our assistance levels. As can be seen, and as discussed there in more detail, it is dramatic. By 1982, although our nominal commitment will be the same as it was in 1978, its real value will be only two-thirds of that of 1978. In the following years, as the nominal value itself falls, the decline in the real value will be even more precipitous. In addition, if cost overruns continue to be a serious problem, an increasing portion of these rapidly declining commitments will have to be used to cover such shortfalls.

3.06 While the macro-economic and sectoral analysis available to us has continued to improve over the past year, and the GOE has also improved its sense of priorities, the quantitative basis for assessing appropriate priorities for detailed sectoral assistance allocations is still limited. Similarly, the various sectoral assessments being carried out in Egypt do not, as yet, in most instances, provide a quantitative basis for assessing assistance needs in terms of sectoral development potentials. As a result, the allocations discussed below and presented in Table I at the end of

this paper are largely based on qualitative assessments and subject to refinement in subsequent CDSSs.

3.07 With regard to the development of the productive sectors, we believe our allocations to agriculture (\$260 million) represent close to the maximum that can be absorbed through programs in agricultural technology, agricultural policy, and institutional development.

3.08 In industry, the admittedly-incomplete information available to us indicates that \$730 million should enable us to make a major contribution to the expansion of the private sector as well as to the rehabilitation, modernization, and completion of those existing public sector industrial investments that are potentially economically-viable. Institutional constraints to increasing resource flows are our first priority in the private sector. As these constraints are addressed, it will be possible to expand our program in this area. Finally, there may be certain new public sector industrial investments that can be shown to be essential for overall industrial development. If so, we will be prepared to allocate funds to them.

3.09 In total, we anticipate AID commitments to the industrial sector will peak in 1983 and then drop off sharply as our objectives for public sector industry and private sector expansion are met.

3.10 By the end of the CDSS period, we anticipate that U.S. and other donor commitments will substantially be addressing the key bottlenecks in the industrial production infrastructure area. In

particular, electrical generation, port development, and commodity storage and handling investments should be meeting priority national needs, as well as the needs of the larger urban centers where two-thirds of the urban population are located. We will also be looking at possible requirements in the telecommunication sector that are not being addressed by other programs. Our overall allocation of \$300 million is a relatively low proportion of the probable level of foreign exchange requirements of investment in these infrastructure areas for the 1982-86 period. This is reflective of the enormous overall financing needs in these areas and the capability of other donors to provide substantial financing. Given that the IBRD is providing the main support to drainage of old lands and our belief that development of new lands appears at this time to be uneconomic other than on a limited basis during the period of the CDSS, we do not foresee developing assistance activities in agricultural infrastructure (primarily water drilling system) that would require financing beyond the \$300 million we have projected. We will, however, continue to develop and review information on new land development to assess its viability.

3.11 As discussed above, our efforts in the population/health area are focused on reorienting, strengthening and expanding outreach of existing systems rather than constructing additional facilities. We believe that these allocations are the maximum that can be effectively utilized by Egypt and indeed are predicated on a

fairly rapid increase in absorptive capacity. The relatively low U.S. contribution to Egyptian expenditures in these areas is not reflective of the priority we assign to this sector but rather to the fact that the basic staff and facilities are already in place--we are seeking to make the systems more effective.

3.12 Our allocations to social infrastructure represent a considerable increase over the amounts foreseen in last year's CDSS. This reflects our decision to support a significant expansion in primary school physical facilities. Our allocation in the urban shelter/water/sewage areas reflect our objective of shifting the bulk of housing investment to the private sector and our expectation that our program in social infrastructure will increasingly move away from the largest Egyptian cities to broader distribution for smaller cities. In this context we have also increased our level of planned support to decentralization activities in Egypt.

C. Strategy Implications for Implementation and Staffing Requirements

3.13 By 1982 AID assistance to Egypt independent of the PL-480 program or U.S.-owned excess pounds will have reached close to five billion dollars. Of this amount, approximately three billion dollars will be in the form of project assistance. The total number of projects under active implementation at that time should number about 100. In addition, during the period from 1982-86 we propose to obligate over \$2.3 billion, of which close to three-quarters of that amount will be project assistance. The weight of prior program

activity will be such that, even taking into consideration reduced funding levels which are planned to begin in FY 83, the total number of active projects will probably not fall significantly below 75 by the end of FY 86.

3.14 The implications of these figures are clear. There is no AID program underway today and almost certainly no assistance program in the past with a heavier implementation schedule than that before the USAID mission in Egypt. Obviously, there is need for the U.S. and Egypt to think in the broadest and most innovative terms possible and to select modes of implementation which will maximize the development impact of the AID program while husbanding scarce management resources.

3.15 While the need for innovation is clear, we recognize that there are limitations that will be placed upon program implementation. First, from both the U.S. and Egyptian perspectives there are definite limitations on the number of U.S. direct-hire personnel that can or should be assigned to the AID program in Egypt. Beyond this, in the Egyptian view, any mode which is overly "U.S. intensive," whether direct-hire or U.S. contract intensive, is likely to be resisted. (In this connection, it is worth noting that the concept of host country contracting has not proven to be a particularly labor savings device from the standpoint of U.S. management time. In fact, the contrary has been the case.) Secondly, given that U.S. objectives are related to total performance of the economy and in a like fashion Egyptian

expectations as to U.S. assistance equally broad, it would not be possible to concentrate total U.S. resources in one or two sectors of the economy, as tempting as this might be from an implementation standpoint. Finally, while AID should be prepared to operate as flexibly as possible in Egypt, it is clear that from the standpoint of program probity and congressional oversight, it would not be possible nor desirable to relax many of the standard AID requirements concerning the contracting process, competition, voucher review, etc. Nevertheless, we must continue to weigh the risks that might be associated with new implementation modes against their potential advantages given the other constraints that exist.

3.16 With these constraints in mind, it is our intention to employ a range of implementation devices in implementing program strategy. During the past five years, as we have gained experience in a number of sectors of the economy and as strategic objectives have become clearer, it has been possible to begin to deploy blocks of resources against program targets. By 1982, it should be possible to organize larger programs which will be directed at such targets as provincial city development, agricultural infrastructure, infant mortality, rehabilitation of public sector industry, and private sector lending.

3.17 In general, we foresee using three broad program mechanisms in implementing much of our strategy, each of which should permit the utilization of larger blocks of resources in a management efficient manner.

(i) Use of the CIP - As noted earlier, we plan phaseout of the CIP for stabilization purposes in FY 82. The CIP, however, has proven to be an extremely effective mechanism for financing capital equipment and replacement parts and we plan to continue the program for this purpose after FY 82. We see the CIP as an important element of our industrial and infrastructural strategy and perhaps for our agricultural strategy as well. We plan to use it to finance equipment needed to rehabilitate and/or expand existing plants in instances where technology is known, little or no engineering is required, and the importing firms have a proven capability for managing and implementing similar activities. Obviously, the dividing line between projects and CIP activities will often be fine and we will have to monitor the allocation process carefully to ensure that proper program safeguards are not sidestepped.

(ii) Use of GOE Implementation Mechanisms - Where it appears feasible and appropriate, we plan to use GOE implementation and administrative mechanisms to carry out program objectives. This would include program activities involving substantial local costs, requiring relatively uncomplicated construction and only modest amounts of technical assistance. It may also involve some budget support, sectoral loans and possibly blockgrants. This

approach would appear to be appropriate for a range of provincial activities, such as providing basic services to villages, on farm infrastructure, and possibly school construction. Fixed amount reimbursement may become an element of the approach.

(iii) Use of Intermediaries - In instances where substantial technical assistance and/or engineering is required and the use of foreign exchange is substantial, we will look to intermediaries to the maximum extent possible. This will include the use of contractors as intermediaries (such as in the present Industrial Production Project), the use of collaborative assistance modes and expanded use of voluntary agencies. We plan to use this approach in connection with the public sector industries (the more complicated rehabilitation efforts not covered under the CIP), private sector activities, and perhaps provincial city development as well.

3.18 At the present time, the authorized U.S. direct-hire personnel level for USAID/Egypt is 130 (against approximately 115 on board). It is likely that personnel levels will peak in FY 80 and slowly begin to diminish in succeeding fiscal years. In the future, we plan to reorient and train increasing numbers of Egyptian employees to replace U.S. direct-hire personnel wherever possible. In addition, the modes of implementation outlined above should also bring about some savings in personnel. As pointed out earlier,

however, the number of active projects under active implementation in 1986 will probably total in the neighborhood of 75, an implementation load which will still require substantial U.S. support. Secondly, as the program size diminishes, the weight of the program should shift from larger industrial and infrastructural projects to more U.S. labor intensive basic human needs activities. It is likely, therefore, that during the period of the CDSS, a wholesale reduction in U.S. personnel will not be possible.

TABLE I
COUNTRY DEVELOPMENT STRATEGY STATEMENT
PROPOSED U.S. FISCAL YEAR OBLIGATION
(\$ Millions)

	Current	Planned/Proposed CDSS Levels					
	1981	1982	1983	1984	1985	1986	1987
Stability	612	513	250	250	250	250	250
CIP	300	200	-	-	-	-	-
PL 480 I	312	313	250	250	250	250	250
Production	127	1403	310	277	50	28	28
Industry	112	105	240	212	25	-	-
Agriculture	15	35	70	65	25	28	28
Production Infrastructure	130	156	200	100	75	75	75
Industry	80	106	125	50	25	25	25
Agriculture	50	50	75	50	50	50	50
Social Infrastructure	185.5	162.5	95	50	65	10	10
Urban Shelter/ Water/Sewage	164.5	162.5	40	30	20	-	-
Education	21	-	30	20	10	10	10
HIGS	-	-	25	-	25	-	-
Decentralization	-	10	30	30	30	20	20
Title III (non add)	(15)	(15)	(15)	(15)	(15)	(15)	(15)
Other	-	10	30	30	30	20	20
Management/Manpower	39	-	5	5	5	5	5
Peace Fellowship	24	-	-	-	-	-	-
Other	15	-	5	5	5	5	5
Population/Health	69.3	79.3	37	41	55	70	70
Population	18.5	25	15	20	30	45	45
PL 480 Title II	26.8	24.3	14	13	13	13	13
Miscellaneous Non- Strategy	26	26.5	12	10	8	5	5
Total Economic Asst.	1188.8	1087.3	939	763	538	463	463
Total PL 480 Title I	312	313	250	250	250	250	250
Total PL 480 Title II	26.8	24.3	14	13	13	13	13
Total AID Assistance (Excluding HIGS)	850	750	650	500	250	200	200

TABLE 2
U.S. AID COMMITMENTS AND DISBURSEMENTS IN
NOMINAL AND REAL TERMS
(\$ Millions and Percentages)

(1) Year	(2) Infla. Factor	(3) Nominal Oblig.	(4) Real Oblig.	(5) As of % of GNP	(6) Nominal Disb.	(7) Real Disb.	(8) As a % of Fix- ed Inves.
1975	.81	\$261	\$322	5/	\$ 16	\$ 20	5/
1976	.87	795	914	5/	131	151	5/
1977	.93	699	752	5/	261	281	5/
1978	1.00	750	750	5/	488	488	5/
1979	1.13	835	739	5.1	447	396	12.4
1980	1.24	865	698	4.4	730	589	17.2
1981	1.35	850	625	3.7	800	588	15.8
1982	1.50	750	500	2.7	850	567	14.6
1983	1.65	650	394	2.0	750	455	10.9
1984	1.82	500	275	1.3	550	302	6.7
1985	2.00	250	125	0.5	500	250	5.1
1986	2.20	200	91	0.4	400	182	3.4

- (1) U.S. fiscal years for AID commitments. Calendar years for all else.
- (2) Actual U.S. inflation rates for industrial products used through 1979. A 10 percent annual rate is assumed thereafter.
- (3) The obligation shown for 1976 includes the interim quarter.
- (4) Real obligations are expressed in 1978 prices.
- (5) Because of problems of exchange rate valuation, percentages were not calculated prior to ;1979.
- (7) Real disbursements are expressed in 1978 prices.
- (8) See note (5).

Explanatory Notes:

The basic AID commitment level reached its current nominal value of \$750 million in 1978. Using this year as a base, the real values of past and projected AID commitments are shown in column (4). As can be seen, they decline steadily even though nominal commitments during FY 1979-81 are up because of the special supplementary appropriation of \$300 million. By the first year of this CDSS period (FY 1982) the real value of the \$750 commitment projected for that year will have fallen to only two-thirds of the value of the 1978 commitment - although in nominal terms they are identical.

The relationship of AID commitments to the Egyptian economy are shown in column (5). AID commitments in 1979 equalled 5.1 percent of Egypt's GNP. With the anticipated real growth in the Egyptian economy and the adverse impact of U.S. inflation by 1982 the real value of U. S. commitments will have fallen to 2.7 percent of GNP. By the last year of the CDSS period, projected AID commitments will have fallen to 0.4 percent of Egypt's GNP -- less than one-tenth of their current relative significance.

Columns (6) and (7) of Table 2 present projected AID disbursements in nominal and real terms, respectively. Real disbursements are shown as peaking in 1979 and 1980 and declining steadily thereafter.

Column (8) shows the relationship between AID disbursements and total gross fixed investment in Egypt. The real value of AID disbursements (both project and balance of payments assistance) will reach a peak of 17.2 percent of fixed investment in 1980. By 1982, the percentage will have fallen to 14.6 percent and by the end of the CDSs AID disbursement will represent only 3.3 percent of total Egyptian investment.

TABLE 3
GOE REVENUE AND EXPENDITURE^{1/}
(LE Millions)

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Total Revenue	1,524	2,015	2,755	3,173	4,440
Total Expenditure	2,917	3,280	4,025	5,254	6,960
(Subsidy)	(622)	(434)	(650)	(684)	(1,280)
Overall Deficit	1,383	1,265	1,270	2,081	2,520

Structure of Deficit Financing (%)

Overall Deficit	100	100	100	100	100
Foreign Financing	15	39	36	34	27
Domestic Financing	85	61	64	66	73
(Bank Financing)	(54)	(41)	(34)	(38)	(40)
Overall Deficit/GNP	29	19	16	21	21
Bank Financing/GNP	16	8	6	8	9

^{1/} Estimates

Source: USAID/Cairo

Annex XI Technology Choice in Egypt (PP.44-49)

V. CST STRATEGY CONSIDERATIONS FOR FUTURE USAID PROGRAMMING

5.01 The centerpiece of effective CST strategy for the USAID must be the macro-economic dialogue. We have argued strongly that cost/price distortions in the Egyptian economy systematically bias firm-level technology choice away from capital savings. Two basic elements of macro-policy -- interest rate policy and energy pricing policy -- are central. USAID is planning a multi-component energy program, for example, which includes utility management, energy planning and renewable energy field testing. For this program to work in the direction of CST - and particularly for the program to make headway in the areas of energy policy and renewables -- both capital and energy pricing must move towards market levels. The mission is actively engaged in energy pricing discussions with both the economic ministries and the energy and production ministries. The macro-economic annex of the CDSS lays out the substance of the policy dialogue in this area. USAID is working in tandem with the IBRD to achieve changes in electricity pricing (through covenants

and conditions on AID and IBRD financing of electric generation capacity).

5.02 In the area of interest rate policy, USAID practice in the past has been to treat the issue on a project-by-project basis, specifying particular on-lending terms for ag credit, CIP, DIB and other loan programs. While this approach has secured marginal increases in interest rates for specially earmarked "pools" of USAID financing it has not contributed significantly to overall interest rate policy. More general pressure from donors (IBRD, IMF and USAID) at the policy level had had some impact, and rates have generally moved slightly closer to a "market level" over the past year. There is major room for further advance in this area, however, and it appears that across-the-board dialogue can play an increasing role in the interest rate area.

5.03 Beyond price policy, mission strategy in CST can benefit from two kinds of program guidance. The first lies in the area of identifying more precisely where Egyptian comparative advantage lies in production activities (and within the area of comparative advantage, where labor-intensity is prominent). We are currently underway with an Industry Policy Study :(under the leadership of Dr Gustav Paparek and involving six expatriate and about eight Egyptian industry economists) which includes this kind of comparative advantage and labor policy analysis within its key terms of

reference. The study also is scheduled to identify policy recommendations (for USAID and for GOE) which can shift public sector industrial operations towards an environment in which market price signals are less muffled and in which technology and investment choices will be more efficient. The outputs of this study in tandem with extensive analyses scheduled for both our intermediate lending portfolio (DIB Evaluation) and our public sector industry portfolio (IPP evaluation) will serve as the base of an employment and CST oriented industrial strategy paper in the 1982 CDSS. In the face of these major undertakings (totalling more than 50 professional person months) it would be inappropriate to anticipate or prejudge strategy recommendations in this area.

5.03 The second cluster of major strategy considerations includes technology policy, technology information, and manpower policy. USAID sees these as areas where we can substantially increase our efforts during the necessarily slow process of macro-economic policy adjustment. We anticipate significant new programming in the area of Industrial R&D - with the specific intention of improving the process of industrial technology selection and increasing the ability of Egyptian industrial enterprises to draw upon domestic Egyptian technological resources. Sound choice of technology depends on easy and unrestricted access to information about technological options (including unbiased

information about the real costs of those options). Through the Industrial R&D program we will directly contribute to the availability of technical information and to the institutionalization of a capacity to analyze and compare technical alternatives. We similarly anticipate that this function can be substantially strengthened within the IPP project -- giving major industrial enterprises in Egypt better access to multiple channels of process technology. In the small business area, the SSE and Rural Employment projects include major technology information components.

5.04 The growth of the decentralization component of the mission investment program reflects our growing confidence that this approach is inherently CST-oriented and is increasingly providing nationwide physical demonstrations of the viability and attractiveness of lower cost and more labor intensive approaches to construction and infrastructure.

5.05 CST strategy, industry strategy and employment strategy are of necessity intertwined. This paper has outlined some of the basic problems constraining CST in Egypt, some of the inroads the AID program is making against those constraints and some prospects for further gains through strategic concentration on both price and non-price determinants of technology choice. A separate CDSS annex lays out the known parameters of the employment and manpower

situation in Egypt and provides the basis for moving towards a definition of employment objectives for the USAID program and for the GOE. Major work on industry policy is underway and will provide close analysis of both employment and productivity issues in this sector. These represent part of a continuing and dynamic process of strategy definition. There is no one point at which all the data and analysis converge and a single, unified and permanent strategy emerges. USAID's overall strategic focus on stability, productivity and equity has begun to encompass a sharper definition of sub-objectives in CST, employment, PQLI and other development goals. This paper is a step in that process. It is not the last word. As the analytic base for the USAID program grows our capacity to interrelate and integrate multiple considerations also grows. We have not articulated hard-and-fast CST rules and guidelines because we continue to believe that flexibility and the ability to respond to sectoral variation is important. We also believe that the continuation of the broad policy dialogue (combined with improved analysis and sharpened project design) is more fruitful than across-the-board application of necessarily arbitrary criteria in investment selection.

5.06 We hope to engage the considerable analytic and technical skills of central AID staff in this process of analysis and policy development. This promises to be a more fruitful and effective

approach towards shared goals and objectives than the project-by-project approach which has been the primary mode of USAID/AID-W dialogue on these issues.

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Annex XII Agricultural Prices in Egypt (PP.24-26)

[Faint, illegible text, likely a table or list of agricultural prices]

V. THE RELATION OF AGRICULTURAL PRICE POLICY REFORM TO OTHER AID ACTIVITIES

5.01 The reforms of agricultural price policy are parallel to proposals in other sectors to eliminate cost and price distortions (c.f. LaPittus memorandum, 11/16/80). The 1982 CDSS (Annex IV, Agricultural Sector Strategy Update) describes the portfolio of USAID/Cairo agriculture projects. Components of various projects are conducive to indirectly bringing about adoption of the proposed reforms, while others implement the reforms directly as part of the projects themselves. The most direct connection between the USAID/Cairo program and enactment of the reforms is between the CIP fertilizer component for 1980, privatization, and reduction of subsidies.

VI. CONCLUSIONS

6.01 The analytical literature used for this report contains a common understanding of the historical impact which price policy has had on growth and income of the agricultural sector during the

period from the 1950s to the mid-1970s. The estimates of the consequences of the policy for income agree more than for growth.

6.02 To summarize, our conclusions are as follows:

1. Egyptian farmers have historically responded to price changes for basic crops in spite of resource allocation controls.
2. Farmers' response to prices has primarily been through inter-crop substitution and input reallocation rather than by productivity increases. The introduction of yield-increasing technologies has not been an important source of growth in the sector. The cost of labor has been the fastest rising component of costs of production which has induced demand for labor-saving mechanization.
3. The reform of agricultural price policy by itself has limited potential to increase sectoral growth. The lower estimate of sectoral response to policy reform (circa 8 percent) is more realistic than the higher estimate of 40 percent.
4. Achieving the higher growth rate in the agricultural sector depends on addressing demand and supply side constraints, in addition to adjusting price policy. The constraints are primarily in the areas of marketing, infrastructure, and technology development and extension. Some of the problems are in Egypt's control to remedy, whereas others are not (e.g., inadequate foreign market demand).
5. The agricultural sector has been the source of large income transfers to other sectors during the period 1965-1977. The average annual income transfer out of agriculture has been above 1,200

million LE for this period. Agricultural income would have doubled if production were valued at world market prices.

6. Though discriminatory, agricultural price policy has been efficient in the sense of orienting farmers towards production of economically high return crops.

7. Viewed as a tax, the land use controls for crops have not had a regressive impact on income distribution within the agricultural sector. In fact, the controls may have been slightly progressive in their relative impact on small and large farmers.

8. Certain reform objectives regarding agricultural price policy are being achieved through the growth of the uncontrolled sub-sector.

Annex XIII Egypt's Food and Energy Subsidies (PP.1-18)

EGYPT'S FOOD AND ENERGY SUBSIDIES

IN 1979

Part I: Summary Findings

Introduction

1.01 The Government of Egypt (GOE) has a history of providing direct and indirect subsidies or income transfers to various sectors and income groups that goes back to at least the 1950's. The agriculture sector has been "taxed" heavily over the last two decades by GOE price controls to provide an income transfer to support GOE intentions to develop the industrial sector. A few basic food commodities were marginally subsidized by the GOE as far back as 1960. However, it was not until 1974 that food and energy international prices began to diverge greatly from domestic prices in Egypt. This divergence started with the fourfold or more, OPEC led, petroleum price increase which in turn also affected food prices. The GOE already had made the basic commitment to try to protect consumers, i.e. individuals as well as industry, from some of these price changes. As a result, as the divergences became greater after 1974, the price and income adjustments necessary to offset the differences also became greater. Therefore, it has become more difficult to decide what to do because: a) the magnitude of the problem is very large; b) any change to reduce subsidies without an offsetting income transfer, will detrimentally affect the standard of living of some group; and, c) it is very hard to devise practical ways to effect income transfers that achieve social objectives.

1.02 There are many studies of subsidies in Egypt and who is benefitting from them.^{1/} Most studies are limited in one way or another, as this one is also. Some studies address subsidies within or between sectors, others attempt to measure the value of a particular subsidy or its effect on income distribution. This paper attempts to measure the value of the energy subsidy in 1979; and, to estimate the impact of this subsidy, and the budgeted 1979 food subsidy, on urban household expenditures. From this, one can have a better understanding of the magnitude of income transfers the GOE is fostering and the impact on various income groups. Also, ways may become more apparent to retarget and/or to reduce the income transfer in such a way that normal market prices are not distorted.

1.03 Of necessity, a number of simplifying assumptions have been made in order to carry out this analysis. The results are somewhat weakened by having to make these assumptions. However, the

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- ^{1/} A. Cuddihy, Agricultural Price Management in Egypt World Bank Staff Paper No. 288, April 1980.
B. K. Korayem, The Impact of the Elimination of the Food Subsidy in the Cost of Living of the Urban Population in Egypt, May 1980.
C. L. Taylor, Food Subsidies in Egypt, Unpublished Manuscript 4ct. 1979.
D. A. Rahman, Study of subsidies for the GOE.
E. Vol. 1, Main Report Annexes 1.1 and 1.2, World Bank's May 1978 Report # 1815EGT.

orders of magnitude and general conclusions from this study will probably withstand a much more detailed analysis. What has been attempted here can only be considered as a first attempt to catalog and to discuss these subsidies and what income groups are receiving them. In order to facilitate further work in this area we have included in the Appendices as much detail on our assumption and methodology as possible. The net result of this work is to have a rough estimate of the 1979 food and energy subsidies, and their impacts on various income groups in the urban sector.

Magnitude

1.04 In total the estimated food and energy subsidies in 1979 are just over 2.9 billion Egyptian Pounds (see Subsidy Highlights, page 3A and Table I-1 at the end of this Part). About one-third of this, LE 1.0 billion, is the direct food subsidy provided by the Government of Egypt through the budget. This amount represents the difference between the purchase price and handling costs of subsidized items, and the sales revenue for them. (No attempt was made to measure the food subsidies that may be indirectly provided by the government through controlled domestic farm gate output prices and/or subsidized farm input sales.) The remaining two-thirds, about LE 1.9 billion, is the direct and indirect domestic energy subsidy. This amount represents the difference between the domestic sales price of petroleum products and electricity, and their opportunity costs to Egypt. The opportunity cost to Egypt of petroleum products is the products'

1979 Food and Energy Subsidy Highlights

A. Magnitude By Sector (LE Billion)

<u>Item</u>	<u>Urban</u>	<u>Rural</u>	<u>Total</u>
Food	1.0	-0-	1.0
Energy	<u>1.2</u>	<u>0.7</u>	<u>1.9</u>
Total	LE 2.2 Billion	LE 0.7 Billion	LE 2.9 Billion

B. Distribution in Urban Sector by Household Expenditure Class

1. As a Percent of Subsidy

<u>Household Expenditure Class (LE/yr)</u>	<u>Urban Population Distribution</u>	<u>Subsidy Distribution</u>		
		<u>Food</u>	<u>Energy</u>	<u>Total</u>
0-778	26.6%	21.7%	15.5%	18.4%
779-1113	23.7%	22.1%	18.1%	19.9%
1114-1782	28.5%	29.2%	27.1%	28.1%
1783+	21.2%	27.1%	39.3%	33.6%

2. As a Percent of Expenditures

<u>Household Expenditure Class (LE/yr)</u>	<u>Urban Expenditures Est. (LE Mil)</u>	<u>Subsidy Related to Expenditures</u>		
		<u>Food</u>	<u>Energy</u>	<u>Total</u>
0-778	775.4	28.5%	23.4%	51.9%
779-1113	881.0	25.5%	24.0%	49.5%
1114-1782	1,472.5	20.0%	21.6%	41.7%
1783+	2,213.5	12.5%	20.8%	33.3%
Total	5,342.3	19.1%	21.9%	41.0%

international sales value ^{2/}. The real value of electricity is its marginal economic cost of production.^{3/}

1.05 The L.E. 1.0 billion food subsidy can be further broken down into specific food items. The most important are wheat and wheat flour which were subsidized on the order of LE 590 million in 1979. Fats and oils are the next most important items. They cost the government another LE 200 million in income transfers. Sugar and meat subsidies cost LE 44 million each. The remaining LE 141 million is spread over a host of other commodities which include at least corn, beans, and tea.

1.06 The L.E. 1.9 billion energy subsidy is first divided into categories of fuel and electricity, and then grouped as to whether the subsidy element can be considered as directly passed on to the consumer or indirectly passed on. The direct fuel subsidies (i.e. fuels of which the greater part is sold directly to consumers at less than international prices) are: kerosene at LE 340 million; gasoline at LE 160 million, and butagas at LE 89 million. The direct electricity subsidy, equated mostly with residential sales (non-industrial), is estimated at LE 222 million. The indirect energy subsidy measures the net real value of fuel and electricity consumed as an intermediate input into other sectors of the economy for the production

^{2/} IMF Report February 1980, Table 28, showing domestic petroleum prices and the corresponding international prices on November 15, 1979.

^{3/} See Appendix G for the calculation of this using August 1980, fuel oil prices.

of all products. It is assumed that the industries purchasing this subsidized fuel and electricity pass the savings on to consumers through lower product prices. The indirect fuel subsidy^{4/} is estimated at LE 850 million. The indirect electricity subsidy is valued at LE 289 million. However, of this electricity subsidy, LE 54 million was related to the portion of aluminum production that was exported. Therefore it was not passed on to domestic consumers in an identifiable manner. (Although since this product was exported at international prices, some of the electricity subsidy was recaptured by Egypt.)

Distribution

1.07 The LE 2.9 billion food and energy subsidy is unequally distributed between the urban and rural populations^{5/}. Roughly 75 percent of the subsidy or LE 2.2 billion is estimated to go to the urban population which is about 45 percent of the total population. This is composed of the entire LE 1.0 billion food subsidy which essentially goes to the urban population, and LE 1.2 billion (63 percent) of the energy subsidy. Further this subsidy or income transfer, when compared with total estimated urban household expenditures^{6/} (used as a substitute for income), represents a 41

^{4/} Excluding fuel sold to the Egyptian Electricity Authority (EEA) to produce electricity.

^{5/} The actual urban population estimate used in this study was derived from the May 1978 World Bank Report which in turn was based on the 1974/75 Household Expenditure Survey by CAPMAS. The basic urban data was some 5 million people higher than in the 1976 Census data. This difference was not resolved in the study, but would only change per capita data.

^{6/} This estimate was not independently verified.

percent addition. Thus, if the GOE wanted to redirect this subsidy by increasing income, urban households would need roughly a 41 percent increase in their income. Also of interest is that for the 21 percent of the urban population living in the highest household expenditures level, the income transfer represented by food and energy subsidies is 33 percent of its expenditures. The income transfer to the 27 percent of the urban population living in the lowest household expenditures level represents 52 percent of its expenditures. Thus, while the lower income levels are receiving a substantial income transfer, the methods used also transfers a sizeable value to higher income groups. The remaining 25 percent of the food and energy subsidy - LE 0.7 billion - goes to the rural population which is about 55 percent of the total. (See Subsidy Highlights, page 3A and Table I-1)

1.08 Within the urban population the food and energy subsidy is also skewed toward the higher income level. Table I-2 indicates that only 38 percent of the total food and energy subsidy can be attributed to the lower urban household expenditure levels which contain 50 percent of the population; while the remaining 62 percent goes to the upper 50 percent. The relative distribution is even further apart at the top and bottom levels: 27 percent of the population in the lowest expenditure levels receive only about 18 percent of the subsidies, while the 21 percent in the upper levels receive 32 percent of the subsidies.

1.09 The distribution of the food subsidies alone is reasonably equitable within rough approximations of population quartiles on an

absolute value basis, see Table I-2. The calculations indicate a slight advantage going to households at the highest expenditure level which have 21 percent of the population. They received an income transfer representing 27 percent of the subsidy. The lowest household expenditures levels, with about 27 percent of the population, received 22 percent of the subsidy. The advantage to the higher income levels may be due in part to our inability to differentiate which groups consume more of the unsubsidized food items or at least less subsidized ones. Data is not yet available to demonstrate that people in higher household expenditures level consume goods which contain less subsidized inputs. This problem is most evident with wheat products, where the subsidy is applied largely through product quality differentiation and where it is impossible to determine if this policy actually leads to different product consumption patterns.

1.10 With the rather equitable distribution of the subsidy, based on population, it is natural to have the value of the food subsidy decline as a proportion of rising expenditure levels. Thus, the food subsidy represent an approximate 28.5 percent increase in income to the 27 percent of the population in the lowest household expenditures. However, for the 21 percent population in the highest household expenditure levels, the income equivalent of the food subsidy is only about 12.5 percent of its expenditures.

1.11 It is interesting to note that when the individual subsidized food items are considered alone, only wheat, sugar, and

(by assumption) "other" have reasonably equitable distributions, based on population. (Again, however, determining how the wheat subsidy actually is transferred to different income levels, because of product differentiation, is virtually impossible to estimate.) In fact, only sugar, of the food items, shows the lowest expenditure class as receiving a proportion greater than the percent of population contained in the class. Fats and oils, and meat subsidies have distributions which favor the population in the upper household expenditure classes. See Table I-3 (A).

1.12 Also of interest is the proportion of the food commodity subsidy compared to expenditures within each household class group. Wheat is of course the largest at all expenditures levels, although as the income level increases, it represents a smaller proportion. Oils and fats, sugar and "other" follow the same pattern but represent much smaller proportions than wheat of total expenditures within each group. The meat subsidy, although small in aggregate terms, appears to follow expenditures because it represents roughly a constant percent of expenditures in each household income class. See Table 1-3(B). Of all the food subsidies only the value of the wheat subsidy exceeds 5 percent of income for any expenditure class.

1.13 The distribution of the urban energy subsidy by approximate quartile is much less equitable than the food subsidy. The lowest 27 percent of the population receives only 16 percent of the subsidy, while the upper 21 percent receives 39 percent of the subsidy. Comparable figures for the food subsidy were, respectively, 22 percent and 27 percent. Looking at the lowest 50

percent of the population, they received only 34 percent of the energy subsidy compared with 44 percent of the food subsidy. See Table I-2.

1.14 With the urban energy subsidy distribution skewed toward higher income levels, it is expected that the value of the subsidy will stay relatively constant as a proportion of income within each expenditure class. This is also illustrated in Table I-2. The share of the urban energy subsidy within expenditure levels varies only between 21 and 24 percent of the expenditures. (See Para. 1.10 above for comparable data on the food subsidy).

1.15 Looking at the energy subsidy by specific type (see Table I-3 (C)) gasoline is most highly skewed to upper income classes with the 21 percent of the population in the highest expenditure level receiving 70 percent of the subsidy. Gasoline is followed by butagas, electricity, and the indirect energy subsidy, in decreasing order of the degree of skewedness toward the upper income levels. Only kerosene is more favorably distributed to lower income levels with the 27 percent of the population in the lowest expenditure class receiving 33 percent of the kerosene subsidy (this is similar to the sugar subsidy in the food category).

1.16 It is interesting to note the relative value of each subsidy when compared with total expenditures within each household classification as shown in Table I-3(D). For each expenditure level, of the total income transfer represented by the energy subsidy, about one half comes from the direct portion and the other half from the indirect portion. However, given the skewed

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distribution of the subsidy from each direct item, the relative importance within each income level varies. At the lowest household income levels, the kerosene subsidy represent almost a 7 percent increase in income. This is almost 10 percent when electricity is added. Also, looking at the relative commodity contribution to the direct energy subsidy of this income class, 85 percent comes from kerosene and electricity, respectively, 60 percent and 25 percent. Butagas and gasoline represent only 15 percent. At the next higher level, the relative importance shifts somewhat from kerosene and electricity, with the total only about 75 percent of the direct energy subsidy; and within the items, from kerosene to electricity with 40 percent from kerosene, and 35 percent from electricity. These shifts continue in the next higher group with the total for kerosene and electricity only 69 percent and the respective compositions, 29 percent and 40 percent. The shifts are completed in the highest income level where kerosene and electricity represent only about 45 percent of direct energy subsidies, with kerosene at 10 percent and electricity at 35 percent. At this income level it is electricity and gasoline which represent the most important direct energy related income transfers. They are almost 75 percent of the total direct energy subsidy received by this group. It should be noted that for all but one expenditure class, the direct commodity energy subsidy as a percent of expenditures within a household group never exceeds 5 percent of income. Only in the case of kerosene at the lowest expenditure level does the subsidy value represent a transfer of more than 5 percent of income.

Impact

1.17 The overall magnitude and distribution of the food and energy subsidies have been discussed above. The importance of this data is being able to discuss the real impact food and energy subsidies have on people, on the economy, and on the government's ability to find ways to affect these subsidies. Some of the important impacts are noted below:

- food and energy subsidies are highly skewed toward the urban population and, within this population, toward higher income levels.

- the urban food and energy subsidy represents, on average, 41 percent of income, over 50 percent of income for the lowest income quartile, but even 33 percent for the 21 percent of the population at the highest income levels (notwithstanding the fact that higher income levels seem to gain substantially from these subsidies, the value of the income transfer to lower income levels is even greater and probably represents an important addition to their standard of living)..

- the general income distribution is almost totally unaffected by the distribution of subsidies; therefore, need seems to be less important than income as a determinant of who receives a subsidy (which probably reflects the method of distribution more than anything else).

- only in the case of wheat, and kerosene for the lowest expenditure quartile does the direct subsidy for any particular items exceed 5 percent of income in any quartile.

- the food subsidy is much more equitably distributed to the population than the energy subsidy.

1.18 Part II and Part III to follow go on to describe in more detail, respectively, the food and the energy subsidies in Egypt. A more detailed breakdown of the household expenditure levels, population, and subsidy is provided so that additional insights and information are available. The basic results do not change, but the impacts on particular groups are more clearly shown. Thus policy makers will have a better understanding of potential for changes in the system.

TABLE I-1
SUMMARY OF EGYPT'S
FOOD AND ENERGY SUBSIDY IN 1979
 (LE MILLION)

<u>Type</u>	<u>Urban</u>	<u>Rural</u>	<u>Total</u>
I. <u>Food (All Direct)</u>	<u>1,019</u>	<u>0</u>	<u>1,019</u>
A. Wheat	590	0	590
B. Oil	200	0	200
C. Sugar	44	0	44
D. Meat	44	0	44
E. Other	141	0	141
II. <u>Energy</u>	<u>1,171</u>	<u>725</u>	<u>1,896</u>
1. <u>Direct</u>	<u>569</u>	<u>243</u>	<u>812</u>
A. Kerosene	163	176	340
B. Butagas	82	7	89
C. Electricity	199	24	222
D. Gasoline	125	36	160
2. <u>Indirect</u>	<u>602</u>	<u>483</u>	<u>1,085</u>
A. Fuel	472	378	850
B. Electricity	130	105	235 <u>1/</u>
III. Total	<u>2,190</u>	<u>725</u>	<u>2,915 <u>1/</u></u>

Totals may not add due to rounding.

1/ Does not include LE 54 million estimated indirect electricity subsidy provided in the production of exported aluminum.

TABLE I-3
 SUMMARY PRESENTATION OF FOOD AND ENERGY
 SUBSIDIES CAPTURED BY SHARES OF THE URBAN POPULATION IN
 SELECTED HOUSEHOLD EXPENDITURE LEVELS (HEL) 1979

79 Est. Urban HEL (LE)	Urban Population In each HEL			Food Subsidy by HEL			Energy Subsidy by HEL			Total Food & Energy Subsidy by HEL		
	LE Mil.	%	Cum.%	LE Mil.	%	Cum.%	LE Mil.	%	Cum. %	LE Mil.	%	Cum. %
0-778	6.36	26.6	26.6	221.0	21.7	21.7	181.4	15.5	15.5	402.4	18.4	18.4
779-1113	5.66	23.7	50.3	224.7	22.1	43.8	211.7	18.1	33.6	436.4	19.9	38.3
1114-1782	6.82	28.5	78.8	297.2	29.2	72.9	317.5	27.1	60.7	614.7	28.1	66.4
1783+	5.11	21.2	100.0	276.0	27.1	100.0	460.8	39.3	100.0	736.5	33.6	100.0
Total	23.95	100.0		1,018.9	100.0		1,171.3	100.0		2,190.2	100.0	

79 Est. Urban HEL (LE)	Per Capita Subsidies (LE/person)			Subsidy as a Share of Estimated Total Household Expenditures (%)			
	Food	Energy	Total	Exp(LEMil)	Food	Energy	Total
0-778	34.7	28.5	63.2	775.4	28.5	23.4	51.9
779-1113	39.7	37.4	77.1	881.0	25.5	24.0	49.5
1114-1782	43.6	46.6	90.1	1472.5	20.0	21.6	41.7
1783+	54.0	60.2	114.0	2213.5	12.5	20.8	33.3
Total	42.5	48.9	91.4	5342.3	19.1	21.9	41.0

Totals may not add due to rounding.

TABLE I-3(A)
 Summary Detail of Food Subsidies:
 Distribution Within Selected Household Expenditure Levels (HEL) 1979

Est. 1979 Urban HEL (HE)	% Urban Pop. in each HEL		Total Food Subsidy		Of Which:											
					A. Selected				B. Other							
					Total		Wheat		Fats		Sugar		Meat		Total	
%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %			
0-773	26.6	26.6	21.7	21.7	21.7	21.7	22.9	22.9	18.5	18.5	27.1	27.1	14.1	14.1	21.7	21.7
779-1113	23.7	50.3	22.1	43.8	22.1	43.8	23.2	46.1	19.7	38.2	23.6	50.7	16.5	30.6	22.1	43.8
1114-1782	28.5	78.8	29.2	72.9	29.2	72.9	29.5	75.3	29.5	67.7	28.5	79.2	28.1	58.7	29.2	72.9
1783+	21.2	100.0	27.1	100.0	27.1	100.0	24.7	100.0	32.3	100.0	20.8	100.0	41.3	100.0	27.1	100.0
Total	100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0	

Totals may not add due to rounding.

TABLE I-3(B)
Summary Detail of Food Subsidies as a Share of Estimated
Household Expenditures 1979 (%)

Est. 1979 Urban HEL (LE)	I Urban Pop Distrib (%)	II Household Expend (LE/Mil)	III Total Food Sub (A.1&B) as % of II	Of Which:					B. Other % Total
				A. Selected %	1.Total	2.Wheat	3.Fats	4.Sugar	
0-778	26.6	775.4	28.5	24.5	17.5	4.7	1.5	0.8	4.0
779-1113	23.7	881.0	25.5	22.0	15.5	4.5	1.2	0.8	3.5
1114-1782	28.5	1472.5	20.2	17.4	11.7	4.0	0.9	0.8	2.8
1784+	21.2	2213.5	12.5	10.7	6.6	2.9	0.4	0.8	1.7
Total	100.0	5342.3	19.1	16.5	11.0	3.7	0.8	0.8	2.6

Totals may not add due to rounding.

TABLE I-3 (C)
Summary Detail of Urban Energy Subsidies: Distribution Within Selected Household Expenditure Levels (HEL) 1979

Est. 1979 Urban HEL (LE)	% Urban Pop in Each HEL		Total Energy Subsidy (A&B1)		Of Which:														
					A. Indirect		B. Direct					C. Gasoline		D. Electricity		E. Butagas		F. Kerosene	
					%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %	%
0-778	26.6	26.6	15.5	15.5	15.3	15.3	15.7	15.7	32.9	32.9	6.8	6.8	11.5	11.5	5.6	5.6			
779-1113	23.7	50.3	18.1	33.6	18.1	33.4	18.0	33.7	25.6	58.5	16.9	23.7	18.2	29.7	8.7	14.3			
1114-1782	28.5	78.8	27.1	60.7	28.2	61.6	25.9	59.6	26.0	84.5	32.4	56.1	29.5	59.2	15.6	29.9			
1783+	21.2	100.0	39.3	100.0	38.4	100.0	40.4	100.0	15.4	100.0	43.9	100.0	40.8	100.0	70.0	100.0			
Total	100.0		100.0		100.0		100.0		100.0		100.0		100.0						

Totals may not add due to rounding.

TABLE I-3(D)
Summary Detail of Urban Energy Subsidies as a Share of
Estimated Household Expenditures in 1979 (%)

Est. 1979 Urban HEL (LE)	I Urban Pop Distrib (%)	II Household Expend (LE/Mil)	Tot Urban Energy Sub (A&B.1) as % of II (%)	Of Which:					
				A. Indirect		B. Direct			
				Total(%)	1.Total	2.Kero	3.Buta	4.Elec	5.Gasol
0-778	26.6	775.4	23.4	11.9	11.5	6.9	0.7	2.9	0.9
779-1113	23.7	881.0	24.0	12.4	11.6	4.7	1.6	4.1	1.2
1114-1782	28.5	1472.5	21.6	11.6	10.0	2.9	1.8	4.0	1.3
1783+	21.2	2212.3	20.8	10.4	10.4	1.1	1.6	3.7	2.3
Total	100.0	5342.3	21.9	11.3	10.7	3.1	1.5	3.7	2.3

Totals may not add due to rounding.

Annex XIV Urban Egypt (PP.60-83)

IV. SOME OBSERVATIONS - URBAN POLICY APPROACHES

1. Current Egyptian Urban Policy:

4.01 Current Egyptian urban policy contains a mixture of approaches in response to a series of population, employment, economic and social issues. On the one hand, there is an inter-regional strategy to decentralize from the Cairo-Alexandria region expressed in several ways: by promoting free-standing new desert towns; by the emphasis on the reconstruction of the Canal Cities; by assigning Minia and Quena as growth poles; by exploring the possibility of developing Damietta as a counterpart port city to Alexandria and; by fostering population and employment dispersal into many other areas designated under the Five Year Plan. On the other hand, there is an intra-regional attempt in both the Cairo and Alexandria areas towards changing the radial concentric form of high population concentration in the center cities to a polynucleated form of dispersal within each region through the development of satellite cities.

4.02 Each of these approaches speaks to a different set of perceived needs. The decentralization or inter-regional approach addresses what the GOE considers as the most pressing issue facing Egypt today and in the years ahead - namely, the major economic, social and population transformation taking place from rural to urban areas. Moreover, this phenomena, as recognized by government,

is compounded by high rates of urban population fertility rates. Can Cairo possibly cope with an almost doubling of its population to 15 million inhabitants by the year 2000? And at what human and economic costs? What will such hyperurbanization mean to the rest of the country in terms of investments, employment opportunities, equity and quality of life? These are some of the questions underlying dispersal approaches.

4.03 Whereas the intra-regional approach looks to the questions of urbanization and employment from a different perspectives; more recognition is given to the premise that existing urban structures have economies of scale and will quite naturally grow in population and investment. And a corresponding attempt is made towards directing the growth, to a series of satellite cities within the major Cairo and Alexandria governorates - areas which would pose a minimum threat to agricultural land loss.

4.04 Nevertheless, despite these inter and intra regional efforts, it is safe to say that the GOE does not have a coherent urban policy based upon well reasoned analysis of alternative strategies. Rather, separate and often uncoordinated responses, both explicit and implicit, are generated to a series of issues both real and perceived. And, while there may not exist a single spatial distribution of population and employment which would satisfy all of Egyptian society needs, a range of settlement pattern alternatives

which would reflect "trade-offs" among competing societal objectives, urgently needs to be developed. Alternative settlement configurations must necessarily deal with a host of interrelated issues, many of which have been previously stated - the population transformation which is taking place in the country as witnessed by the large movements of peoples out of agriculture towards urban areas and employment opportunity -- is a phenomena, which directly impacts policy strategy options. High natural fertility rates, particularly in urban areas, and a decrease in the mortality rates also add to ever increasing urban difficulties.

4.05 Rather than a static set of inter-intra regional policy objectives based upon incomplete analysis of growth needs and potentials, a more dynamic approach should be developed. This approach would examine the entire range of potential target localities throughout the country. It would investigate their growth potentials and capacities to absorb additional employment and population and the economic social and political tradeoffs between different sets of alternatives.

2. The National Urban Policy Study:

4.06 The NUPS study will fill in several of the information gaps in the urban field. Although, as pointed out previously, much of the work to date is preliminary, a number of base line studies have

been prepared.^{30/} One of the more interesting examinations by NUPS will cover settlement systems. This study will review the historical development of Egypt's settlements, their current status and the special role played by Cairo and Alexandria.^{31/} An urban development standards and cost working paper, as examined in Section III of this Annex provides an important series of costs and investments related to different construction standards. Other studies presently underway seek to develop an understanding of the structure and functioning of the Egyptian government - how ministries relate to one another - and how activities are coordinated and followed-up.

4.07 However, the most significant aspect of the entire effort is the synthesis of this, and other related information in order to generate alternative settlement patterns. The settlement pattern generation (SPG) will establish rank-ordering of localities based

^{30/} Data bases on population characteristics at the national, planning region, governorate, and urban area levels have been prepared. Internal rates of migration and population projections through the year 2000 have also been examined. In the economic arena, a geographic abstract of Egypt's social-economic statistics is being completed which will contain national, regional, and selected local data on employment and labor force, macroeconomic data, agriculture and industry sectors, income distribution and household expenditure data.

^{31/} Landsat data on settlement pattern land utilization is being run for the entire country which will provide useful information on some of the absorption rates of arable land through conversion to urban areas.

upon their growth, population and employment absorption potentials. Estimates would also be made for future infrastructure demand in the target localities for a range of national settlement patterns reflecting "trade-offs" among competing societal objectives.

4.08 An important consideration in generating alternative settlement patterns relates to employment. The NUPS approach assigns non-agricultural investments of plant and equipment to target localities under two major alternatives: 1) under the first alternative, an intra-regional urbanization approach, Cairo would have the major share of the investments assigned to it and; 2) under the second alternative, other regions in the country, not to include Cairo and Alexandria, would receive the major share of the investments using a decentralization or inter-regional urbanization approach.^{32/} It is expected that many of the settlement patterns generated under the SPG will contain mixtures of investment assignments not unlike current national urban policies of both an inter and intra-regional policy approach.^{32/} In fact, current policy will be used as a basis for the generation of one or more series of alternatives.

^{32/} According to NUPS, see PADCO, Inc. Status Report on the National Urban Policy Study, Oct. 30, 1980, pp. 22, actual investment assignments would be based on the following:

- 1) forecasts of national savings and investment at the year 2000;
- 2) industrial investments for the target localities and for the rest of the nation;
- 3) local employment estimates;
- 4) estimates for local labor force; and
- 5) local population estimates via the labor force participation rate.

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4.09 Other variables built into the system will impose different financial burdens on government, such as the need to provide infrastructure to the target localities. The actual financial burden will depend on the development alternative chosen. These, in turn, will be chosen under different assumptions -- from providing new free standing infrastructure to upgrading of existing facilities. Direct and indirect control variables to establish and maintain the generated settlement patterns will be applied in order to obtain maximum effectiveness. Land-use controls and restrictions "push incentives" will be promulgated to prevent further industrial development in the primate city. "Pull incentives" to promote population and economic activity to target localities will also be developed.

4.10 The next step in the process is the introduction of constraint and sensitivity analysis (CSA), for financial, construction and administrative resources. And, finally, an impact and evaluation operation will examine the total costs of the constrained alternatives and their expected impacts. This process, although extremely judgemental, will discriminate amongst settlement strategies. Developmental and overhead costs, as well as other costs, i.e., air and water pollution, congestion, travel time, etc., will be evaluated. In addition, ratings will be developed on the impacts of various settlement strategies on national economic growth and efficiency, on spatial distribution of consumption, and on public participation in government.

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4.11 The National Urban Policy Study is developing much needed demographic, economic, social, administrative and settlement pattern data on Egypt. Its methodological approach to the generation of alternative national settlement patterns will provide an efficient tool to test a series of different settlement mixes under varying assumptions. A range of assumptions will be made on different development standards, costs, and impacts, on various settlement incentives, and on political and administrative feasibility. In contrast to the present ad hoc decision making, the NUPS approach, if used wisely, can significantly add to the GOE's urban policy decision making capability. It will present a much wider range of settlement pattern choice indicating costs, impacts and necessary trade-offs.

4.12 The NUPS settlement pattern generation needs GOE interaction. Critical questions regarding infrastructure types and standards, the elimination of high risks and preferred alternatives are inputs which would greatly enhance the quality and feasibility of the final alternatives presented. This will not be possible without an open and continuous process of GOE involvement during the generation of alternatives. There is no "right" answer but a series of informed choices. GOE will have to select an urbanization settlement pattern based upon the criteria and weights which it gives to the several trade-offs presented for each alternative. This cannot be done for government - it is a GOE decision. Effectuation of any chosen policy

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will require high level commitment. Urbanization policies fail because they often tend to simply concentrate on problems of urban decentralization and ignore the fact that national economic problems such as trade, industrial and infrastructure policies provide strong implicit incentives in factors of location.

4.13 Change and adjustment are integral parts of the NUPS alternative settlement pattern generation model. The model is dynamic able to reflect input changes on certain variables as to their effect on the entire system. Consequently, decision making should be approached in an open manner. Urban policy is complex. Decisions should not be frozen at any one time; rather they should respond to changing circumstances and reflect new data. For example, the NUPS generation of alternative settlement patterns may suggest that the cost of developing new settlements under an inter-regional strategy approach are very high. Other considerations such as possible agricultural land loss, higher maintenance costs, etc., once added to the mix, would give the GOE a more total picture upon which informed decisions could be made. Inputs, costs, etc., may change over time and the urban policy should be able to respond to these changes. This means that the data and information base upon which decisions are made needs to be kept current; some form of policy review and appraisal should be part of an ongoing process.

4.14 USAID needs to insure that the data and information base upon which decisions are made is kept current and that policies are reviewed,

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evaluated and updated on a continuous basis in light of changing circumstances and feedback. The Advisory Committee set up to monitor the study can play an important role if it is also charged with the maintenance of the data base and its periodical updating and review. In addition to the National Urban Policy Study, USAID is supporting a series of other efforts which merit attention as to their impact on urban policy. These efforts include studies on informal housing, land use and infrastructure, housing finance and provincial cities.

3. Other Studies:

4.15 Informal Housing: The informal housing construction sector has great vitality. As contrasted to the public sector, housing census data provided by CAPMAS indicates that informal housing currently provides the largest share of the shelter needs of low income families often at one half (or less) the capital cost of similar public construction. However, more precise information on the actual contribution of this sector in meeting housing needs is not available. The types of infrastructure provided, the costs, financing mechanisms and abilities to pay for this type of housing, is not fully known.

4.16 A study is to be conducted for Cairo and one provincial city in Egypt in order to compare the characteristics of the housing supplied by the informal sector with housing supplied by the formal private and public sectors. Comparisons will be made for costs, rates of production, physical characteristics, levels of direct and indirect subsidies and the number of population housed. In addition, the study is expected to

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describe a series of housing market factors. These would include several items: waiting time to secure informal housing, actual amounts spent by renter and owners, linkages between formal and informal markets, and the advantages and disadvantages of the process in terms of physical characteristics of the housing provided, service adequacy, and costs.

4.17 An important aspect of the study is to recommend various means or alternatives which would incorporate the vitality of the informal housing supply process into an overall approach to improve the availability of shelter for low income families. USAID anticipates that this study together with USAID-funded Cairo University/MIT project--which provided background on construction methods in the informal sector--will help the GOE provide housing at less capital costs. Some of the most significant aspects of this study will relate to two other USAID sponsored studies: the availability and cost of land and infrastructure and, the availability and cost of housing financing.

4.18 Land and Infrastructure: Much of the urban increases in Cairo and in other cities in the country consist of very low income households without adequate access to land, infrastructure and housing. The major issues are of both a supply and demand nature. The supply question deals with the capacity of the private and public sectors to meet present and anticipated needs for land infrastructure and housing; the demand question involves the ability of potential buyers to purchase housing considering the lack of an adequate mortgage system.

4.19 Observations on the private building industry both formal and informal, including individual families building their own units suggests that significant impacts on urban housing deficits can be made through

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these processes. However, much depends on the availability of land and infrastructure facilities. Water, sewerage and electricity must be made available in a timely fashion on the growing periphery of urban areas. Other vital services of health, education, public transportation and employment opportunities, are also necessary to ensure the development of sound communities.

4.20 The land use/infrastructure study for the Cairo metropolitan area which will first establish the potential available lands for housing by examining ownership patterns for both agricultural and non-agricultural lands in and around the metropolitan area. These lands will then be evaluated specifically as to their suitability for the construction of low and moderate income housing. Particular attention is to be given to the opportunity costs of using agriculture lands as a land resource base in those instances in which non-agricultural or desert lands may not be available or of sufficient quantity to handle population needs. The study will examine the adequacy of Cairo's existing urban procedures, and land regulations to meet urbanization needs. It will identify the feasibility and desirability of USAID's assistance to the metropolitan area in terms of financial support assistance for an existing institution or support to establish a new one. The institution would be changed with assembling and servicing predominantly vacant non-agricultural land to be sold or leased to the private market for low/moderate income housing development over the next ten to twenty year period.

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4.21 Housing Finance: As previously mentioned, the major issues in dealing with urban housing problems are those of a supply and demand nature. Questions on the supply side are largely being examined under the informal housing study and land and infrastructure studies as outlined above. The effective demand of buyers and the workings of the housing finance system both formal and informal also deserves specific attention. The Government of Egypt has been producing low priced public sector housing at highly subsidized prices.^{33/} Yet, this output represents only a fraction of the country's housing production. Private builders, both legal and non-sanctioned builders, are responsible for the vast majority of housing production in Egypt. Housing finance, its types and quality affect what is produced and its affordability on a non-subsidized basis to low income urban households.

4.22 A housing finance study is to be undertaken which will develop information on both the public and private, formal and informal housing finance systems. It will examine the present operation of the system and suggest ways by which it can more effectively increase the production of affordable non-subsidized housing for the urban poor. The study will describe the Cairo housing finance system through all phases of shelter development. It will assess the strengths and constraints of major

^{33/} MIT housing studies estimate that subsidies in Egyptian public housing run between 50 and 90 percent of real costs.

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sources of housing finance, the financing techniques employed, and the process of capital mobilization. In particular, the study will identify points of entry into the finance system identifying ways to increase the effective flow of unsubsidized capital into housing construction where AID's funds could be used to the greatest advantage for the lower quartiles of Cairo's population.

4.23 Provincial Cities: If the thrust of national urban policy over the next several decades is to slow the rate of growth in Cairo and Alexandria and to increase the rates of medium and smaller towns, especially the provincial capitals, greater emphasis must be given to means of equipping these target areas to act as growth and service centers for the urban hinterland. And while the goals envisioned under the decentralization Law 43 of 1979 are to bring more decision making to local governments, the effect has been very uneven among governorates. Most governorates and their provincial capitals continue to heavily rely on technical inputs from central ministries; they rely almost entirely upon central government funding for the provision of urban services.

4.24 USAID is supporting a provincial city study which will develop an informational base in the three major cities of the Governorates of Fayoum, Beni Suef and Minia. The study is to determine how physical infrastructure facilities are planned, budgeted, financed, designed, constructed, and maintained with particular attention to the interrelationships of governorates, central government, public organizations and municipalities. The study will ascertain the local

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abilities to undertake infrastructure activities and identify one or more possible projects in each city. This effort is to be followed by implementation of identified projects which would provide the municipal governments in the three provincial cities with capital and Egyptian A&E services for basic city infrastructure. It may also include technical assistance and training necessary to accelerate project implementation at the provincial city/regional level.

4.25 Urban Neighborhood Services (UNS): The urban neighborhood service program for Cairo and Alexandria seeks to improve the capacity of city government to respond to urgent physical and social needs at the local level. In some ways it may be considered the metropolitan complement of the provincial city effort. Its goal is to assist in the decentralization process by providing funding to local levels of government for needed infrastructure. However, as contrasted to the provincial city effort, the UNS Program will support infrastructure of a more free standing nature. The effort seeks local involvement to the maximum extent possible in identification and assessment of needs, planning and project execution, self-help, local employment generation and on-job training. The UNSP will build initiatives on the part of the Egyptian Government administration at the governorate level both in Cairo and Alexandria to more effectively meet the needs of their respective populations. A campaign to improve streets, parks, and the general environment is presently underway in both Cairo and in Alexandria to restore the urban fabric of these cities which has eroded due to the neglect and general lack of maintenance. The UNSP seeks to assist and

augment Cairo's and Alexandria's plans for city betterment.

4.26 In order to respond to immediate needs, as well as to ensure efficient use of resources, an initial demonstration effort is to be undertaken in the Cairo and Alexandria Governorates. The purpose is to test the acceptability of the proposed approach and to help to establish final program design. Eligible activities under the program would include improvements, repair and maintenance to the following: local streets; sewers; water lines and public fountains; public buildings; garbage collection and disposal facilities; and similar locally advocated activities. While no major equipment purchases are to be provided under the demonstration grant, the larger project may include commodity imports.

4.27 USAID's Role: At this point the question can be raised as to USAID's appropriate role in urban policy? Just as there may be no one correct answer to urban policy but a series of alternatives involving choice between trade-offs -- there should be no single USAID response but rather a series of mutually reinforcing responses. USAID is seeking broad interests in order to avoid becoming too closely identified with a narrow policy, class interest or objective. Continued emphasis is being placed upon raising the standard of living for all Egyptians, and helping to establish a sense of national security and equity.

4.28 Sufficient evidence exists in developing countries which suggests that there is a general relationship between the degree of settlement concentration and economic efficiency and equity -- more

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concentrated settlements tending to be more productive of national growth and more dispersed strategies more equitable. Moreover, the structure of settlements either a major metropolitan area or the degree of polynucleation may influence the trade-offs between the efficiency of concentrated patterns and the diseconomies of agglomeration. Consequently, the task of choosing between these alternatives is a GOE decision which needs to be supported by a coherent set of USAID programs. In addition, national urban policies involve linking explicit elements of development policy to spatial priorities as well as sectoral priorities. At present these elements are not linked in any meaningful way. Furthermore, implicit policies may require modification in order to accomplish explicit purposes of national urban policy. USAID's role thus becomes one of helping to clarify and structure the policy issues for GOE consideration.

4.29 While major destabilizing policy shifts should be avoided -- specific gains must be made in developing a more effective tax system on the one hand and checking increases in regressive subsidy programs on the other hand. Egypt has made great economic strides over the past few years. In 1980 it had an annual 9 percent GNP increase and a growth of employment rate of 3.5 percent which has outpaced its rate of population growth of 2.8 percent. Its investment of 23 percent of gross domestic product is exceptionally high and a 1.5 billion dollar balance of payments surplus for 1980 have been very positive economic signs.

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Nevertheless, Egypt is still a poor country with a swollen and inefficient public sector which accounts for 75 percent of the country's output, a 2.5 billion dollar direct subsidy program, and a fragile natural resource base. Its agricultural land areas are extremely limited, making it a net importer of foodstuffs and grains. Its oil energy reserves, although presently in surplus, will only be sufficient to meet internal consumption within the decade. Consequently, Egypt needs careful management. It cannot afford waste and inefficiency in its human and natural resources.

4.30 USAID's portfolio of projects and activities is to be reviewed in light of a national settlement strategy. In particular, some attention is being given to a redefinition of projects away from a strictly rural/urban focus to a broader classification by geographic region. It may be more useful to have projects identified as impacting on, for example, upper or lower Egypt, the Delta, the Canal area or the metropolitan areas of Cairo and Alexandria, etc. Ideally, USAID's activities should be based upon an accepted national development settlement strategy based upon a careful consideration of the country's potentials as well as its limitations. And added attention needs to be given to an evaluation of the geographical/population impact of projects.

4.31 USAID sees its role as informative and supportive. The several research efforts as outlined above should bring more intelligence to the decision making process and help to shape projects to compliment stated

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GOE goals. Projects which augment the supply of housing by providing institutional changes in land assembly and servicing and those which assist the demand side by developing new sources of housing finance and credit can measurably increase the quality of life for low income families, decrease the dependency upon the informal sector and bring more rationale to land use planning. And success of the provincial city and other decentralization efforts to build sounder administrative, project identification and implementation capacity at the governorate and secondary city level, should measurably improve basic needs and in turn support decentralization strategies. Nevertheless, since several structural problems remain in the system, USAID's role is also one of informing and cajoling the GOE to take corrective action where necessary.

4.32 Decentralization is an espoused goal of the Egyptian Government. Law 43 of 1979 gives added decision making authority to governors. But one of the most glaring deficiencies in this process is the lack of a viable means of local financing. Governorates, markazs, towns and villages are dependent upon funding for infrastructure development and maintenance, housing, schools, hospitals upon the central government. Yet, central funding for local needs is never ample; only 10-15 percent of local budget needs are met. Elaborate budget making processes are engaged in each year by towns, markazs and villages, approved by their respective governorates, only to be severely cut by central government - a highly demoralizing exercise for local

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government. As long as this ritualistic and futilistic system continues, a truly decentralized government structure is not possible. Efforts are underway to give local government more adequate financing. The Organization of Reconstruction and Development of Egyptian Villages, ORDEV, provides direct financial assistance to help municipal councils develop income generating projects. This turns out to be a very meager support for local needs -- other avenues of revenue such as property taxation must be developed.

4.33 The inadequate and archaic Egyptian property taxation system is well known. However, its particular relationship and impact on decentralization may not be fully appreciated.^{34/} Just as solid urban financing is a necessary cornerstone for decentralization -- the property tax is one of the most important ingredients for the generation of local financing capability. Proper taxation is a viable means of generating local revenue in developed countries; it is also becoming as important in many LDC's who find that it can be levied without being an unnecessary burden on the poor. Care is needed that it does not act as a disincentive to housing supply - greater emphasis needs to be placed on higher taxation on vacant or underutilized urban land and not on urban

^{34/} For a fuller discussion of this subject, see Peter W. Amato, "Urban Policy Overview Document: Findings and Recommendations"; AID Contract NE-C-1632/Egypt. August 1979, p. 73-75, unpublished mimeo. See also Report of the Joint Land Policy Com, GOE/USAID, Urban Land Use in Egypt, August 1977.

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structures. USAID is concerned with these issues and will ascertain GOE's interest in an examination of the property tax. If necessary it may consider supporting a pilot effort to explore the parameters involved and the usefulness of a project in this area.

4.34 Transportation policy - its role in the welfare of the urban poor and in national settlement - has not been elaborated upon. Urban transportation provides the link between residences, employment and amenities as well as between consumers and producers in urban areas. Transport demand and cost will vary directly with city size making these factors increasingly more important as cities become larger. Inter-urban transport networks link cities and economic regions together. Their capacities and efficiencies become increasingly important under decentralization strategies which call for the dispersal of economic activities and populations to secondary and tertiary areas in the country.

4.35 USAID's transportation involvements have been limited to commodity imports such as earth moving equipment for highway construction and transport vehicles including town's trucks and buses. It has also supported a series of joint Cairo/MIT university studies on traffic flow in Cairo. However, USAID has looked to other major donors, particularly to the IBRD for larger transport studies and highway and road network construction and maintenance financing. The IBRD has developed a list of

project components and costs as follows:^{35/} central Cairo area and corridor improvement schemes; junction improvements for the Cairo and Giza Governorates; support to public transport for the Cairo Transport Authority (CTA), and the Helipolis Metro's tram operatiin; support to Para-Transit Operations; environmental road surfacing; support to traffic pllice of the Cairo, Giza and Kalyoubia Governorates, and technical assistance.

4.36 At this point USAID is particularly interested in coordinating its activites on national settlement policies with other donor activities in the transportation area in order that idividual efforts will complement one another. Moreover, it may become more appropriate, for an enlargement of USAID's involvement in the transportation area, both of an intra and inter-urban nature, in order to support its other projects including a national urban policy strategy. The NUPS program will examine transportation systems and constraints. It will study existing transport networks, the functional relationships and interactions between them and the national and regional urban patterns. This would include the impact of transportation on the direction of development. It may be expected that certain priorities and projects

^{35/} See AIDE Memoire, IBRD, Second Egypt Urban Development Project, Cairo Transport Component, November 14, 1978, updated as of January, 1980, mimeo, unpublished.

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will be developed out of the NUPS effort for GOE and USAID's consideration.

4.37 Discussions on a toll road between Cairo and Alexandria have taken place over the past year. However, these decisions have been very informal and no precise documentation has been presented on alignments, standards of construction, and relationship to the existing agricultural and desert roads. Although a very preliminary review would suggest that an upgrading to the existing desert road would be the more practical solution, a well laid out toll road available to traffic and trucking on a 24-hour basis with adequate road services and limited access may be worth careful appraisal. Although it would significantly increase the primacy of the Cairo-Alexandria region, it would also provide easy access for land extensive activities including warehousing and manufacturing and create a new employment corridor.

4.38 The NUPS, as part of their final submission, will prepare an Urban Management Handbook. The purpose of this Handbook is to provide direct and useful information to sub-national levels of government concerning their perspective and role in National Urban Policy and Urban Management. The Ministry of Planning has recently solicited AID's assistance in training at the regional level intending to incorporate regional "space planning" into long established financial and developmental planning approaches. Regional Planning Offices have now

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been established in eight sub-economic regions of the country. Each regional planning office is headed by an Undersecretary of State for Planning assisted by a small, generally untrained staff. Under USAID's Decentralization Programs, possible assistance to Egypt's regional planning offices is being considered.

4.39 USAID's needed role in the training of professionals at the regional, governorate and city/markaz level is becoming increasingly more evident. Such training should consist in but not be limited to the following: urban development management; urban and regional planning; housing; urban economics; traffic and transportation planning; urban information systems organization and analysis and; project financial planning and management.

Egyptian urban planners have few national training centers available to them. Both Cairo University and the American University of Cairo provide very limited training in the above areas. Given the national urgency in the whole complex field of urban development, a two prong approach may be considered. One approach would be to set up an in-country training effort employing as many Egyptian professionals as possible and provide fellowships for the few outstanding candidates to study in the U.S. Another parallel need would be to train Egyptians to develop the necessary skills to eventually teach locally in the urban planning and development fields. This latter approach would necessitate teacher training exchanges and assistance to develop local educational institutional capabilities.

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4.40 Both of the above approaches will be needed for the strengthening of urban development capacity at various levels of government. Urban development planning, capital budgeting, project identification and appraisal, and coordinated urban investment programming all call for highly developed technical skills. In the long run, Egypt must look to its own professionals for the provision of such urban development skills. And USAID would provide a much needed service in assisting Egypt in meeting these vital need through necessary financial and administrative assistance.

Annex XV Manpower and Employment *(PP.31-88)

*Important - Because this Annex draws upon draft ILO documents that are not yet publicly available, distribution should be limited to U.S. Government Agencies and Multilateral Donor Agencies to which the U.S. Government contributes. When providing the CDSS to other than these organizations, the excerpts included here should be removed.

IV. REVIEW OF CURRENT DEBATE AND ANALYSIS

4.01 This section of the paper will attempt to do two things:
(i) define the range of current debate on employment and labor force by degree of controversy and (ii) briefly summarize selected current analyses, including the available draft submissions of the ILO Employment Strategy Mission to Egypt.

A. State of the Debate

4.02 An attempt is made in this portion of the paper to order the many elements of the current discussion on Egyptian employment and labor force by the degree of apparent controversy. In reviewing the current literature it becomes rapidly clear that a number of factors with varying degrees of certainty/controversy are cited as key to understanding/predicting magnitudes and rates of change in

Egyptian employment and labor force. Hopefully, a sorting out of some of these factors by degree of their controversy may assist in focusing attention on the more relevant areas of policy concern. This review of "the debate" is organized into three parts: (i) areas of concensus/absence of controversy, (ii) areas of uncertainty, and (iii) areas of controversy.

1. Areas of Consensus/Absence of Controversy

4.03 Nine areas of Egyptian labor force and employment seem relatively non-controversial: (i) the rural-urban transformation, (ii) the agricultural/non-agricultural transformation, (iii) trends within the non-agricultural sectors, (iv) growth of public sector employment, (v-vii) trends in educational status, occupational status and employment status, (viii) degree of seasonal unemployment, and (ix) wage trends by sector of economic activity.

4.04 Rural-Urban Transformation: The rapid urbanization of the Egyptian population and labor force is undisputed. Only the present degree and rate of change is open to question. The latest sampling estimates indicate the urban sector accounted for 44.2 percent of the population and 44.7 percent of the labor force in 1978, and is probably growing at a rate 3-5 times faster than the rural sector. It appears generally accepted that the urban sector will absorb most new growth in total population and labor force in the coming years; largely by force of necessity, partly because of the inherent urban bias in government policies.

4.05 Agricultural-Non-Agricultural Transformation: Agriculture, although still the principal employer in the economy, has not

generally been a significant source of new employment since 1947 (Segal: 1980). Sample estimates indicate the agricultural labor force declined both relatively (54.2 % to 42.1 %) and absolutely (493.7 thousand) from 1971 to 1978. Apparent absolute increases in the agricultural labor force 1960-76 (census data) are probably explained in part by treatment of military conscripts drafted from rural areas (Hansen: 1980a). Lubell (1980) states the size of the agricultural labor force has been in absolute decline since its secular peak in 1972. It appears generally accepted that agriculture will continue its decline in relative importance and is unlikely to be a source of significant new employment in the future.

4.06 Trends Within the Non-Agricultural Sectors: There appear to be no serious disputes that services, manufacturing, construction and unspecified have been the principal source of new employment by sector of economic activity in the seventies, nor that the fastest growing sectors have been unspecified, mining and quarries, electricity, gas and water, and construction. It is generally believed that some of the growth in manufacturing employment and much of the growth in services employment actually represents "excess" employment generated by government hiring policies. The implications of rapid growth in the unspecified category have not been generally examined, although the category seems to be treated as casual labor, unemployed, or as part of the informal employment sector (Abdel-Fadil: 1980).

4.07 Growth of Public Sector Employment: Although there is general agreement that the public sector, defined to include

administration, authorities and enterprises, has grown quite rapidly during the last two decades, statistical evidence is incomplete. Excluding public enterprises and not counting military conscripts, the administration and authorities components alone of the public sector apparently accounted for over 45 percent of increases in the labor force and 55 percent of all new employment in the period 1960 to 1976 (Hansen: 1980a). Military conscripts, which are treated as part of the labor force in their sector of economic origin in Population Census data, are believed to have increased by several hundred thousand over the same period. Hansen (1980a) would suggest a net increase equivalent to approximately 9 percent of total employment increases. Data on public enterprise growth for the same period does not appear available. However, the nationalization that occurred during the early 1960's would seriously bias growth of public enterprises upwards even if it were available. Excluding public enterprise employment in their entirety, public administration, public authorities and military conscripts may have accounted for more than half of labor force increases and close to two-thirds of employment increases during the period 1960-76.

4.08 Total public sector employment in 1976 was 2.75 million, including public sector enterprises (963 thousand) but excluding conscripts, and represented slightly more than half of the non-agricultural labor force (Handoussa: 1980). Ministry of Planning estimates for 1979 show the "public sector" (undefined) to account for 36.3 percent of total employment and 59.5 percent of non-agricultural employment (Appendix Table 1.9). Hansen (1980a)

estimates that the source of 66.5 percent of net increases in employment (47.1 percent of gross) 1971 to 1978 was employment in public sector administration and public authorities. A substantial part of remaining growth would almost certainly be found in public enterprises which make up the bulk of the manufacturing sector that accounted for 33.3 percent of net (23.3 percent of gross) growth. Thus, including administration, authorities and enterprises, the public sector may well have accounted for almost nine-tenths of net increases in employment 1971-78, and two-thirds of gross, without taking into consideration military conscripts.^{19a/}

4.09 Although there is relatively little substantive consideration of the role of the public sector as the source of new employment in the literature, neither is there dissent that public sector employment is rapidly assuming the role of major employer in the non-agricultural sector or that the bulk of all new employment in the economy in the 1970's has been located in the public sector. No one seems to be making predictions on future trends but there is some evidence

^{19a/} Public sector manufacturing accounted for 60 percent of total manufacturing employment in 1966. If we assume public enterprise manufacturing employment increases were 60 percent of the total 1971-78, then the public sector accounted for 86.4 percent of net and 61.1 percent of gross increases in employment 1971-78. Handoussa (1980) shows public enterprise employment grew at 4.8 percent in 1977 and 8.0 percent in 1978 while Table 3.2 shows that manufacturing employment grew at only 3.3 percent in aggregate (1976-78). This, coupled with early 1970's pro-employment policies for public enterprises, suggests that the public sector as a whole probably accounts for close to nine-tenths of net and two-thirds of gross increments to employment for the period 1971-78.

that government hiring policies have begun to change.^{19/}

Nevertheless, it would take exceptionally strong economic growth in the non-agricultural private sector to reverse the trends that have been established. Government will probably see no alternative but to continue in its role as the residual employer.

4.10 Trends in Educational, Occupational and Employment Status:

No one seems to dispute that the overall educational status of the labor force is improving or that improvement is relatively (but not absolutely) greater for females than males. It is generally agreed, in spite of the unusually rapid increases in formally educated females, however, that underreporting of illiterate female workers in agriculture has tended to materially distort labor force statistics on female educational status.

4.11 No one seems to dispute the rapid growth in professional and technical, administrative and managerial, clerical, or unclassified occupations. Nor is the low growth in agriculture questioned except to the extent that Hansen (1980a) implies that even the low growth in that sector (1960-76 population census data) is probably overstated because of the inclusion of military

^{19/} Hansen (1980b) notes that the rights of military conscripts to guaranteed government employment was apparently abrogated in 1978, although not clear if retroactive to include current conscripts. He also noted that university graduates are no longer guaranteed employment in public enterprises and that the guaranteed employment policy might be in jeopardy. President Sadat publicly reaffirmed guaranteed employment to university and technical graduates December 1980, directing, however, that new employees apparently be assigned to the rural governorates. Lubell (1980) confirms that military conscripts lost their rights to guaranteed government employment in 1978.

conscripts in their sector of origin when drafted. On a smaller scale, the growth in agricultural workers is probably understated (1960-76) to the extent of the relative underreporting of females in the 1976 census.^{20/} It is generally agreed that females are rapidly assuming far more than their proportional share of white collar and professional positions.

4.12 Finally, no one disputes the clear shift away from the economic status of unpaid family worker and self-employment to that of wage employee (1960-76). What has been disputed is the significant increase in unemployment during that period. The question of unemployment will be covered later in this section, however.

4.13 Degree of Seasonal Unemployment: It appears to be generally agreed that seasonal unemployment in urban areas is essentially nil and is not significant in rural areas (El-Issawy: 1980, Hansen: 1980a, and Lubell: 1980). Estimates of rural seasonal unemployment have not been offered in the literature reviewed, although it is generally argued that completion of the Aswan High Dam (and associated cropping changes) plus a tendency toward late

^{20/} It is important to note, however, that Youssef (1980), Hansen (1980a), Lubell (1980) and many others would disagree on the absolute levels of female participation recorded in agriculture whether in 1960 or 1976. While relative growth in agricultural employment may be slightly understated for 1960-76, the absolute levels of employment are believed to be materially understated throughout.

cultivation has materially reduced seasonal lulls in employment. The 1978 Labor Force Sample Survey estimated seasonal employment in rural areas at 0.8 percent and urban areas at 0.9 percent of their respective labor forces. However, since the survey is taken in May which is an agricultural peak period, it allows no meaningful conclusions to be drawn on seasonal unemployment at slack times of the year.

4.14 Wage Trends by Sector of Economic Activity: Although there appears to be less than unanimous agreement on how closely wage trends have followed productivity trends, there does appear to be general agreement that average wages by economic sector have relatively, and in some cases, absolutely narrowed between 1960 and 1976. There is some belief that wages for unskilled labor in construction, manufacturing and agriculture follow closely together in the late 1970's (Hansen: 1980b; Lubell and Abdel-Fadil: 1980). It is generally believed that private sector wages are closing the gap with public sector wages (Hansen: 1980b). Estimates of real wage increases are mixed but generally indicate little or no improvement. CAPMAS wage data is not available for later than 1976.

2. Areas of Uncertainty

4.15 Areas of uncertainty must certainly number as the grains of sand. Nevertheless, we have limited ourselves to four: (i) female participation rates, (ii) the informal employment sector, (iii) the rate of natural population increase, and (iv) "the future."

4.16 Female Participation Rates: As noted many times earlier, it is generally agreed that female participation in the agricultural labor force is underreported in 1976 as compared to 1960. However,

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what is less certain is the general degree of underreporting of female participation in the economy as a whole, both for cultural and methodological reasons (Youssef: 1980).

4.17 Culturally, it is generally known that the status of a non-employed Moslem female is considered superior to the status of an employed female, except in the professional and possibly white collar occupations. This is known to lead to underreporting, particularly among the less educated and in the rural areas. Methodologically, underreporting may occur simply because certain tasks females perform in agriculture are not defined as employment, possibly because they are varied and not full-time. Complicating the delineation is the simple fact that much of female labor force participation is almost certainly in a non-wage family employment status, thus making it somewhat easier to ignore.

4.18 Taken together these three factors may suggest substantial underreporting of female labor force participation in the rural sector and possibly some underreporting in the urban informal sector. This also suggests that analyzing changes in the agricultural labor force (reported as 98 percent male) may be somewhat complicated, particularly if unreported female participation tends to respond in compensating fashion (Lubell: 1980).

4.19 Informal Employment Sector: Abdel-Fadil (1980) and Lubell and Abdel-Fadil (1980) apparently have made a first attempt to define and estimate the informal employment sector in Egypt. El-Issawy (1980) in his attempt to define and estimate "employment

inadequacy" inevitably subsumes the informal sector. Hansen (1980a) simply defines it "...by definition those parts of the economy about which systematic data are missing," and suggests that "reference to such sectors is therefore nothing more than delineation and acknowledgement of our ignorance ...", "...black spots on the map..."

4.20 Getting a grip on the informal employment sector poses several problems. To begin with, definitions are rather fuzzy. Abdel-Fadil (1980) appears to grope through several pages and revisions before settling on a statistically pragmatic definition by page 8. Lubell and Abdel-Fadil (1980) define informal sector employment within the first paragraph using an ILO definition. Nevertheless, a definition which says the informal sector has one or more of six characteristics but none of which appear sufficient to guarantee inclusion, still leaves a great deal to be desired.^{20a/} In effect, it may be difficult to define the informal sector, but you'll know it if you see it.

4.21 A second difficulty which arises is that the more likely a person is truly part of the informal sector, the less likely that person has been counted. This is because the unit of analysis for a household census (i.e., the Population Census) is the household and the unit of analysis for a business census (e.g., Census of

^{20a/} The ILO definition does get the idea across, however. The informal sector is defined as a collectivity of micro enterprises possessing one or more characteristics that distinguish them from the more organized, "modern" sector, including: (a) small scale of operation, (b) ease of entry, (c) use of indigenous technologies and local materials, (d) family participation in enterprise, (e) lack or access to direct subsidies and other government support measures, and (f) a partly compensating lack of identifiability by government for regulatory and tax purposes.

Establishments), is a business establishment, in particular those with 10 employees or more. In either case a fixed location usually with some sort of physical structure, is implied. Although this problem is recognized (Abdel-Fadil: 1980; Lubell and Abdel-Fadil: 1980) no estimate of its effect on the size of informal employment is attempted. Given the estimates of possible tomb and roof dwellers that were probably not included in the 1965 Population Census in Cairo alone, the size of the non-agricultural informal sector could be drastically underestimated, even at 1.5 million (Lubell and Abdel-Fadil: 1980).

4.22 In sum, the size of the informal sector, with its basically insecure employment and uncertain incomes, is highly uncertain.

4.23 Rate of Natural Population Increase: Although population growth has not generally been at the center of discussion in the literature reviewed, it inevitably lurks in the background when long-term future scenarios are contemplated (Rapid: 1980; Segal: 1980; Tsui: 1979). The rate of natural increase (birth rate minus the death rate) is believed to have shifted from 2.8 percent (1952) to 2.62 percent (1960) to an average 2.31 percent (1966-76) to 2.6 percent (1976) to 2.8 percent (1978). The death rate is believed to have essentially fallen throughout the period. Thus, although the birth rate has clearly fallen, and at times more rapidly than the death rate, in net terms the rate of natural increase appears to have returned to its higher levels.

4.24 Various explanations have been offered for the fluctuating birth rates, ranging from long-term factors such as increasing

urbanization and educational status, particularly of females, to short-term, probably transitory, factors such as war-time mobilization and external migration. The former factors probably account for a true structural shift of the birth rate to below earlier historical levels, the latter for the fluctuations over the transition period. What is not so certain at this point is whether the transitory factors are still working out their efforts or whether we have a true picture of the current underlying (longer-term) birth rate. In either case, but particularly the latter, the pessimistic implications for probable future labor force size and employment requirements are obvious.^{20b/}

4.25 The Future: The discussion on the rate of natural population increase did not by accident just happen to precede this topic. Indeed, any long-term employment strategy for Egypt would be seriously deficient if it did not explicitly include a population strategy.

4.26 Nevertheless, with few exceptions, the current literature chooses to analyze the past, occasionally makes a guesstimate on the present, even less occasionally offers a prediction on the near to mid-term future and rarely looks beyond 1985.^{21/} Under these circumstances it is not difficult to understand the low priority

^{20b/} Rapid (1980) estimates a population of 69.5 million by the year 2000, assuming constant fertility, and a labor force of 24.1 million. The latter assumes a modest increase in the participation rate.

^{21/} The notable exceptions are Segal (1980), Rapid (1980) and Tsui (1979), although the latter two are more general examinations of population impact on a number of factors, including labor force and employment.

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accorded population growth. The future labor force for most scenarios has simply already been born.

4.27 The size of the future labor force and its sources of employment, when writers do turn to it, is generally alluded to in a rather vague, non-assertive, partial analysis type manner.

Discussion is most likely to be focussed on the near to medium-term and limited to speculations on repatriation of gulf-state emigrants (Chocri, et al: 1978; Birks and Sinclair: 1979; and Mohie-Eldin: 1980), concerns on continuing foreign exchange availabilities and the level of effective demand in the economy (Hansen: 1980c).

Taylor and Sabot (1980), however, more formally consider each of the above factors in a 12-sector general equilibrium model that suggests that the level of effective demand is the most crucial variable in the near to mid-term (1976-86), followed by foreign exchange availabilities and trends in external migration. Taylor and Sabot conclude their "...results caution against undue optimism...", "...that even moderate declines in export and investment growth could rather quickly revert the (favorable) wage and unemployment trends of the (early) 1970s," "...that as long as Egypt's population continues to grow rapidly, extraordinary growth of demand aggregates will be required to avoid yet another period of wage stagnation or decline." Hansen (1980b; 1980c) would apparently arrive at the same ranking with more intuitive reasoning but with much more stress on foreign exchange availability as the key to policy flexibility, including effective demand management. Clatanoff, et al (1979) concern themselves solely with estimating manpower requirements by

profession (1979-84 and 1979-89) in order to assist planning for education and training. They readily admit a whole series of problems with their forecasts, including the total non-consideration of emigrants and their potential repatriation.

4.28 For the longer term, few of the determining factors dictating the source of new employment were openly considered. In general, writers seemed to shy away from the subject, perhaps largely because their mandate was viewed narrowly as the examination of the past and immediate present, perhaps in part because writers feel more comfortable dealing with stabilization rather than growth questions, and perhaps partly because no one is prepared yet to vocalize what may be over the horizon, particularly when the current "labor shortage" can be touted instead.

4.29 Labor force supply projections are far more likely to be encountered than suggestions on the source of new employment (Rapid: 1980, Segal: 1980), and where source is considered it is generally done in such facile fashion as to be essentially useless (Clatanoff, et al: 1979; and Tsui: 1979). Lubell (1980) begins an exploration of sources of future employment that trails off after making three or four initial speculations. The essential problem that none of the writers seem to squarely face is whether a system premised upon public sector employment for possibly two-thirds of all new entrants to the labor supply over the last 20 years can long endure. Excess public employment is already considered massive by some (Hansen: 1980a), even among some public sector enterprises (Handoussa: 1980). Taylor, et al: (1980) suggest that the effects of an idle or

underemployed work force are neither insignificant nor necessarily transitory. Workers, unlike machines, are affected by their idle counterparts and skills tend to depreciate if not used.

4.30 But the crucial question upon which a continuing long-term public sector employment policy must ultimately rest is whether the private sector consumes more than it produces. If it does and it is as large as Egypt's, it inevitably runs the risk that it will reach a point where it can no longer sustain itself merely through internal resource transfers, via price, tax and regulatory policies, or through external resource transfers, via long-term loans and grants. In other words, the question rests on whether the economic system, which is largely based on public sector control in the non-agricultural sector, can provide the necessary levels of savings and investment implied by increasing levels of labor supply, without genuine productivity increases within the public sector itself. Handoussa (1980) finds positive signs in her examination of recent public enterprise performance (1976-78) and feels that obvious "surplus" employment is relatively low in the public authorities but rampant in government administration. Nevertheless, this leaves us a long way from estimating the productivity of the largest employers of new labor force entrants into the economy.

4.31 It would appear that the principal determinants of the sources of future employment, at present, lay largely in the hands of government. Government hiring policies and investment policies are the most directly obvious, but pricing and regulatory policies and management policies are equally, if not more, important. Demand

management although a salutary stabilization tool is hardly a long-term employment strategy and ensurance of foreign exchange availability through export promotion sounds fine in principle but leaves a lot unsaid given the pervasive price and regulatory controls in the economy. The prelude to an effective (and socially cost beneficial) export promotion strategy is more often than not, getting one's factor price house in order.

4.32 In sum, "the future" indeed belongs in the category of uncertainty. Nevertheless, it often appears that the labor force and employment literature leaves it even more so than necessary.

3. Areas of Controversy

4.33 The only reason the future was not deemed controversial was the relative absence of opinion. The same cannot generally be said of the topics included in this section. In many senses what is listed in this section represents the summing up or culmination of all the previous uncertainties big and small. After all, the size of the labor force does about sum it up. And open unemployment is simply the difference between total employment and labor force. Nevertheless, some subjects are not quite so straight forward. The degree of "underemployment," "employment inadequacy," "surplus labor" or "disguised unemployment" and, to a lesser extent, whether a current "labor shortage" or "labor surplus" exists are not questions that are normally measured directly by labor force and employment statistics. For that matter, neither is the stock, and to a lesser degree the flow, of Egyptian emigrants. Finally, although almost no one seems to find merit in the policy of

guaranteed government employment for university and technical school graduates, nevertheless the policy continues to exist and be reaffirmed, which is cause enough to be included here.

4.34 The following areas of controversy will be briefly discussed: (i) size of labor force/employment, (ii) degree of unemployment, (iii) other concepts bordering on unemployment, including degree of underemployment/surplus labor/inadequate employment/disguised unemployment, (iv) existence of a current labor shortage/labor surplus, (v) the stock and flow of emigrants and their potential repatriation, and (vi) the policy of guaranteed government employment to university/technical school graduates.

4.35 Size of Labor Force/Employment:^{22/} A great deal of controversy over the size of the labor force and employment would appear to exist if the profusion of differing estimates is any indication. Fortunately, many of these differences appear readily explainable in non-substantive terms. Other concerns with the data, occasionally expressed by writers but never seemingly estimated, qualify more as substantive. The apparent confusion surrounding the size of the labor force and employment (and, hence unemployment) would appear largely explicable in terms of the following types of

^{22/} At the outset it should be pointed out that labor force and employment are two separate concepts that differ by the degree of unemployment. The greater the degree of unemployment the more important it is to be sure which concept is being used, particularly when comparisons are made over time or with other measures. Although it is clear that all writers of the literature reviewed are cognizant of these differences, occasional laxities occurred in labeling tables and in discussion.

reasons: (i) substantive, (ii) methodological, and (iii) definitional and procedural.

4.36 Substantive: To some extent it is arbitrary whether some factors are classified as substantive or methodological sources of confusion/disagreement. Two principal factors of concern, the underreporting of the informal employment sector and the underreporting of female participation in agriculture qualify as such. They are considered substantive because they possibly represent a source of serious underestimation of the labor force and size of employment. This is in contrast, for example, with the treatment of military conscripts which tends to distort the meaning of census data but at least are included in the labor force. A third factor which is alluded to by some writers, "the discouraged worker," also faces a similar dilemma. The failure to measure this category is probably more rightly a definitional problem; the fact that no accounting is made qualifies it as substantive.

4.37 Each of the three factors cited above are variously noted in most of the literature reviewed. Each of the factors have the effect of underestimating the size of the labor force and, hence, labor force participation rates. The first two also underestimate employment and the last underestimates unemployment.^{23/}

^{23/} Note, the "discouraged worker" is strictly speaking (definitionally) neither part of the labor force or unemployment, since one must be "actively" involved in the labor market. Nevertheless, if the phenomena is significant quantitatively, it is foolish policywise to ignore it. Also, in another vein it may be argued that unreported informal employment coincides with uncounted households and, hence, probably doesn't materially distort participation rates overall.

4.38 The degree of significance of these factors has not been estimated in the literature. However, various anecdotal evidence and small sample surveys would indicate the underreporting of female participation in agriculture to be the largest distortion. Underreporting of the informal sector is probably also significant, particularly if analyzing the urban labor force by itself. The significance of the "discouraged worker hypothesis" is debatable. On the one hand, there is a strong presumption that "the poor cannot afford not to work." On the other hand, guaranteed government employment provides a strong incentive among the formally educated (graduates) to remain in the labor market. Perhaps the truly most significant source of "discouraged workers" are the category of illiterate to primary educated urban females. Nevertheless, the size or existence of "discouraged workers" is totally speculative at this point.

4.39 Methodological: It would appear that much of the difficulty in interpreting and comparing data, both within the same data series and between other publications, arises largely for methodological, definitional and procedural reasons. The difficulties are compounded by careless usage and labeling of concepts and data series by writers, who end up at times comparing apples with oranges or at least oranges with tangerines.

4.40 The essential methodological questions at issue appear to be relatively standard ones: (i) validity of sampling and estimating techniques of the labor force sample surveys, (ii) measurement error both in census data and the sample surveys, and (iii) changes in

methodology including sampling coverage and the point within the year measurement is made.

4.41 Vague skepticism is cast at times on the validity of sampling and estimating techniques used in the annual Labor Force Sample Surveys (Hansen: 1980a). Specifics are not provided but the size of the samples and error margins selected, particularly as between the urban and rural areas, is probably the cause of most concern. Other sample surveys have similar problems. It should be noted, however, that the Labor Force Sample Survey methodology is based on similar U.S. labor surveys.

4.42 Measurement error, as discussed earlier, is considered to exist in both the Labor Force Sample Surveys and the Population Census. The cause of most concern is the known underreporting of female participation in agriculture and in the size of the informal sectors.^{24/}

4.43 Changes in methodology, including sampling/collection coverage and the point in time at which data is collected is a cause for concern. Labor Force Sample Survey data apparently underwent enough changes in methodology and sampling coverage in the 1960's to essentially disregard it for that period. The data is believed to be relatively comparable for the 1970's. Population Census data was not gathered for precisely the same categorical breakdowns in 1960 and 1976, but the differences are apparently not considered serious.

^{24/} Measurement error exists in all statistics, of course, but here we are concerned with substantial error biased in one direction.

4.44 Changes in the time at which data is collected during an annual cycle is considered to pose a problem for comparison of census data, however. The 1960 census was taken at the agricultural peak (September at that time) and the 1976 census at a seasonal slack in agriculture (November). This is considered to explain, in part, a substantial rise in unemployment between the two censuses. It might also be noted that Labor Force Sample Survey data is gathered in May, although subsequent to completion of the Aswan Dam this is also considered an agricultural peak.

4.45 Definitional and Procedural: Other points of confusion in the interpretation and comparison of data appear to be definitional or procedural. In particular, three factors appear to come up repeatedly: (i) the treatment of military conscripts, (ii) age group definitions of the labor force or employment, and (iii) the particular time periods chosen for analysis.

4.46 The statistical treatment of conscripts has been raised several times previously in this Annex. Briefly, the problem is that the Population Census data includes military conscripts in its definition of the labor force and the Labor Force Sample Surveys do not.^{25/} The problem goes deeper, however. We do not know the

^{25/} Hansen (1980a) most clearly points out the ramifications of the treatment of military conscripts. Many authors do not seem aware of their statistical treatment and in some cases there is confusion over their treatment. Handoussa (1980), for example, states that the armed forces are not included in the census labor force. Even Hansen (1980b) shows some vacillation, however when he at one point intimates that he's not sure how conscripts are treated by the sample survey.

level of military conscripts in any given year or the pressures that may be imposed on the labor market in terms net demobilization. This means that changes in unemployment statistics are difficult to interpret.

4.47 In addition to the problems created for comparing labor force and employment data between the censuses and the sample surveys, the treatment of military conscripts makes it difficult to interpret trends by sector of economic activity even between the censuses. Military conscripts are counted in their economic activity of origin. Thus, not only are conscripts believed to be significantly larger in number in 1976 (Hansen: 1980a estimates a net 300,000), they are also believed to be counted largely as part of the agricultural labor force. It is also unknown precisely how conscripts who were unemployed at the time of their conscription are treated. Hansen (1980a) feels they probably are the source of part of the increase in the unspecified employment categories in 1976.

4.48 What all of this means is that long-term trends by sector of economic activity (1960-76) are partly obscured and it makes comparisons between recent Labor Force Sample Surveys and the 1976 Population Census difficult. It also raises substantive questions on the interpretation of unemployment estimates.

4.49 If the treatment of military conscripts isn't confusing enough, the plethora of age group definitions of the labor force and employment are. Briefly stated, labor force and employment are counted, estimated and discussed in terms of several different age group definitions. Population Census labor force and employment

data, as a general rule, is presented on an ages 6+ basis. Labor Force Sample Survey data, as an overriding general rule, is presented on an ages 12-64 basis. Nevertheless, census data can and does appear on an ages 12+ basis and less often on an ages 10+ and 15 years+ basis. And sample survey data is available on a summarized basis for ages 6+, although not including unemployment estimates for either ages 6-11 or 65+. In other words, a lot of different age groupings are available and none are strictly comparable in all senses between census and sample surveys. More than any other single factor, careless usage and comparison of age group data probably accounts for the largest amount of wheel spinning in the literature, particularly when attempting to draw inferences on the basis of more than one primary data source.

4.50 "Procedural" is probably (almost certainly) the wrong term for the last difficulty to be discussed. Nevertheless, it is observed, that because data is not generally available on a periodic basis for all aspects of interest relating to employment and labor force, that quite commonly an analysis will be made on the basis of data relating to completely different time periods or time frames.^{26/} For example, Agricultural Censuses, Censuses of

^{26/} A different, but related and commonly occurring, problem is the slipshod use of preliminary and final 1976 Population Census data without accurately specifying source. This is understandable, given the lengthy publication schedule involved and the desire of analysts to get on with their work. Nevertheless, some portion of the profusion of differing data is undoubtedly due to this problem.

Establishments (both 10 or more and 25 or more), wage surveys, household consumption surveys and many specialized surveys generate data for many disparate periods, in addition to estimates made by the Planning Ministry and various other ministries relating to public sector authorities or enterprises. When information from these sources are stirred together with Population Census and Labor Force Sample Surveys, analytical chaos can and probably does result.

4.51 Given the tendency to leap into analysis without discussion of the data being used and the use of data for dissimilar periods without any attempt at reconciliation one can only throw up their hands and say "...there may be a procedural problem here."

4.52 In sum, lack of consistency in definitions, concepts and methodology results in a great deal of confusion (controversy) over the size of the Egyptian labor force and employment, particularly when using data from different sources. Nevertheless, undue carelessness on the part of analysts has probably worsened the situation beyond where it need be. Other aspects of the controversy over the meaning of the data, including whether certain trends are secular or transitory, will be discussed under following topics.

4.53 Degree of Unemployment: This is a subject that almost everyone says something about, although most comments can be put in the category of passing remarks. The problem is, everything that plagues the measurement and interpretation of employment and the labor force tends to also affect the measurement and interpretation

of unemployment.^{27/}

4.54 The principal data sources measuring unemployment from 1960 to 1976 nominally show unemployment both rising from 2.2 % to 7.6 % (Census data) and falling from 4.8 % to 2.7 % (Sample Survey data) Hansen (1980a) provides probably the best and most complete discussion on unemployment trends and their interpretation and promptly dismisses the above results for a variety of reasons. Rising unemployment in the census data is dismissed because of (i) non-comparability in data collection dates probably resulting in higher seasonal agricultural unemployment in 1976, (ii) the possible statistical treatment of military conscripts without previous work experience as part of the unemployed, and (iii) probable increases in graduates waiting on guaranteed government employment. Doubt is also cast on the level and trend of Labor Force Sample Survey results. In the first instance, skepticism appears to be raised on how diligently the survey actually seeks out unemployment. In the second, lack of comparability is raised on grounds of agricultural seasonality problems similar to that plaguing Census data (except in the opposite direction), the effect of mobilization and demobilization of conscripts, and changes in sampling coverage. Rising trends in sample survey data 1971-78 (from 1.8 % to 3.6 %)

^{27/} It is generally acknowledged that the degree of open unemployment in Egypt is low by international standards. There are many possible explanations for international differences, but we will focus only upon internal comparisons here. Other interpretations of less than full employment will be discussed in the following topic.

are dismissed on the basis of progressive demobilization of conscripts following the 1973 War. In sum, Hansen (1980a) appears to argue that open unemployment, uncontaminated by the above, has probably remained at relatively stable, low levels.

4.55 El-Issawy (1980) tends to dismiss the policy significance of a concept such as open unemployment by implication, on the grounds that it doesn't really get at the problem. In other words, the poor can't afford not to be employed no matter how meager their earnings or productivity. Nevertheless, El-Issawy implicitly supports Hansen's contention on census estimates when he dismisses 1976 census rural unemployment estimates of 6.4 percent as much too high. Basically, however, El-Issawy is too busy building his 1974/75 employment inadequacy estimates to pay much attention to open unemployment. He does pause long enough to note that the 1976 census reports unemployment of 5.2 percent for ages 12+ and 4.3 percent for ages 15+ and takes an age 12+ definition as more reasonable for his purposes.

4.56 Which all brings us to an important point. The Labor Force Sample Survey data generally quoted is usually an unemployment rate for ages 12-64. By far, the most popularly quoted rate for the Population Census is for ages 6+. Thus, analysts are not talking about the same labor force or the same unemployment rate. Even Hansen (1980a) does not consider or mention the effect of this when comparing rates. An idea of the significance can be gathered, however, if the rate of unemployment (census data) drops from 7.6 percent to 5.2 percent by going from an age 6+ definition to age 12+

definition (El-Issawy: 1980). The latter result is still not comparable with the Labor Force Sample Survey ages 12-64 definition, simply because it still includes both employment and unemployment for those aged 65 and over.^{28/}

4.57 Tables 4.1 and 4.2 in the statistical Appendix give some feeling for the magnitudes involved as we shift from one age group to another. Although a strict comparison between census and survey data is not possible because no survey was taken in 1976, a rough comparison can be made by making adjustments for age groupings for 1975 and 1977 sample survey data and taking a compounded average.

4.58 Unfortunately, the attempted exercise at reconciliation in Table 4.2 was not a complete success because unemployment data is not collected for any group other than ages 12-64 by the sample survey and available census data did not break down ages 65+ unemployment.^{29/} A further problem was rooted in the lack of information on conscripts included in the census labor force and, possibly, unemployment data. In general, crude differences in data sources for employment defined as ages 12+ (not adjusted for conscripts) are reasonably small. Differences in employment for ages 6-11 are substantial, however. And differences in unemployment are substantial no matter how the age groupings are considered.^{30/}

^{28/} The survey data is also an average of 1975 and 1977.

^{29/} This break down probably is available, however.

^{30/} Also, the estimates appear to show a 1.6% of unemployment rate for ages 12 (Census 1976) not 5.2% as suggested by El-Issawy.

4.59 The significance of age groups 6-11 and 65+ can be better understood if we realize that together they account for 9.1% of estimated employment in 1978 or that the 1976 census shows ages 6-11 alone as accounting for 7.2% of total employment and 9.6% of unemployment. In other words, these age groups are significant portions of the labor force and cannot be safely ignored in any analysis.

4.60 In conclusion, interpretations of the level or the trends in unemployment appear inconclusive. Nevertheless, the 1976 Census did show a substantial increase in unemployment over 1960 and the Labor Force Sample Survey data does show a consistent rise in the rate of unemployment from 1971 to 1978. It would appear that a good deal of the current controversy could be resolved by coming up with (i) good estimates of military conscripts (including their exact treatment in census data), (ii) estimates of university and technical school graduates waiting on guaranteed government employment, and (iii) estimates of seasonal unemployment in agriculture for 1976. Specific age-group analysis, using comparable age groups, is also a must. Finally, a close examination and comparison of the definitions and techniques actually used in collecting the unemployment data might prove beneficial. In the final analysis, the burden of showing either that unemployment is rising or not rising, or that it has significant or insignificant policy implications, would seem to be on those who claim otherwise, i.e., one and all.

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4.61 Other Concepts Bordering an Unemployment: This subject will not be dealt with in the length it deserves in terms of policy significance. People who write on concepts such as under employment, surplus employment, inadequate employment, and disguised unemployment are all trying to say the same thing; that the measure of our "employment problem" is much bigger than the size of open unemployment; that we are only looking at the tip of the iceberg.^{31/} Open unemployment simply represents one extreme of a continuum, along which we find the other estimates that border on unemployment, ending with those whose wage equals the marginal product and whose income is also above whatever the poverty line is defined to be.

4.62 If we were to rank the various concepts by order of their probable magnitudes in Egypt, we might find something along the following lines. Picture a pyramid of all those whose "wage" is equal to or greater than their marginal product and/or whose income falls below the defined poverty line. Although there will certainly be exceptions, we can generalize that the total area of the pyramid equals the magnitude of the "inadequately employed" (El-Issawy: 1980).^{32/} Occupying the largest area at the base of the pyramid

^{31/} Most of the recent literature reviewed for this Annex discusses or alludes to one or more of these concepts, often in less than rigorous fashion

^{32/} For example, we can envision supernumeraries, possibly more often in the public sector, whose wage exceeds their marginal product and whose income exceeds the poverty line. This case may actually be significant for Egypt.

we will probably find the "underemployed," defined as those receiving a money wage larger than their marginal product and located within the formal employment sector probably most often in the public sector. What we probably find next are the "disguised unemployed," defined here as those who receive an average product (or share income) that is less than their marginal product. These people are most likely to be found in agriculture, probably small landholders, and in the urban informal sector in a variety of jobs. In agriculture the wage for these groups tends to be an average product; in the informal sector the work/income tends to be shared among the competition. In either case, the average product or income is greater than the marginal product.

4.63 From this point on, it becomes rather dubious as to what the ranking should be. It is not clear from statistical and anecdotal evidence whether "surplus labor" or "open unemployment" is the larger. For completeness, "seasonal unemployment," "discouraged workers," and wage laborers receiving their marginal product but falling below the poverty line" should also be considered. A hazardous guess would be that "open unemployment" is the next largest category, defined as those actively seeking employment and found largely in the urban areas. The next smaller category may well be "wage laborers receiving their marginal product but falling below the poverty line." This category seems most likely to be found in rural areas among landless laborers moving between agricultural and non-agricultural work and to a lesser extent in the urban areas.

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4.34 The next smaller category is probably the person year equivalent of "seasonal unemployment," defined as those regularly occupied with predictable employment for most of the year and predictable unemployment at specific times of the year and who would work if the work were available. This category will be found primarily in agriculture, largely among the landless laborers and less likely, although possible, among the small landholders who also work as wage laborers. This category is thought to have significantly decreased in significance in recent years because of the completion of the Aswan Dam and changes in cropping patterns. This category is an overlapping (non-add) category since it is highly likely that those who are seasonably unemployed have already been counted among the "inadequately employed" among one of the other categories.

4.65 Continuing, we probably come to "surplus labor," defined in its classical sense as non-wage labor receiving the average product, whose marginal product is zero.^{33/} In other words, labor can be withdrawn, other things equal, without decreasing total product. This category is considered to be small in Egypt and most likely to

^{33/} It is realized that this term is often equated with employees in the public sector. While it is true that the marginal product may also be zero for some of these employees the situation is distinguished by government replacing the family as employer and a wage replacing the average product. From a productivity standpoint the difference is trivial. From a policy standpoint the difference is major. Presumably government can reallocate employees. The family probably has no choice of reallocation and has less choice otherwise in dealing with the marginal member.

be found in agriculture, if at all. We finally come to the "discouraged worker," defined loosely as those who tend to seek employment unsuccessfully during economic upswings, thus causing unemployment to "mystifyingly" increase and who tend to drop out of the active labor market during economic down swings because they are "discouraged," thus causing the unemployment rate to no longer measure their presence. The size of this category is a total unknown. This Annex speculates elsewhere that the "discouraged worker" effect is small by economic necessity for much of the population but might be found most significantly among relatively uneducated urban females.

4.66 The pyramid appears to be complete. What its size is depends upon the poverty level definition. El-Issawy (1980) estimates employment inadequacy in 1974/5 at 3.8 million workers or 39% of the labor force.^{34/} At that point in time, the rural sector was believed to contain almost two-thirds (64.2%) of the "inadequately employed." While it is clear that one can quibble over the size of the pyramid, the relative shares of its components, and the relative urgency of the poorer workers, it seems absolutely clear that the "employment problem" in Egypt goes far beyond the level of open unemployment. It is not clear what these categorizations suggest in operational policy terms, however.

^{34/} El-Issawy uses a poverty definition of LE 270/yr. for a rural household and LE 337.5/yr. for an urban household, based on Radwan's (1977) rural poverty definition and adjusted for the IBRD (1978) urban spread. He then works from the estimates on households back to an estimate on labor force.

Certainly it would be better to move workers from situations where their marginal product is zero, or less than the average product, to more productive situations. But that, in itself, does not tell us much. Or maybe it does. Maybe what most of this discussion has suggested is that Egypt's real "employment problem" is the need for higher total factor productivity not unemployment per se. People are employed. They just aren't generally highly productive.

4.67 What might be done about this is another question.

Certainly the allocation of investment, the pricing, hiring and regulatory policies of government, and the management policies of public enterprises and authorities lie deeply at the heart of the question. Since government essentially controls all of the above (except a small portion of investment), and is the major source of all new employment, it would appear that government must bear a major responsibility for increased productivity. In the face of a rapidly growing population that has little choice but to move to the urban areas (and probably seek public sector employment), the only meaningful welfare policy in the long run is one firmly grounded on providing increasingly productive employment rather than one based on spreading the poverty. Otherwise, an already identified unsatisfactory status quo may not only fail to improve but will almost certainly diminish.

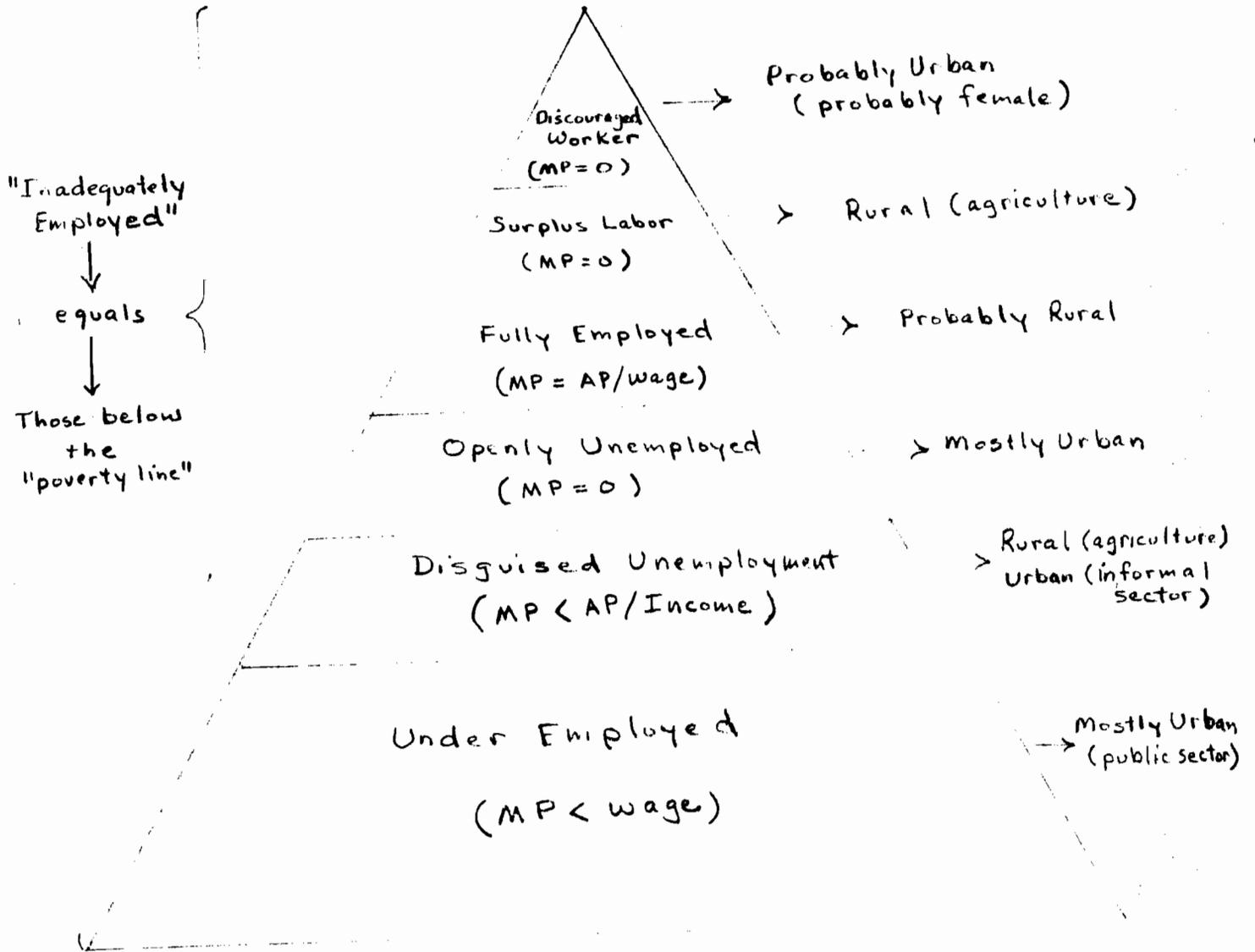


Fig 1: Other Concepts Bordering on Unemployment

4.68 Existence of Labor Shortage/Labor Surplus: In view of the preceding comments the above question may seem slightly redundant. Nevertheless, in imperfect labor markets, particularly if the imperfections have been introduced by government policy, or in situations where large shocks have been introduced into the system during a short period of time, it is conceivable for a "labor shortage" to arise despite all of the contorted forms of "employment" discussed earlier. Since probably one of the most popular questions raised these days is whether Egypt is in a current condition of labor surplus or labor shortage, something has to be said on the subject.

4.69 What is a labor surplus or labor shortage? Earlier, it was suggested that a labor surplus exists, in the classical sense, when a worker receives the average product but produces a marginal product equaling zero, implying that labor could be withdrawn, other things equal, without reducing total product. No one seriously suggests this case exists in any significant amounts in Egypt, and if it did it would tend to be found in agriculture. If we replace the word "average product" with wage or income the story may be different. There are some who would suggest that a large portion of public sector employees fall into this category. If we relax the condition that marginal product must equal zero and simply specify that it be less than average product/wage/income, then it is generally believed that a great number of the labor force falls into this category, particularly in the public sector, the urban informal sector and possibly among the non-wage family agricultural

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laborers. Thus, whether "surplus labor" currently exists in any significant form depends largely on the definition one has in mind. Generally, it can be deduced that those who support the case for labor surplus have one of the broader definitions in mind.

4.70 The concept of labor shortage is not generally thought of in terms of marginal and average products although one might surmise that one of the characteristics of such a situation would be marginal products equaling average products/wages/income. A "shortage" per se cannot exist under most strict economic definitions unless price is not free to equilibrate demand and supply. In other words, an "economic shortage" implies excess demand that can only be alleviated by rising prices. And once prices have risen the "shortage" disappears. In the longer term the demand and/or the supply curve may again shift as substitution and complementarity effects are worked out in the economy. The implication of the economic definition, however, is that a "shortage" is a transitory phenomena that will be remedied in the short run by rising prices and possibly in the longer run by new shifts in the basic demand and supply curves that will probably have the effect of reducing prices somewhat, although not to their former level.

4.71 If we translate this definition to that of "labor shortage" in a strict sense, it would imply a situation in which the labor market had not yet had time to bid up wages. This more or less seems to be the sense in which claims of labor shortage are generally made. Rising wages are pointed to as evidence of a shortage,

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although at times the distinction between rising wages and the level of wages is confused, i.e., "high wages" are taken as evidence of a "shortage" rather than its "solution" or elimination. In sum, a "labor shortage" would appear to be detected in practice by rising wages and the possibility, to a lesser extent, by the difficulty in time and effort (rising information and transaction costs) involved in recruiting labor at whatever the prevailing rates happen to be.

4.72 The problem would seem to be solved. A labor shortage is detected by rising wages. This interpretation is somewhat complicated, however, because wages may rise for a variety of reasons, not the least of which is inflation. Thus, it would appear that rising real wages, adjusted for inflation, are probably a better indicator of the existence of a general labor shortage. Even this modification does not end our journey, however. An additional factor complicates the interpretation of rising wages because not all wages rise at the same rate. This may imply intersectoral shortages, geographical shortages, or occupational skill shortages that have nothing to do with inflation. Thus, differences in relative wage increases in the above categories suggest that real as opposed to inflationary factors are at work and that certain "shortages" existed even if real wages did not increase. In sum, widespread rises in real wages are a good sign of a general labor shortage; sharp relative changes in wage structure, whether by economic sector, geographical region, or occupational skill, are a good sign that more specific/localized labor shortages existed.

4.73 The fact that real wages may be rising or the wage structure

is shifting does not tell us why they are rising/shifting, that they will continue to rise/shift, or that it is "bad for the economy" in some way. Rising real wages or shifting wage structures merely signal that changes have occurred in the underlying factors that affect labor demand or supply curves. It may be that increased worker productivity or changes in consumer preferences shifted the demand curve, or that external migration or changes in education/training shifted the supply curve. All of these changes and many more can be occurring in differential terms in the many sub-markets that make up the "labor market". To the extent high labor mobility exists between economic sectors, geographical locations, and occupational skills, major changes in isolated sectors or markets will be quickly smoothed out, with not much effect on wages. The less this is true the greater the wage differential that will appear for a given change in an underlying market factor.

4.74 The factors lying behind labor market changes are not necessarily immutable. They may continue, reverse themselves, or be overtaken and obscured by new factors. We may not know at any given time whether the adjustment to an original "shortage" has been completed, if new changes are occurring, or new factors are entering the equation. Thus, the existence of a shortage or the speed and direction of changes in wage levels in the future is a mystery except to the extent we understand the fundamental factors underlying labor demand and supply.

4.75 At this point, it should be pointed out that rising wages

are not "good" or "bad". They simply reflect various market adjustments. However, if rising earned real incomes and "improvement" in income distribution (a decreasing Gini coefficient) are considered signs of progress, rising real wages are certainly the route. Nevertheless, if rising wages are determined in large part by government fiat or if rapidly rising wages in a key sector or a key skill tend to constrain the economic growth of other sectors, then there may be reason for policy concern.

4.76 What all of the preceding is intended to illustrate is that the idea of labor shortages or labor surpluses are readily understandable phenomena; that labor surpluses under their strict definition probably don't occur too often unless labor mobility is exceedingly low or unless induced by exogenous market forces such as government hiring practices; that the best evidence of a general labor shortage is widespread rising real wages; that changes in the relative wage structure, even in the absence of real wage increases, is probably evidence of specific/localized labor shortages; that the labor market is really many markets with the potential for many or a few "labor shortages" to exist at any one time, and finally; that rising real wages ("labor shortages"), in the final analysis, is probably what development is really all about.

4.77 Hansen (1980a) concludes that the Egyptian labor market has moved from one characterized by labor surplus in the sixties to one characterized by labor shortage in the seventies. El-Issawy (1980) concludes that the labor market has both surpluses in the strict sense (but only in the urban areas), and shortages, although limited

to certain occupations, particularly with relatively high skill levels. El-Issawy (1980) and Handoussa (1980) both suggest that labor shortages and surpluses exist simultaneously within the public sector and within the same ministries and presumably other organizations. Lubell and Abdel-Fadil (1980) note that most of the evidence offered in support of a "labor shortage" is anecdotal, possibly confused with the effects of rapid inflation, and conclude that "the Egyptian labor force remains in surplus to effective demand for the great mass of unskilled, despite pressures on the supply of skilled workers." They also conclude that mobility of unskilled workers between economic sectors is considerable. Lubell (1980) notes that widespread complaints of "labor shortage" among employers "...should be interpreted as a temporary tightening of the labor market which results from a buoyant level of demand for some types of labor and a relative reduction in supply of skilled and to some extent of unskilled labor, and is reflected in some upward pressure on wages." He notes that emigration resulted in a drastic reduction of "the excess supply of Egyptian labor" and elsewhere that "the resulting shortage of agricultural labor has been acute enough for the government to attempt to ban the emigration of agricultural workers." Taylor and Sabot (1980) conclude that a tightening of the labor market occurred during the period 1974-77, although they do not consider it a secular trend. Mohie-Eldin (1980) provides ample evidence on emigration flows that tends to support everyone's claim on the importance of emigration during the

1970's.^{35/}

4.78 Thus, the recent literature tends to arrive at an array of conclusions on the existence of a labor shortage or labor surplus in the economy. The weight of opinion tends to support some of each, with perhaps the strongest confidence being expressed in the existence of a "labor surplus" in the public sector and a "labor shortage" among skilled construction workers. A relatively "tight labor market," in the sense of historically high money wage levels, is also generally considered to exist for unskilled agricultural and construction workers.

4.79 Except for Hansen's (1980) sweeping conclusion no one seems to conclude that labor shortages are widespread. Curiously, Hansen appears to provide the least evidence of all to support his contention. He provides no analysis of wages to support his thesis, limiting his argument primarily to an attack on rising unemployment rates and noting the decline in seasonal agricultural unemployment. Hansen (1980b) does briefly examine wages in a second paper and concludes that government wages have been relatively stable in real terms with agricultural wages swinging below "inflation" 1966-72 and

^{35/} Note: With the exception of El-Issawy and Taylor and Sabot none of the writers above bother to define in what sense they define "surplus labor." In some cases the intent is implied, in others it is far from clear. Similarly, with the exception of Taylor and Sabot, no one really defines what a labor shortage means or how we measure it.

above "inflation" 1972-79. However, his use of world inflation rather than domestic inflation to arrive at his conclusions casts some doubt on their validity.^{36/} Construction wages were reviewed for 1966-76 with no claims made for real wage increases.

4.80 Lubell (1980) notes that real agricultural wages doubled between 1975 and 1980, while lagging behind total value added.

Unfortunately, the data used in arriving at these conclusions is not presented. Lubell and Abdel-Fadil (1980) look at limited categories of wage levels for the period 1960 to 1976, primarily from an urban perspective. They note that agricultural wages have risen relatively faster from 1970 to 1976 than either construction or manufacturing. However, no attempt was made to determine real wage increases or to evaluate changes 1976-80.^{37/} They note, in passing, that some evidence exists for increases in skilled worker earnings during this period.

4.81 El-Issawy (1980) examines annual real wage increases in agriculture and shows that real wages declined from 1966/67 to 1971/72 and then rose until 1976. However, real wages were only

^{36/} Needless to say, Egyptian inflation is believed to have been substantially above world inflation during recent years which may cast some doubt on the extent of real wage increases. Nevertheless, Hansen shows nominal agricultural wages rising at an average 21.8% 1971-79.

^{37/} CAPMAS wage statistics were not available for later than 1976.

10.6% higher after 10 years and El-Issawy concludes that real agricultural wages fell from 1976-78, since they were almost constant in nominal terms. Handoussa (1980) concludes that real wage increases probably occurred in public enterprises examined 1976-78, although it could not be directly demonstrated from her data.

4.82 Taylor and Sabot (1980), looking at real wages in rural Egypt 1938 to 1974, conclude that long-term trends support a secular stagnation thesis, i.e., the existence of "disguised unemployment." They note, however, that marked fluctuations over this period indicates some relationship, if only indirect, between wages and marginal productivity of labor. Examination of separate wage data 1974 to 1977 for construction, agriculture, services, and mining plus industry, lead to the conclusion that a tightening of the labor market occurred for agricultural and construction workers. Taylor and Sabot, although mincing their words, reject the notion that the 1974 to 1977 evidence may represent the beginnings of a new secular trend toward "labor shortage."

4.83 Thus, it would seem that the mixture of fragmentary evidence presented on wage data is contradictory, often presented in undeflated terms, and seldom covers periods much after 1976. The strongest single piece of evidence on "general tightening" of the labor market would appear to potentially be agricultural wages, because of the size of that labor market, its known relationships to other markets, and the relatively current data series available. Nevertheless, some dispute appears to exist over whether real

wages actually improved during the seventies, although a relative improvement of agricultural wages against many other sectors probably occurred. Thus, although no one doubts the reported large wage increases for selected skilled labor, particularly in construction, it would appear that wage data and analysis presented to date does not support a conclusion that a general labor shortage exists. Limited evidence on relative wage structure by economic sector seems to clearly indicate the existence of a labor shortage in agriculture at some point between 1970 and 1976 (Table 2.9).

4.84 In sum, because of the many factors at work affecting the demand and supply for labor during the sixties and seventies it becomes truly difficult to separate transitory effects from, perhaps, the more permanent effects. This, undoubtedly, has complicated the attempts to analyze the general direction and well being of the Egyptian labor force. In addition, optimists may have chosen to see more of the factors supporting a growing condition of shortage, while pessimists have tended to focus on those supporting a worsening of the surplus. Nevertheless, whatever may have precisely happened in the Egyptian labor market in the 1970's and whatever its exact condition may be on the eve of 1981, it does little, if anything, to change the dominant factors affecting future labor supply or the likely source of future domestic employment. And neither of these likely conditions give particular cause for celebration.

4.85 Stock and Flow of Emigrants and Potential Repatriation: The rush of Egyptian emigrant labor to O.P.E.C. countries following the 1973 War and Arab oil embargo is invariably cited as one of the three principal factors behind the "tightening" of the Egyptian labor market during the 1970's.^{38/} Resultant shortages in the manual skill areas have been particularly acute and are cited as a constraining factor not only on the construction sector but to growth in the economy as a whole. Many writers, however, see emigration as, more importantly, providing an outlet to "surplus" Egyptian labor and as one of Egypt's two largest sources of foreign exchange earnings. Whatever, the particular emphasis, all writers are agreed that Egyptian emigration in the 1970's has had profound effects on the economy.

4.86 Nevertheless, there is less than unanimity on the size of the emigrant labor force, its future direction, and how well the Egyptian economy has adjusted, or will adjust, to its ebbs and flows. It is to these subjects we will briefly turn.

4.87 Size of Emigrant Labor Force: Mohie-Eldin (1980) and Choucri, et al. (1978) amply set forth the difficulties involved in

^{38/}The other principal factors are considered to be (i) the inflationary monetary and fiscal policies followed by the GOE and (ii) GOE hiring policies premised on government as the residual employer.

estimating the size of the emigrant labor force. The essential problem is that no statistics are collected for the stock of emigrants and, since 1973, no complete set of statistics has been collected on flows.^{39/} Complicating the estimation process is the sorting of working emigrants from their dependents. In large part this is accomplished more with the assistance of the country of destination's data than with Egyptian statistics. As a result of the data situation "...no agency or department or a responsible authority really knows the number of Egyptian workers working abroad"; "the number is anybody's guess" (Mohie-Eldin: 1980).

4.88 Nevertheless, analysts will persevere and estimates have been made. Their range (Table 13) indicates the degree of uncertainty/controversy surrounding the whole subject of Egyptian emigration. As can readily be seen, Egyptian migrant workers abroad have been estimated to range between 250,000 (1975) and 1,390,000 (1978). AID has generally accepted the estimate of 1.0 million (1976) of Chourci, et al (1978) for its reporting purposes.

However, it is generally believed that net emigration continued at least through 1978 which would suggest that the stock of emigrant workers is even larger (Rhoda, et al: 1979; Mohie-Eldin: 1980). The Choucri, et al (1978) estimate of 1.0 million is based on the

^{39/}Even earlier flow data is deficient in the sense that it measured only flows but not returnees. Thus, no statistical data exists for net emigration.

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1976 Population Census estimate of 1,425,000 emigrants abroad and a 70 percent labor participation rate, derived on the basis of analysis of various data. However, it is worth noting that Birks and Sinclair (1979), as part of a regional study, attempted to estimate Egyptian emigrant labor on the basis of records in their country of destination and come up with a much smaller number of 0.4 million for 1975. Irrespective of these differences, whatever the exact stock of Egyptian workers abroad in the 1970's it is conceded by almost everyone to have grown rapidly since 1973.

TABLE 13
MIGRANT WORKERS ABROAD

<u>SOURCE</u>	<u>ESTIMATE</u>	<u>YEAR</u>
Arab-American Bank	250,000	1975
Birks and Sinclair (1979)	397,600	1975
I.L.O. Migration Project	600,000	1976
Ministry of Planning	600,000	1976
Choucri, et al (1978)	1,000,000	1976
I.M.F. Survey	350,000	1977
Ministry of Manpower	1,390,000	1978

Source: Mohie-Eldin (1980), p. 91.

4.89 Future Direction of Labor Emigration: The general consensus in the literature has been that labor emigration flows probably peaked in 1978 and have leveled off since (Rhoda, et al: 1979; and others). Mohie-Eldin's (1980) estimates on gross emigration flows 1968-1980 would suggest that although 1978 saw a small decline in the annual flow, that growth resumed in both 1979 and 1980, albeit

at a lower rate than in the mid-70's. Assuming the estimates are correct, that return flows have not increased dramatically, and that emigrant participation rates have not declined, one might reasonably conclude that the emigrant labor stock has also continued to grow.

4.90 Nevertheless, the general consensus would most clearly support a constant or slowly growing emigrant labor force in the 1980's, assuming no major economic or political reversals in the O.P.E.C. countries to which Egyptian labor have emigrated. Although no one is specifically predicting that Egypt will have to repatriate its emigrants in the near future, the volatility of the Middle East region makes it prudent to consider the possibility.

4.91 The probability of adverse political events affecting emigrant flows is considered far more likely to occur than adverse economic trends. Although the sharp increase in construction and investment activity in the 1970's has probably leveled off in the Middle East, continued activity of this nature coupled with operational labor requirements should sustain a steady requirement for expatriate labor, even in the face of Asian competition. The more worrisome aspect of Egyptian labor emigration is its concentration in three countries, Lybia (40.0%), Saudi Arabia (35.0%) and Kuwait (11.0%), with the balance largely in the Gulf area (Mohie-Eldin: 1980 - "2nd alternative"). It is distinctly easy to imagine the potential vulnerability of Egyptian emigrants to political events, given this geographical distribution. How actually vulnerable they might be and the implications for the domestic labor market will be considered next.

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4.92 Ability of Domestic Labor Market to Cope: There are basically two schools of thought on this subject. Birks and Sinclair (1979) suggest the Egyptian labor market has very low occupational mobility, even among relatively similar low skill occupations, and as a result reacts much too slowly to changes in demand or supply. As evidence of this they point to their relatively low estimate of emigrants working abroad in 1975 (0.4 million) and the continuing existence of labor shortages for skilled workers and craftsmen in Egypt. In either instance they imply that the Egyptian labor force has failed to respond to relatively high wage opportunities. They suggest that little labor transfer occurs between the rural and modern sectors in the short to medium term. They explain the general lack of labor mobility principally on the basis of the overwhelming share of public sector employment in the non-agricultural sector (they estimate 75 percent) and the desire on the part of these employees to maintain employment security. They also postulate that much of the remainder of the work force is unqualified for international migration because it is unemployed and/or inexperienced.

4.93 Choucri, et al (1978), while recognizing the existence of some labor market imperfections and rigidities, would tend to dispute Birks and Sinclair on many of the above points. In their view the labor market has dealt with much larger emigration than indicated by Birks and Sinclair (estimated 1.0 million workers abroad in 1976) and has managed, through occupational upgrading and transfers from the rural section, to allow the key construction sector to substantially expand its employment in spite of massive

emigration of its members, albeit at very high wage increases. Thus, they, in effect, argue that labor market mobility although imperfect is hardly in the state of repair suggested by Birks and Sinclair. Nevertheless, Choucri, et al have substantial concern over labor shortages in the construction sector which they feel may constrain growth in the rest of economy.^{40/}

4.94 It is easy to surmise that low labor mobility, whether occupational, regional, or sectoral makes any adjustment more difficult than high labor mobility. Thus, the ease with which Egyptian emigrant labor could be repatriated depends in part upon this question. For what it is worth, the statistical evidence reviewed in this Annex and the weight of opinion in the literature on labor mobility tends to support Choucri, et al.

4.95 How well Egypt could weather repatriation of labor emigrants would depend not only on the degree of labor mobility, but on the size, speed, and composition of the repatriation. The larger the repatriation and the faster it occurs, the greater the shock and adjustments necessary in the domestic economy. The more the

^{40/}Indeed, the essential thesis of Choucri, et al (1978) is that the construction sector is crucial to any developing country's growth and that constraints on its growth (i.e., skilled labor shortages) can impose serious constraints on the growth of other economic sectors. More eloquently, "The relative magnitude of the construction component in investment, the inflexibility of substitution for it by other inputs, its long gestation period, and [its non-traded character] make the sector a special focus of concern in all developing countries. Its capacity sets a physical limit to the acceleration of growth, for overall investment cannot grow faster than this sector's output and the product desired cannot be imported. Moreover, since its timing is relatively inflexible, the amount of real output growth which can be achieved in any

repatriation is skewed toward skilled labor presently in short supply and the less toward unskilled labor, the easier it should be to absorb without undue downward wage pressure. On the first count, the weight of opinion would suggest that it is unlikely that all emigrants would have to be repatriated, whether for economic or political reasons. However, the rationale for this conclusion rests largely on the relatively large numbers of skilled and professional workers abroad who are the very workers who are considered least vulnerable to involuntary repatriation. Thus, although Egypt may not be particularly vulnerable to a sudden return of all of its emigrant workers, those who would be most likely to return are in least demand. In terms of how fast repatriation might have to take place, in effect, anything is possible.

4.96 In sum, the Egyptian labor market has probably coped reasonably well with substantial outflows of key skills from key economic sectors. In the event of involuntary repatriation of emigrant labor, it is more likely that it is the relatively less skilled that will be most noticeably affected both domestically and abroad. In sheer magnitude, however, it is doubtful that Egypt

(40/ Cont'd)

year when the economy is working close to its overall capacity will depend on the amount of construction activity accomplished one, two, three, or more years in the past."

"In terms of relative value added, labor input is the most important input in construction activity. In addition, the labor used has important components with relatively high skills, so, at any time, its availability may be the most important constraint on the output capacity of the construction sector. It is clear, then, that the emigration of construction labor and its effects in determining the capacity of the construction sector can be significant."

would have to absorb the equivalent of more than 5 to 6 percent of its present labor force.

4.97 Government Policy of Guaranteed Employment to Graduates:

There appears to be remarkable concensus in the literature on the GOE policy that guarantees government employment to university and technical school graduates. It is almost universally cited as one of the principal reasons for the (generally believed) existence of widespread "underemployment" or "surplus labor" in the public sector. Although little actual evidence has been presented either on the extent of public sector hiring of graduates or the extent to which those hired were redundant or unnecessary, it is almost an article of faith that both are widespread. We will return to what the literature says the effects of this policy are after briefly reviewing its evolution. We will then briefly speculate on its likely future impact.

4.98 Evolution of Policy:^{41/} The policy of guaranteed public employment of university and technical school graduates originated in Law No. 14, 1969 and was made permanent by Law No. 85 in 1973. The law guaranteed university and technical school ("intermediate") graduates the right to obtain public sector employment two and three years, respectively, after their gradation, if in the meantime they had not otherwise obtained employment or dropped out of the labor force. At the same time the law prohibited the public sector from

^{41/}Hansen (1980a) provides the best single review of the guaranteed employment policy for graduates and other government hiring policies and is the primary source of information for this section.

hiring graduates until two and three years, respectively, had elapsed since their graduation. If employment is obtained during the interim period, even if only temporarily, the graduate loses eligibility for the guaranteed program.

4.99 At some point later in the 1970's (exact date unknown) graduates lost their right to guaranteed employment in public enterprises. This was probably part of the drive to provide greater freedom to public enterprises in their hiring policies, which also resulted in the abrogation of the right of military conscripts to this form of guaranteed employment in 1978. Although rumors have apparently circulated from time to time that the GOE was in the process of reconsidering its policy towards graduates, the policy was reconfirmed as late as December 1980 in a speech by President Sadat. Nevertheless, a potentially significant change in policy may have occurred, if the GOE follows through on Sadat's statement that graduates taking advantage of the guaranteed employment program in the future will be assigned to the rural governorates. Implications of this apparent policy change will be examined after a brief of opinion on the effects of the guaranteed employment policy.

4.100 Effects of the Policy: As noted earlier the conventional wisdom, or "folklore" as put by Choucri, et al (1978), is that massive underemployment or surplus labor exists in the public sector, largely because of specific government hiring policies including guaranteed employment to graduates^{42/}. Indeed, the

^{42/}In addition to guaranteed employment to university and technical school graduates, the government engaged in a general "employment drive" in the early 1960's, and until 1978 guaranteed employment to demobilized military conscripts.

circumstantial evidence of public sector employment growth during the 1960's and 1970's would tend to support these hypotheses. Hansen (1980a), for example, estimates that the increase in excess employment for government administration and public authorities was probably 750,000 between 1960 and 1976. Handoussa (1980) cites numerous case studies from the Werner Report that indicate employment in public sector textile enterprises to be many multiples of comparable USA/European operations. Handoussa also notes large numbers of non-specific job holders in government administration and that the percentage of production workers to total work staff is much lower for public sector as opposed to private sector enterprises. She attributes each as evidence of probable surplus employment. Nevertheless, as Handoussa points out, the government policy on hiring graduates can only explain a portion of the problem of surplus employees, noting for general government administration in 1976 that only 1.3 percent of other clerical, 19 percent of "executives," and 57 percent of "administration officials and directors" have a university degree or its equivalent.

4.101 No one in the literature reviewed made an estimate of the total number of graduates hired under the GOE policy of guaranteed employment, their distribution between government administration, public authorities or public enterprises, or the degree to which the graduates may have represented excess employment. It is generally believed that many of the graduates taking part in the program were hired for government administration and that this tendency increased after the guaranteed right to public enterprise employment was abrogated. Handoussa (1980) notes, for example, that the 1980

budget for general administration provides LE 33 million for 148,400 new jobs, "mostly for graduates." Nevertheless, in any strict sense no accounting has been made that would answer the questions posed.

4.102 In a very rough sense, some idea of the magnitudes that might be involved can be gained by looking at the supply of university and technical school graduates. University graduates have increased from 29.6 thousand in 1972/3 to 67.1 thousand in 1977/78.^{43/} Although it is not exactly clear who qualifies under the technical ("intermediate") category, it apparently accounted for 47 percent of total eligible graduates in 1976.^{44/} According to a government release, approximately 67 thousand out of 105 thousand graduates in 1976 applied for guaranteed employment.^{45/} If we take these "facts" and assume that university graduates remain proportional to other eligible graduates and that applicants to total graduates remain proportional, we can estimate that the public sector provided employment to 312 thousand graduates under the guaranteed employment policy 1976-80. The employment generated for the period 1969-75 would be less under the same set of assumptions, possibly not more than 200-250 thousand. Thus, the public sector as a whole may have hired more than half a million graduates since the inception of the program.^{46/}

^{43/}Statistical Yearbook, CAPMAS, July, 1979, p. 179.

^{44/}Cairo Press Review, December 8, 1980, p.18 plus data from above footnote source.

^{45/}Ibid.

^{46/}Although these estimates are extremely crude it is highly doubtful that more than 0.9 million graduates could have been hired under the guaranteed employment program since its inception in 1969; even if all graduates elected for public sector employment. Participation rates may have been higher in earlier years, however, when public sector employment was relatively more attractive than private sector employment.

4.103 There are other concerns besides the problem of increasing excess employment in the public sector, however. Hansen (1980a) and others have expressed the concern that the policy of guaranteed employment to graduates has created a monster that feeds upon itself and in the process may be destroying the university system. In brief, the thesis suggests that the policy of guaranteed public sector employment has induced ever increasing numbers of students to the universities and technical schools to the point where the quality of the education has materially declined. Hansen (1980a) explains the growing and, seemingly, insatiable demand for graduates by the public sector (incredibly, the demand actually exceeds supply each year) with a hypothesis on bureaucratization. He suggests, that in the absence of a budgetary constraint (since funds are automatically provided to individual ministries and operations), that graduates are perceived as a free good. Even if their marginal productivity is less than zero they may be perceived as desirable because expansion of the bureaucracy creates opportunities for advancement for those who request the graduates.

4.104 In sum, Hansen (1980a) poses a depressing vicious circle hypothesis powered by guaranteed employment: "...guaranteed employment for graduates has created strong pressures on university authorities for increased intake which now runs way above the capacities of the universities with disastrous consequences for educational quality; low quality education forces graduates to depend on guaranteed government employment; increasing government employment leads to an increase in the upper layers of the

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bureaucracy which, to justify its own existence and create advancement possibilities for itself request ever increasing numbers of new graduates."

4.105 In concluding this section, it is useful to remind ourselves that much of the foregoing is based on conjecture. Nevertheless, the aggregate statistics on public sector employment show it to be the most rapidly growing part of the economy and probably absorbing two out of every three new employees. University and technical school graduates have undoubtedly been an important part of this phenomena.

4.106 Future Implications: To some degree we may have already taken a peek at one possibility for the future in the form of Hansen's (1980a) vicious circle hypothesis. Certainly, even if all links in the argument do not hold it is doubtful that present university and technical school enrollments will decline in the absence of conscious policy decisions to limit the enrollments. Unfortunately, in the sense considered here, graduates are known to be substantially above the 1976 level of 105 thousand. This is not only a large number, it suggests a relatively powerful lobbying group for continuation of the current policy, once we realize there were 476.5 thousand students enrolled in universities alone in 1977/8 and probably half that number in technical schools.

4.107 There are additional implications for the future, however, if we assume an unchanged policy. The employment guarantee will have to be spread among fewer opportunities since the right to public enterprise employment has been abrogated. It seems likely, in view of Handoussa's (1980) review, that government administration will increasingly be burdened with the excess.

4.108 Possibly on the brighter side is the GOE's increasing awareness of their problems. The GOE knows it has an enrollment problem in higher education that cannot realistically be allowed to persist. And it knows the guaranteed employment policy for graduates should be eased out. The problem, of course, is how to politically remedy these situations. First steps may have been taken on both accounts. Limiting university enrollments is presently under active review within the Ministry of Education and President Sadat's decision to limit graduate placement to the rural governorates will almost certainly reduce the desirability of public sector employment.

4.109 The subtle change in the employment guarantee does not have subtle implications upon closer examination, however. In blunt terms, educated Egyptians have not chosen in the past to work in the rural areas, particularly the female.^{47/} Ninety percent of the labor force with bachelor degrees or above were estimated to work in urban areas in 1978 and females were even higher at 96.2 percent (Table 1.2). Similarly, 74.9 percent of those with intermediate certificates but less than a bachelor's degree were estimated as part of the urban labor force, with females at 85.7 percent. Thus, it is quite possible the "subtle change" in policy may reap twin benefits if it is followed through. Not only will probably reduce the overall desirability of public employment per se, and it may well improve human resource allocation by placing new graduates that elect public service in the rural areas.

^{47/}Although it is true that opportunities may not have existed in rural areas, there appears to be a clear urban preference among graduates in any case.

Annex XVI Macro Economic Analysis (Entire Annex)

EGYPT: MACRO ECONOMIC PERFORMANCE, PROBLEMS AND PROSPECTS

- I. Recent Economic Performance
 - A. Growth
 - B. Investment
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 - A. Agriculture
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EGYPT: MACRO ECONOMIC PERFORMANCE, PROBLEMS AND PROSPECTS

I. Recent Macro Economic Performance

1.01 It is useful first to review Egypt's recent macro economic performance in terms of a set of traditional performance indicators: growth, investment, inflation, employment and international developments. In terms of all these indicators, the Egyptian economy is performing very well.^{1/}

A. Growth

1.02 While per capita income at U.S. \$460 remains quite low, real GDP growth averaged in excess of 9% per annum between 1977 and 1979. Preliminary, unofficial estimates place the 1980 GDP growth rate above 8%. Virtually all sectors have participated in this growth. In this connection, it is helpful to review both sectoral contributions to total growth and the growth rates in individual sectors.

1.03 In terms of sectoral contributions to total growth, forty-three percent of the growth that occurred between 1977 and 1979 was generated in the commodity producing sectors, of which 14% was contributed by industry and 13% by petroleum. Agriculture, at 6%, registered a relatively weak contribution to total growth.

^{1/} A detailed statistical review of performance is contained in Tables 1 to 12, appended.

Thirty-seven percent of the total growth was generated in the distribution sectors, of which the trade, finance, insurance sector generated 23 percent, the Suez Canal 6 percent and transport 8 percent. The services sector generated 19 percent of total growth. Within the sector, other services (mainly government) generated 15 percent of the growth, tourism generated 1 percent and housing generated 3 percent.

1.04 In terms of the growth rates of individual sectors as distinct from sectoral contributions to total growth, outstanding performance was registered in the petroleum, construction and Suez Canal sectors. The growth rate in each of these sectors averaged in excess of 15 percent between 1977 and 1979. Relatively strong growth rates were also registered in the electricity, transport and trade, finance, insurance sectors. Agriculture and industry registered the weakest individual growth rates, with agriculture at about 5 percent and industry at about 8 percent.

B. Investment

1.05 Since 1977 fixed investment has averaged a highly respectable 23 percent of GDP. This investment has not only contributed to the GDP growth rate directly but has also reduced bottlenecks to growth itself. Electricity generating capacity has increased, telecommunications have improved substantially, the capacity of the Suez Canal has increased, new hotels and tourism facilities have been built and capacity additions and improvements have been made in both public and private sector industrial enterprises. Social

investments have not been neglected. Schools have been built, sanitation facilities have been improved and health related investment has been substantial.

C. Inflation and Employment

1.06 In consequence of Egypt's ability to finance large imports and a large surplus of imports over exports, these favorable investment levels have not been bought at the expense of a cut-back in overall living standards or, until 1980, at the expense of disquieting inflation rates. As measured by the growth rate of per capita real private consumption, living standards have risen perceptibly, although not shared equally across all income classes. There is tenuous evidence which suggests that growth in employment has exceeded the growth in the labor force in recent years.^{2/}

In 1980, the official consumer price index registered an inflation rate of 18% following inflation rates averaging about 10% in the two preceding years. The jump in inflation in 1980 reflected two principal phenomena. Early in 1980, the government increased substantially the highly subsidized price of bread as well as subsidized prices for certain other commodities. In addition, however, to the rise in administratively controlled prices, the inflation rate in 1980 also reflected heightened aggregate demand pressures.

^{2/} On the basis of Ministry of Planning figures recorded in Table 8, the rate of growth of employment was 3.35% over the 1977-79 period as compared with a labor force growth rate of less than 3%. However, estimates of employment growth from official labor force surveys differ from and have typically been smaller than those provided by the Ministry of Planning. For a discussion of the issue, see the Annex on Employment.

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fueled by increases in government purchases of domestic goods and services. On balance, the inflation which did occur in 1980 probably had a larger impact on low income households than on high income households because of the much greater weight of bread and cereal products the expenditure pattern of low income households as compared to high income households.

D. International Developments

1.07 Sharp increases in foreign exchange earnings from petroleum, workers' remittances, the Suez Canal and tourism combined with substantial increases in capital account revenues from direct foreign investment and foreign aid have enabled Egypt to register strong improvements in virtually all international performance indicators. Since 1977 Egypt has been able to reduce the debt service ratio and current account deficit to much more manageable proportions; liberalize the import and foreign exchange regimes; sustain a steady rise in imports essential for maintaining growth; and in 1980, marginally strengthen a weak position in official holdings of foreign exchange reserves. At the end of 1980, official holdings of foreign exchange reserves were equal to somewhat less than two months' imports. The debt service ratio was about 15% in 1980 as compared with double this figure in the mid-1970s. The current account deficit in 1980 fell to about \$500 million from about \$1.5 billion in 1977. Between 1978 and 1980 direct foreign investment more than doubled, rising from about \$300 million in 1978 to an estimated \$700 million in 1980. On a gross disbursements basis, medium-and long-term foreign aid flows rose to almost \$1.5 billion in 1980 from \$1.1 billion in 1978. Over half of these flows derived from U.S. project and non-project assistance.

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II. Current Problems

2.01 In spite of this impressive performance, the Egyptian economy faces a near term future in which quite substantial structural readjustments will be needed to ensure a continuation of favorable economic performance. Moreover, the recent record of buoyancy in all traditional macro economic indicators is itself deceptive and requires both qualification and re-interpretation. These observations are not made to detract from what has been impressive performance in many respects. Nor are they meant to discount the very positive role played in these developments by Egypt's economic policies, especially those associated with the initiation and gradual implementation of the Open Door policy beginning in 1974. Rather, they are meant to focus greater attention on the problems that need to be addressed and gradually resolved if favorable performance is to be sustained beyond the near term--beyond the coming three to five year period during which foreign exchange earnings can reasonably be expected to keep pace with growth requirements.

2.02 The immediate problem facing Egypt is the need to recognize that the current abundance of foreign exchange earnings is likely to prove to be transitory. Egypt's current abundance of foreign exchange revenues derives largely from exceptionally rapid growth in earnings from petroleum, workers' remittances, Suez Canal tolls and tourism. Between 1978 and 1980, revenues from petroleum alone increased fourfold, benefiting from a fortuitous coincidence of sharp OPEC-led price increases combined with the bringing onto stream of production from new fields. These revenues alone provided about

two-thirds of merchandise export earnings in 1980.

2.03 Prospects for continued very rapid growth in earnings from petroleum are questionable at best. Domestic consumption of petroleum, abetted by quite large price subsidies, is currently rising at 10-11% per year. Production from existing fields is projected to begin declining in the mid-1980s. Unless new fields are discovered and brought into production, Egypt's exportable petroleum surplus may be cut from both blades of the scissors: declining production and rising domestic consumption. While price increases for petroleum are likely to maintain a moderate growth trend in earnings, the sharp growth rates in earnings experienced between 1978 and 1980 are not likely to be repeated. Even with a projected continuation of relatively favorable earnings prospects from workers' remittances, Suez Canal tolls and tourism, the message is clear. Within the near term, Egypt will need to begin supplementing foreign exchange earnings from petroleum and conserving on import expenditures through the development of economically efficient tradeable goods production in the commodity producing agricultural and industrial sectors. Given the long gestation periods, substantial investments and very difficult structural readjustments that this will entail, Egypt will also continue to need substantial net capital inflows from aid and direct foreign investment.

2.04 There is a wide consensus on this "diagnosis" and "remedy" among Egypt's principal bilateral and multilateral donors. The identical message is clearly conveyed in the two recent World Bank

reports on Egypt.^{3/} While not a donor in the conventional sense, the IMF will no doubt convey a similar message in its forthcoming report. Many Egyptian leaders recognize the problems ahead and the need to address them.

2.05 There are opportunities for efficient development and growth in both the agricultural and industrial sectors. As suggested by the relatively weak sectoral growth rates recorded for agriculture and industry in 1977-1979, there are also powerful constraints.

Agriculture

2.06 At present the agricultural sector remains the largest single sector in the economy. It accounts for over 20% of GDP at current (1979) prices and provides about 40% of total employment. A large variety of food and non-food agricultural commodities are produced: wheat, corn, cotton, many fruits and vegetables, sugar, poultry and red meats. Many of these crops offer opportunities for further processing (i.e., domestic income generation) and export potential in Middle Eastern, EEC and other markets. These markets are not there for the taking; they will have to be actively sought out and developed. Among all traded goods, agricultural goods face the stiffest and most intransigent barriers to entry. Other countries -- Morocco being a geographically close example -- have, however, demonstrated that success is possible.

^{3/}Arab Republic of Egypt: Domestic Resource Mobilization and Growth Prospects for the 1980s. Report No. 3123-EGT. World Bank, 1980
Egypt: Recent Economic Developments and External Capital Requirements. Report No. 3253-EGT. World Bank, 1980

2.07 Many of the barriers to increased agricultural output, efficient import substitution and export development reflect problems which need to be dealt with through investment: land reclamation, drainage, irrigation, salinity and the development of supporting transportation and other infrastructure. Others are institutional in nature. Much of agricultural input and output marketing is handled through public sector channels -- channels that lack incentives to or are precluded from maintaining adequate input supplies, seeking out least cost sources of supply and developing more profitable product markets. There are opportunities to improve output potential through enhanced extension services and research. A principal problem is the pattern of government controls over input and output price and crop allocations. The set of price signals and crop allocation patterns given to the farmer do not optimize the value of agricultural production at world market prices. In spite of relatively large procurement price increases in 1980, the agricultural sector is effectively taxed. Procurement prices are substantially below international levels and are kept down in order to implicitly tax agricultural sector export income, or to maintain low prices to urban consumers and industrial users. While these pricing policies may satisfy distributional or industrial objectives, they do so at the expense of a more efficient allocation of resources, and, by implication, Egypt's development prospects for efficient export generation and import substitution.

2.08 A final problem is the orientation of agricultural investment policy toward food security objectives involving very large capital expenditures for new lands reclamation. The issue is not one of technological feasibility, nor even one of cost. Rather, it is a question of whether the returns to this investment compare favorably with the returns possible on less "visible" investments in the agricultural sector. Compounding the problem is the "price" basis for calculating returns. As noted above, many of Egypt's agricultural input and output prices differ radically from efficiency or shadow prices. The resulting difference between returns calculated on the bases of financial prices and efficiency prices oftentimes puts the international donor community's view of efficient import substitution and export development investment at odds with Egyptian agricultural investment policy.

Industry

2.09 The Egyptian industrial sector accounts for about 12% of GDP in current (1979) prices and a somewhat smaller percentage of employment. While textiles account for over one-fifth of industrial output, there is substantial production of processed foodstuffs, chemicals, building materials, consumer durables and engineering and metallurgical products (steel and aluminum products). Public sector enterprises currently account for about 70% of total output, a share which has fallen since the active promotion of private domestic, foreign and joint venture companies initiated through the Open Door policy.

2.10 There are extremely serious constraints to the development of efficient, export oriented industry in Egypt. These constraints do not reflect, however, an absence of comparative advantage in industrial products, especially in those industrial areas where Egypt has a strong natural resource base (textiles, petrochemicals, processed foodstuffs, and labor intensive production in general). Rather, they reflect a whole host of solvable but extremely intransigent problems of historical, political, institutional and economic origin.

2.11 In brief, Egypt's development strategy during the period 1952-1974 can be more or less aptly described as "inward looking", Soviet-type and heavy industry oriented. State ownership of industry and the banking system was seen as a means to distribute more equitably the available output. Autarkic import substitution policies were seen as a means to develop -- with little regard for Egypt's comparative advantage. Heavy industry was viewed as an essential base for developing downstream processing industries. Private industry was heavily discriminated against through taxation policies, access to credit and access to foreign exchange -- both for meeting import requirements and through surrender requirements on foreign exchange earnings. The pricing of substantial components of industrial output gradually lost "touch" with the market, serving instead distributional objectives. Controls on imports through prohibitory tariff levels, quotas and/or access to foreign exchange

ensured that domestic pricing could be insulated from price and technological developments in the world economy. Employment levels similarly lost "touch" with the market through labor legislation designed to achieve distributional and full employment objectives. Compounding the problem, a series of three wars and associated emphasis on military expenditures added a deteriorated infrastructure stock and a host of postponed infrastructure expenditures to an already burdensome legacy. Centralized decision making with respect to prices, wages, and investment left little room for an efficient allocation of resources based on the free interplay of competitive market forces.

2.12 This legacy which was inherited at the time the Open Door policies were initiated is an extra-ordinarily heavy burden and it remains so today. The public sector enterprises were and continue to be ill-prepared for the liberalizing environment of the Open Door policy. They are burdened by price controls on output in the face of input cost increases, deficient investment budgets, excessive employment levels and a wage structure inappropriate for current market conditions. All of these factors put them at a perceived disadvantage relative to the less restrictive environment enjoyed by private industry and joint venture companies. These are partly embodied in the three separate pieces of legislation which govern industry today: one for Open Door companies, one for private

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industry and one for public sector industry. Policies relating to pricing, labor, taxation, credit and access to foreign exchange differ among the company types.

2.13 While the liberalizing Open Door policies have begun to introduce economic rationality in Egypt's economic structure, there is much that remains to be accomplished and continuing uncertainty about how far and how quickly to proceed.

2.14 In view of the problems of pricing and employment identified in the agricultural and industrial sectors, it is useful to both review and reinterpret Egypt's recent macro economic record in these areas.

Inflation

2.15 Fully one-third of the commodity weights in the official consumer price index is represented by products -- mainly basic foodstuffs and rents -- which are administratively controlled. The relatively favorable inflation rates averaging slightly above 10% in 1977-1979 and about 18% in 1980 need to be reinterpreted in this context. Price controls generate one or a combination of offsets: production cutbacks in the controlled commodities, production subsidies to producers, shortages of the price controlled commodities, a spillover of inflationary pressures into non-price controlled domestic or imported substitutes and increased imports of the price controlled products -- imports which have to be sold at below CIF import prices. In fact, every one of these offsets has

occurred. For example, Egypt's visible subsidy bill for consumer commodities -- visible in the sense that it is explicitly represented in the Central Government budget as the difference between procurement costs and controlled sales prices -- more than doubled between 1977 and 1979, rising considerably faster than both total tax revenues and public sector fixed investment.^{4/} Moreover, Egypt's visible subsidy bill does not tell the whole story. There is not a single energy product in Egypt whose price is not controlled at levels substantially below international market prices. The problem has become more acute of late. As a result of the doubling of international petroleum prices between the beginning of 1979 and the end of 1980, Egypt's domestic energy prices now stand at less than one-fifth of international market prices. As this evidence suggests, Egypt's relatively favorable record on inflation is a highly imperfect and deceptive indicator of favorable price performance. Inflation has been repressed, not controlled. Moreover, the repression has taken the form of precluding adjustments in the structure of relative prices which are necessary to ensure an efficient allocation of resources. Egypt's low energy

^{4/}In 1977, visible consumer subsidies were equal to 40% of public sector fixed investment expenditures (investment expenditures of the Central Administration and public sector enterprises combined). In 1979, the figure was 53% and the budget estimate for FY 80/81 is 59%. Part of the growth was due to the devaluation of 1979. The devaluation was not passed on into a rise in domestic LE prices. Instead, it was absorbed as an increase in the budget for subsidies.

prices, for example, stimulate energy consumption precisely at a time when energy conservation is required. It is for this reason that it is essential to distinguish between pressures leading to an overall rise in all prices and pressures leading to a change in the structure of relative prices. This is so even when the change in the structure of relative prices usually does result in a rise in the overall price level. The former does need to be attacked; the latter is an unavoidable consequence of the fact that energy prices loom large in the overall price level both because they are consumed directly and because they are consumed indirectly in the form of products which are produced partly with energy inputs. In Egypt this important distinction is not commonly made or understood.

Employment

2.16 The record on employment is equally deceptive. Certainly, Egypt's highly buoyant growth performance has generated some substantial new gainful employment opportunities, most strongly in the construction sector (Table 8). However, as suggested above and developed much more fully in the Employment Annex, Egypt's record on employment growth is subject to strong qualification. It only partially reflects performance associated with the creation of gainful new job opportunities.

2.17 Since the 1952 Revolution, Egypt has had a strong and laudable concern for providing full employment. When, however, market forces have not generated sufficient opportunities, the

government has acted as an employer of last resort, especially for school and university graduates. The degree of commitment to guaranteed employment has varied over the years. For the most part, the government is aware that employment generated through administrative decisions impose a substantial cost in terms of efficiency, work force incentives and competitiveness in domestic and foreign markets in commodity producing public sector firms. Nevertheless, the social safety value provided by employment guarantees has resulted in an uneasy intermixing of social and efficiency objectives in the level of as well as in the structure of employment.

2.18 As a result of this intermixing, there is an employment problem in Egypt. Redundant employment in the Central Administration is large. To a lesser but still substantial degree, many of the commodity producing public sector firms are constrained to operate with employment levels in both administrative and production positions which exceed corresponding levels in domestic Egyptian and foreign firms operating in similar sectors and with similar plant and equipment. The armed forces continue to serve as a temporary, stop-gap form of employment creation. Between one and one and one-half million Egyptians, about 10% of the labor force, work abroad. The population is currently growing at 2.9% per year. Egypt's need to generate gainful employment opportunities, not only for new entrants to the labor force, but also to provide gainful opportunities for existing redundant employment in the public sector, is truly large.

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III. The Magnitude and Development Implications of the Conflict
Between Efficiency and Equity

3.01 In essence, Egypt's employment situation and the structure of Egypt's prices and associated implicit and explicit subsidies are two manifestations of a common problem. Both prices and employment are serving social objectives at the expense of allocative efficiency.

3.02 The problem is not merely of academic interest. If Egypt is to begin the process of supplementing foreign exchange earnings from petroleum through the development of efficient tradeable goods' production in the Industrial and Agricultural sectors, there must be a shift in employment and investment toward areas in these sectors where Egypt has a comparative advantage. To generate this shift, the structure of relative prices must be made right -- must be allowed properly to signal where Egypt's comparative advantages lie. In the Egyptian context, this means that many subsidized prices will have to rise. This, in turn, means that households whose income is spent on these subsidized commodities will experience a decline in real living standards unless the rise in prices is accompanied by a compensating (offsetting) income transfer. It is no simple matter to devise or to implement an income transfer system. Yet, to be socially sustainable, the resulting rise in prices must be accompanied by an offsetting income

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transfer system, especially if the magnitude of the subsidies is large relative to income.

3.03 Moreover, this is only half the story. The rise in subsidized prices will generate both an absolutely higher price level and, within that absolutely higher price level, a changed structure of relative prices. As discussed below, these factors will also generate readjustment costs in the economy. These readjustment costs will also have to be addressed if the goal of developing efficient tradeable goods industries is to be achieved.

3.04 The magnitude of the problem -- both in its economic and social sustainability dimension -- has been estimated in the Subsidies Annex for 1979, covering the main food and energy products which are subsidized. Table 1.2 in the Annex provides estimates of these subsidies as a share of urban household expenditures for different urban household expenditure classes. For all practical purposes, these can be regarded as the income equivalent of the subsidies for different urban household income classes. On this interpretation of Table 1.2, we can consider what would happen to the real incomes of the urban population in lower, middle and upper income class urban households if, overnight, the prices for selected food and energy products were permitted to move to non-subsidized levels.

3.05 The estimated urban population in 1979 is above 24 million. In the absence of an offsetting income transfer, the lowest 25% of the urban population would experience a decline in real standards of living of over 50%. About 28% of the decline would be due to the elimination of food subsidies and about 23% would be due to the elimination of energy subsidies.

3.06 The next 25% of the urban population would experience a decline in living standards equal to slightly less than 50%, about 25% due to the elimination of food subsidies and about 24% due to the elimination of energy subsidies.

3.07 The next 30% of the urban population would experience a decline in living standards of about 40%, about 20% due to the elimination of food subsidies and the remaining 20% due to the elimination of energy subsidies.

3.08 The highest 20% of the urban population would experience a decline in living standards of about 33%, about 12% due to the elimination of food subsidies and 21% due to the elimination of energy subsidies.

3.09 On average for the urban population as a whole, the elimination of food and energy subsidies would reduce living

standards by about 40%, about half due to the elimination of each subsidy.^{5/}

3.10 It would be extremely difficult to overstate the magnitude of the structural readjustment dilemma implied by these estimates. On the one hand, subsidization that takes place through the price system must be eliminated because it destroys the ability of the price system to generate correct signals for investment, consumption, export development and import substitution. On the other hand, it is quite difficult to implement the market solution when the price subsidies provide substantial income-equivalents to the population and the existing capital stock and structure of production has been built up on the basis of incorrect price signals.

3.11 In order to focus attention on the structural readjustment aspects of the dilemma, let us assume that a socially sustainable income transfer system can be put into effect. In particular, suppose the government could take the \$2.2 billion subsidy bill calculated in the Subsidy Annex and distribute it to each household in an amount exactly equal to what would be required to purchase the subsidized goods at the unsubsidized prices. While it might seem

^{5/} Many of the energy subsidies are indirectly received by the consumer in the form of lower prices for goods whose costs of production include subsidized energy inputs. The subsidy paper assumes that cost increases resulting from subsidy elimination on a producer's energy inputs will be passed on in the form of higher prices. Thus, producer subsidies are taken into account but are passed through to the ultimate beneficiary.

that all would now be set right, this is not the case. There would now be a new, higher price level. More important, there would also be a new structure of relative prices. The subsidized goods would rise in price relative to the non-subsidized goods. The result would be a new set of comparative advantages in trade for Egypt. Even if the absolute rise in the general price level were fully offset by exchange rate depreciation, the change in the structure of relative prices could render many of Egypt's industries uncompetitive against imports in the domestic market and uncompetitive in world export markets. Certainly, it is also true that many Egyptian industries and potential industries would find themselves newly competitive in the domestic market and in world markets. But there is a fundamental difference. Egypt's existing capital stock of machinery, plant and equipment has been built up upon a sequence of investments based on "incorrect" price signals. This is the investment it has in place; it does not have in place much of the investment, marketing skills and outlets necessary to take advantage of the new opportunities. While Egypt may well have to "write off" much of past investment, it will take considerable time as well as new investment to take advantage of the new opportunities.

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3.12 The argument does not rest on trade alone. At, for example, low energy prices there is little incentive to invest in relatively more costly but relatively less energy intensive capital equipment and production processes. Even if there were no alteration in comparative advantage, the new regime of energy prices might very conceivably dictate "scrapping" of substantial past investment or replacement of it. Given the problems of adjustment, it might seem preferable to simply continue to postpone it. This is, unfortunately, not a viable option.

3.13 The non-viability of the situation reflects two facts. First, the longer adjustment is postponed, the larger will become the adjustment burden that has to be borne. In energy pricing, for example, the longer adjustment to appropriate pricing is postponed, the greater will be the amount of investment which will continue to take place in energy intensive production processes and machinery. For much of this investment, less energy intensive technology might have been purchased had the right price signals been provided by the market. Retrofitting or adaptation of the equipment may well prove costly or impossible. In some cases investments may have to be scrapped. More important, for reasons noted earlier, Egypt's current abundance of foreign exchange revenues is likely to be transitory and it is this temporary abundance that has enabled Egypt to pay for its subsidy bill.

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IV. A Synopsis of the Situation

4.01 In summary, Egypt is not in an enviable situation:

- At some point in the mid 1980s, Egypt will need to begin supplementing foreign exchange earnings from petroleum and conserving on import expenditures through the development of efficient tradeable goods production in the agricultural and industrial sectors.
- There are a host of cost/price distortions which preclude the current structure of prices from signaling properly where Egypt's comparative advantages lie in these sectors.
- While these cost/price distortions must be eliminated to generate the required shifts in investment and employment into the right areas in these sectors, this will not be easy to do.
- The cost/price distortions that need to be eliminated simultaneously provide large cost subsidies to producers and very substantial income equivalents to all classes of society.
- Precipitous adjustment to the new regime of prices would be socially unsustainable. For consumers, the result would be a massive reduction in living standards. For producers, there would be extreme difficulties in meeting investment requirements for both readapting the existing production processes and for taking advantage of new opportunities opened up by the new structure of

prices. In some cases, moreover, some industries/firms might not be able to survive on their own under the new structure of prices. The same can be said for some classes of consumers.

- Compounding the problem, there are a host of legal, institutional and bureaucratic holdovers from the inward looking development strategy of the pre-1974 period which are probably at least as strong an impediment to needed changes as the pricing/distributional impact issue.

- Finally, but not exhaustively, the domestic financial resources needed to finance investment requirements in a non-inflationary manner are unlikely to be sufficient in the absence of improved incentives for private savings, establishment of a tax base more elastic with respect to income and gradual reduction in the subsidy bill.

V. Policies for Sustaining Development

5.01 While Egypt is not in an enviable position, it is by no means in an impossible situation. In fact, the current relative abundance of foreign exchange revenues will provide perhaps as long as a five-year period during which appropriate structural readjustments can be put into place. It is a unique opportunity, an opportunity to introduce gradually a set of reforms that will provide for Egypt's future. While there is an imperative to adjust there is also an opportunity to adjust without the eventual need to

introduce harsh stabilization policies. Specifically, suppose Egypt did not succeed in supplementing foreign exchange earnings from petroleum as required. At some point in the mid 1980s, foreign exchange availabilities would fall short of import requirements. For a time, Egypt might be able to borrow to maintain import levels. Eventually, creditworthiness considerations would dry up sources of net new borrowing. At this point, Egypt would have no choice but to tighten up on imports through such aggregate demand restraining measures as the introduction of tax increases, government expenditure restraint and/or tight credit ceilings on bank finance of aggregate demand. Alternatively, but with the same ultimate impact on growth and employment, Egypt could simply directly cut back on imports through a reimposition of the direct controls which characterized the late 1960s and early 1970s.

Pricing Policies

5.02 A primary requirement is getting appropriate price signals into the economy. It simply will not be possible to direct investment and employment into areas where Egypt has comparative advantages in the absence of the ability of the structure of relative prices to reflect where these comparative advantages lie.

5.03 Given the magnitude and pervasiveness of the price distortions which currently exist, it seems inevitable that this will have to be done over a relatively long time. While five years

may not be fully sufficient to make all the required readjustments, it should be sufficient to make at least a substantial beginning. For firms, time will be provided to adjust to a sequence of cost increases that, in the aggregate, might be quite large as in, say, the energy area. In this area, foreign aid could play a facilitating role by financing investments in energy saving equipment, production processes and firm or industry specific energy technology analyses. For households, time will be provided to spread out the implicit reduction in real incomes that will result from the phased reduction in price subsidies. Moreover, because time is available, it may even be possible to completely avoid real income losses. If growth provides household income increases of sufficient magnitude, the growth itself can absorb the subsidy reduction losses. The mechanism would be wage increases in tandem with subsidies reduction, with part of the wage increases being offset by subsidies reduction.

5.04 One major qualification is in order. Subsidies play a very important role in providing income to the poor, many of whom could not easily adjust to the uncompensated elimination of price subsidies. For these groups, an appropriate income transfer system will be needed. A food stamp system, even one of a commodity specific nature, is an attractive proposal. Food stamps offer a

variety of options. For example, they could be defined to have a value equal to, say, 80% of the market price of specific (or all) items. In that way price increases, since they would require a larger absolute cash payment, would still generate shifts toward substitutes which have not risen as much in price. In addition to target income groups, it is also possible that some firms or industries may have to be protected from the elimination of price subsidies through long term budget transfers. While this may not be desirable, it may be unavoidable.

5.05 A further and related policy desideratum would be clear signals with respect to the levels (static and dynamic) to which prices are adjusting. The reason for this is clear. It is important that investment decisions be based on a correct set of price signals. If prices are on their way to some level, it would be better if the investment decisions were based on where prices are going as distinct from where they are now. Slow price adjustment need not forestall correct investment decisions.

5.06 Finally, it will not be enough simply to get the price signals "right". They also have to be acted upon in the investment selection process. Private sector firms/individuals will automatically do this. The public sector is not under the same constraints. This is so for public goods (e.g., defense) as well as

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for goods which can be sold individually on the market. Since about 75% of total fixed investment in Egypt is undertaken by the public sector, it would seem of considerable importance to ensure that public investment decisions be based on sound economic appraisals of the merits of investment projects which are "competing" for public sector funding.

Exchange Rate Management

5.07 Exchange rate management will play a critical role in Egypt's future. Effective exchange rate management requires careful attention to price developments both within and outside Egypt. One dimension of the problem is how to manage the exchange rate in response to an overall rise in the price level due to the phased elimination of price subsidies. If Egypt were to act to forestall the resulting pressures to depreciate the exchange rate, export development and import substitution would both suffer. Prices would rise in Egypt with no compensating depreciation in the exchange rate. A second dimension of the problem is the petroleum earnings-related buoyancy in the current exchange rate. Recently, Egypt has registered declining real exports of manufactures and increased real imports of manufactures, many of which do compete with domestic Egyptian production. In this connection, one issue is whether the government should permit the exchange rate to be buoyed by petroleum

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earnings in the face of declining competitiveness of Egyptian manufactures in home and world export markets. A second issue is the shadow exchange rate which should be used for projects whose outputs will come on stream in the mid-1980s. If, in fact, the current exchange rate reflects a transitory buoyancy, it would be quite proper to take steps to keep this transitory buoyancy from being reflected in the market exchange rate. Operationally, this means that Egypt would have to sell L.E. for dollars in the foreign exchange market in order to keep the L.E. at its "proper" fundamental level. One thing is clear from all of this: Egypt should develop and continuously monitor indices of the competitiveness of its exports in world markets and the competitiveness of domestic manufactures against imports. These indices would provide information absolutely essential for sound decisions on exchange rate management.

Inflation and Public Sector Finance

5.08 There is strong evidence that Egypt is currently entering a period which will require greatly heightened attention to inflation related demand management considerations.

5.09 In Egypt's 1980/81 fiscal year, an astounding 37% of public sector revenue is estimated to come from Suez Canal and petroleum revenues in the form of both profit transfers and business taxes.

The growth in these revenues reflect the recent rise in petroleum prices and increased revenues anticipated from the recently completed widening and deepening of the Suez Canal. Expenditures based on Suez Canal and petroleum revenues are quite unlike expenditures based on taxes paid by domestic Egyptian economic units. In the latter case, there is a one-for-one substitution of government expenditures for the expenditures of domestic Egyptian economic units. In the former case, this isn't true. For the most part, the revenues are received from economic units whose income is not spent in Egypt. Instead of being a one-for-one substitution of government demand for private Egyptian demand, these expenditures are additive with respect to total Egyptian demand. Moreover, the monetary consequences are expansionary. The foreign exchange receipts which are converted into L.E. equivalents wind up as additions to the money stock with possible "second round" expansionary effects on demand for domestic and imported products.

5.10 The inflationary implications of expenditures based so heavily on these revenue sources do not appear to be adequately recognized by many government authorities. Their attention seems to be more directed at the size, as distinct from the source, of government revenues. The inflationary implications of these revenue sources will need to be far better recognized by the government if

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inflation is to be controlled. Neither current nor capital investment expenditures based on these sources can be financed in a non-inflationary manner. While the possibility exists that domestic inflationary pressures could be avoided through increasing expenditures only on imports, this is more a theoretically valid proposition than a practical, empirically valid possibility. Governments simply do not "fine tune" their expenditures in the required manner even if they could.

5.11 These observations have important implications for non-inflationary financing of Egypt's ambitious investment plans in the current five-year period. Much heavier reliance must be placed on either subsidy reductions, tax increases, promotion of voluntary private savings or a combination of them than on either bank finance, canal/petroleum revenues or foreign borrowing to pay for local currency costs. Inflation is made more difficult to deal with after the fact than before it becomes pervasive. For one, it will make it much more difficult to develop a capital market willing to provide (voluntary) long-term debt and equity capital for investment. The observations also have important implications for inflation control in general. Egypt's ability to control inflationary pressures through monetary policies of the type common to more developed countries will have to be introduced. In this

connection, the Central Bank's role in establishing as well as administering legal reserve requirements, rediscount rates and policies and other monetary policy instruments will have to be developed and improved. One final point deserves special emphasis. In fighting inflation, care must be taken to distinguish between inflation resulting from generalized excess demand pressures and inflation that reflects the phased elimination of price controls on subsidized products. The former source of inflation is a proper subject of anti-inflationary monetary and fiscal policies. The latter is an unavoidable consequence of the need to permit the price system to allocate resource properly.

The Subsidy Bill

5.12 Egypt's tax revenue could be increased through greater emphasis on income taxes and the introduction of an expenditure tax. These would be welcome developments, especially if the tax burden were concentrated on higher income individuals and on luxury consumption items. In this connection, draft tax legislation incorporating this concentration is currently being discussed within the government. While it is too early to predict the outcome, it is a sign that tax effort may at least be headed in the right direction.

5.13 As a complement to these measures or in partial substitution for them, it would be extremely worthwhile to explore the

possibilities for a relatively rapid reduction in price subsidies accruing to higher income class households. If the estimates in the Subsidies Annex are even approximately correct, higher income households receive a large share of Egypt's total subsidy bill: 33.6% of the total food and energy subsidy, 39.3% of the energy subsidy and 21.2% of the food subsidy are estimated to have been received by the top 20% of urban household income classes. In nominal terms, this is equivalent to L.E. 736.8 millions, equal to 28% of consolidated central government and public sector fixed investment. The government revenue equivalent of the elimination of subsidies in favor of this group would obviously be large. Moreover, within both the food subsidy and the energy subsidy, there are commodities which are much more heavily consumed by higher income groups -- gasoline and meat are examples. Elimination of these subsidies alone would affect mainly higher income groups.

5.14 More generally, the (phased) elimination of subsidies received by all but the lowest income group would result in a substantial revenue equivalent increase to the government. The subsidy received by all but the lowest income group is estimated at about L.E. 1.8 billion. A ten percentage point phasedown per year would provide, therefore, L.E. 180 million in constant 1979 L.E.

All of these magnitudes suggest the importance of carefully studying the various options for reducing the subsidy bill, both in their quantitative and social dimensions.

Other Policy Requirements

5.15 Most of the policy considerations discussed above are traditional ones. In Egypt, as noted earlier, there are a host of institutional problems which will remain as constraints to needed changes. One, for example, is the absence of uniform treatment for the three different types of firms in the industrial sector. Ultimately, as the government recognizes, these problems will also have to be addressed.

VI. Conclusion

6.01 It would be difficult to predict the outcome of events over the next few years. They will be critical years for Egyptian policymakers. There is an opportunity for real fundamental change. At the same time, Egyptian policymakers will have to cope with complex, interrelated social and economic issues.

6.02 It is, for example, easy to say that an income transfer system must be introduced as a substitute for subsidies that are provided through the price system. It is quite another matter to devise, implement and administer such a system. It is easy to say that energy prices must rise to their opportunity cost levels but

how does one build a political consensus in favor of price increases. More generally, how does one build a consensus in favor of changes that ultimately will have to occur at ever greater cost -- and perhaps with abrupt suddenness -- when the changes can in fact be temporarily postponed? These are but a few of the problems with which Egypt's economic and political policy leaders will have to cope. To say it will not be easy is an understatement; to say that it cannot be done is an overstatement.

6.03 The role for Egypt's multilateral and bilateral donors is no less complex. It is unquestionably true that Egypt will need large resource transfers in the years ahead if socially sustainable consumption levels are to be combined with adequate investment levels. At the same time, there is a very fine dividing line between demonstrating an understanding of the difficulties of making essential policy adjustments from an Egyptian perspective and, by not pressing for appropriate policy changes, simply underwriting improper policies through providing resource transfers which permit the situation to be temporarily sustainable.

TABLE 1
Gross Domestic Product at Constant 1975 Prices
 (Millions LE)

	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	Contrib. to Growth <u>1977-79</u>	Avg. Annual Rate of Growth <u>1977-79</u>
<u>Commodity Sectors</u>	<u>3034</u>	<u>3180</u>	<u>3486</u>	<u>3692</u>	<u>0.43</u>	<u>7.75</u>
Agriculture	141	1447	1528	1587	0.06	4.72
Industry and Mining	948	1012	1068	1170	0.14	7.52
Petroleum	265	350	427	471	0.13	16.00
Electricity and Public Utilities	97	108	127	135	0.02	11.80
Construction	233	263	336	349	0.08	15.20
<u>Distribution Sectors</u>	<u>1224</u>	<u>1379</u>	<u>1596</u>	<u>1797</u>	<u>0.37</u>	<u>14.15</u>
Transport, Comm., Storage	245	289	333	375	0.08	13.90
Suez Canal	142	171	201	232	0.06	16.40
Trade, Finance Insurance	837	919	1062	1190	0.23	13.97
<u>Service Sectors</u>	<u>1259</u>	<u>1336</u>	<u>1437</u>	<u>1545</u>	<u>0.19</u>	<u>7.53</u>
Housing	225	231	246	270	0.03	8.11
Tourism	114	107	121	126	0.01	8.51
Other Services	922	998	1070	1149	0.15	7.29
<u>GDP at Factor Cost</u>	<u>5519</u>	<u>5895</u>	<u>6519</u>	<u>7054</u>	<u>1.00</u>	<u>9.40</u>

TABLE 2
GDP SECTORAL GROWTH RATES AND ECONOMIC STRUCTURE
 (From GDP at 1975 Prices)

	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79</u>	<u>GDP in Millions</u>		<u>Structure</u>		<u>Structure</u>
					<u>of 1975 LE</u>		<u>(1975 Prices)</u>		<u>(Current Prices)</u>
					<u>1975</u>	<u>1979</u>	<u>1975</u>	<u>1979</u>	<u>1979</u>
<u>Community Sectors</u>	<u>7.0</u>	<u>4.8</u>	<u>9.6</u>	<u>6.7</u>	<u>2816.4</u>	<u>3691.8</u>	<u>55.6</u>	<u>52.3</u>	<u>57.2</u>
Agriculture	1.5	-2.9	9.3	0.3	1468.9	1587.4	29.0	22.5	22.5
Industry & Mining	6.8	6.8	5.5	10.5	887.6	1179.6	17.5	16.7	12.4
Petroleum	78.1	31.9	21.9	10.3	149.0	470.5	2.9	6.7	16.0
Electricity	10.8	12.1	19.1	4.5	69.2	107.5	1.4	1.5	0.9
Construction	-3.9	12.9	27.7	3.2	242.5	346.7	4.8	4.9	5.5
<u>Distribution Sectors</u>	<u>19.0</u>	<u>12.2</u>	<u>15.8</u>	<u>13.1</u>	<u>1035.7</u>	<u>1811.7</u>	<u>20.5</u>	<u>25.6</u>	<u>23.9</u>
Transportation, Com- munication & Storage	13.5	15.8	15.2	12.4	219.6	347.0	4.3	4.9	4.0
Suez Canal	266.2	20.2	17.6	22.3	38.8	245.8	0.8	3.5	3.5
Trade & Finance	8.3	9.8	15.6	11.6	777.3	1191.9	15.4	16.9	16.4
<u>Services Sectors</u>	<u>5.4</u>	<u>7.1</u>	<u>7.6</u>	<u>6.3</u>	<u>1209.2</u>	<u>1561.4</u>	<u>23.9</u>	<u>22.1</u>	<u>18.9</u>
Housing	6.5	9.3	6.7	7.3	208.7	277.9	4.1	3.9	2.4
Public Utilities	7.0	9.0	11.1	13.7	18.6	27.4	0.4	0.4	0.3
Other Services	5.1	6.6	7.7	6.0	981.9	1256.1	19.4	17.8	16.3
<u>GDP at Factor Cost</u>	<u>9.1</u>	<u>7.0</u>	<u>10.6</u>	<u>8.2</u>	<u>5061.3</u>	<u>7064.9</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Source: Ministry of Planning (Revised), IMF.

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TABLE 3
STRUCTURE OF GROSS FIXED INVESTMENT
(In Percent)

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
<u>Commodity Sectors</u>	<u>46.4</u>	<u>55.4</u>	<u>58.2</u>	<u>57.0</u>	<u>55.0</u>
Agriculture	7.5	6.8	8.0	7.3	8.0
Industry & Mining	22.7	26.1	30.5	29.2	24.4
Petroleum ^{1/}	9.6	12.8	11.2	7.7	13.5
Electricity	4.2	4.1	5.9	7.7	6.8
Construction	2.4	5.5	2.6	5.1	2.3
<u>Distribution Sectors</u>	<u>31.5</u>	<u>27.5</u>	<u>25.7</u>	<u>27.8</u>	<u>28.5</u>
Transportation, Communications & Storage ^{2/}	30.3	25.7	24.1	26.4	26.4
Trade & Finance	1.2	1.8	1.6	1.4	2.1
<u>Service Sectors</u>	<u>23.4</u>	<u>18.6</u>	<u>17.9</u>	<u>17.0</u>	<u>18.2</u>
Housing	14.0	8.8	6.8	5.2	4.2
Public Utilities	3.6	3.1	3.6	3.7	4.8
Other Services	5.8	6.7	7.5	8.1	9.2
Less: Expenditures for Purchase of Land	-1.3	-1.4	-1.9	-1.8	-1.7
<u>Gross Fixed Investment</u> (In Millions of LE)	<u>100.0</u> (1265.3)	<u>100.0</u> (1450.1)	<u>100.0</u> (1838.3)	<u>100.0</u> (2617.8)	<u>100.0</u> (3345.6)
Public Sector	84.1	79.5	80.4	83.2	76.1
Private Sector	15.9	20.5	19.6	16.8	23.9
<u>Memorandum Items</u>					
GNP (LE Millions)	5231	6838	8643	10,765	13,235
Investment as % of GNP	24.2	21.2	21.3	24.3	25.3

^{1/} Exploration and production by foreign and domestic companies

^{2/} Includes Suez Canal

Source: Ministry of Planning, IMF

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TABLE 4
Available Resources, Aggregate Demand and Savings
(In Millions of LE)

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
<u>GDP at Mkt Prices</u>	<u>5247</u>	<u>6705</u>	<u>8210</u>	<u>9782</u>	<u>12475</u>
Net Factor Income	-16	133	433	983	761
<u>GNP at Mkt Prices</u>	<u>5231</u>	<u>6838</u>	<u>8643</u>	<u>10765</u>	<u>13236</u>
<u>Import Surplus</u>	<u>922</u>	<u>721</u>	<u>803</u>	<u>1371</u>	<u>2002</u>
Imports	1886	1872	2575	3316	5254
Exports	964	1151	1772	1945	3252
<u>Available Domestic Resources</u>	<u>6169</u>	<u>7426</u>	<u>9013</u>	<u>11153</u>	<u>14477</u>
<u>Investment</u>	<u>1724</u>	<u>1889</u>	<u>2399</u>	<u>3034</u>	<u>3796</u>
Fixed	1265	1450	1838	2618	3346
(Public)	(1064)	(1153)	(1477)	(2179)	(2547)
(Private)	(201)	(297)	(361)	(439)	(799)
Stock Changes	459	439	561	416	450
<u>Consumption</u>	<u>4445</u>	<u>5539</u>	<u>6614</u>	<u>8119</u>	<u>10682</u>
Public (GOE)	1344	1572	1697	1841	2059
Private	3101	3965	4917	6278	8623
<u>Domestic Savings</u>	<u>802</u>	<u>1168</u>	<u>1596</u>	<u>1668</u>	<u>1793</u>
% GDP	15.3	17.4	19.4	17.0	14.4
% Investment	46.5	61.8	66.5	54.8	47.2
<u>Import Surplus</u>	<u>922</u>	<u>721</u>	<u>803</u>	<u>1371</u>	<u>2002</u>
% GDP	17.6	10.8	9.8	14.0	16.0
% Investment	53.5	38.2	33.5	45.2	52.7
<u>Investment (Fixed)</u>	<u>1265</u>	<u>1450</u>	<u>1838</u>	<u>2618</u>	<u>3346</u>
% GDP	24.1	21.6	22.4	26.8	26.8
% GNP	24.2	21.2	21.3	24.3	25.3
% Available National Resources	20.5	19.5	20.4	23.5	23.1

Sources: Ministry of Planning, IMF, and USAID/Cairo.

TABLE 5
EXPORTS
(In Millions of Current Dollars)

	<u>1978</u>	<u>1979</u>	<u>1980^{b/}</u>	<u>1981</u>	<u>1982</u>
<u>Goods Except Petroleum</u>	<u>1,296</u>	<u>1,140</u>	<u>1,215</u>	<u>1,285</u>	<u>1,355</u>
Cotton	285	348	350	350	350
Other Agricultural Prod.	174	134	145	160	175
Yarn & Textiles	273	267	270	280	290
Other Indus. Prod.	223	231	250	275	300
Other	341	160	200	220	240
<u>Petroleum</u>	<u>688</u>	<u>1,375</u>	<u>2,730</u>	<u>3,240^{c/}</u>	<u>3,155^{c/}</u>
<u>Exports by Foreign Cos.</u>					
(Profit)	<u>148</u>	<u>448</u>	<u>747</u>	<u>940</u>	<u>970</u>
<u>Total Goods Exports</u>	<u>2,132</u>	<u>2,963</u>	<u>4,692</u>	<u>5,465</u>	<u>5,480</u>
<u>Non-Factor Services</u>	<u>1,541</u>	<u>1,561</u>	<u>1,700</u>	<u>1,950</u>	<u>2,200</u>
Suez Canal Dues	541	589	650	800	900
Tourism Receipts (Offic.)	702	601	600	650	750
Other	325	371	450	500	550
<u>Factor Services</u>	<u>1,905</u>	<u>2,520</u>	<u>2,975</u>	<u>3,480</u>	<u>4,070</u>
Workers' Remittances ^{a/}	1,760	2,214	2,545	2,930	3,370
(Cash)	(921)	(954)	(1,000)		
(Imports)	(839)	(1,260)	(1,545)		
Investment Income	145	306	430	550	700
<u>Total Exports</u>	<u>5,578</u>	<u>7,044</u>	<u>9,367</u>	<u>10,895</u>	<u>11,750</u>

Sources: Central Bank of Egypt and USAID/Cairo.

^{a/} Workers' Remittances for 1981 and 1982 are projected to increase at 15% same as in 1980/79.

^{b/} 1980 estimates are based on DBE figures for the first six months.

^{c/} Petroleum exports are based on 630,000 and 650,000 bpb production with the Suez blend price of \$40 and others \$35 per barrel.

TABLE 6
IMPORTS
(In Millions of Current Dollars)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
<u>Goods</u>	<u>5,283</u>	<u>6,682</u>	<u>7,570</u>	<u>8,795</u>	<u>10,215</u>
Food	1,355	1,447	2,590	3,015	3,510
Intermediate	1,711	2,527	2,790	3,235	3,750
Capital	1,400	2,271	1,625	1,885	2,185
Other Consumer Goods	817	437	565	660	770
<u>Non-Factor Services</u>	<u>1,005</u>	<u>1,094</u>	<u>1,280</u>	<u>1,435</u>	<u>1,605</u>
<u>Factor Services</u>	<u>563</u>	<u>876</u>	<u>1,197</u>	<u>1,440</u>	<u>1,520</u>
Interest on Debt	415	428	450	500	550
Exports by Foreign Oil Co.	148	448	747	940	970
<u>Total Imports</u>	<u>6,851</u>	<u>8,652</u>	<u>10,047</u>	<u>11,670</u>	<u>13,340</u>

Sources: Central Bank of Egypt and USAID/Cairo.

Explanation on Projections:

1. Goods' imports in 1980 are based on imports during January-June 1980 reported by the CBE.
2. Projections of goods' imports for 1981 and 1982 are based on the following assumptions in percent.

	<u>Population Growth</u>	<u>Income Elasticity For Imports</u>	<u>World Inflation</u>	<u>Price Elasticity For Imports</u>	<u>Import Growth Rate, Assuming GNP Rising at 8%</u>
Food	2.8	0.5	12.0	-0.2	16.4
Intermediate	-	1.0	8.0	1.0	16.0
Capital	-	1.0	8.0	1.0	16.0
Other Consumer Goods	2.8	1.5	10.0	-0.8	16.8

3. Non-Factor Services Imports are projected to increase at 12% per year, slightly more than the world inflation rate.

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TABLE 7
BALANCE OF PAYMENTS - CURRENT ACCOUNT
(In Millions of Current Dollars)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
<u>Trade Balance</u>	<u>-3,151</u>	<u>-3,719</u>	<u>-2,878</u>	<u>-3,330</u>	<u>-4,735</u>
Exports	2,132	2,963	4,692	5,465	5,480
Imports	-5,283	-6,682	-7,570	-8,795	-10,215
<u>Non-Factor Services, Net</u>	<u>536</u>	<u>467</u>	<u>420</u>	<u>515</u>	<u>595</u>
Receipts	1,541	1,561	1,700	1,950	2,200
Payments	-1,005	-1,094	-1,280	-1,435	-1,605
<u>Factor Services, Net</u>	<u>1,342</u>	<u>1,644</u>	<u>1,778</u>	<u>2,040</u>	<u>2,550</u>
Receipts	1,905	2,520	2,975	3,480	4,070
Payments	- 563	- 876	1,197	1,440	-1,520
<u>Current Acct. Deficits</u>	<u>-1,273</u>	<u>-1,608</u>	<u>- 608</u>	<u>- 775</u>	<u>-1,580</u>
<u>Unrequited Transfers</u>	<u>345</u>	<u>89</u>	<u>120</u>	<u>150</u>	<u>150</u>
<u>Current Acct. Deficits Plus Transfers</u>	<u>- 928</u>	<u>-1,519</u>	<u>- 560</u>	<u>- 625</u>	<u>-1,440</u>

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TABLE 7 (cont.)
BALANCE OF PAYMENTS - CAPITAL ACCOUNT
(In Millions of Current Dollars)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
<u>Current Acct. Deficits</u>					
<u>Plus Transfers</u>	- 928	-1,519	- 560	- 625	-1,440
<u>Amortization Payments</u>	- 899 ^{a/}	-1,063	-1,313	-1,345	-1,320
(Official Loans ^{b/})	(-250)	(-436)	(-455)	(-535)	(-610)
(Suppliers' Credits)	(-585)	(-557)	(-782)	(-725)	(-625)
(IMF Repayments)	(- 50)	(- 70)	(- 76)	(- 85)	(- 85)
<u>Total Requirements</u>	-1,827	-2,582	-1,873	-1,970	-2,760
<u>Total Available</u>	2,300	2,235	2,655	2,860	2,410
Internat'l Assistance	1,100	1,158	1,455	1,860	2,060
U.S., Total	500	658	855	1,110	1,260
(C.I.P.)	(300)	(263)	(405)	(300)	(300)
(PL-480)	(200)	(245)	(250)	(310)	(310)
(Project)	(50)	(150)	(200)	(500)	(650)
Others (3rd Country, IBRD, IMF, etc.)	550	500	600	750	800
Supplier's Credits	385	477	500	300	300
Direct Investment	315	600	700	700	650
GODE	500	-	-	-	-
<u>Basic Balance</u>	473	-347	+782	+890	-350
<u>Other Capital Movements</u>	-414	+384	-258	-400	400
ST Bank Facilities, Net	-379	53	-258	-400	+400
(Loans)		(778)	(600)		
(Repayments)		(-725)	(-858)		
Errors and Omissions	- 35	331	-	-	-
Changes in Reserves (=-Inc.)	- 59	- 37	-524	-490	-50
<u>Official Intern'l Reserves</u>					
<u>Excluding Gold</u>	492	529	1,053	1,543	1,593

^{a/} Based on IBRD estimates for 1978.

^{b/} Based on USAID/Cairo projections on future loans.

Sources: Central Bank of Egypt, E/C and USAID/Cairo,
and IBRD and IMF publications

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TABLE 8
Employment by Sector
(In Thousands of Persons)

	<u>1977</u>	<u>1978</u>	<u>1979</u> ^{1/}	Avg. Ann. % Growth <u>1977-79</u>
<u>Commodity Sectors</u>	<u>5,855.6</u>	<u>6,021.0</u>	<u>6,206.3</u>	<u>2.95</u>
Agriculture	4,103.5	4,135.0	4,165.0	0.74
Industry, Petroleum & Mining	1,247.1	1,297.0	1,351.9	4.12
Electricity	48.0	51.0	60.2	11.98
Construction	457.0	538.0	629.2	17.33
<u>Distribution Sectors</u>	<u>1,494.9</u>	<u>1,542.5</u>	<u>1,580.9</u>	<u>2.83</u>
Transportation, Comm. & Storage	444.3	448.6	452.5	0.92
Trade and Finance	1,050.6	1,093.9	1,128.7	3.55
<u>Service Sectors</u>	<u>2,535.0</u>	<u>2,652.9</u>	<u>2,773.1</u>	<u>4.59</u>
Housing	144.8	146.5	155.0	3.46
Public Utilities	54.6	60.0	64.0	8.26
Other Services	2,335.6	2,446.4	2,554.1	4.57
<u>Total</u>	<u>9,885.5</u>	<u>10,216.4</u>	<u>10,560.3</u>	<u>3.35</u>

Source: Ministry of Planning

^{1/} Provisional

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TABLE 9
SECTORAL GROWTH RATES FOR EMPLOYMENT

	<u>74/75</u>	<u>75/76</u>	<u>76/77</u>	<u>77/78</u>	<u>Prelim 78/79</u>	<u>Plan 79/80</u>
<u>Commodity Sectors</u>	<u>2.9</u>	<u>-1.6</u>	<u>1.3</u>	<u>3.5</u>	<u>2.6</u>	<u>2.7</u>
Agriculture	0.1	-3.6	0.9	2.2	0.0	0.7
Industry, Petroleum & Mining	2.2	2.1	3.8	5.5	4.1	3.6
Electricity	7.9	14.6	14.7	-5.4	18.0	4.8
Construction	41.9	7.6	-5.0	17.7	17.0	13.5
<u>Distribution Sectors</u>	<u>7.1</u>	<u>4.2</u>	<u>4.6</u>	<u>4.1</u>	<u>6.5</u>	<u>6.1</u>
Transportation, Communications & Storage	1.8	2.6	7.2	4.1	9.5	7.7
Trade & Finance	9.5	4.9	3.5	4.2	5.3	5.4
<u>Service Sectors</u>	<u>6.1</u>	<u>4.7</u>	<u>3.6</u>	<u>4.5</u>	<u>13.9</u>	<u>3.4</u>
Housing	2.9	0.7	0.8	0.6	6.2	4.5
Public Utilities	16.3	6.8	1.1	11.1)		
Other Services	7.3	4.8	3.9	4.6)	14.3	3.3
<u>Total Employment Growth</u>	<u>4.4</u>	<u>0.8</u>	<u>2.3</u>	<u>3.9</u>	<u>5.9</u>	<u>3.4</u>

Source: Ministry of Planning

11/26/80

TABLE 10
Implicit Price Deflators for GDP
by Sectors 77/79
(1975 = 100)

<u>Sector</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>Avg. Annual % Rate of Growth</u>
Commodity Sectors	1.29	1.40	1.86	20.0
Agriculture	1.41	1.50	1.69	9.50
Industry & Mining	1.11	1.24	1.26	6.54
Petroleum	1.34	1.47	4.05	73.85
Electricity & Public Utilities	0.98	0.98	0.99	0.51
Construction	1.36	1.51	1.87	17.26
Distribution Sectors	1.21	1.39	1.58	14.27
Transportation, Comm., & Storage	1.11	1.19	1.26	6.54
Suez Canal	0.99	1.46	1.82	35.58
Trade, Finance & Insurance	1.29	1.45	1.63	12.41
Service Sectors	1.23	1.34	1.45	8.57
Housing	1.06	1.07	1.06	0.00
Other Services	1.26	1.39	1.53	10.20
GDP at Factor Cost	1.34	1.38	1.69	12.30

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TABLE 11
 Egypt: Consumer Price Index for Urban Population, 1975-80
 (1966/67 = 100)

End of Period	1975	1976	1977	1978	1979	September	
						1979	1980
Food and Beverages (52.5) ^{1/}	181.9	209.2	231.3	254.7	277.3	270.8	357.6
Cereals (11.2)	121.5	125.8	135.8	139.3	134.4	132.6	181.9
Pulses (6.6)	202.1	218.1	256.9	273.9	305.4	288.8	431.3
Meat, Fish, and Eggs (13.1)	234.2	287.8	316.2	331.8	383.7	371.0	539.3
Dairy Products (5.9)	216.6	240.9	279.6	315.4	336.9	323.6	386.3
Vegetables (3.8)	218.5	276.8	241.3	331.7	336.8	376.1	346.3
Fruits (2.9)	187.6	230.2	263.6	362.2	392.4	364.3	483.9
Housing (15.7)	108.6	109.1	109.5	110.2	111.2	120.5	116.1
Furniture and Other Durables (1.3)	128.4	136.3	156.3	181.1	187.7	187.7	187.8
Clothing (8.4)	140.1	147.4	188.1	239.1	247.5	247.5	297.8
Transportation and Communication (4.4)	122.6	136.0	144.7	145.1	185.6	185.6	193.9
Services (9.9)	140.5	144.0	180.8	203.8	244.2	244.2	272.8
Personal Expenses (7.8)	125.0	128.1	133.9	160.7	187.9	187.9	210.7
All Items (100.0)	155.2	171.2	191.1	212.6	233.5	231.5	285.6

Sources: Central Agency for Public Mobilization and Statistics: IMF.

^{1/} The numbers in parentheses are indicative commodity weights based on the commodity weights employed in five regional subindices and population weights for these regions. The regional weights are based on a family budget survey of 1964/65 and the sample population census of 1966.

TABLE 12
Summary of Fiscal Operations
 (LE Million)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>Estimated 1980/81</u>
1. Total Government and Public Sector Revenue	<u>2755</u>	<u>3307</u>	<u>4165</u>	<u>6580</u>
a. Total Tax Revenue	1990	2176	2584	4004
b. Other Non-Tax Revenue	113	119	230	360
c. Transferred Profits	384	539	1001	1738
d. Investment Self-Financing	268	473	350	478
2. Total Government and Public Sector Current Expenditure	<u>2547</u>	<u>3270</u>	<u>4208</u>	<u>6416</u>
a. Central and Local Government	1628	2012	2375	3744
b. Public Authority Deficits	139	185	229	359
c. Interest on Public Debt	130	173	234	353
d. Consumer Subsidies	650	900	1370	1960
3. Social Security Surplus	353	381	456	640
4. Total Government and Public Sector Fixed Investment	1609	2475	2581	3311
5. Overall Deficit	-1048	-2057	-2168	-2507
6. External Financing (Net)	674	626	543	595
7. Domestic Financing	374	1431	1625	1912
a. Bank Financing	471	809	1148	1092
b. Non-Bank Financing	-97	622	477	820
<u>Memorandum Items</u>				
Overall Deficit/GDP (%)	12.7	21.3	17.5	13.5
Bank Financing/GDP (%)	5.7	8.4	9.3	5.9

Source: World Bank