

UNCLASSIFIED

Country Development Strategy Statement

FY 1986

EGYPT

ANNEX G

URBAN POLICY AND
STRATEGY UPDATE



APRIL 1984

Agency for International Development
Washington, D.C. 20523

UNCLASSIFIED

THIS STRATEGY STATEMENT HAS BEEN PREPARED BY THE
A.I.D. FIELD MISSION. IT IS PREPARED ANNUALLY AND
USED FOR PLANNING PURPOSES IN THE FIELD AND IN
WASHINGTON. IT DOES NOT REPRESENT OFFICIAL AGENCY
POLICY:

**

*

TABLE OF CONTENTS

	<u>PAGE</u>
<u>PART I - INTRODUCTION AND SUMMARY</u>	
A. Background.	1
B. Urban Annex Update.	3
<u>PART II - THE SETTING</u>	
A. Background.	9
B. Urban Policy and Strategy Up-Date	10
C. Water and Wastewater Sector	13
D. Decentralization Sector	14
<u>PART III - ANALYSIS</u>	
A. Urban Development Policy Issues	16
B. Agency Development Instruments and Urban Policy	16
1. Private Enterprise Development and Job Creations	16
2. Policy Reform.	17
3. Human Resources and Institutional Development.	18
4. Technological Transfer	21
<u>PART IV - STRATEGY</u>	
A. Urban Strategy Approach	23
B. Urban Strategy - Cairo, Alexandria & the Delta	26
1. Environmental Upgrading.	26
2. Cairo Transportation Linkages; and Environmental Upgrading.	28
3. Delta Growth Management.	34
<u>PART V - BIBLIOGRAPHY</u>	
<u>PART VI - APPENDICES</u>	
A. Urbanization in Near East Bureau Countries	
B. USAID's Urban Assistance to Egypt 1975-82 and 1983	
C. Water and Wastewater Sector Recommendations	
D. USAID Assistance to Local Government in Egypt	
E. Ring-Road Action Plan	

BASIC INDICATORS
EGYPT

Land Area: 1,001,000 square kilometers

Population: 39.8 million (1980)

Urban Population: 17.9 million (1980)

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

GNP per capita: \$580 (1980)

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

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

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

Agricultural Share of GDP: 23% (1980)

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

Service Sector Share of GDP: 42% (1980)

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

Gross Domestic Investment: 31% of GDP (1980)

Gross Domestic Saving: 16% of GDP (1980)

Adult Literacy: 44% (1977)

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

Life expectancy at birth: 57 years (1980)

Infant mortality rate: 103 (1980)

Population per physician: 1,050 (1977)

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

PART I INTRODUCTION AND SUMMARY

A. BACKGROUND

Urbanization may be defined as that demographic process by which growing percentages of a country's population reside in urban rather than in rural places. Since the 1940's, the urbanization phenomenon has been observed for all countries throughout the Near East Region. However, over the past decade, the process has greatly accelerated, presenting both developmental opportunities as well as a series of difficult developmental constraints. The Near East Bureau (NEB) now ranks "urbanization" as one of its top region-wide priorities for the 1983-88 planning period.

Egypt's urban population^{1/} was only 19% in 1907. It stood at 33% in 1947, and at the beginning of USAID's major financial obligations, 1975/76, the country's urban population was 44%. During this period, one out of every four Egyptian's lived either in the major metropolitan centers of Cairo or in Alexandria. Today, the country's total population is estimated at over 42 million persons of which approximately 47% or 19.7 million persons live in urban places. By the turn of the century, it is conservatively estimated that over 55% of the country's population will be urban and that one out of every three Egyptians will live either in Cairo or in Alexandria.

Egypt's urban population grew at 2.8% during the 1970-80 period compared to a total population growth of 2.1%. This rate of urbanization, although high, is not extraordinarily high for the Region. Morocco and Turkey, two other NEB countries, had urban population growth rates of 4.6% and 4.5% respectively, over roughly the same time period.

It can be argued that there is a positive relationship between urbanization and per capita income. There is a tendency for higher productive industry, services and complementary activities to be located in urban, rather than in rural areas. Egypt's industrial output is 36% of the country's total output. This rate is only exceeded in the Region by Portugal and Israel and equalled by Tunisia.

^{1/} According to the GOE census definition, all settlements listed as town or 'medina', as contrasted to village or 'ezba' are considered urban. Some settlements which may be administratively and statistically defined as "urban" may sociologically and economically resemble large villages more than small urban centers. Moreover, other settlements may be administratively and statistically defined as "rural" which have more urban features than rural features. Definitional issues appear to be more pronounced for smaller urban settlements and larger rural settlements.

In terms of social services, urbanization acts both positively and negatively. On the plus side, Egypt has more of its eligible population enrolled in secondary schools, and has a larger percentage of its population with access to safe water, than most countries at its level of economic development. Nevertheless, the urbanization process in Egypt presents a number of difficulties, some of which are unique to the country.

Egypt has over 90% of its population living on less than 4% of its land base, principally along the banks of the Nile and in the fertile Delta area. Consequently, urban expansion has meant the loss of valuable agricultural lands. It is estimated that each year the country loses over 60,000 feddans of irreplaceable "old agricultural lands" that cannot adequately be replaced by "new lands." Moreover, present urbanization is taking place, particularly in the large metropolitan areas of Cairo and Alexandria, under very difficult infrastructure and social service inadequacies.

Large current deficits exist in water and wastewater, electricity, communications, urban circulation and transportation systems, education, health, housing and other social services. In addition, the over expansion of urban service employment relative to industrial employment are pressing difficulties that municipalities face in coping with the urbanization phenomena.

Our 1984 Urban Annex indicated that in developing an urban strategy, the Government of Egypt, GOE, needs to focus attention on the following: 1) exploiting the strong economic advantages of the Cairo and Alexandria metropolitan regions by deconcentrating their cores and by establishing closer-in satellite settlements; 2) selecting standards for housing and for infrastructure services based upon affordability by a broad portion of the urban population; 3) encouraging private investment in job creation and housing development; 4) developing a strategy for preserving agricultural land and managing growth in the Delta Cities; and 5) significantly curtailing planned future investments in free-standing new towns. In addition, it was suggested that future growth be directed to the Canal cities and a limited number of Upper Egyptian cities.

Based upon these premises, our 1984 Urban Strategy presented an umbrella of activities principally focused on 1) a mainline infrastructure water and wastewater program for Cairo, Alexandria and the Canal cities, and 2) assistance to urban governments to provide some of the necessary social services of education, health, and community assistance through the Neighborhood Urban Services Program.

B. URBAN ANNEX UPDATE

This Annex Update reviews the premises and objectives of our earlier work, our accomplishments to date, and presents a series of new initiatives aimed at more fully addressing the Egyptian urbanization phenomenon within the USAID's financial constraints. We concur with GOE officials that continued expansion of Cairo and Alexandria along the present unplanned line should not continue. However, the emphasis of our approach is different than that of the GOE. The GOE believes that Cairo and Alexandria are too large and any further growth will result in continued loss of agricultural lands, higher levels of traffic congestion and pollution, and lower levels of municipal services. The GOE recommendations are to develop free standing new towns, border regions, and remote areas.

USAID believes that although in the long-term, Egypt's expansion out of the Nile Valley and Delta ultimately will be essential, both the Cairo and Alexandria regions in the near term can and should absorb further growth. Such growth needs to be planned and built at appropriate standards. The regions contain natural markets, feeder industries and high levels of infrastructure investments. Jobs are much cheaper to develop within these regions; labor and infrastructure services are available. Satellite communities that draw upon available markets, labor, and services need to be built at affordable standards on non-productive agricultural lands.

The Setting re-emphasizes our geographical commitment to the major urban centers of Cairo and Alexandria. It continues to focus on a select number of urban activities that are supportive of major GOE initiatives and or other donor activities, and those that will help to link some of our present activities together.

A review of our initiatives in the water and wastewater sector indicates that while we are addressing system deficiencies and expansion needs, our efforts nevertheless are neutral with respect to the physical expansion of the respective metropolitan areas. The provision of water, and particularly wastewater, tends to follow urban informal development rather than to lead it. There is ample scope, especially on the West Bank, for a re-orientation of the dominant north/south Cairo growth axis to a preferred east/west orientation towards non-productive desert land. However, the wastewater strategy as presently constructed, does not embrace a strong geographical growth refocusing for either Cairo or for Alexandria.

Our Decentralization Sector Program has a strong rural bias. To the extent that it supports new job creation in rural areas, increases the availability and quality of social and infrastructure services and thereby helps to keep people from migrating to urban places, it may be thought of as having a positive, if indirect, effect on the urbanization process. On the other hand, our NUS program, which only commits 17% of

our total decentralization program funds to date, of \$530.2 million, has a direct and measurable affect on assisting major Egyptian metropolitan governments in providing necessary services for their citizens. In addition, our efforts in urban electricity, telecommunications, housing, population, health and related social services and industrial production and credit assistance, all have an impact on urban areas.

Measured in terms of obligations, our assistance to urban areas has been dramatic. During the 1975-82 period, USAID obligated over 60% of its entire portfolio to urban projects and activities benefitting urban populations. During the 1983 period, USAID obligated approximately 2/3rds of its portfolio to urban areas. Projections for the 1984-88 period indicate that these high levels of obligations to urban areas will continue. The question of AID's urban strategy is then, not one of simply increasing the level of obligations. Rather, our strategy is concerned with the linkages that our urban efforts should have across sectors and the spread effects (e.g., multi-project, multi-sectoral) that may be realized through the choice of projects and activities.

The Analysis presents a set of working assumptions. It presents an outline of urban assistance centered around the Agency's four development instruments: (1) private enterprise development; (2) policy reform; (3) institutional development and (4) technological transfer. In terms of private enterprise development our urban programs need to increase the productivity of existing jobs and increase the skills of the labor force. These goals can be accomplished through the provision of infrastructure, i.e., water and wastewater, electricity, transportation. They also can be provided through the use of labor intensive activities, area upgrading, housing activities and skills training programs.

Our attention to policy reform takes the form of attempting to alter pricing policies in order to make them more consistent with resource availabilities and requirements. An IBRD unpublished report indicates that there would be more adverse budgetary effects for the highest-income households for energy price adjustments than for low and medium income households. Our Economic Policy Paper on Water and Wastewater demonstrates that on the average, under the recently approved new tariff rates increase for Cairo, families at the lower end of the income scale, unless the tariff is increased, would be paying less than 1% of their total yearly income for water and wastewater charges. This would amount to between 6% - 9% of low-income families' average annual housing expenditures by the year 1985. Present pricing policies favor urban sectors over rural sectors and in most instances wealthier households over poorer households. The price of public urban services needs to be set at marginal costs that would bring relative prices closer to relative opportunity costs. If applied carefully, such adjustments to pricing could have beneficial effects on the urban process.

From an institutional development perspective, improvements in the workings of municipal governments need to be addressed. Municipal

governments have to more effectively plan for, deliver, and maintain public services. The workings of the urban land market and the rental and housing market need to be improved in terms of providing housing and urban services. In addition, the informal housing market, which presently supplies approximately 75% of all housing units in urban areas, has to be more formally brought into the developmental process. And importantly, our urban strategy seeks effective means of holding populations in rural areas and or in diverting them to secondary cities away from the excessively high concentrations in Egypt's major urban agglomerations.

Our technological transfer approach suggests that our programs need to facilitate efforts to improve the environment in ways that will be as inclusive of as large a number of the urban poor as possible. In addition, appropriate technologies are sought that are neither too complex nor too expensive to install or to maintain. Two areas of urban environmental upgrading are of special concern -- water and wastewater and solid waste disposal -- both of which may present opportunities for intermediate technologies and labor intensive applications.

Our Strategy continues to emphasize that Egypt's future largely will be an urban future. As such, urban areas have to become more efficient producers and managers of both goods and services, public and private. USAID seeks to obtain a multiplier affect by connecting our present separate urban projects into an umbrella of activities. To-date, most of our urban activities have been obligated by sector, and some of their potential impact of greater linkages across sectors and spread effects may not have been fully realized. Our urban approach seeks to address some of the fundamental issues in the urbanization process. It seeks to increase the availability of productive jobs, to improve the quality of the labor force, and to channel the urbanization process in such a way that would minimize the loss of Egypt's valuable agricultural lands.

In terms of increasing productive urban jobs and improving the quality of the labor force, attention must be directed to improving the urban capital and urban labor markets. This can best be accomplished by assisting the workings of credit institutions both in the formal and informal sectors of the economy and by promoting risk management techniques. Government bears the responsibility to reduce regulatory practices that hamper the private sector and to change wage policies that hinder efficient labor allocation. Improvement also is needed in transportation networks and in the location of work place to residence that would help reduce the transportation costs for workers. In terms of municipal government, attention is needed to improve its ability to provide necessary public goods and services and to set prices at marginal costs. Importantly, the private sector also should be given a greater opportunity to provide local goods and services. Human capital has to be improved through education, health, family planning and vocational training. Finally, in terms of minimizing the loss of agricultural land, more enlightened land use practices are needed that would divert major

urban growth away from valuable agricultural lands to non-productive desert lands.

USAID's resources are limited. Our ability to significantly meet all of the above urban needs is severely constrained. Nevertheless, we are having an impact in some areas. Through our infrastructure, decentralization, urban electricity and, social programs we are directly impacting on urban areas. However, other activities and initiatives in the urban area could have a multiplier effect. Activities that would help to link our various programs together and be particularly cognizant of the constraints and opportunities of the urbanization process have to be examined.

We are particularly interested that our efforts either together or individually meet three fundamental tests -- Acceptance, Impact, and Do-Ability. Three new initiatives that would meet our "AID" test and that would provide important linkages across sectors are: (1) a Cairo Transportation Linkage Project; (2) a Cairo Environmental Up-Grading Program; and (3) a Delta Growth Management Program.

1) Proposed Cairo Transportation Linkage Project

Our 1984 Annex spoke of removing the "existing bottlenecks" in the major urban complexes of Cairo and Alexandria. However, no specific recommendations were made. USAID now believes that the proposed Cairo Ring-Road should be given funding attention as a possible project activity. It would meet our "AID" test. The Ring-Road would help to reduce private car traffic inside the existing agglomeration, support the process of urban deconcentration and protect agricultural areas from urban encroachment. It can be implemented at relatively low cost, estimated at \$200 million plus L.E. 140 million for acquisition costs. The road would not intrude greatly on the existing built-up areas or on arable land.

We are exploring the feasibility of supporting all or a portion of the Ring-Road as well as an ecological belt around the existing agglomeration inside of the proposed ring-road. The Ring-Road would facilitate connections between and among urban activities and provide direct access to most of the new satellite residential projects on the fringes of Cairo's urban agglomeration. It also would support the filling-in of urban development within the perimeter of the ring road on non-productive agricultural land. In addition the construction of buffer areas could provide an ideal dumping and compacting areas for solid waste disposal activities.

2) Proposed Cairo Environmental Up-Grading Program

An Environmental Upgrading effort for solid waste disposal in Cairo is our second recommended urban strategy. This program would tie together our limited solid waste collection pilot efforts under the NUS program;

it would support the Cairo Urban Beautification program sponsored by the GOE; and it would assist initiatives already initiated and planned by the IBRD. Less than half of all household wastes are collected in the city of Cairo. Street cleaning and solid waste removal services by the municipality are very understaffed and as a result, refuse accumulates, especially in lower income areas. Refuse build-up on some streets actually blocks vehicular traffic. The IBRD recently has proposed a solid-waste management sub-project that would detail solid waste management collection and disposal needs for Cairo.

The solid waste effort would contribute substantially towards increasing sanitation conditions, especially in low-income areas. It also would reinforce USAID's NUS project activities that presently are providing limited support to districts for solid waste collection. In addition, start-up activities could include funds for road improvements and small scale plastic bag factories (\$20 million) and for the construction of compacting plants (\$45 million). The siting of land in-fill activities and compacting plants also could be related to the construction of buffer areas of the proposed Cairo Ring-Road. A parallel Cairo commodity import equipment purchase for solid waste vehicles and equipment conservatively could cost \$100 million. Actual pick-up activities, needed on a continuing basis by the GOE, are programmed to cost, depending on coverage, \$10-20 million per year.

3) Proposed Delta Growth Management Program

The third new urban initiative is in the area of Delta Growth Management. Our 1984 Strategy indicated that the Delta region presents some of the most complex development problems facing Egypt. The Delta contains many of the fastest growing urban communities in the country. It also contains some of the country's most valuable agricultural lands that are constantly threatened by continued urban expansion. The 1984 Annex suggested additional limited support for a land registry program for the Delta and the undertaking of structure plans for selected areas. It also suggested that more debate, review and discussion are needed on the difficult environmental problems in the Delta. This Urban Annex Update proposes that concerted action be given to the Delta medium sized cities that would assist local units of government to plan for and provide needed public infrastructure and service constraints. Attention also would be given to identifying local public investment potential that can serve as stimuli for local private investments in the Delta that would be consistent with enlightened growth management principles.

USAID proposes a Delta Secondary Cities (DSC) activity within the Decentralization Sector Program that would target assistance to a select number of rapidly growing Delta secondary cities. The effort would seek to provide land use plans for each selected secondary city to channel growth from fertile agricultural lands to non-fertile desert lands. It would provide investments for area upgrading and infrastructure needs patterned after the highly successful BVS and NUS programs.

The DSC would greatly assist in the integration of the Delta cities to the major metropolitan centers of Cairo, Alexandria and the Canal cities. Within the context of sound agricultural land conservation principles, it also could help to deconcentrate the predominance of economic activities now located in Cairo and Alexandria, inducing a partial movement to other areas. A total of \$100 million would be obligated over four years. In addition, consideration is being given to further support of the NUS program beginning FY 86 in the amount of \$60 million over a three year period within the Decentralization Sector Support Program. This would help further to support decentralization activities in the major concentrations of Greater Cairo and Alexandria.

Proposed Portfolio of Urban Activities/Projects 1986-88

A table representing an illustrative obligation budget is presented at the conclusion of the Urban Annex update strategy. The table indicates that the package of suggested new urban initiatives as outlined above would average approximately \$145 million per year beginning FY '85. Together with the water and wastewater activity, presently set at \$200 million per year, a total urban package of \$345 million is developed. If there is a pause in the water and wastewater stream of obligations, the urban activities as proposed could pick up the slack. In addition, FY '85 proposes \$20 million for urban electricity and \$20 million for a population program.

We realize that the new initiatives, as proposed, need much further study. Not all of them may hold up under more careful analysis. Nevertheless, we continue to maintain that a concentrated effort of urban support activities patterned along the lines as outlined would be most supportive of GOE initiatives, and build upon the already impressive base of USAID activities in the urban field.

PART II - THE SETTING

A. BACKGROUND

The Near East Bureau Strategy ranks "urbanization" as one of the top region-wide priorities for the 1983-88 period. This signals a shifting of priority development problems for the 1980's. It recognizes the rapid urbanization trend taking place in the region. It also recognizes that the urbanization process provides an excellent organizing theme for a wide variety of present and future Bureau activities in the Region. (See Appendix A, Urbanization in Near East Bureau Countries.)

The Bureau makes a distinction between "urbanization theme" and "urban development". The latter is used to refer to a limited set of activities specifically involving urban and community development, i.e. low cost housing; decentralization; and telecommunications. "Urbanization theme", on the other hand, is more encompassing. It aggregates "... all Bureau activities related to urban development, including projects for urban water and sewerage, plus urban and community health and electric power generation."

In Egypt during the 1975-82 period, USAID obligated over 60% of its portfolio to urban theme and urban development activities. This includes direct project support activities in electricity, water and wastewater, telecommunications, housing, decentralization and social services, and direct balance of payments and development support activities. During FY 1983, USAID obligated approximately two-thirds of its portfolio to urban areas. And over the 1984-88 planning period, the total resources related to urbanization activities remain over 60%. (See Appendix B, USAID's Urban Assistance To Egypt 1975-82 and 1983.)

It is estimated that during the 1984-83 planning period, for every 10 new additions to the total population, 9 will be urban dwellers. This will be occurring in an environment of limited capacity of the rural economy to create jobs and to hold and/or attract migration. Moreover, the urbanization trend may be even further exacerbated by a decline in oil prices in the region and a resulting decline in emigration of Egyptian workers to the Gulf States.

Water, including wastewater activities, account for 44% of urban activities in USAID's portfolio in Egypt. With increasing urbanization, greater demands will be made on all parts of the urban system. The water and wastewater sector will become increasingly vital to Egypt's economic development and political stability. Urban populations will expect a higher quality of water service and more efficient wastewater operations. They also will expect adequate housing, health, social services and educational facilities. Consequently, USAID's emphasis on the urbanization theme and urban development projects over the planning period is of utmost importance. Nevertheless, it is equally important that AID's urban activities and projects be designed around an overall urban strategy, thus ensuring maximum impact of scarce resources.

B. URBAN POLICY AND STRATEGY UPDATE

In light of the Bureau's new region-wide priorities, this Urban Policy and Strategy Update attempts to develop a systematic re-examination of the premises, goals and objectives upon which our 1984 Annex was based. Our earlier study was based upon the accumulated knowledge and lessons learned in previous urban project activities and upon a series of urban studies: the National Urban Policy Study (NUPS); Informal Housing in Egypt; Housing Finance; and Land Use and Infrastructure.

The major findings and conclusions of these studies are: 1) that Egypt will become increasingly urban, with Cairo and Alexandria accounting for the majority of urban inhabitants, and 2) that main line infrastructure systems (water, sewerage, transport) have not kept pace with urban growth, especially in the major cities. Furthermore, the studies have found that the informal sector is the predominant supplier of urban housing and that although there is no absolute shortage of housing, per se, there is considerable overcrowding. Scarcity and cost of appropriate developable land in Cairo and Alexandria are major impediments to providing affordable housing for low income families.

USAID recognizes that the unplanned growth of Cairo and Alexandria results in the loss of valuable agricultural lands. It places increasing burdens on inadequate infrastructure systems and municipal government. Many GOE officials complain about increasing levels of traffic congestions, and air, water and noise pollution in Cairo and Alexandria. They also complain about a lowering of the standards of municipal services with respect to drinking water and wastewater, overcrowded schools, and insufficient health and other social services. The GOE currently is constructing new towns. They also indicate interest in developing border regions and remote areas in the country in order to relieve the congestion in Cairo and Alexandria, to provide new agricultural lands, and for reasons of national security.

USAID believes that unplanned growth in Cairo and Alexandria should not continue. Yet we do not fully concur that it is in the best national interests to respond to the unplanned growth of Cairo and Alexandria by making massive investments in "new towns" and in large scale urban expansions of remote areas.

New town development often is related to the concept of optimal city size. In the case of Egypt, a large number of GOE urban theorists believe that Cairo and Alexandria are too large, and further urban expansion is causing the loss of agricultural lands, particularly at the fringes of these cities. In order to alleviate these problems, entirely new, planned urban communities, completely detached from the commuting zones of existing cities, e.g. Sadat City, New Ameriya and 10th of Ramadan, are being constructed by the GOE.

New town developments need to be distinguished from the development of large-scale satellite communities on the fringe of the urban community, i.e., the planned developments of 6th of October, 15th of May, and Al Obour, within the Greater Cairo area. These latter communities are within the job market commuting area of Greater Cairo; whereas, new towns are outside of existing urban job markets and entirely new markets need to be created. The design standards of satellite communities can be geared to prevalent income levels in the city. And in most instances public facilities are available or nearby, as are natural markets and feeder industries.

The construction of new towns raises questions of costs, methods of financing, and manpower and planning capabilities. New towns in developing countries according to Bertrand Renaud (IBRD) "... have never lived up to the claim that they were a particularly good way of absorbing urban populations". They also constitute the most expensive way of financing urban development.

A sound urban development approach for Egypt should be based upon our major recommendations laid out by the National Urban Policy Study. These recommendations cut across the interests of all major ministries. The analysis conducted reviews all major sectoral plans and demonstrates that it is not economically feasible to attempt simultaneously to upgrade all existing urban settlements; develop extensive industrial bases in all of the largest cities; substantially expand urban places in remote areas; and build free-standing new cities as currently planned.

The Study recommends substantial modifications in current policies and programs. It proposes careful GOE consideration be given to the following:

1. That attention be given to exploiting the strong economic advantage of the Cairo and Alexandria metropolitan regions to absorb major portions of expected growth in urban populations while deconcentrating the cores of these cities by establishing other close-in satellite settlements similar to the 6th of October and El Obour presently underway in the Cairo Region;
2. That planned future investments in free standing new towns such as the 10th of Ramadan, Sadat City and New Ameriya be significantly curtailed and that focus be directed on additional growth in the Canal Cities, and in a limited number of Upper Egyptian cities;
3. That the standards selected for housing and related services reflect greater affordability within urban areas. The development of housing and infrastructure standards are needed that are affordable by a broader portion of the urban population. Increased efforts also are needed to recover public investment outlays from the recipients of publicly supported housing and services;

4. That the amount of public investment in industrial investment policies and sectorial policies for housing and infrastructure be conserved. Priority should be given to encouragement of private investment in job creation, housing and related infrastructure development; and
5. That a strategy for preserving agricultural land and managing growth in the Delta Cities be carefully followed.

The suggested modifications and new approaches to current policies all have the general purpose of improving efficiency in the allocation of investment and conserving public resources. Achieving these objectives is essential since resources are likely to be insufficient to provide needed finance for the total government plans and programs already developed or being developed.

Our previous Urban Policy and Strategy stressed two major points:

1. Policies are needed that assist the formal and informal private sector to create sufficient urban jobs to reduce unemployment to a reasonable level; and
2. Assistance should be provided to urban governments to help them plan for and manage more efficiently the services they provide and to raise the level of revenues necessary to run municipal governments.

The dynamics of population growth and rural-urban migration mean that problems are getting worse at a much faster rate than solutions are being developed. Rural-urban migration has accelerated beyond the pace dictated by economic opportunities. As a consequence, urban employment in low paying informal sector activities is very high, and urban systems are unable to provide basic services to urban population. Policies and projects are needed that will slow down rural to urban migration and overall natural increases to urban populations.

Our urban strategy has pointed out the limited direct impact that our projects, acting alone, can have on the multitude of forces involved in Egypt's urbanization process. We had concluded earlier, and still remain convinced, that in order to obtain maximum impact, our urban strategy must be concentrated in a select number of urban projects and be supportive of major GOE initiatives in the sector. Our strategy also must consider urbanization theme activities in industry, employment, health and population. The outline of our strategy is based upon our concurrence that the dominance of Cairo and Alexandria in the urban system will continue; that huge deficits exist in necessary urban infrastructure, especially in the country's principal cities; and that inefficiencies in resource allocation are due to institutional weaknesses and market signal distortions.

In terms of the project component aspects of our strategy, USAID has concentrated on a few selected urban activities. We are supporting major main-line water and sewerage infrastructure investments in both Cairo and Alexandria. We also are providing infrastructure support for the Canal Cities and institutional assistance to local government through the Decentralization Program. Urban areas are specifically addressed through our Neighborhood Urban Services (NUS) project. Consequently, it is appropriate to review the status of the major components of our urban strategy in order to determine how effective they have been in meeting our sector goals and objectives and to determine what adjustments and/or changes, if any, may be necessary.

C. WATER/WASTEWATER SECTOR

The informal Housing Study has demonstrated that development takes place according to land accessibility and not necessarily where urban infrastructure may exist. The Study has indicated that water and wastewater follow the development of informal housing, which is the largest developer of all housing in urban areas (over 80% in Cairo).

Current USAID wastewater projects are generally neutral with respect to the physical expansion of the metropolitan areas of Cairo and Alexandria. The Ambric plans prepared for the Greater Cairo area including the West Bank (Giza area) are sufficiently flexible to allow a reorientation of the growth axis from the now dominant north-south orientation to a preferred east-west orientation towards generally non-productive desert lands.

Moreover, the major USAID emphasis in Giza is oriented to a west expansion. Activity in Alexandria would lead to the expansion of the city, but as in the case of Cairo, the provision of water and wastewater has been found to follow urban development, rather than to guide it. Nevertheless, although the water and wastewater sector has not been found to be the leader in urban development, it necessarily is a vital link in the urbanization process. USAID is providing substantial benefits to the existing urban agglomerations of Cairo, Alexandria, and the Canal cities through its water and wastewater activities. The basis for urban expansion is being made through major rehabilitation to existing systems.

The United States has agreed upon major funding in the water and wastewater sector, subject to the availability of funds. We have agreed in principle to allocate to the sector \$ 1 billion from foreign assistance funds that may be granted to Egypt during the five year period, FY 1983-87. Of this amount, nearly \$200 million was made available in FY 1983 in support of the on-going Cairo Sewerage, Alexandria Wastewater, and Canal Cities Water and Sewerage Projects. The Government of Egypt is interested in additional support for its plans to undertake the Cairo West Bank Sewerage Project and to undertake Phase II improvements to the Alexandria Wastewater System.

It is essential that the wastewater and water systems that are underway and those that are proposed be implemented rapidly and that they function effectively in the years ahead. The achievement of these goals calls for a number of broad objectives being met. Our Water and Wastewater Sector Strategy and Assessment have included a number of recommendations to make the sector stronger in order to meet the above objectives:

- (1) Local water and wastewater organizations need to develop the capacity to forecast their revenue requirements; establish and collect adequate tariffs; and should be provided with budget support by the GOE adequate to cover shortfalls;
- (2) Local water and wastewater organizations need to develop as financially independent organizations responsible for the full range of activities required to provide water and wastewater services;
- (3) The National Organization for Potable Water and Sanitary Drainage (NOPWASD) needs to develop the capacity to establish policies for the water and wastewater sector, coordinate sector financing, and provide water and wastewater utilities with technical assistance and training support on a contractual basis; and
- (4) Local water and wastewater organizations need to be able to hire qualified staff and retain them through training and adequate incentives. (See Appendix C Water and Wastewater Sector Recommendations for greater detail on the above.)

D. DECENTRALIZATION SECTOR

USAID's support for decentralization, through its project activities, has sought to have a positive impact on the quality of life in both rural and in urban areas. According to our FY 1985 Decentralization Sector Strategy Statement, our support is based on the following premises:

"...local involvement in the provision of basic services means better needs identification and more enlightened project prioritizing; decentralized government provides greater opportunity to find effective solutions to local development problems through local participation, including greater private sector involvement; and local control over expenditures and greater local revenue generation for the provision and maintenance of basic services ensure less wastage, better management, and, in the long term, greater amounts of resources, both human and capital, at the local governmental level."

Moreover, our assistance recognizes that local governments seldom have sufficient resources to finance essential physical and social infrastructure needs. Consequently, our Sector Strategy is "based upon the operational goal of local governments obtaining the legal right and administrative ability to significantly increase local revenue generation

through levying taxes and fees... and to use such added revenues... for locally desired outputs."

Consequently, the decentralization portfolio of projects is positioned to have an impact on small towns and rural areas by improving the quality of life and encouraging the development and growth of local private enterprise. To the extent that such assistance will support new job creation and keep potential migrants from moving to major urban centers, our local decentralization portfolio of projects can be thought of as having a positive influence on the urbanization process. (See Appendix D, USAID Assistance to Local Government in Egypt, for an outline of decentralization activities in the Sector Portfolio.)

However, with the exception of the Neighborhood Urban Services Project and the Provincial Cities Program, the decentralization portfolio of activities operates at the village level, attempting to provide financial support to political decentralization and to improve living environments in rural areas. Moreover, although broad spatial coverage is attempted in twenty one rural governorates under the Basic Village Services Program and the Decentralization Support Fund projects, there is no concentration on a specific development constraint or geographical area. Consequently, these activities can be considered neutral with respect to direct impact on the urbanization process. However, as mentioned previously, they may have some effect with respect to "holding" people in rural areas.

The most dramatic impact that the Decentralization Sector Support Program has on urban development is through the NUS Project. NUS has as its main objective the improvement of urban local government capability to provide services to its citizens, with special emphasis upon addressing the needs of low income groups and neighborhoods. The specific purpose of the Project is to expand and strengthen in Greater Cairo and Alexandria, the local governments' institutional capability to undertake efficiently all of the actions needed to put public services and infrastructures in place and to make them operational. Since the NUS Project focuses on improving these capabilities at the Governorate, and particularly at the District, level, it is hoped that local government will respond more effectively to community or neighborhood needs in areas that now suffer from inadequate services and infrastructure. Additionally, by the Project's making neighborhood associations or cooperative societies (PVO's) eligible for NUS funding and technical assistance, some needs not ordinarily within the purview of municipal government can be met successfully.

PART III - ANALYSIS

A. Urban Development Policy Issues

Working Assumptions--

Major objectives of the USAID program are to promote broadly based sustained economic growth and to alleviate poverty.

A fundamental premise is that in order to achieve the above, efforts are needed to increase the availability of productive jobs and improve the quality of the labor force. It also follows that returns in terms of poverty alleviation and broadly based sustainable economic growth are greater in urban areas than in rural areas, as the majority of the poor in Egypt increasingly are found in urban areas.

Consequently, a development strategy in Egypt must necessarily be closely tied to solving urban problems and improving the human capital base. This dictates assistance in education, health, nutrition, family planning, vocational training, and management skills.

B. Agency Development Instruments and Urban Policy

In addition, our overall urban assistance centers around the Agency's four development instruments:

1. private enterprise development
2. policy reform
3. human resources and institutional development
4. technological transfer

In terms of the above instruments, our urban strategy needs to consider the following:

1. Private Enterprise Development and Job Creations.

Assist private sector development activities by helping to provide necessary infrastructure (water and wastewater, electricity, transportation) in urban areas.

They also include the use of labor intensive technology; provide access to informal sector activities as well as formal sector activities; and include area upgrading housing activities and credit assistance.

Our private enterprise and job creation programs need to:

- increase the productivity of existing jobs
- create additional jobs of relatively high labor productivity

- move workers from low to high productivity jobs
- increase the skills of the labor force
- allocate capital efficiently and mobilize domestic resources for new investments
- develop an efficient public sector capable of providing a constant dependable stream of public goods and services

2. Policy Reform

Many of the problems involved in the urbanization process are exacerbated by the large and growing volume of resources that are being misallocated by price distortions. These price distortions are a means of distributing real income gains to urban consumers by e.g., taxing agricultural income at highly discriminatory rates; providing direct income transfers to urban households through high subsidization of water and wastewater utilities and public transport; and supporting rent control practices. The resulting price distortions give false signals with respect to consumption, investment, and production decisions. Hence, such decisions often are not consistent with Egypt's comparative advantages. They also distort the terms of trade in favor of the urban household, thereby favoring rural to urban migration.

The problem of price distortions has been identified in previous CDSS's and other reports. (See FY 1984 Annex, "Policy Issues Facing Egypt," Annex D; "Selected GOE Policy Changes 1974-82; Economic Policy Discussion Paper No. 1, "Energy Use and Pricing Policies in Egypt"; and Economic Policy Discussion Paper No. 2, "Water and Wastewater.")

Some of the price distortion problems outlined above are deeply entrenched and have historical roots. Others date from the 1972-73 period of the worldwide run-up in international food and energy prices. Subsidies currently are providing income equivalents equal to over L.E. 9.0 billion to economic units throughout the economy, representing approximately 30% of GNP.

Consequently, there is a compelling need to alter pricing policies that are more consistent with resource availabilities and requirements. This no doubt will lead to difficult economic management/adjustment problems. One common fear associated with possible increases in pricing is that they might trigger a surge in overall inflation. This, in time, could lead to a loss in living standards of the Egyptian consumer, particularly the low-medium income urban household. It also could be destabilizing. However, in terms of energy pricing, an unpublished World Bank staff report indicates that there would be more adverse budget effects for high-income, urban households but shows no significant differences in energy costs as a percentage of income for low and medium income households.

Nevertheless, according to an Economic Policy Discussion Paper on Energy Use and Pricing it is "...easy to identify the personal costs associated with

higher energy prices but difficult to identify the personal benefits that will arise when the higher government revenues are employed." The paper further argues that this uncertainty about the distribution of benefits constitutes a potential argument for a gradual upward adjustment in the relative price of energy. But such "gradualism" should not result in the price of energy falling further in relation to the prices of other goods and services.

In terms of other consumer goods and services, the price of water historically has cost urban consumers only a small percentage of the cost of production and distribution. Our Economic Policy Paper on Water and Wastewater indicates that, on the average, under the recently approved new tariff rates for Cairo set at 20 millimes per m³, families at the lower end of the income scale, unless the tariff is increased, would be paying less than 1% of their total yearly income for water/wastewater charges by the year 1985. This amounts to between 6% to 9% of the average annual housing expenditure. If the present tariff rate was raised to a combined water/wastewater minimum as indicated in the paper, consumers at the lower end of the income scale would still only be paying 1.7% to 2.7% of their total yearly income for water/wastewater charges by the year 1985.

Although pricing policy reform is needed, it cannot be assumed that through such reforms major changes will occur in urbanization patterns or in urbanization rates. The present urban patterns are the result of a series of economic, political, and social forces of long standing that cannot be dramatically altered by any one policy reform. The NUPS has indicated that Cairo, for example, will continue to grow, despite GOE efforts to divert population to new towns. Cairo's population is conservatively estimated to reach 16.5 million by the year 2,000. Nevertheless, the present pricing policy biases urban sectors over rural sectors and, in many instances, wealthier households over poorer. Policy reform is needed that would set the price of public urban services at marginal costs and bring relative prices closer to relative opportunity costs. Adjustments to such policies, if applied carefully, could have beneficial effects on the urban process and assist USAID in its attempt to allocate resources in an effective manner.

3. Human Resources and Institutional Development

There are a series of institution issues relative to the urbanization process that need to be addressed:

a. Improving the workings of municipal governments:

Municipal governments can be aided through institutional support to assist their planning capabilities, the development of investment choices among infrastructure projects and in the maintenance of existing infrastructure. These reforms cannot be adequately addressed without attention to unfavorable and discriminatory constraints, such as traditionally very low wage levels for municipal workers. In addition, attention is needed to improve the use of the private sector for the provision of urban public goods and services and to improve the tax collection capability of municipal governments.

b. Improving the workings of the land market:

The availability of land, its location and cost not only is a vital component of housing but also is an important ingredient in the urbanization process. Our 1984 CDSS Urban Policy and Strategy Paper reported on the Land and Infrastructure Study for Cairo. The Land and Infrastructure Study indicated that 26 vacant sites exist in Cairo totaling over 30,000 fedans. These sites are "in largely non-agricultural desert land. They could house all the population needs for metropolitan Cairo over the next 18-20 years -- 6 to 8 million persons -- if built at appropriate densities from 200-300 persons per feddan. Importantly, land tenure issues need to be resolved in informal areas that would encourage investment and provide collateral for urban households.

c. Improving the workings of the rental housing market:

The housing market in Egypt favors housing built for sale. Since the passage of the strict 1960 rent control law, the construction of private market rental units has been minimal, particularly at the low to moderate end of the income scale. Luxury rental furnished apartments for lease to foreigners do not fall under rent control and continue to be built for investment purposes. The rental law seriously affects building maintenance, exterior hallways, and public spaces as rents seldom cover costs for needed repairs and routine maintenance. "Key money" is a means by which individuals may gain access to the private sector formal and informal housing rental market. Although it is forbidden by law, a landlord, as a standard practice, often demands from a prospective tenant, a sum of at least 100 times the average monthly rent of a housing unit.

The rent control law in Egypt's major cities and the concomitant practice of key money is another example of artificial pricing of a necessary consumer commodity, housing. The practice hinders the working of the rental housing market, forcing many households to build and occupy informal housing, often in areas poorly served by water and wastewater facilities and other important urban services. It also tends to lock households into a particular housing location if they are living in a rent controlled unit and/or have paid key money for their housing. This often places undue strains on the transportation system. A worker's workplace may change over time, but the worker's residence may be "locked into" a rent controlled building.

d. Improving the workings of the informal housing market:

The Informal Housing Market Study by ABT Associates has indicated that informal housing plays a very important role in meeting the needs of low income urban households. During the 1960-1976 period in Egypt, approximately 1.5 million dwelling units, or 75% of the total supplied housing units, were built outside of the official public/private system. These units are not officially recorded and are called "informal housing". The informal housing units were generally 2-5 stories in height and were built in brick or cement block at standards not much different than those for officially sanctioned structures. The informal housing was occupied at a density of 2-3 persons per room.

Informal housing in Egypt generally is built over a period of years in incremental stages. An owner may accumulate savings and purchase building materials on an ad hoc basis over time. The owner often acts as the general contractor. Informal housing provides several opportunities: it permits a rapid response to housing needs, especially for low income persons; it provides a form of investment favoring owners; it often is constructed near to areas of employment; and it does not put a drain on public resources. However, informal housing may occupy arable land, the sites are seldom initially served by water and wastewater and are lacking public authority supervision, and the housing may be built to inadequate structural standards. Consequently, an urban program must seek ways to foster the advantages inherent in the informal housing sector and to minimize the disadvantages.

e. Addressing the population issue:

Notwithstanding the advances that may be made in the institutional areas of municipal government and improvements in the land and housing markets as outlined above, without a direct attack on the population issue, few real gains will be realized. The major factors involved in urban growth in Egypt are natural increases, and rural to urban migration. Approximately two-thirds of Egypt's urban growth is due to the former with only one-third due to the latter. Thus, one of the major challenges facing Egypt is controlling its high fertility rate. Egypt's urban population was only 19% in 1907; it rose to 33% in 1947; and by 1976 it stood at 44%.

By the year 2000, Egypt's urban population conservatively is projected to reach 55 percent of the country's total population. Or looked at in another way, almost the entire present population of the country will live in urban places by the year 2000. And every one of the urban problems facing Egypt is being magnified on a daily basis by the natural increase of population. More than 43% of Egypt's total population is under the age of 15 years. This means that population growth will be sharply increased over the next 20 years, even if the birth rate falls substantially below its current rate of 2.8%.

High rates of urban population growth are an obstacle to economic and social progress. Urban unemployment is a serious issue. The urban labor force has grown by 4.4%, over the past decade, whereas urban employment has only grown by 3.3%. Urban policy needs to be based on programs aimed at substantially reducing the high fertility rates.

Rural to urban migration is almost as important in the urbanization process as natural increase. More than one-third of Greater Cairo's population growth during the 1966-1976 period was due to net migration. Migrants were generally in the 15-29 years of age group. This added to the number of persons in the labor force and substantially increased the population in the reproductive years. Recent migration to Cairo and Alexandria has increased the levels of the unskilled labor force and those in informal service occupations. Consequently, an urban strategy must seek not only to reduce the natural increase of population; it also must find more effective means of restraining population migration to urban centers or of diverting emigrants to secondary

cities. There should be more investment in secondary cities to correct the inappropriate skewing to larger cities that presently exists.

4. Technological Transfer

While it is important that poor countries avoid the expensive technologies that may be inappropriate at a particular time in their development, it is also true that "small is not always beautiful, local is not always better, and labor-intensive is not always dependable." USAID, therefore, primarily is concerned in the Urban area that its programs should facilitate efforts to improve the environment and be inclusive of as large a number of low/moderate income persons as possible in the development process. Two areas of urban environmental upgrading are of special concern in terms of appropriate technologies -- water/wastewater systems and solid waste disposal.

We presently are involved in major, relatively hi-tech wastewater systems in Cairo and Alexandria and in water and wastewaters systems in the Canal and Provincial Cities Programs. It therefore is necessary that we continue to keep open other options in low income residential areas. Standpipes for water supply and various forms of low-tech waste disposal systems need to be investigated for their feasibility, maintenance, cost, and labor intense provisions.

Standpipes in urban areas present a number of difficulties. They are subject to vandalism, tend to waste water if left unsupervised, and may cause flooding if proper drainage is not installed. However, standpipes are low-cost and distribute water to large numbers of population. Also, standpipes can easily be absorbed into a city's water distribution system if household connections to individual units become economically feasible at a later date. For standpipes to work correctly, local governments need to work closely with communities, using residents to police and care for the units.

In poor communities, whether rural or urban, conventional pit latrines and open trenches are losing favor. Other alternatives that have less odor and insects associated with them are becoming popular. The aqua privy or a pour-flush toilet is widely used in India, Southeast Asia and Latin America, and its usefulness in some of Egypt's urban areas needs to be explored.

In the area of solid waste management, significant strides in appropriate technology can be taken in Egypt. Solid waste activities in the urban areas of the country present a combination of low-tech popular Zabaleen and municipal approaches. The Zabaleens are poor Coptic Egyptians who make their living collecting, sorting and selling materials, glass, cardboard and wood products collected from garbage from well-to-do neighborhoods. Selective high-tech private sector activities also could beneficially be introduced. The low-tech popular zabaleen approach that is now very widespread in Cairo and Alexandria needs to be reorganized for collection in poor areas that have limited access and are often inaccessible by truck. Manual, animal powered pushcarts or small motorcycle driven vehicles may be more appropriate in many high density low-income informal housing areas.

In other sections of a city, where good roads exist, hi-tech private sector waste management in combination with municipal waste management systems may be more appropriate. However, there should be daily collection in densely populated areas, regardless of the form used.

The IBRD has embarked upon a limited solid waste improvement program in Cairo using Zabaleen workers. And USAID is exploring different forms of solid waste collection systems in its housing upgrading programs under the Helwan Housing Program. Our NUS effort has assisted the Governorate of Alexandria in a pilot clean-up program in its districts, and we are presently involved in a Cairo solid waste pilot effort. All of these approaches, using appropriate technologies, should to be explored further.

PART IV - STRATEGY

A. Urban Strategy Approach

Our FY 1984 Urban Policy and Strategy Annex outlined the following major conclusions. They remain pertinent to our urban policy update strategy and are repeated below:

1. Egypt is becoming predominantly urban in character, and Cairo and Alexandria will maintain and increase their dominance over the urban landscape;
2. Main-line urban infrastructure, e.g., water, sewerage, roads and transportation linkages, are deteriorating, particularly in Cairo and Alexandria, and necessary expansions are not keeping pace with city growth;
3. Contrary to commonly held opinions, there is not an absolute deficit of housing units per se, but overcrowding, high housing costs, and deteriorated or absent infrastructure are major problems, especially in Cairo and Alexandria;
4. The urbanization pressures on agricultural land on the edges of cities in the Delta, the Nile Valley, and around Cairo and Alexandria are severe, and the resulting losses cannot be balanced by desert reclamation;
5. The scarcity and high cost of appropriate developable land in Cairo and Alexandria are major impediments to providing affordable housing for low and moderate income families; and
6. The GOE fails to appreciate the dynamics of the urbanization process, the major role that Cairo and Alexandria are playing and will continue to play in this process, the cost effective housing solutions that the informal private sector is playing, and the need to deal creatively with land development.

Our strategy update takes into consideration the above points, as well as the experience we have gained to date thru several of our urban project activities. In particular, our strategy continues to emphasize that Egypt's future largely will be an urban future. As such, urban areas will have to become more efficient producers of goods and services and provide necessary basic services for their populations, to include employment, education, health, housing, transportation and habitable living environments. Our urban strategy also seeks to obtain a multiplier affect by connecting the separate urban projects that we already have underway in urban areas into an umbrella of activities.

Importantly, by the turn of the century, the Cairo/Alexandria Region will contain approximately 60% of the country's entire urban population. Thus, the success in meeting the urban challenge largely will depend on the success in meeting the infrastructure, housing, jobs, health and social services in Cairo and Alexandria.

One of the fundamental premises of our urban strategy is to increase the availability of productive jobs and to improve the quality of the labor force. In order to achieve this, six areas of attention need to be addressed:

1. Improving the functioning of the urban capital markets
 - o reform interest rate policy
 - o improve risk management
 - o improve the working of both formal and informal credit institutions in urban areas
2. Improving the functioning of urban labor markets
 - o assist development wage policies to aid more efficient labor allocation
 - o assist government to reduce regulatory practices that hamper private sector activities
 - o improve transportation networks and land use in order to reduce the costs for workers
3. Improving the working of municipal government
 - o assist municipal governments to improve planning capability for infrastructure projects in terms of design, implementation, and maintenance
 - o increase the use of the private sector in the provision of goods and services
 - o set prices of public urban services at marginal costs
 - o improve land tenure security in informal areas so as to encourage investment and provide collateral
4. Improving the productivity of the private sector
 - o provide infrastructure to maximize output and employment impact
 - o provide access to informal sector activities

5. Improving human capital activities

- o promote activities in education, health, family planning and vocational training

6. Improving the overall allocation of resources

- o promote macroeconomic and sectoral policy reforms
- o bring relative prices closer to relative opportunity costs in such areas as food prices and public services.

Understandably, USAID acting alone, cannot finance all of the above activities that would assist in increasing the availability of productive jobs and in upgrading the quality of the labor force. Nevertheless, USAID already is involved in a number of the activities. In particular, USAID is assisting, under its NUS Program, in improving the workings of municipal governments and in improving human capital activities. In addition, it is assisting in improving the overall allocation of resources and in attempting to bring relative prices closer to relative opportunity costs in the electricity sector and in its agricultural policy initiatives. It also is attempting to assist in the functioning of the capital and labor markets through its assistance to business credit and by addressing the issue of new wage packages for water and wastewater personnel.

In terms of job creation, the NUPS has calculated that job creation is more efficient and least costly to produce in the major urban centers of Cairo and Alexandria. However, an adequate urban infrastructure base is needed to attract and hold investment in employment-generating activities. Power and communication are needed, as are adequate housing, water and wastewater systems, transportation, and education and health services.

USAID is particularly interested in ensuring that its urban portfolio of projects, taken either together or individually, meet three fundamental criteria or an "AID" test, consisting of "Acceptance", "Impact", and "Do-Ability."

1. Acceptance: High acceptance to Egyptian bureaucracy and to the masses of low/moderate income Egyptians; U.S. Congress and AID bureaucracy satisfied that program adequately addresses goals and objectives of foreign assistance and has high visibility; and U.S. business interests sufficiently addressed.

2. Impact: Strong developmental impact related directly to economic vitality of urban areas and/or productivity of workers; strong basic human needs impact, meeting one or more basic human needs; significant spread affect impact by linking one or more of USAID's urban activities together; and balance of payments impact, meeting Egypt's balance of payments needs.

3. Do-ability: Easily do-able within 3-5 year time frame. Activities should not be overly encumbered by policy or institutional constraints that would seriously hinder implementation. (On the other hand, the activities should contribute to achieving policy reform.) Nor should activities be too complex in terms of the mix of goods and services or technology. In addition, the activity should be within an appropriate and feasible USAID funding level.

Understandably, not all urban projects and activities will meet the above criteria in a similar fashion. Some may have high GOE acceptance but low developmental impact or low do-ability or vice versa. The above criteria should be used as an initial screening device through which the most appropriate mix of urban project activities are developed and tied together. (See Diagram 1 below, Urban Policy Framework, for steps in the process.)

B. Urban Strategy Cairo and Alexandria and the Delta

1. Environmental Upgrading

a. Main Line Infrastructure

The above tasks are numerous. AID's resources are limited. Consequently our strategy seeks a multiplier effect wherever possible among our on-going projects. In Cairo and Alexandria, we have concentrated on mainline infrastructure support. The Government of Egypt has asked for additional support for its plans to improve further and expand the Cairo West Bank Sewerage Project and to undertake Phase II improvements to the Alexandria Wastewater System as follows:

Diagram 1

URBAN POLICY FRAMEWORK
DEVELOPMENT CONSIDERATIONS

Population	—————	↓	—————	Economy
Settlement Distribution	—————	↓	—————	Industry
Infrastructure/Services	—————	↓	—————	Potential Resource Shortfalls
Policy Administration	—————	↓	—————	Employment

Development Principles

Efficiency in Settlement Systems	—————	↓	—————	Conservation of Public Investment Funds
Major Metropolitan Growth	—————	↓	—————	Metropolitan Growth Management
Delta Growth Management	—————	↓	—————	Industry & Regional Infrastructure
Decentralization	—————	↓	—————	Urban Infrastructure and Services

Development Strategy

Concentration Cairo/Alex	—————	↓	—————	Delta, Canal Cities, Upper Egypt
Acceptance	—————	↓	—————	GOE, U.S. Congress, AID, Business Community
Impact	—————	↓	—————	Developmental Basic Human Needs Spread Effect
Do-Ability	—————	↓	—————	Ease of implementation Short-term (3-5 year) Minimum policy/instit. constraints Appropriate Technology

Development Programs/Projects

Cairo/Alexandria	—————	↓	—————	<u>Environmental Upgrading</u> Infrastructure—water/wastewater Transportation Neighborhood Services/ Solid Waste Activities
Delta	—————	↓	—————	Growth Management
Canal Cities	—————	↓	—————	Industrial Development and water/wastewater infrastructure
Upper Egyptian Cities	—————	↓	—————	Decentralization, Industrial Development in selected cities, infrastructure support

FY 84	- Cairo Sewerage (North West Project)	- \$225 million
FY 85	- Cairo Sewerage (Pyramids Project - \$125 million) Alexandria Phase II (East Plant Expansion and Sludge Disposal \$80 million)	- \$205 million
FY 86	- Alexandria Phase II (West Plant expansion, Central Collectors and Outfall - \$160 million partial funding) - Cairo Sewerage (Giza Project - \$40 million)	- \$200 million
FY 87	- Alexandria Phase II (West Plant expansion, Central Collectors and Outfall - \$165 million completion of funding)	- \$165 million
	TOTAL	- \$800 million

USAID believes that the above program, while complex in its capital and organizational elements, is consistent with urban needs, will address large segments of the urban poor, and will not unnecessarily cause urban growth needs to encroach upon agricultural lands. The achievement of goals in the urban water and wastewater sector calls for the establishment of autonomous water and sewer authorities with adequate staff and sufficient resources to cover system operation and maintenance, routine annual improvements, and debt service. USAID is in the process of establishing a dialogue with the Egyptian Government on all of the above points.

Although mainline infrastructure activities in Cairo and Alexandria remain an important ingredient of our urban strategy, USAID needs to remain flexible to other options that either taken together or as a separate package would be supportive of an urban strategy and meet our "AID" developmental test of Acceptance, Impact and Do-Ability. Such an add-on or optional policy would focus on three programs: (a) Transportation Linkages Program, (b) Cairo Environmental Up-Grading Program, and (c) Delta Growth Management Program.

2. Cairo Transportation Linkages, and Environmental Upgrading

a. Transportation Linkages

Attention to removing "existing bottlenecks" in the major urban complexes of Cairo and Alexandria was suggested in our 1984 Strategy. However, no specific recommendations were made. We now believe that the proposed Cairo Ring Road should be given attention as a possible project activity that would meet our "AID" tests of high acceptance, impact, and do-ability.

The 1970 Cairo Preliminary Master Plan proposed a Ring-Road around the agglomeration. The Long-Range Master Scheme of the Greater Cairo Region, completed February 1983, has led to the recommendation of the implementation of a Ring-Road around the Greater Cairo Agglomeration. The 1983 proposal differs quite significantly from that proposed in the 1970 Master Plan proposal owing to the growth of the built-up areas in Cairo and to changes in development concepts. The objectives of the Ring-Road are:

- to reduce private-car traffic inside the existing agglomeration, one of the means being to connect the entrances to the Greater Cairo Agglomeration;
- to support the process of urban deconcentration; and
- to protect agricultural areas from urban encroachment.

The prime advantage of the proposed Ring-Road is that it can be implemented at a relatively low cost, and with little intrusion on the existing built-up areas and on arable land.

USAID is exploring the feasibility of funding all or a portion of the Ring-Road 1985-88 portion (See Appendix E, Ring-Road Action Plan Cairo, Egypt). Also, consideration should be given for support of an ecological belt (500 meters wide) around the existing agglomeration inside of the proposed ring-road, as suggested by the Master Scheme. This would ensure that open spaces are available to the city for parks, recreational activities and in some cases the ecological belt could be used for small agricultural experimental stations. Solid wastes could be used to fill land depressions within the ecological belt as may be needed.

The proposed Ring-Road would assist the process of urban decentralization by opening up new desert land to urbanization and thus protect agricultural areas from urban encroachment. It also would help to limit vehicular traffic inside the agglomeration and in turn to delimit the size of the urban agglomeration.

A summary of the proposed Cairo Ring-Road in terms of its meeting the "AID" test of acceptance, impact and do-ability follows:

Acceptance

1. High GOE Bureaucracy Acceptance

1970 Cairo Preliminary Master Plan Proposal

1983 Greater Cairo Region Long-Range Master Scheme Proposal

1982 Ring-Road Action Plan Proposal

2. High Acceptance to Egyptian Masses

Will greatly facilitate movement around Cairo and thus relieve thru-traffic congestion on many inner-city streets.

3. High Congress AID Bureaucracy Acceptance

Few policy issues involved (no tariffs or pricing issues). Road and connecting tissue of bridges and overpasses will have high visibility.

4. High U.S. Business Interests

Possibility of major road, bridge and equipment contracts to U.S. firms.

Impact

1. High Developmental Impact

- Increase vitality of Cairo's urban center by significantly reducing thru-traffic;
- Provide easier access to jobs and industry in and around Greater Cairo area;
- Support process of urban decentralization by opening up access to other areas
- Protect agricultural lands from encroachment

2. High Human Needs Impact

- Increase labor productivity
- Provide easier access and link between employment, residences and social services
- Decrease transportation cost and time between activities.

3. High Spread Effects

- Ring-Road facility will facilitate connection between and among urban activities and provide direct access to most of the new settlements and new residential projects on the fringe of the agglomeration in the desert.
- By delimiting the size of Cairo it will encourage water/wastewater infrastructure connections on the west bank (USAID activity) and to non-productive agricultural lands.

- Its construction and buffer areas can provide ideal dumping and compacting areas for solid waste activities (USAID activity).

Do-ability

- The project is disbursed over several years. The easiest portions will be developed first.
- 1st Phase (Sections 3 and 4) eastern desert sections, land is cheap, available and easy to build upon
- Good access will be provided to all desert settlements from Mokattam to Heliopolis -- Cost L.E. 18 million (the time frame is one year)
- And begin Nile Bridge and Left Bank interchange (4 lanes) and Maadi Corniche Autostrade (4 lanes), part of Section 1 and 2 -- Cost L.E. 116 million (the time frame is 3 years)
- Total 1st Phase Cost LE 134 million -- average cost per year expense is L.E. 33 million.

The above activities of Phase I of the Ring-Road are not overly encumbered by policy or institutional issues, nor is the recommended technology involved highly complex or inappropriate to the transportation needs.

Phase 2, 3 and 4 of the Ring-Road are proposed to be undertaken during the 1989-95 year period at an additional total cost of L.E. 176 million. The possibility of moving up this timetable to possibly include Phase 2 and 3 in 1984-89 time frame needs to be examined. (See Appendix E for a breakdown of the Cairo Ring-Road Proposed Phasing and Costs.)

In addition to the Ring-Road, other road development activities in and around Cairo that would help to relieve pressure on the existing system and or improve their carrying capacity need to be considered.

b. Environmental Upgrading

The NUS Project within the Decentralization Sector is providing necessary upgrading, rehabilitation and additions to education, health and youth club facilities. It also is giving financial assistance to PVO activities. It also is providing upgrading of communities through paving, road improvements, and limited water and wastewater projects. In addition, some limited attention is being given to solid waste collection pilot programs in both Alexandria and Cairo. These activities include clean-up campaigns in each community by informing residents of the need for cleanliness and proper disposal of solid wastes. It also is building plastic bag manufacturing outlets, and providing small motorcycle type vehicles with appropriate attachments to collect refuse in difficult-to-reach informal areas.

It is estimated that only about 45% of all household waste is collected, generally from the higher income areas in the cities of Cairo and Alexandria. Public street cleaning and solid waste removal services are very understaffed. As a result, even surfaced roads are inadequately serviced and refuse accumulates, especially in low income areas. Refuse has been observed to accumulate up to half a meter deep in some areas of central Cairo and Giza. Some streets are completely blocked by refuse materials that has not been picked up.

The IBRD also has been concerned with the problem of solid waste collection and has funded some limited activities involving assistance to the Zabaleen community. The IBRD, under their Greater Cairo Urban Development Project, Urban 2, (May, 1982) has proposed a solid-waste management sub-project (U.S. \$0.6 million) that would provide a detailed solid waste management program for the City of Cairo. In addition IBRD proposes a pilot program solid waste management and selected low-income area upgrading effort for Rod El Farag and Abdine Districts in Cairo and for Old Giza and Monera Districts in Giza. The total area to be covered would be 2.6 km² at an estimated cost of U.S. \$14.8 million. Specifically the plan would consist of:

- (i) development of an approved plan for streets and sidewalks, public transport routes, and pedestrian and market areas;
- (ii) removal of refuse;
- (iii) levelling and paving of roads and footpaths;
- (iv) installation of street lighting; and
- (v) wages or contract fees for solid waste collection and street cleaning.

High GOE interest in solid waste activities in Cairo/Giza is evidenced by the Urban Beautification Program currently underway by the Cairo Governorate. In addition, the IBRD has been involved in the solid waste area, and USAID, under its NUS project and under the CIP also has been involved.

It now is proposed that USAID consider providing major support in solid waste for the Cairo Governorate that would consist in a more comprehensive effort including the construction of compacting plants and land-fill solid waste disposal activities. Such an effort in solid waste would meet the "AID" test as follows:

Acceptance

1. High GOE Bureaucracy Acceptance

- o Cairo Beautification Campaign presently underway
- o Pronouncements by Governors of importance of clean-up activities

- o NUS Steering Committee endorsement of Special Solid Waste project for Cairo and Alexandria.
2. High Acceptance to Egyptian Masses
 - o Solid waste effort will greatly facilitate cleanliness and health standards in poor communities
 - o Will facilitate transportation and movement in poor communities
 3. High Potential Congress and AID Bureaucracy Acceptance
 - o Meets Agency and Bureau's goals and objectives of high impact on the urban poor
 - o Solid waste disposal effort will have immediate and high visibility to all citizens in the community especially to low-income groups.
 4. High U.S. Business Interests
 - o Possibility of major equipment and solid waste management contracts to U.S. firms.

Impact

1. Significant Development Impact
 - o Increase vitality of urban neighborhoods
 - o Provide easier access to urban areas especially in several poor communities, that are now impassible due to solid waste build-up.
2. Significant Human Needs Impact
 - o Effort will directly contribute towards increasing sanitation conditions, especially in low-income areas.
 - o Effort will provide easier access to many low-income areas.
3. High Spread Effect
 - o Solid waste disposal effort will contribute to overall GOE Cairo City Beautification campaign.
 - o It will reinforce USAID NUS Project activities.
 - o The disposal and compacting can contribute to the construction of buffer zones for the proposed Cairo Ring-Road project (possible USAID project activity, see above).

Do-Ability

The project already is underway through the NUS activity, GOE Urban Beautification Program and IBRD efforts and proposals.

The project can be divided into meaningful phases by districts or zones after a solid waste management program is designed for the entire city. The Zabaleen community plays a very important role in the solid waste collection system in Cairo. It will be of utmost importance that this valuable resource continues to serve the solid waste collection needs of the city. Appropriate technologies need to be developed suitable to the Zabaleen community.

A start-up activity could include additional funds for road improvements and small scale plastic bag factories (20 million) plus construction of compacting plants (\$45 million). A commodity import equipment purchase for solid waste activities conservatively could cost \$100 million for the Cairo Governorate.

Actual pick-up activities would be on a continuing basis programmed to cost, depending on coverage, between \$10-\$20 million per year.

3. Delta Growth Management

Delta Secondary Cities Program

The National Urban Policy Study, NUPS, Final Report, Volume I, indicates "...the whole set of urban and rural development issues, industrialization and agricultural growth, and orderly use of both urban and arable land find expression in the Delta. It is not an exaggeration to say that the ability to manage urban and rural growth effectively in the Delta may be the key to the long-term development path of Egypt." The NUPS goes on to ask for "...immediate development of information and analysis to support near-term physical development and land use planning."

The CDSS Annex E on Decentralization and the Sector Assessment, indicated "...there is a need to up-grade services in medium sized towns (50-100,000 population) where living conditions are often as poor as those in major urban areas or in rural villages..." The CDSS Annex goes on to say that there is a need to "...provide a framework for institution building, and planning and management development in the markazes, governorates and regional offices, to complement work already being done in the villages."

Consequently, it is appropriate that concerted action be given to the Delta medium sized cities that would assist local units of government, through the GOPP, to delineate the magnitudes of public investments required for further urbanization in the area. It also would appear to be appropriate to help local units of government schedule the necessary development action as part of the national Five Year Plan and annual plans and budgeting process, consistent with the NUPS recommendations for the Delta. Importantly, attention also

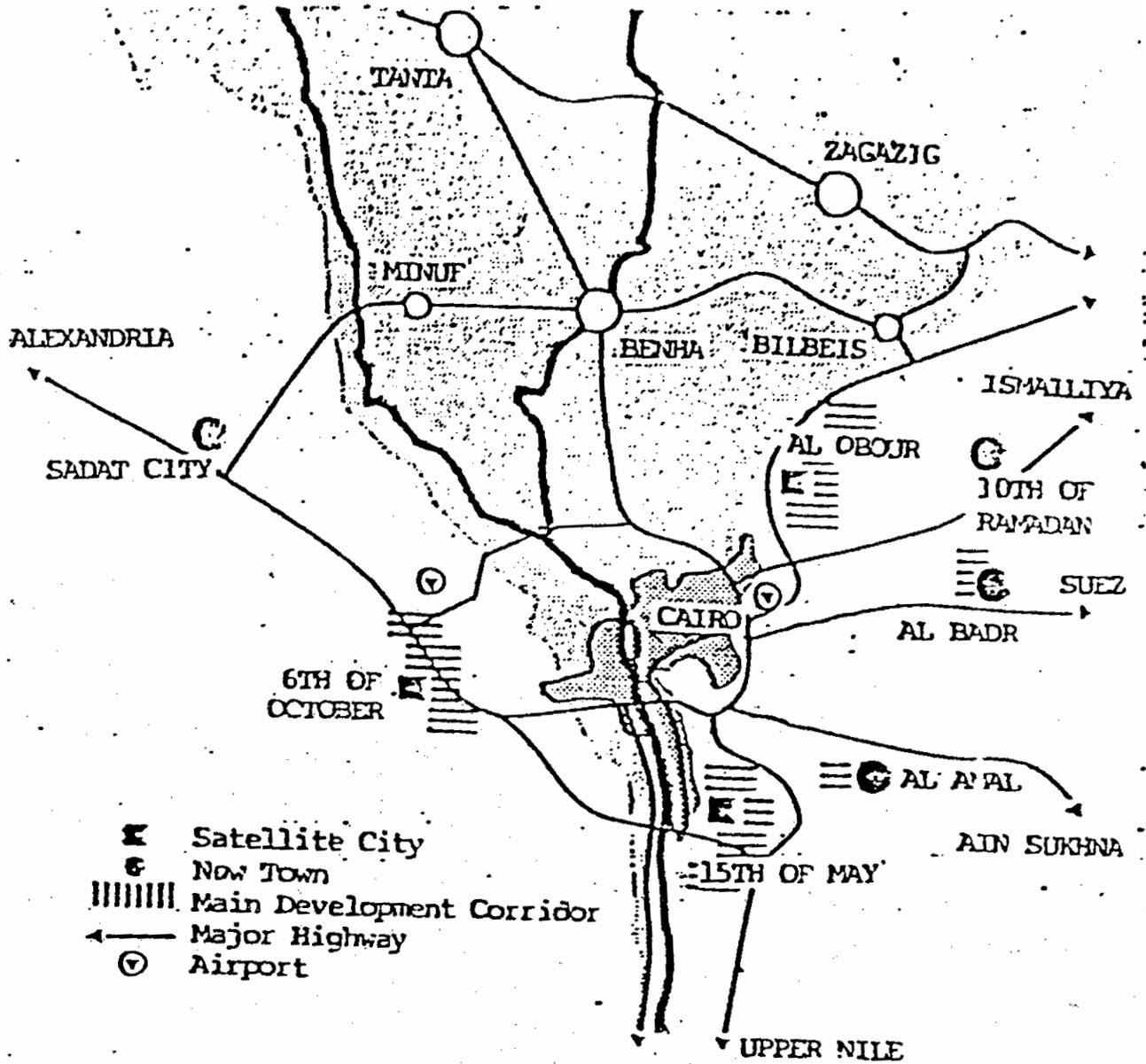


FIG. 1. : STRATEGY PLAN - REGIONAL INTEGRATION

should be given to identifying the local public investment potentials that can serve as stimuli for local private investment and to identify the types and magnitudes of private economic activities to be locally encouraged.

USAID is interested in developing a possible Delta Secondary Cities (DSC) activity within the Decentralization Sector Program that would target assistance to a select number of rapidly growing secondary cities in the Delta area. The DSC activity would:

- (1) assist the GOE and the GOPP in carrying out Law No. 3, 1983, Town Planning Act, that requires local units of government to draw up master plans and revise them every five years for land use, infrastructure, public services, urban renewal and area upgrading;
- (2) develop a practical public and private action framework for guiding future urbanization in appropriate areas away from fertile agricultural lands to non-fertile desert lands and to higher and more efficient land use standards consistent with the National Urban Policy, NUPS recommendations; and
- (3) provide investment for area upgrading and infrastructure development in selected DSC's.

A summary of the Delta Secondary Cities Program (DSC) in terms of its meeting the "AID" test of Acceptance, Impact and Do-Ability follows:

Acceptance

1. High GOE Bureaucracy

- o Success of the BVS and the NUS Programs and the desire to have a similar type of impact on secondary cities.

2. High Acceptance of Egyptian Masses

- o Project will impact directly on low/moderate income groups in secondary cities in the Delta.

3. High Potential AID Bureaucracy and Congressional Acceptance

- o Project patterned after very successful BVS and NUS projects that have amply demonstrated quick dispersal and ease of targeting on poor/moderate income groups.
- o Few difficult policy issues.

4. U.S. Business Interests Addressed

- o As in BVS and NUS activities, there is a potential for significant equipment purchases.

Impact

1. High Developmental Impact

- o potential for conservation of agricultural land through appropriate land use planning activities.
- o increase vitality of the urban centers of secondary cities, including job creation.
- o support process of decentralization by assisting municipal governments to plan, implement and maintain projects.

2. High Human Needs Impact

- o provide necessary infrastructure services such as road improvements, electricity, and water/wastewater.
- o provide necessary social services, e.g., health, education, youth centers.

3. High Spread Effects

- o DSC program will assist in the integration of the Delta cities to the major metropolitan centers of Cairo, Alexandria and the Canal Cities.
- o DSC program will help to deconcentrate the predominance of economic activities from Cairo and Alexandria, as appropriate, to other areas within the context of good management and conservation principles for agricultural lands.

Do-Ability

1. Ease of Implementation

- o DSC Program will operate along lines similar to the BVS and NUS, which have a proven record of quick dispersal of funds.

2. Short Time Framework

- o DSC Program is planned over a 4-5 year time frame that would include land use/master planning for a select number of secondary cities in the Delta (8-10). A total of \$100 million would be obligated over 4 years.

In addition, further support of the NUS beginning in FY '86 to FY '88 is also envisioned in the amount of \$60 million. This would help to sustain the urban district decentralization program through infrastructure and PVO activities in the major concentrations of Greater Cairo and Alexandria.

3. Minimum Policy/Institutional Constraints

- o As previously mentioned, there are no significant or major policy or institutional constraints that would hamper quick implementation of the DSC Project.

4. Appropriate Technology

- o The DSC Program would address appropriate technology in all sub-project activities. It would seek labor intensive activities where appropriate. The DSC Program would not introduce technologies that may provide difficult maintenance or upkeep problems.

Table 1 below presents an illustrative portfolio of urban activities and projects for the 1985-88 plan period.

PORTFOLIO OF SUGGESTED URBAN ACTIVITIES/PROJECTS 1985-83

<u>PROJECT ASSISTANCE</u>	<u>FY 84*</u>	<u>FY 85</u>	<u>FY 86</u>	<u>FY 87</u>	<u>FY 88</u>	<u>TOTAL</u> (by project)
Water/Wastewater	200	200	200	200	200	1 Billion
Ring-Road		50	50	50	50	200 million
Solid Waste		15	15	15	15	60 million
Roads improvements		10	10			20 million
other support activities						
Commodity Import (Equipment solid waste)		25	25	25	25	100 million
Decentralization						
NUS			20	20	20	60 million
DSC		25	25	25	25	100 million
TOTAL		125	145	135	135	
Grand Total including water/ wastewater	200	345	345	345		

*FY'84 also proposes \$20 million in Urban Electricity and in the population program.

PART V. - BIBLIOGRAPHY

ABT Associates, Inc., Informal Housing in Egypt, draft, final report, November 13, 1981

Ambric, in association with Acto, Sanes and Tencon, 1980, Rehabilitation and Expansion of the Cairo Wastewater System, Interim Development Plan Report, prepared for General Organization for Sewerage and Sanitary Drainage, August 1977

AID Policy and Strategy Papers, Washington, D.C.

"Approach to the Policy Dialogue", USAID, Washington, D.C., December 1982

"Private Enterprise Development", USAID, Washington, D.C., May 1982

"Near East Bureau Strategy", 1983-1988 (unpublished)

Arab Republic of Egypt, Law No. 50 of 1981, Decentralization Law

Arab Republic of Egypt, Law No. 59 of 1979, Concerning the Formation of New Urban Communities

Arab Republic of Egypt, Ministry of Planning, The Five-Year Plan 1982/83 - 1986/87 Parts I, II and III, December 1982

Black and Veatch International, General Organization for Greater Cairo Water Supply, "Revenue Requirements, Cost of Service Rates", March 1983

Camp Dresser and McKee, Inc., and Arab Technical and Economical Consulting Office, Alexandria Waterworks Master Plan Study, prepared for Ministry of Housing and Reconstruction, A.R.E., 1978

CAPMAS, Preliminary Results of Differential Internal Migration Sample Survey, 1979

CDSS FY 1984 Annex, Urban Policy and Strategy, Egypt, February 1982

CDSS FY 1984 Annex; Employment and Labor Force, Egypt, February 1982

CDSS FY 1984 Annex, Policy Issues Facing Egypt, February 1982

CDSS FY 1985 Annex D, Selected GOE Policy Changes, 1974-82 and Implications for the Future, February 1983

CDSS FY 1985 Annex E, Decentralization: Status, Constraints and Strategy, Egypt, February 1983

CDSS FY 1985 Annex, Water and Wastewater Sector: Status Constraints and Strategy, March 1983

11-

Dames & Moore, Cairo Metropolitan Area Land Use Infrastructure Development Study, Final Report, September 1981

Es-Parson, Socio-Economic Report on Proposed Service Loan No. 263-K-04201, March 1980

Foda, Omar, Doban, "Financial and Management Analysis, Report of Local Gov. Units", AID Contract Report, June 1981

Little, Arthur D., Inc., Review and Evaluation of Small-Scale Enterprise in Egypt, Phase I, Draft Report, January 1982

National Savings and Loan League, Housing Finance, June 1981

Norconsult, A.S., Middle East Consulting Office, et al., 1979, Structure Plan for Suez Governorate, 1979, prepared for Ministry of Development and New Communities, UNDP, A.R.E.

OTUI (Omnium Technique de l'Urbanisme et de l'Infrastructure) Greater Cairo Region, Long Range Urban Development Scheme, Interim Report No. 1, Volume 1, Dec. 1981 and Final Report February, 1983

OTUI Long-Range Greater Cairo Region Long Range Urban Development Scheme, Ring-Road Urban Development Scheme, Ring-Road: Action Plan, November 1982

PADCO, Inc., National Urban Policy Study

_____, Final Report - Volume One, July 31, 1983

_____, Egypt - Urban Growth and Urban Data Report, July, 1982

_____, Urban Management Handbook, July 31, 1982

PADCO, Inc., Near East Bureau Countries Current and Projected Urbanization and Associated Indications, April 1983

Renaud, Bertrand. National Urban Policy in Developing Countries, Oxford University Press, 1981.

Sector Assessment USAID, Cairo,

The Decentralization of Local Government in Egypt, January 1983, G. Keer, P. Amato, et. al.

Water and Wastewater Sector Assessment, May 1983, D. Painter, P. Amato, et. al.

The Urban Edge, Vol.5, No. 9, October 1981

"Appropriate Technology for the Urban Environment"

USAID, Economic Policy Discussion Papers

No. 1 "Energy Use and Pricing Policies in Egypt," David Dod, July 1983

No. 2 "Water and Wastewater Tariff Rates," Peter W. Amato, January 1984

USAID, Annual Budget Submission FY 1985 Egypt, June 1983

PART VI - APPENDICES

- A. Urbanization in Near East Bureau Countries
- B. USAID's Urban Assistance to Egypt 1975-82 and 1983
- C. Water and Wastewater Sector Recommendations
- D. USAID Assistance to Local Government in Egypt
- E. Ring-Road Action Plan

URBANIZATION IN NEAR EAST BUREAU COUNTRIES

Egypt

a. Urbanization Indicators

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

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

source: Office of Housing and Urban Programs
Agency for International Development
Near East Bureau Countries Current and Projected Urbanization
and Associated Indicators, April, 1983, PADCO

b. Economic Indicators

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

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

c. Social Indicators

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

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

C. Urbanization, Rural-Urban Migration and Poverty

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

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

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

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

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

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

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

TABLE II

PRODUCTIVITY IN THE AGRICULTURAL
AND INDUSTRIAL SECTORS

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

Productivity is defined as the agricultural or industrial GDP per agricultural or industrial worker, respectively.

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

TABLE 12
URBAN POPULATION GROWTH
AND RURAL TO URBAN MIGRATION

Country	Urban Population 1980	2000 Urban Population World Bank Estimate	2000 Urban Population At National Population Growth Rate ¹	Implied Migration Rural to Urban ² 1980-2000 ²	Migrants as Percent of 2000 Urban Population	Migrants as Percent of the Change in Urban Population	2000 Urban Population at 1970-80 Rates	Implied Migration Rural to Urban ² 1980-2000 ²	Migrants as Percent of 2000 Urban Population	Migrants as Percent of the Change in Urban Population
Yemen AR	0.7	2.0	1.1	0.9	45.0	69.2	3.4	2.3	67.6	85.7
Egypt	17.9	35.4	27.0	8.4	23.8	48.1	31.1	4.1	13.2	31.2
Morocco	8.3	18.7	14.8	3.9	20.9	37.6	20.4	5.6	27.5	46.3
Tunisia	3.3	5.9	5.2	0.7	12.6	28.6	7.2	2.0	28.4	57.4
Jordan	1.8	3.8	3.4	0.4	11.2	21.2	4.5	1.1	25.0	41.7
Lebanon	2.0	4.2	3.0	1.2	29.4	56.2	3.6	0.6	17.7	39.8
Turkey	21.1	41.0	31.5	9.5	23.2	47.8	50.9	19.4	38.1	65.1
Portugal	3.0	5.2	3.4	1.8	35.2	83.3	5.4	2.0	37.6	84.7
Israel	3.5	N/A	4.5	N/A	N/A	N/A	5.0	0.5	10.3	34.2
					24.4	68.99				

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

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

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

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

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

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

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

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

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

TABLE 13

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

REGION	1975	INCREASE OR DECREASE		1980	INCREASE OR DECREASE		1990	INCREASE OR DECREASE		2000	
Urban Poor Households (thousands)											
Eastern Africa	1,039	+330.5		1,369	+1,175		2,544.5	+2,158.5		4,703	6.2
Western Africa	1,072	+333		1,405	+861		2,266	+961		3,227	4.5
East Asia and the Pacific	2,664	+1,491		4,155	+956		5,111	+633		5,744	3.1
South Asia	10,213	+3,757		13,970	+7,285		21,255	+11,300		32,555	4.7
Europe, the Middle East, and North Africa	5,581	+699		6,250	+1,374		7,574	+1,169		8,743	1.8
Latin America and the Caribbean	12,945	+1,078		14,023	+2,775		16,798	+2,530		19,328	1.6
Total	33,514	+7,658.5		41,173	+14,376		55,548.5	+18,751.5		74,300	3.2
Rural Poor Households (thousands)											
Eastern Africa	5,902.5	-555.5		6,458	+1,100		7,558	+1,067		8,625	1.5
Western Africa	2,670	-268		2,938	-450		2,488	-250		2,238	-1.0
East Asia and the Pacific	14,327	-1,774		12,553	-834		11,719	-1,847		9,872	-1.5
South Asia	49,677	-878		48,799	-7,763		41,036	-8,327		32,709	-1.7
Europe, the Middle East and North Africa	4,563	-802		3,761	-1,428		2,333	-930		1,403	-4.6
Latin America and the Caribbean	6,040	-1,108		4,932	-1,904		3,028	-1,407		1,621	-5.1
Total	83,279.5	-3,738.5		79,441	-11,279		68,162	-11,694		56,468	-1.5

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

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

Table 14
URBAN POVERTY, HOUSING, and SERVICES^{1/}

Country	GNP per Capita (US \$)	Urban Poverty Threshold (US \$)		Urban Population Below Absolute Urban Poverty Threshold (%)	Household Size (persons/family)		Dwelling Occupancy Rate (persons/room)		Access to Safe Water (% of population)		Access to Excrete Disposal (% of population)		Access to Electricity (% of dwellings)	
		Absolute	Relative		Total	Urban	Total	Urban	Total	Urban	Total	Urban	Total	Urban
Algeria	1260	475	227	20	n.a.	6 1/2	n.a.	3 9/1	77	80	67	60	60	100
Cyprus	2120	n.a.	747	0	3 9	a	0 9	0 8	95	94	95	94	99	100
Egypt	390	120	163	21	5 8	h	1 8	2 4/d	66	88	25 1/g	50/d	38	62
Iraq	1850	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	62	90	47	75	n.a.	n.a.
Jordan	1050	235/d	192/e, l	18/d	6 6	h	n.a.	3 0/1	56	60	n.a.	10/g	43	71
Lebanon	1070/a	n.a.	n.a.	n.a.	5 5/g	4 9/g	2 4/g	2 1/g	92/g	95/g	n.a.	n.a.	98/g	n.a.
Moreocco	670	389	242	28	n.a.	n.a.	n.a.	n.a.	55	100	29/g	75/g	28	60
Oman	2570	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	32	100	12	100	20	50
Portugal	1990	n.a.	480	n.a.	n.a.	n.a.	n.a.	n.a.	66/h	90/h	20/h	n.a.	95	100
Romania	1750	n.a.	394	0/c	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	100	100
Syria	930	227/f	278/f	13/f	5 9/g	5 9/g	n.a.	n.a.	75	80	n.a.	55 1/g	48	80
Tunisia	950	204	193	20	6 0	5 8	3 2/g	2 3/d	70	93 1/m	62/m, g	100/m, g	44	78
Turkey	1200	330/e, l	385/e, l	n.a.	n.a.	n.a.	n.a.	n.a.	75	70	8 1/m	20	72	95
Yemen AR	520	690/b	n.a.	33/b	5 0	4 2	2 8	1 8	4	30	n.a.	n.a.	9	62
Yemen PDR	420	n.a.	90	n.a.	n.a.	n.a.	n.a.	n.a.	24	30	n.a.	n.a.	22	45
Yugoslavia	2380	n.a.	n.a.	0/c	3 8	3 3	1 4/g	1 3/g	n.a.	n.a.	n.a.	n.a.	90	100

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

Similarly, unless noted otherwise, data are for 1978.

^{1/a} 1974 figure.

^{1/b} Source: World Bank; Yemen Arab Republic: Urban Sector Report, November 1979.

^{1/c} Source: Country Economist.

^{1/d} Source: World Bank, The Hashemite Kingdom of Jordan: Urban Development Project, Staff Appraisal Report, June 23, 1980.

^{1/e} Source: URBOR.

^{1/f} 1977 figure.

^{1/g} 1970 figure.

^{1/h} Source: World Bank; Egypt: Urban Sector Review; Working Papers of consultants.

^{1/i} Source: Halcrow Fox and Associates, Jouzy and Partners Jordan Urban Project, Interim Sector Report No. 2, Review of the Current Situation, April 1979.

^{1/j} For Annaba only.

^{1/k} Source: EMENA Water Supply and Sewerage Division estimate.

^{1/l} Source: World Health Organization: Community Water Supply and Wastewater Disposal, Report by the Director General, March 29, 1976.

^{1/m} Source: World Bank; Lisbon Region Water Supply, Project Brief.

^{1/n} House connections to sewerage system

^{1/o} Source: World Bank; Water Supply and Sewerage Sector Study, 1977.

^{1/p} Source: World Health Organization; Water Supply and Sewerage Sector Study, 1977.

^{1/q} Source: World Bank, Energy Department; Power Sector Data for 1978.

APPENDIX B
TABLE I
USAID URBAN ASSISTANCE TO EGYPT 1975-82

STATUS REPORT 1975-1982	COMPLETE/DIRECT		PARTIAL/INDIRECT	
	GRANT	LOAN	GRANT	LOAN
	(\$ millions)		(\$ millions)	
<u>I. General Economic Support</u>				
<u>A. Balance of Payments</u>				
Commodity Import Program (1975)			670	1,805
PL 480 Title I Food for Peace (1975)				1,864.4
<u>B. Development Planning</u>				
Technical & Feasibility Studies (1975)			64.4	
Tech. Transfer/Manpower Dev. (1975)			37.3	
Applied Source/Tech. (1977)			24.4	
Development Planning Studies (1978)			15.8	
<u>II. Infrastructure</u>				
<u>A. Electricity</u>				
Electric Power Dist. Equip. (1975)	29.8			
Ismailia Electric Power Plant (1976)	141.0			
National Energy Control (1976)			2.5	41.0
Gas Turbine Generators (1976)			67.3	
Urban Electric Power Dist. Equip. (1977)	10.0		46.012	
*Shoubra El Kheima Thermal Power Plant (1979)				190.0
<u>B. Water and Sewerage</u>				
Cairo Water System (1977)	61.4	30.0		
Alex. Sewerage System (1977)		15.0		
Canal Cities Water/Sewerage (1978)	36.0	60.0		
Cairo Sewerage (1978)	99.1			
<u>C. Telecommunications</u>				
Expansion & Modernization (1978)	202	40		
<u>D. Housing</u>				
Low Income Housing & Community Upgrading (1978)	80			

APPENDIX B
TABLE I continued

STATUS REPORT 1975-1982	COMPLETE/DIRECT		PARTIAL/INDIRECT	
	GRANT	LOAN	GRANT	LOAN
	(\$ millions)		(\$ millions)	
II. <u>Infrastructure</u> (Continued)				
E. <u>Decentralization</u>				
Neighborhood Urban Services (1981)	36.5			
III. <u>Transportation, Industry, Commerce, Finance</u>				
Industrial Production (1978)			98.55	46.44
Industrial Productivity Improvement (1980)			39.00	
Mehalla Textile Plant Rehab. (1976)		96		
<u>Business & Finance</u>				
Development Indus. Bank I & II (1976/78)			2	32
Private Investment Encouragement Fund (1979)			33	
Private Sector Prod. Credit (1982)			68	
IV. <u>Social Services</u>				
Urban Health Delivery (1979)	37.3			
Family Planning (1977)			67.6	
Peace Fellowship (1980)			54.0	
University Linkages (1980)			27.5	
PL 480 Title II (1975)			130.7	
GRAND TOTAL	\$820.42	\$354.31	\$1,524.75	\$3,788.84

Urban Assistance Totals 1975-82 (millions)

Direct Assistance

\$820.42 Grant
354.31 Loan

\$1,174.73

Partial/Indirect Assistance

\$1,524.75 Grant
\$3,788.89 Loan

\$5,313.64 x 2/3* = \$3,542.39

Grand Total

\$4,717.12 out of total USAID Egypt program
= 62.9% 1975-82

*Assumption: 2/3's of all Partial/Indirect Assistance goes to urban areas.

APPENDIX B
TABLE II
USAID ASSISTANCE TO EGYPT FY 1983

FY 1983	COMPLETE/DIRECT (\$ millions)	PARTIAL/INDIRECT (\$ millions)
1. PL-480		250.0
Commodity Import		300.0
2. <u>Project Assistance</u>		
Population		20.0
Cairo Sewerage	29.9	
Ismailia	109.0	
Business Support		9.1
Canal Cities Water/Sewerage	73.0	
Alexandria Sewerage	79.4	
	-----	-----
TOTAL	291.3	579.1

Urban Assistance Totals 1983

Direct Assistance \$291.3 + 2/3* x Partial/Indirect Assistance \$579.1 = \$677.36 million. \$677.36 million out of \$1,000 million = 67.7%

*Assumption: 2/3's of all partial/indirect assistance gone to urban area.

Water and Wastewater Sector Recommendations

A. FINANCING WATER AND WASTEWATER SERVICES

In order for water and wastewater utilities to be assured revenues that will cover the costs of operation; maintenance; routine improvements and additions; and debt service (cash basis revenue requirements), it is necessary that a number of actions be undertaken and accomplished in conjunction with the proposed program of capital projects. These actions are designed to ensure the financial viability of the local organizations during program implementation and in the future.

1. Water and Wastewater organizations in Alexandria, Cairo and the Canal Cities must develop the capability to accurately account for operational expenses and forecast cash basis revenue requirements each fiscal year. With management and technical assistance, funded through the Program, this capability will be developed by March 31, 1985 along with a statement of revenue requirements for FY 85-86 for each utility. Revenue requirements for FY 84-85 shall be determined by the updating of the Management and Tariff Studies Relative to Water/Sewerage Systems prepared by Black and Veatch.
2. Having established revenue requirements for the 1984-85 fiscal year, the GOE will implement rate increases which will, when collected, meet the revenue requirements for the affected water utilities in Alexandria, Cairo and the Canal Cities. A surcharge equal to the pro-rated cost of 10% of the revenue requirements of the wastewater utilities in Alexandria, Cairo and the Canal Cities will be added to all water bills. Although the above may be effective as late as January 1, 1985, the necessary administrative actions (decrees) shall be completed by July 1, 1984.

3. The GOE Fiscal 84-85 budget shall provide sufficient budget allocations to water and wastewater organizations in Alexandria, Cairo and the Canal Cities to finance the difference between projected revenues and requirements.
4. Using the developed capability to forecast revenue requirements, water tariffs in Alexandria, Cairo and the Canal Cities will be increased by July 1, 1985 to cover requirements for FY 85-86. A surcharge equal to the pro-rated value of 20% of wastewater revenue requirements shall be added to each water bill. The FY 85-86 budget shall provide sufficient allocations to the water and wastewater utilities to finance projected shortfalls in actual revenues.
5. The above procedure shall be repeated in fiscal years 86 through 88 with the proviso that the wastewater tariff surcharge will be increased to 30% of requirements in 1986; 50% in 1987; and 100% in 1988.
6. To assist the administration of tariff collections, utilities will undertake to accomplish the metering of 75% of the users of water in Alexandria, Cairo and the Canal Cities by July 1, 1987 and collect 90% of all billings. The GOE shall insure payment of billings for water and wastewater to public buildings and institutions.
7. AID Grants to the GOE for water and wastewater capital improvements in Alexandria, Cairo and the Canal Cities shall be lent by the GOE to respective utilities.

B. LOCAL ORGANIZATIONS FOR WATER AND WASTEWATER SERVICES

The goal of the Government of Egypt is to develop financially independent organizations that are responsible to local political leadership for the provision of water and wastewater services.

To this end, the Government of Egypt has established a series of objectives that will lead to the achievement of the goal. These include:

1. Development of public sector water and wastewater organizations that have the following characteristics:
 - A) The revenues of the organization equal or exceed the annual cash requirements for operation, maintenance, routine improvements, and debt service.
 - B) The organization shall establish tariffs and fees according to policies established by NOPWASD, and they shall collect and retain the subsequent revenues for their own use.
 - C) The organization shall be responsible for planning, developing, operating and maintaining their local water and wastewater systems at levels of service agreed by their management according to policies established by NOPWASD.
 - D) The organizations shall compensate their employees sufficiently to attract and retain the skilled staff necessary to operate and manage their systems according to manpower policies established by NOPWASD.

2. Public sector water and wastewater organizations, as defined above, shall be developed according to the following schedule:

- A) An Alexandria water organization with all necessary legal authority shall be formally established by July 1, 1984. The Alexandria Water organization shall be functioning as defined above, by July 1, 1986.
- B) An Alexandria wastewater organization with all necessary legal authority shall be formally established by July 1, 1984. The Alexandria wastewater organization shall be functioning, as defined above, by July 1, 1988.
- C) A Greater Cairo Wastewater organization with all necessary legal authority shall be formally established by July 1, 1984. The Greater Cairo Wastewater organization shall be functioning, as defined above, by July 1, 1988.
- D) A Greater Cairo Water organization with all necessary legal authority shall be formally established by July 1, 1985. The Greater Cairo Water organization shall be functioning, as defined above, by July 1, 1986.
- E) A Suez Canal Area Water organization with all necessary legal authority shall be formally established by July 1, 1985. The Suez Canal Area Water organization shall be functioning, as defined above, by July 1, 1987.
- F) An organization or organizations for Suez Canal Area Wastewater will all necessary legal authority shall be formally established by July 1, 1985. The Suez Canal Area Wastewater organization or organizations shall be functioning, as defined above, by July 1, 1988.

C. NATIONAL ORGANIZATION FOR WATER AND WASTEWATER SERVICES

The goal of the Government of Egypt is to develop NOPWASD as an organization that establishes policies for the water and wastewater sector, coordinates sector financing, and provides local organizations with technical assistance and training support on a contractual basis.

To reach this goal the Government of Egypt shall assist NOPWASD to:

1. Develop a capacity to establish and enforce broad policies for the water and wastewater sector including tariff policies, sector development plans, and manpower policies.
2. Develop a capacity to coordinate water and wastewater sector financing by drafting five year investment plans for the sector as a whole, and by assisting local organizations to obtain their required level of annual budget support from the Ministries of Finance and Planning.
3. Develop a capacity to provide technical services such as system planning, engineering design, manpower planning, and system operation/maintenance on a fee-for-services basis to those local organizations that do not have adequate staff to perform these activities on their own.
4. Develop a capacity to provide training programs specific to the needs of all categories of workers in water and wastewater organizations on a fee basis.

D. MANPOWER DEVELOPMENT AND TRAINING

The effective operation of water and wastewater utilities in Alexandria, Cairo and the Canal Cities is dependent upon their adequate staffing. Adequate staffing in turn requires training programs and incentives for the retention of qualified and experienced staffs. To achieve this, the GOE is prepared to:

1. Initiate a manpower development study by July 1, 1984 to identify the members and types of staff required by the above mentioned utilities along with appropriate wage levels and the training and incentive programs necessary to meet and maintain staffing requirements.
2. Develop and initiate a plan of action to address study recommendations by January 1, 1985.

APPENDIX D

USAID ASSISTANCE TO LOCAL GOVERNMENT IN EGYPT

Introduction:

USAID assistance to Local Government activities in Egypt, specifically in Decentralization and through projects/activities assisted by AID's Office of Local Administration and Development, are all being implemented under the Decentralization Sector Support Program. The first project activity became operational in 1979-80 and is focused on small income-generating project loans to rural village councils. Subsequent separate projects were developed to focus on basic infrastructure in rural villages, infrastructure upgrading in three governorate capital cities, major equipment procurement by rural governorates for support of decentralization, and neighborhood infrastructure/services in the metropolitan urban areas of Cairo and Alexandria. In August 1982, in response to Government of Egypt requests for the combining of projects into general sectors to ensure greater implementation flexibility, all these projects were combined under the "umbrella" of the Decentralization Sector Support Program. These and subsequent activities within the "Sector" fall under the general guidance and direction of the Sector Steering Committee, comprised of representatives from the Ministry responsible for Local Government, and the Ministries of Investment and International Cooperation, Planning, Finance, and Economy plus selected Governorate representatives.

Guidance on world-wide AID assistance to Local Government Programs was recently re-defined in Washington. Major areas of concern for AID assistance programs to Local Governments include (a) demonstrated strengthening of growth and local initiative both in public and private sector areas, (b) clear and convincing evidence that this support is not increasing local government dependence on central government initiatives, (c) balanced encouragement of local revenue utilization, and (d) recognition that local government development is a relatively long-term institution-building process that requires sufficient opportunities and time-frames to develop sustained self-help capacities.

While the long history of Egypt is replete with ebbs and flows of the centralization vs. decentralization issues, the most recent historical trends clearly indicate a national movement toward decentralization. Analyses and practical applications of local government laws since 1975 (Law 52/1975, Law 43/1979, Law 50/1981) provide the basis for encouraging increased support to the local government system in Egypt. It is with this background and environment that the specific requests and subsequent inter-governmental (Egyptian-US) agreements and protocols for local government assistance were initiated. Concurrently, the growth and general interest in the development of local government systems principally are Egyptian initiatives.

USAID Projects within the Decentralization Sector Support Program

USAID has designed an overall decentralization program in cooperation with the Government of Egypt for both urban districts and for rural areas. At the governorate, urban district, markaz, and village level the concern is to assist the poor by providing basic services of water, sanitation, schools, health clinics and other services and activities. The program also aims to strengthen local institutions and their popular and executive leadership.

USAID grants totalling \$530.2 million over a five year period already have been committed to Egypt for institution building activities. They work in two separate but complementary ways:

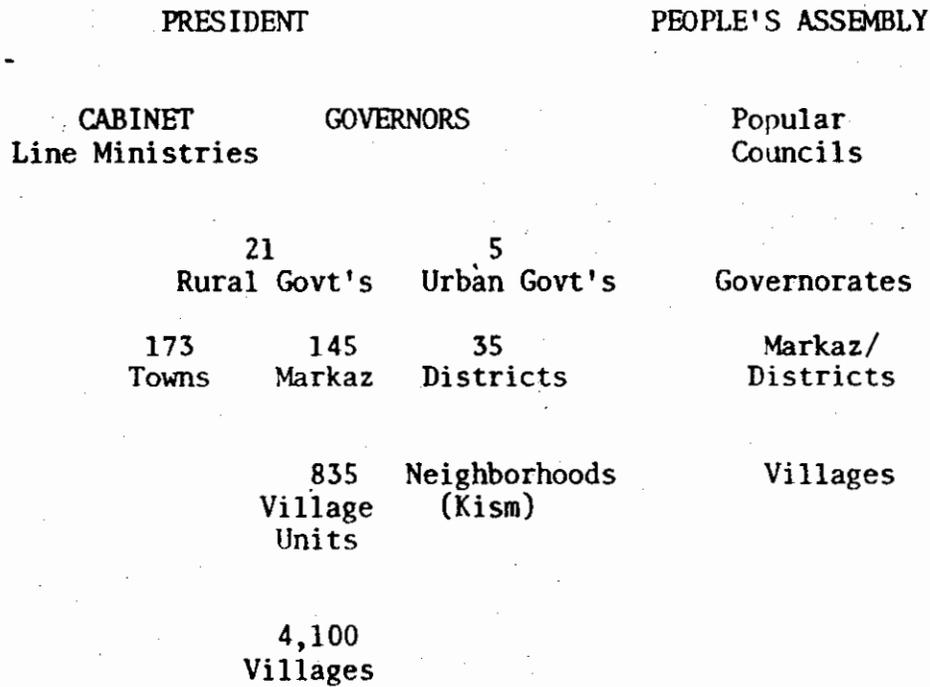
- A. by making available the resources needed for village councils to start up productive ventures. The resulting income then provides to the village an initial financial base for its own local service activities. And,
- B. by providing resources for direct infrastructure improvements to solve urgent problems faced by villagers and urban poor alike, to raise their standard of living.

Funds are disbursed directly through local councils and governments so as to enhance their ability to plan and carry out complete projects. In this way, the visible benefits reach millions of Egyptians.

The Sector Program objective is to establish a functioning system of decentralized decision-making and budgetary processes for local development. AID assistance at Project and Sector levels, we believe, is impacting on GOE policy and implementation objectives for economic and administrative decentralization.

LOCAL GOVERNMENT IN EGYPT

Basic Framework For Decentralized Development



DECENTRALIZATION PORTFOLIO

USAID/EGYPT

Decentralization Project
Officers

- * 6 USDH Foreign Service
- *13 FSN Professionals

Technical Assistance
Consultants

- * 4 Consultant Contracts
with -
- * Total Staff:
23 Expatriate
45 Egyptian Professionals

THE SIX PROJECT ACTIVITIES

A. DEVELOPMENT DECENTRALIZATION (263-K-605.1)

\$26.2 Mil.US, \$5.4 Mil. GOE

1st.Operational Year: FY 80

Beneficiaries: 4.2 Mil. people in LDF project villages

- * Establish and capitalize Local Development Fund in ORDEV for loans to village councils for income-producing projects:
438 loans to date - 700 loans by 1985
- * Establish ORDEV-Local Government Training Academy at Sakkara.
(Will open January 1984)
- * Provide on-the-job, U.S., and Third Country Training for local government leaders at all levels. As of September 1983, more than 4,700 local government personnel have received intensive training.

B. BASIC VILLAGE SERVICES (263-K-605.2)

\$220.0 Mil. US (Grant and PL480/Title III)

\$ 39.0 Mil. GOE

1st.Operational Year: FY 80

Beneficiaries: 23 Mil. in villages of 20 rural Govts.

- * Provides development funds to rural village councils for locally planned and implemented infrastructure projects. (Average \$4.3 Mil. per Governorate per year for 3 years). GOE budgets 10% maintenance funds in advance of each subproject. Total AID contribution expenditures to date exceed \$182 million.
- * Began with 3 Governorates (Fayoum, Sharkia and Sohag) in FY 80. Expanded to 9 Governorates in 1981-82, adding Beheira, Menoufia, Giza, Qaliubia, Minia and Qena, and to 20 rural Governorates in 1982/83.
- * Of 3,560 projects to-date in 1,425 village units, 56% are in potable water, 24% are rural-access roads, 12% are sanitation drainage, and 8% are "other" (markets, slaughter houses, ferry boats). By the end of FY1983, BVS will have 1,800 km of rural roads and 3,600kms of pipes in water systems all completed and operational. In 1982-83, another 2,100 village projects will be initiated.
- * Over 3,000 local government engineers, technicians, planners, managers and local leaders will have been trained.

C. PROVINCIAL CITIES DEVELOPMENT (263-K-605.3)

\$75.0 Mil. US, \$25.0 Mil. GOE

1st.Operational Year: FY 82

Beneficiaries: over 500,000 residents of 3 Project Cities

- * Provides for infrastructure and equipment for 3 provincial capital cities (Fayoum, Beni Suef, and Minia) with combined population of 490,000 plus. Nearly \$10 million already has been expended by AID.
- * Conducts training for technicians, engineers and planners/managers in 3 cities.
- * To-date, over 75 sub-projects are underway or completed; e.g.:
Refurnished/replaced city water filters and pumps for Minia treatment plant
 - Repaving of Fayoum City roads
 - New water mains for Minia system
 - New area sewerage expansion in Fayoum
 - Water-valve control boxes on all city systems.

D. DECENTRALIZATION SUPPORT FUND (263-K-605.4)

\$100.0 Mil. US, \$20.0 Mil. GOE

1st. Operational Year: FY 82

Beneficiaries: 14.8 million people in Govt. & Markaz towns

- * Allocated approximately \$2.3 mil. (1st Tranche) to each rural governorate for draw-down procurement of major U.S. equipment in support of decentralization projects and activities. The 2nd Tranche allotment of the new \$50 million obligation is awaiting the Project's Steering Committee Recommendation.
- * Mechanisms/procedures established in 21 rural governorates for equipment requirement analyses and specifications determination. Procurement contracts include operations and maintenance training at all levels.
- * Competitively-bid U.S. equipment awards and arrivals in country to-date total \$32.4 Mil. First equipment arrived beginning May 1982. Currently operating in 21 Govts are 39 motorgraders, 22 bulldozers, 111 dumptrucks and 86 medium and small firetrucks. Scheduled arrivals in 1983 include 196 sewerage dumptrucks, 52 loaders and refuse trucks, 99 waterspray trucks, 150 small firetrucks, 10 desalination units, 160 deepwell pumping units, 10 articulated beam trucks, 21 horizontal pumps, 10 sewage jet cleaners, 15 road rollers, etc.

E. NEIGHBORHOOD URBAN SERVICES (263-K-605.5)

\$89.0 Mil US, \$13.9 Mil. GOE

1st. Operational Year: Fy 82

Direct Beneficiaries: 3.9 mil. people in Urban
Cairo/Alexandria

- * Provides local fund resources to special accounts for neighborhood improvement projects by district councils of urban Cairo and Alexandria and to locally-based Private Voluntary Organizations (PVOs). More than \$27 million has been expended and over 700 sub-projects have been or are being implemented.
- * Average project-size of 317 projects (1981-1982) in Cairo's 12 districts and Alex's 6 districts was LE 20,000. Projects included: 91 new classrooms, 4 new hospitals, 22 equipped/renovated clinics, 30 new youth centers, 8 local markets, 35 street drainage-paving-lighting projects, 41 new or renovated day-care centers, 27 social/cultural centers, etc.
- * 1982-83 projects (Total 394) expanded into urban Giza + Qaliubia, in addition to 18 Cairo and Alex districts councils. Projects included 430 new classrooms, 27 health centers/clinics, 68 street-paving/lighting projects, 38 water-sewerage projects, and solid-waste clean-up projects in every district.
- * Project identifying, planning, managing/implementing, monitoring/evaluation training is being provided to 1,000+ urban managers, technicians, and district council personnel.

F. DECENTRALIZATION SECTOR SUPPORT (263-K-605)

\$3.5 Mil US

1st. Operational Year: FY 1983

- * Continuing policy dialogue and implementation strategy-planning with Sector Steering Committee: Ministries of Local Government, Investment/International Cooperation, Planning, Finance and Economy plus Governorate representatives.
- * Established oversight technical secretariat for Sector and Sector projects for Sector Steering Committee and Supreme Council for Local Government.
- * Focus and Follow-Up on various components of Sector projects and Decentralization as a policy entity:
 - Continued authorities/policies devolving to local units from Local Government Laws
 - Provide ad-hoc assistance to Local Gov't components in policy changes, training, and skills development
 - Encourage continued local revenue utilization and concentrate on local revenue generation.

DECENTRALIZATION SECTOR SUPPORT/PORTFOLIO (11/10/83)

Total present USAID Financial Commitment to 1985

Expenditures through 9/30/83 (\$ MIL)

Unliquidated Obligations 1980-1983 (\$ MIL)

ACTIVITY

ACCOMPLISHMENTS TO DATE

Development Decentralization	26.2	18.7	* 438 Local Devevelopment Fund Projects in 421 villages in 21 Rural Governorates	26.2
			* LE 900,000 returned interest funds to capital account, and. reloaned	
Basic Village Services	145.0 (g) [75.0 (PL480)]	107.0 57.8]	* 3,560 local infrastructure projects underway in 1400 villages. 1200 completed/operating.	145.0 [75.0 PL480]
Provincial Cities Development	30.0	9.4	* 75 capital infrastructure projects underway or completed in 3 target cities: Fayoum, Minia, Beni Suef.	75.0
Decentralization Support Fund	100.0	33.9	* Major equipment for governorate activities delivered to 21 rural governorates. (Graders, dozers, trucks, firetrucks).	100.0
Neighborhood Urban Services	54.5	33.9	* 700 projects in Cairo and Alexandria ((6 districts), and urban Giza & Qaliubia 253 completed/operational in health, education, utilities, social services.	89.0
Sector Support	3.5	---	* Assessment completed. Strategy focus on policy changes and skills development.	20.0
Sub-Totals	359.2	203.4		455.2
TOTAL	[75.0]	[57.8]	60.2% expended of obligation	[75.0]
	434.2	261.2		\$530.2 GRAND TOTAL

THE FUTURE: Consolidation of Experience

In the near future (over the next 12 months) USAID expects to continue and even accelerate the implementation process of all Decentralization projects in cooperation with all local governments with the assistance and advice of the Decentralization Sector Steering Committee. Within the flexible context of the Sector Program, and in-line with Government of Egypt requests, additional resources may also be applied to various project components. The GOE and USAID already are committed to and working on design specifics for Decentralization Sector Support II, a new \$500 million assistance strategy to local government capacity building.

The Sector Assessment, recently completed, reviewed three inter-related dimensions of the Program: administrative/functional; political; and resource flows (funding and staff inputs/outputs). USAID anticipates continuing progress relative to policy applications providing yet increased authorities to local governments (both popular and executive councils) for administering local development programs aimed at the provision of basic services. While executive functions/responsibilities and budgets have already reassigned to local levels, and while local capabilities for planning and implementation continue grow and expand, USAID believes that there are two major components that require additional focus and attention. The first is in the area of planning and management development. This, of course, involves skills transfer and institutional-capacity development at various levels of local government. The second focus, we believe, relates to financial resource constraints and perhaps revised policy applications leading to increased local revenue generation/utilization assigned to local development activities.

The current decentralization objective of USAID is to assist in the provision of supplementary resources for local development that enhance and demonstrate local development capacities at various local levels. Future progress is contingent upon policy changes and actions that lead to greater local self-reliance for local development. Throughout USAID Decentralization Activities, a primary goal at both urban and rural levels is to assist in transferring the experience of identifying, designing, implementing and maintaining the myriad of sub-projects that raise the standard of living of local people. The overall result should be more self-reliance and less dependence on others for the solving of every-day problems at local levels.

APPENDIX E

RING-ROAD ACTION PLAN --CAIRO, EGYPT

The study of the Long-Range Master Scheme of the Greater Cairo Region has led to the recommendation of the implementation of a Ring-Road around the Greater Cairo Agglomeration, able to contribute rapidly and significantly to a number of main urban development goals :

- to reduce private-car traffic inside the existing agglomeration, one of the means being to connect the entrances to the Greater Cairo Agglomeration,
- to support the process of urban deconcentration, and
- to protect agricultural areas from urban encroachment.

Its prime advantage is that it can be implemented at a relatively low cost, and with little intrusion on the existing built-up areas and on arable land.

The alignment proposed differs quite significantly from that proposed in the 1970 Master Plan owing to the growth of the built-up areas and to changes in development concepts, including the need to meet more objectives.

The project will be presented under four headings :

1. Alignments, designs and costs.
2. Effets on traffic.
3. Impact on the land-use.
4. Phases of implementation.

1. ALIGNMENTS , DESIGNS AND COSTS

Alignments

Several alternative alignments have been considered, including the previous outer Ring-Road project. They were evaluated from the point of view of traffic attraction, consistency with urban development projects and costs.

The recommended alignment (Figure "1") appeared best suited to improve the present traffic conditions and, at the same time, to fit in with

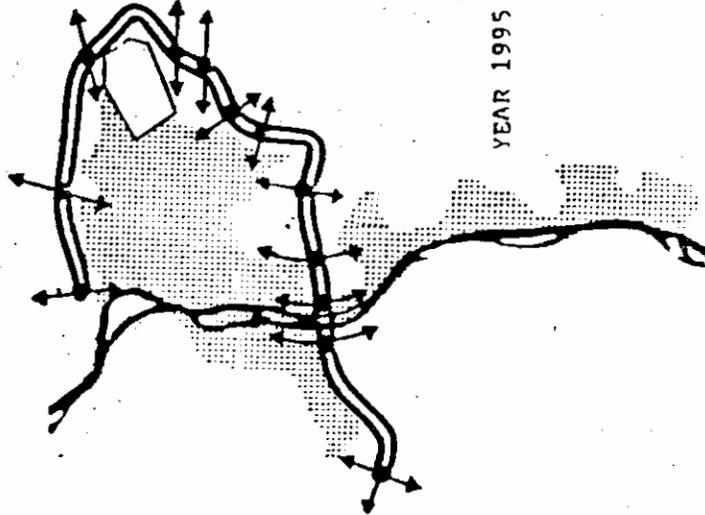
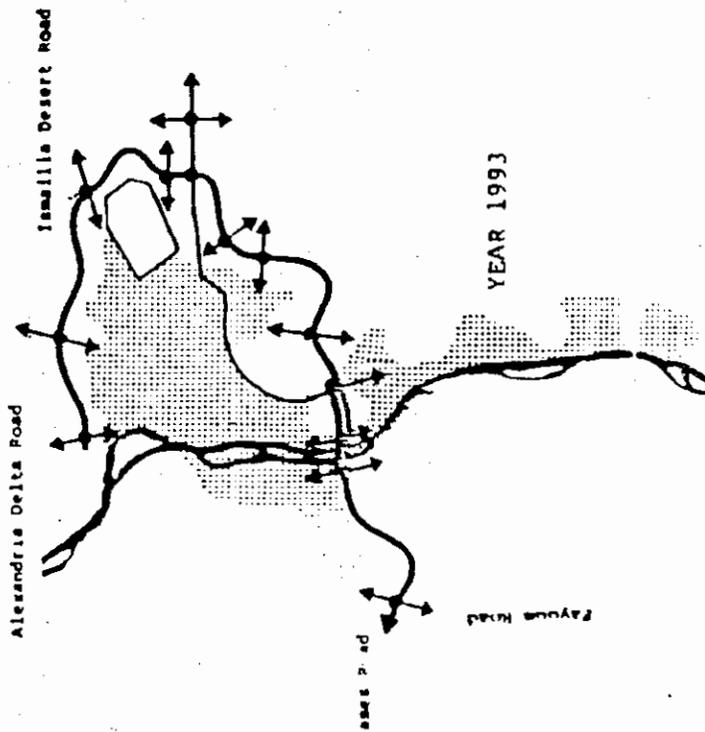
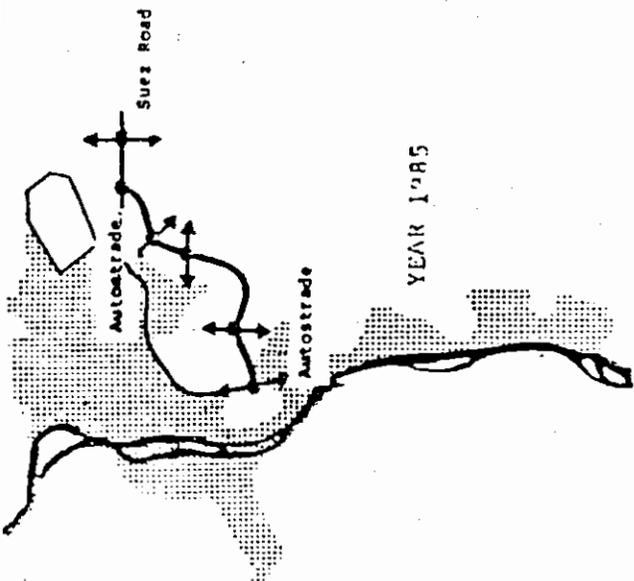
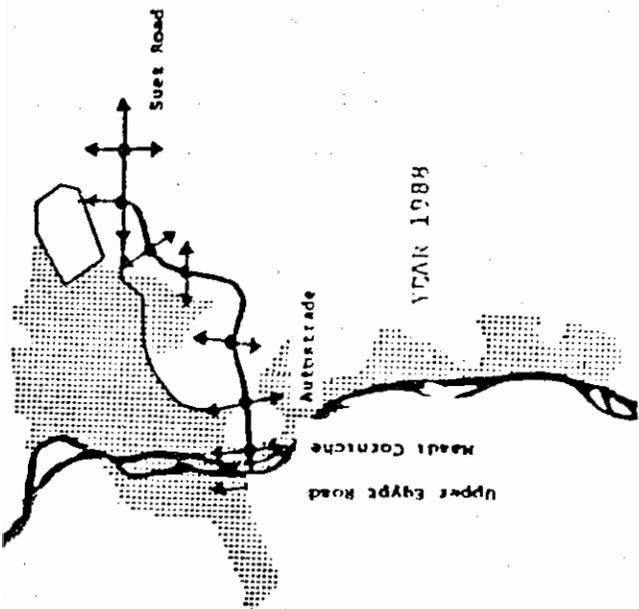
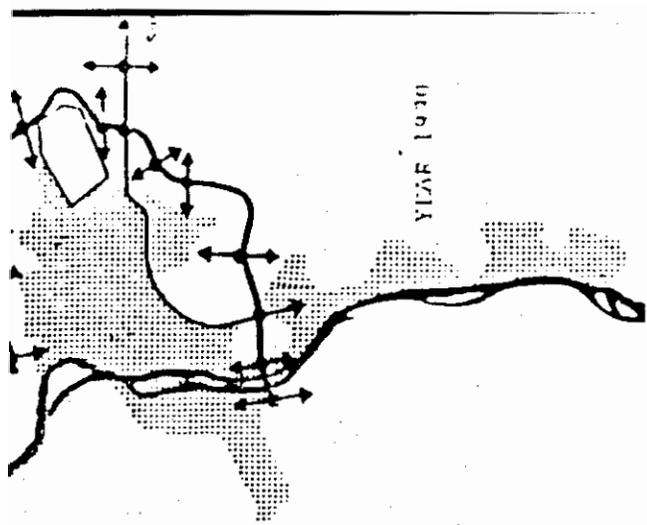


Figure 2 PHASING OF THE RING-ROAD CONSTRUCTION

- Scale 1/500,000

0 5 km

Ring Road (4 lanes) (8 lanes)

Autostrade

Main Interchange

the future transport policy.

Table "1" summarizes the main physical features.

Table 1 - DESCRIPTION OF THE RECOMMENDED ALIGNMENT

GOVERNORATE	SECTION NUMBER	LOCATION (See Figure "1")	LENGTH IN KILOMETERS			
			ON ARABLE LAND	ON URBANIZED LAND	ON DESERT LAND	TOTAL
GIZA	1	Fayoum Road to Maadi Corniche (including Nile Bridge)	7.5	1.5	5.0	14.0
CAIRO	2	Corniche to Autostrade	-	6.0	-	6.0
CAIRO	3	Autostrade to Mokattam Plateau	-	-	8.0	8.0
CAIRO	4	Mokattam to Suez Road	-	-	15.0	15.0
CAIRO	5	Suez Road to Ismailia Desert Road	-	2.0	7.5	9.5
CAIRO	6	Ismailia Desert Road to Ismailia Delta Road	9.0	1.0	2.0	12.0
QALU-BIAH	7	Ismailia Delta Road to Alexandria Delta Road	7.0	1.0	-	8.0
TOTAL LENGTH BY TYPE OF LAND USES			23.5	11.5	37.5	72.5
PERCENTAGE BY TYPE OF LAND USES			32 %	16 %	52 %	100 %

Designs

The design criteria must comply with :

- a. The classification of the Ring-Road as a "regional" road : design speed of 100 Km/h, separate level intersections, freeway characteristics.
- b. The high volume of traffic which can be attracted, requiring four lanes in each direction in the year 2000.

- c. The necessity of reducing cost and environmental impact for a quick implementation, resulting in a narrow right-of-way (40 meters) in agricultural areas and ground-level construction.
- d. The prevention of undue access by adequate fencing, pedestrian crossings, earthworks.

Costs

The total project has been estimated at 310 million Egyptian Pounds. Costs will be high for the Maadi Section which requires the destruction of buildings and important structural works ; they will be moderate in agricultural sections and low in desert sections.

Land acquisition in built-up and agricultural areas will represent almost half the total expense, Nile bridge excluded.

Table "2" shows a break-down of costs by main sections and for the two implementation phases.

Table 2 - COST SUMMARY - MILLION L.E.

SECTION	LOCATION	FIRST PHASE*			TOTAL COSTS**			AVERAGE COST/KM
		LAND	WORKS	TOTAL	LAND	WORKS	TOTAL	
1	Fayoum Road to Maadi	25	12	37	25	23	48	3.7
	Nile Bridge	-	27	27	-	50	50	50.0
2	Corniche to Autostrade	54	20	74	54	30	84	14.0
3	Autostrade to Mokattam Plateau	-	8	8	-	14	14	1.8
4	Mokattam/Suez Road	-	10	10	-	21	21	1.4
5	Suez Road/Ismailia Desert Road	1	8	8	1	19	20	2.1
6	Ismailia Desert Rd / Ismailia Delta Road	20	12	32	20	18	38	3.2
7	Ismailia Delta Road/Alexandria Delta Rd	20	9	29	20	15	35	4.4
	TOTAL	120	106	226	120	190	310	4.3

(*) Two lanes in each direction.

(**) Four lanes in each direction = Total costs include first phase costs.

2. EFFECT ON TRAFFIC

As all major roads presently cross the most congested urban areas, the Ring-Road will provide higher level of service and shorter time of travel for an important part of transit and external trips, in spite of the remoteness of some sections : Table "3" presents a general estimate of the traffic which can be attracted after the implementation of the first phase (1990) and at the horizon of the Master Scheme (Year 2000).

Table 3 - RING-ROAD AVERAGE DAILY TRAFFIC - ALL VEHICLES
In Passenger-car equivalent x kilometers (pce x Km)

Y E A R	FIRST STAGE (1990)		ULTIMATE STAGE (2000)	
	pce x Km	%	pce x Km	%
<u>RING-ROAD : Total</u>	3,625,000	100	8,000,000	100
. Transit Traffic (1)	145,000	4	274,000	3
. External Traffic (2)	1,751,000	48	3,352,000	42
. Internal Traffic (3)	1,729,000	48	4,374,000	55
<u>GREATER CAIRO REGION: Total</u>	28,907,000	100	52,305,000	100
. Transit Traffic	176,000	0.6	332,000	0.6
. External Traffic	4,231,000	14.6	7,973,000	15.2
. Internal Traffic	24,500,000	84.8	44,000,000	84.2

- (1) Traffic which merely crosses the Greater Cairo Agglomeration.
Traffic reaching road capacity of 50,000 pce/day in 1990,
120,000 pce/day in 2000.
- (2) Origin in the urban region and destination outside or vice versa.
- (3) Origin and destination inside the urban region.

The Ring-Road would thus attract 82 per cent of transit traffic (145,000 : 176,000), 41 per cent of external traffic and 7 per cent of internal traffic in its first development stage.

On the whole, the Ring-Road would assume 12.5 per cent of the total regional traffic by 1990 (end of first stage) and 15 per cent by year 2000.

3. IMPACT ON LAND USE

- Opening of New Desert Land to Urbanization

The recommended alignment provides a direct access to most of the New Settlements planned for in the Greater Cairo Region Master Scheme and to a large number of new residential projects on the fringe of the agglomeration in the desert. Table "4" gives a list of the main pro-

We suggest beginning with the eastern desert sections, from the Autostrade North to Maadi to Suez Road (Sections 3 and 4) as they are cheap and can be built rapidly. Thus, a good access will be provided as early as the end of 1984 to all desert settlements from Mokattam to Heliopolis. At the same time, the Nile bridge and Section "2" should be undertaken from the Upper Egypt Road to the Autostrade : this would take advantage of the near completion of the latter, immediately reducing the congestion in South Cairo and on the Giza bridge.

Table "5" and Figure "2" propose a schedule of implementation over twelve years.

Table 5 - TENTATIVE PHASING OF IMPLEMENTATION (Expenses in Million LE)

PHASE	S E C T I O N	C O S T			YEARS	AVERAGE YEARLY EXPENSE
		LAND	WORKS	TOTAL		
1	Maadi Autostrade to Suez Road (4 lanes), Sections "3" and "4"	-	18	18	01.01.84 31.12.84	
	Nile Bridge and Left Bank interchange (4 lanes)	12	30	42	01.01.85 to	
	Maadi Corniche to Autostrade (4 lanes), part of Sections "1" and "2"	54	20	74	31.12.88	
	Subtotal Stage "1"	66	68	134	1984 to '88	33
2	Suez Road to Alexandria Delta Road (4 lanes), Sections "5" "6" and "7"	41	29	70	01.01.89 to 31.12.90	35
3	Fayoum Road to Upper Egypt Road (4 lanes)	13	9	22	01.01.91 to	20
	Widening of Nile bridge and Section "2", from 4 to 8 lanes		37	37	31.12.93	
4	Widening of Sections "1", "3", "4", "5", "6" and "7", from 4 to 8 lanes.	-	47	47	01.01.94 to 31.12.95	23
TOTAL		120	190	310		26

The Ring-Road project extends over three governorates, crosses private land and public land owned by various government organizations and requires large financial resources for land acquisition and construction. The very size of the Ring-Road implies, for a successful implementation, specially designed procedures.

It is recommended establishing a separate public authority whose general purpose would be to minimize costs and maximize returns of the supplied facility. Its functions should include :

We suggest beginning with the eastern desert sections, from the Autostrade North to Maadi to Suez Road (Sections 3 and 4) as they are cheap and can be built rapidly. Thus, a good access will be provided as early as the end of 1984 to all desert settlements from Mokattam to Heliopolis. At the same time, the Nile bridge and Section "2" should be undertaken from the Upper Egypt Road to the Autostrade : this would take advantage of the near completion of the latter, immediately reducing the congestion in South Cairo and on the Giza bridge.

Table "5" and Figure "2" propose a schedule of implementation over twelve years.

Table 5 - TENTATIVE PHASING OF IMPLEMENTATION (Expenses in Million LE)

PHASE	S E C T I O N	C O S T			YEARS	AVERAGE YEARLY EXPENSE
		LAND	WORKS	TOTAL		
1	Maadi Autostrade to Suez Road (4 lanes), Sections "3" and "4"	-	18	18	01.01.84 31.12.84	
	Nile Bridge and Left Bank interchange (4 lanes)	12	30	42	01.01.85 to	
	Maadi Corniche to Autostrade (4 lanes), part of Sections "1" and "2"	54	20	74	31.12.88	
	Subtotal Stage "1"	66	68	134	1984 to '88	33
2	Suez Road to Alexandria Delta Road (4 lanes), Sections "5" "6" and "7"	41	29	70	01.01.89 to 31.12.90	35
3	Fayoum Road to Upper Egypt Road (4 lanes)	13	9	22	01.01.91 to	20
	Widening of Nile bridge and Section "2", from 4 to 8 lanes		37	37	31.12.93	
4	Widening of Sections "1", "3", "4", "5", "6" and "7", from 4 to 8 lanes.	-	47	47	01.01.94 to 31.12.95	23
TOTAL		120	190	310		26

The Ring-Road project extends over three governorates, crosses private land and public land owned by various government organizations and requires large financial resources for land acquisition and construction. The very size of the Ring-Road implies, for a successful implementation, specially designed procedures.

It is recommended establishing a separate public authority whose general purpose would be to minimize costs and maximize returns of the supplied facility. Its functions should include :

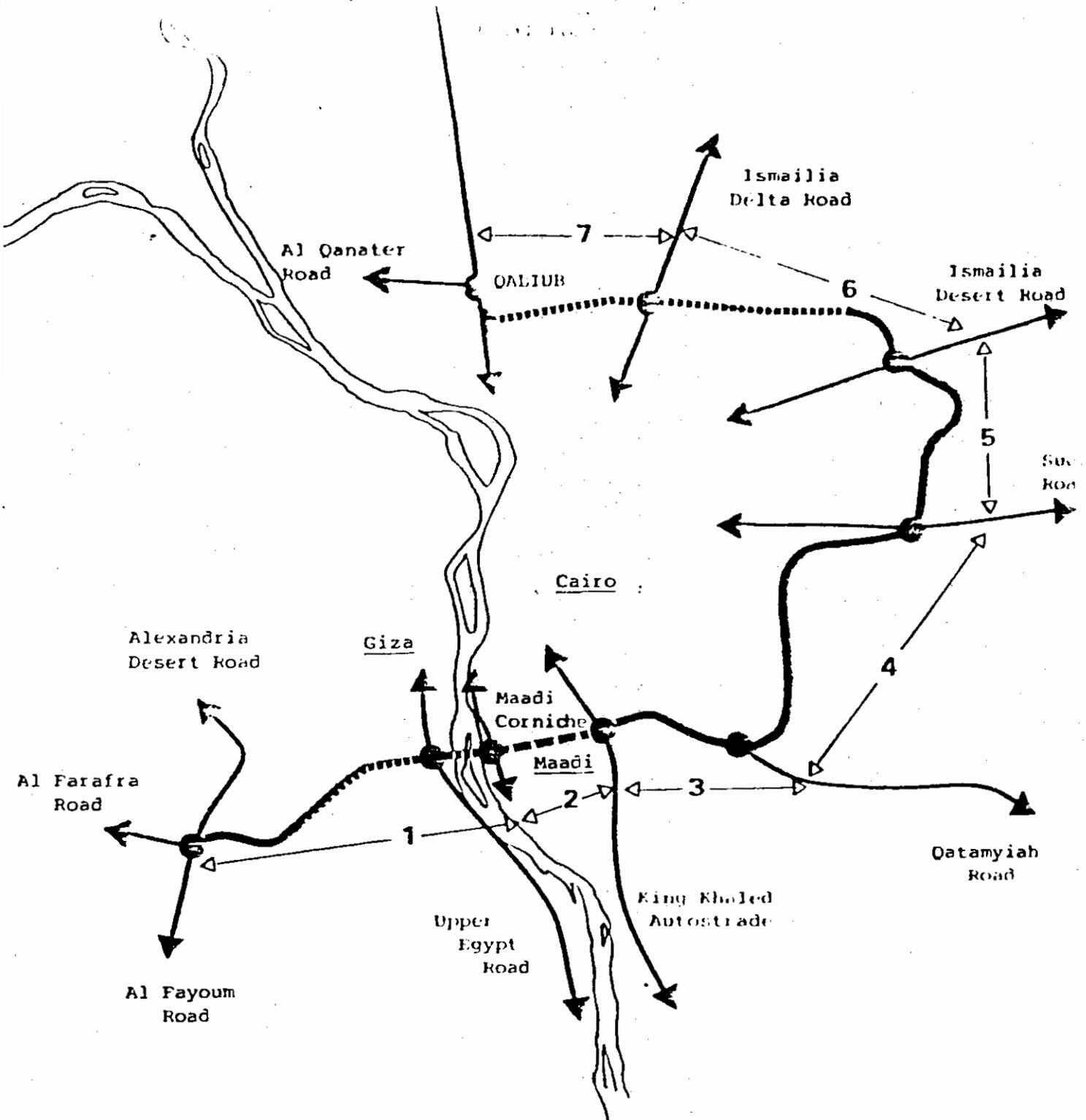


Figure 1 RECOMMENDED RING-ROAD ALIGNMENT

- Scale 1/250,000

- On desert land
- In urbanized areas
- On arable land

a) Engineering and Real Estate Studies

The final alignment in agricultural and built-up areas depends upon detailed land surveys permitting evaluation of the least costly and least disruptive alternatives.

These studies must be engaged for the totality of the Ring-Road as soon as the agreement to initiate this project is obtained.

b) Land Assembly

- Public Land : Negotiate with the responsible public organizations the transfer of land property to the Ring-Road authority.
- Private Land : Support the Governorates in the implementation of the expropriation procedures and supply funds for land acquisition. In agricultural areas, organize the reassembly of land when properties are split by the Ring-Road.
- Built-Up Areas : Compensation for buildings to be demolished. The relocation of the displaced population should be arranged with the Ministry of Development, Housing and New-Communities, and with the Governorates.

c) Land Delivery

- Conveyance of the land to contractors for the phased execution of construction works.
- Management of Land Reserves : Agricultural land which has been acquired to ensure the permanence of the future right-of-way should be leased to farmers until needed for the Ring-Road.

d) Financing

Three items can be distinguished with regard to financing :

- Land Acquisition :

The resources needed are very significant (L.E. 120 Million) and should therefore be allocated quickly in order to ensure the rights-of-way. They constitute transfer payments from the public to the private sector, the use of which should be controlled because of its possible inflationary consequences. Some of the payments

should be made in serviced land in New-Communities, land or housing bonds, and reclaimed agricultural land.

- Road Construction :

Road construction has been phased and should follow either annual budgetary allocations of the governorates, or a special Ring-Road budget.

- Structures :

The Nile bridge, and road or railway bridges and overpasses may need foreign expertise and financing.