



Status Report

United States Economic Assistance to Egypt

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Status Report

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Introduction

Over the past 15 years, the U.S. government has provided about \$15 billion of economic assistance to Egypt. The FY 1990 program will total about \$1 billion. This assistance has supported broad economic goals of the Egyptian government and specific development programs to build a stronger economy and better life for the Egyptian people. The Agency for International Development (AID) carries out this assistance program. Throughout this report, AID refers to the overall agency, while USAID refers to AID's Mission in Egypt. The coordinating agency for the Government of Egypt (GOE) is the Ministry of International Cooperation.

This Status Report is a reference document, revised annually, to provide information on the current status of all of USAID's programs and projects in Egypt. It also serves as a historical record of completed projects.

Historical Perspective on the Program

Egypt faced several major problems when USAID's program began in 1975:

- Deteriorated physical infrastructure from neglect during the war years.
- A breakdown in technical and scientific ties and relationships with the West.
- A stalled economy.

Accordingly, during the early years, the USAID program concentrated on repairing the Suez Canal, reconstructing and expanding electric power, water and wastewater, grain storage, telecommunications and port facilities; rebuilding professional and institutional ties between Egypt and the U.S. through training, technical assistance and joint research between U.S. and Egyptian universities; and providing large-scale financing for essential imports to help revive the economy.

By the end of the seventies, the focus of the USAID program was broadened to give greater attention to agriculture, health and basic education to improve the quality of life of rural people.

Egypt's economic growth of six to eight percent per year in the late 70s and early 80s was not a result of increased productivity. President Sadat's "Open-Door" policies to invigorate the economy through economic liberalization measures had not altered the basic controls on resource allocation and production. A wide range of government policies left over from the Nasser era kept the government responsible for the important economic decisions of virtually every sector. The government's desire to keep consumer prices low, to ensure that the poor could afford basic market goods, and to channel investment into these products and services, led to price distortions and administrative regulations which discouraged growth and efficiency.

Failure of the economy to increase productivity, combined with a growing population and maintenance of widespread consumer subsidies, resulted in a growing fiscal burden for the GOE.

However, there was little need for the GOE to address these problems as long as revenues were growing from the newly-reopened Suez Canal, high oil prices and substantial worker remittances. These external sources of revenue were sufficient to pay for the maintenance of costly subsidies.

To use legislatively earmarked assistance levels effectively in this environment, USAID opted to allocate its resources to projects across the spectrum of the economy. While investments in every sector were constrained to one extent or another by policy issues, with a large number of project alternatives, USAID could vary commitments of new funds from one sector to another, depending on the soundness of the sectoral environment and the economic or social attractiveness of the particular projects.

Changes in the Economic Environment Facing Egypt

Shortly after President Mubarak assumed office, Egypt's boom period began to recede. Oil prices, which began declining in 1981, dropped sharply in 1985 and worker remittances from overseas leveled off. Egypt developed a serious balance of payments gap, ran large budget deficits and became increasingly hard-pressed to manage its external debt.

Gradually, the GOE began to come to grips with the need for a more fundamental structural reform of the economy, and in 1986 announced its commitment to an economic reform program. USAID supported GOE policymakers by a partial shift from project assistance to policy-based program and sector assistance. The Cash Transfer, which was first used in 1984, has provided USAID's first real vehicle for discussion of and support to the GOE macroeconomic reform. In addition, the Agricultural Production and Credit project has supported structural adjustment in the agriculture sector. These actions come at the beginning of the GOE's long and difficult process of economic transformation.

The key requirements for transforming the economy are:

- Moving toward market prices for allocating resources.
- Making the operation of Egypt's infrastructure and capital plants more reliable and efficient.
- Strengthening the growth sectors of agriculture and private industry.
- Improving the efficiency of investment in human resources.

As enunciated by President Mubarak, the nation's commitment to equity and social welfare remains strong, but Egypt's policymakers are increasingly aware that sustainable social programs must be financed through economic growth. Translating this into action is a slow and difficult process, however, and the government is cautiously trying to balance progress in economic policy change with the needs for equity and political stability. Too slow a reform pace could undermine the success of the effort.

Current USAID Assistance Strategy

The critical development problem which Egypt must now address is low productivity of the economy.

The USAID strategy is to help Egypt increase economic productivity, particularly in agriculture and industry, by removing the constraints to the operation of market forces, while maintaining basic services to its people. Key elements of this growth strategy are:

- economic reform to provide the incentives for production increases and an expanded role for the private sector;
- science and technology to provide the means to increase production and productivity; and
- cost-recovery in provision of legitimate government services, to promote efficient use and reduce the budgetary burden.

The Sector Profiles preceding the major sections of this report describe how this strategy is being implemented, and attempt to put the projects in a sectoral context.



Marshall D. Brown
Director

Completed projects will be found at the end of each section printed on blue paper. Major contractors for each project are identified in the project descriptions. A complete list of current contractors for projects carried out in Egypt can be obtained from the Office of Project Support at the USAID Mission.

The Annex is a numerical list of projects. A financial breakdown of A.I.D. assistance to Egypt since 1974 by type of assistance and by sector of project activity can be found at the front of the book.

For more copies of this document or for other materials, contact:

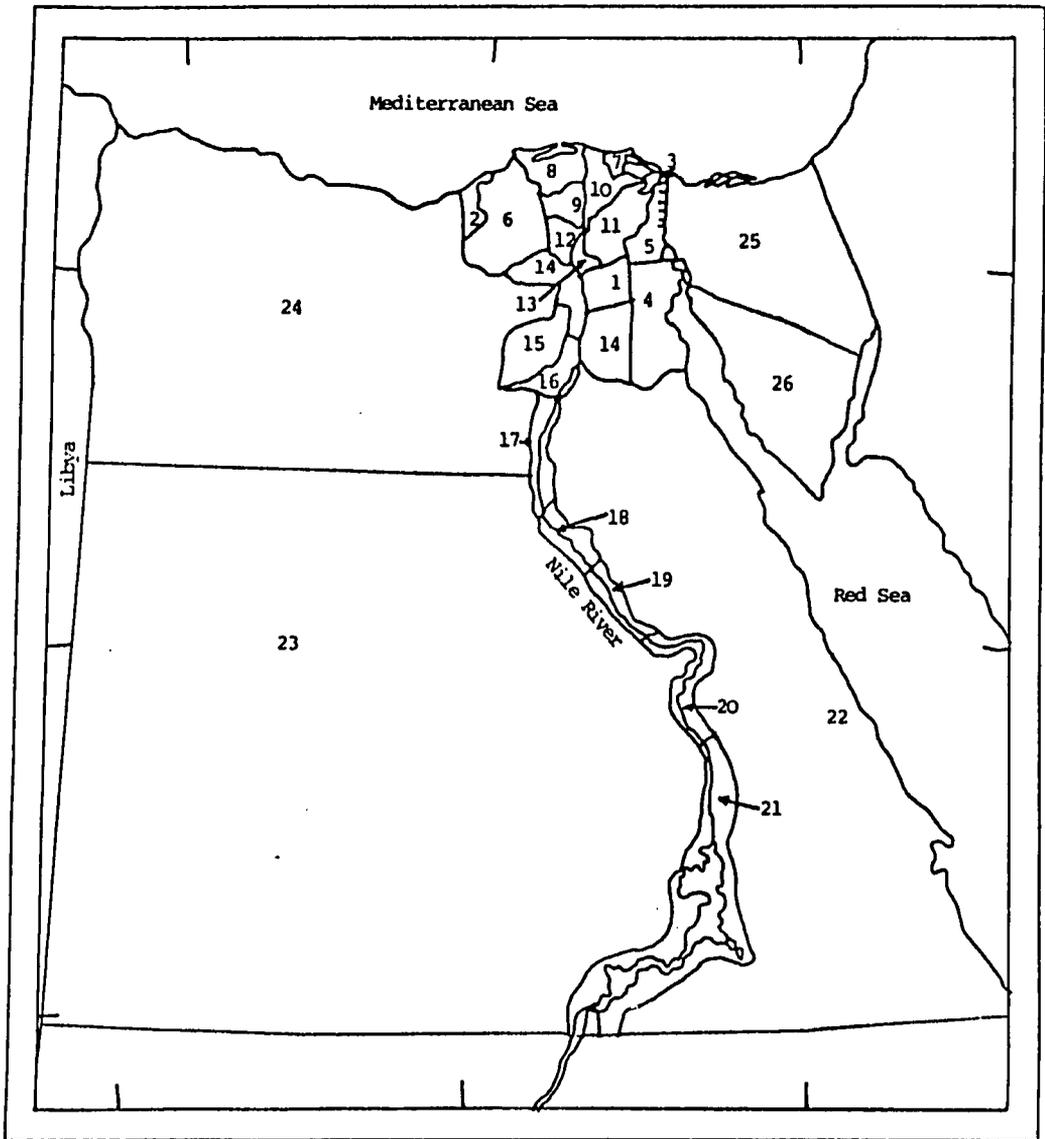
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ARAB REPUBLIC OF EGYPT



URBAN GOVERNORATES

1. Cairo
▲ Cairo
2. Alexandria
▲ Alexandria
3. Port Said
▲ Port Said
4. Suez
▲ Suez

LOWER EGYPT

5. Ismailia
▲ Ismailia
6. Beheira
▲ Damanshour
7. Damietta
▲ Damietta
8. Kafr El Sheikh
▲ Kafr El Sheikh
9. Gharbia
▲ Tanta
10. Dakahlia
▲ Mansura
11. Sharkia
▲ Zaqaqiy
12. Menoufia
▲ Shibin El-Kom
13. Qalubia
▲ Benha

UPPER EGYPT

14. Giza
▲ Giza
15. Fayoum
▲ Fayoum
16. Beni Suef
▲ Beni Suef
17. Menia
▲ Menia
18. Assuit
▲ Assuit
19. Suhag
▲ Suhag
20. Qena
▲ Qena
21. Aswan
▲ Aswan

FRONTIER GOVERNORATES

22. Red Sea
▲ Hurghada
23. New Valley
▲ Kharja
24. Marsa Matrouh
▲ Matrouh
25. North Sinai
▲ El Arish
26. South Sinai
▲ El Tur

▲ Capital of Governorate

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U.S.

ECONOMIC

ASSISTANCE

U.S. ECONOMIC ASSISTANCE TO EGYPT 1975 - 1989 (\$ MILLIONS)

TOTAL \$14,982

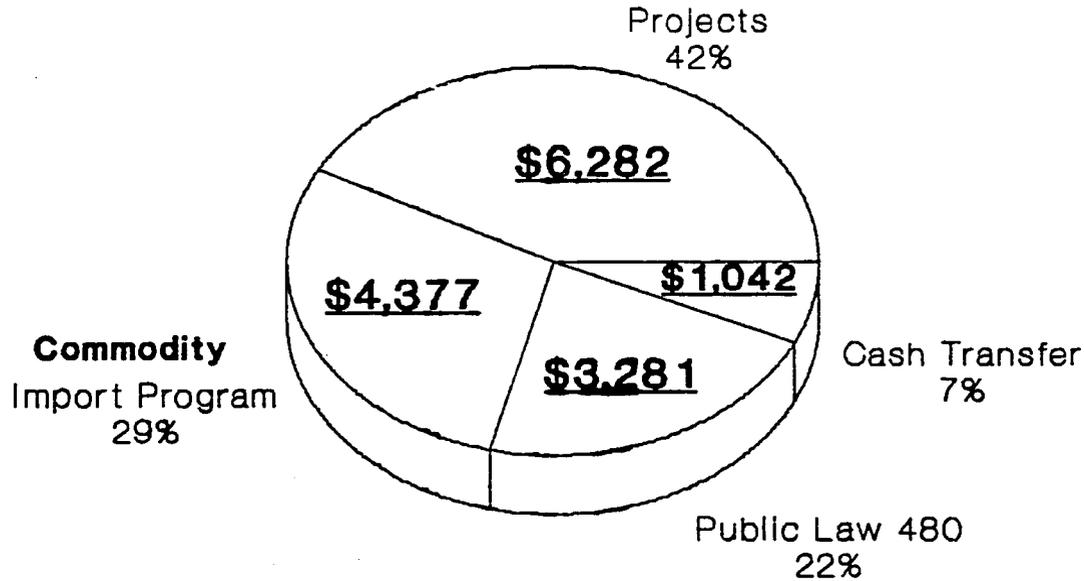


Figure 1

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PROJECTS BY SECTOR

1975 - 1989 (\$ MILLION)

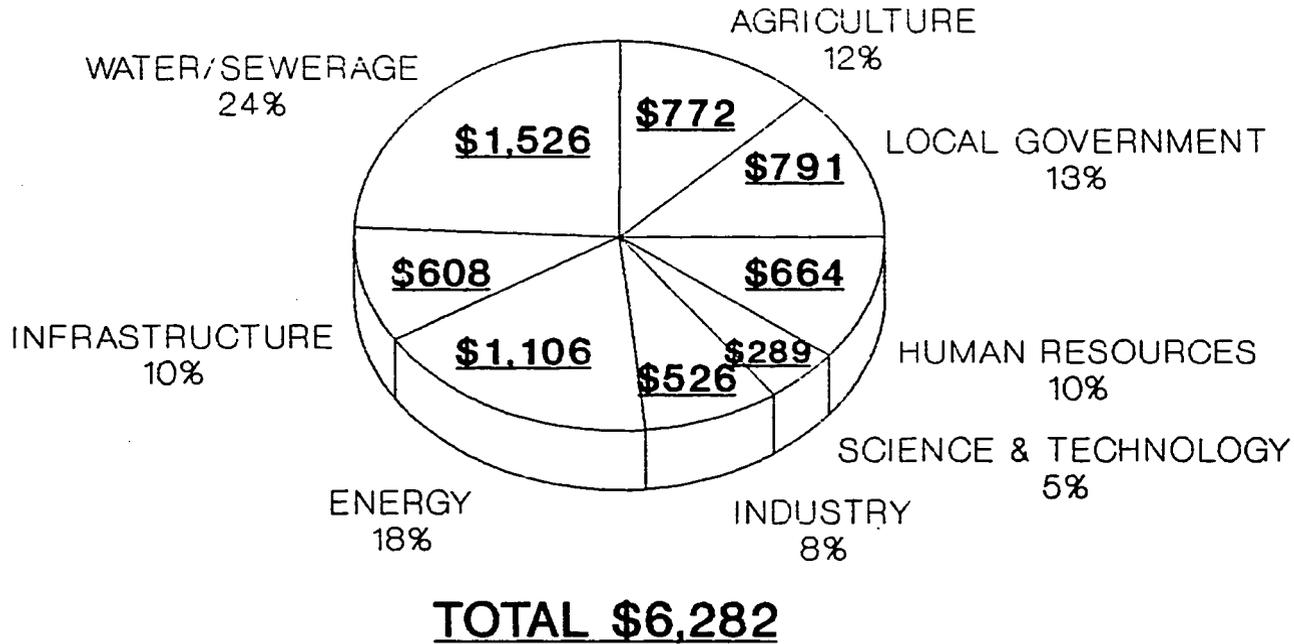


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COMMODITY IMPORT ALLOCATIONS BY SECTOR FY 1975 - 1989 (\$ MILLION)

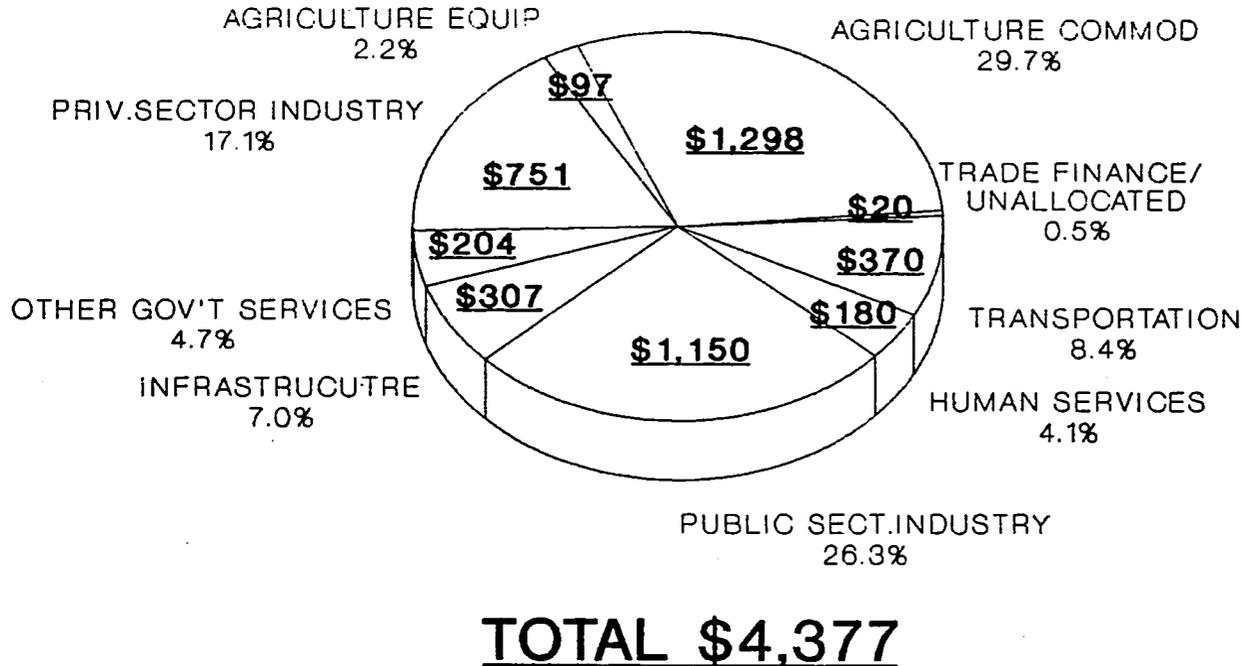


Figure 3

A.

I. PROGRAM ASSISTANCE

Program assistance refers to the portion of the USAID program that does not consist of specific projects. Usually, program assistance addresses broad economic goals, such as supporting the balance of payments. Program assistance to Egypt consists of (1) Public Law 480 (PL 480) Food for Peace; (2) commodity import programs; and (3) direct cash transfers.

PL 480 Food for Peace includes:

Title I: A program for financing U.S. agricultural commodities imports to Egypt at concessional interest rates.

Title II: A program that provided selected food commodities on a grant basis to improve the nutrition of targeted populations.

Title III: A program, now completed, that assisted the Government of Egypt (GOE) through the provision of wheat and flour to finance programs for improving rural infrastructure and basic village services to the rural poor.

Commodity import programs finance government and private sector imports of raw materials, capital goods and consumables from U.S. suppliers.

Direct cash transfers to the GOE were initiated in 1984. These dollar grants assist in the relief of Egypt's balance of payments problems and support the GOE's efforts to undertake structural reform of the economy.

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PL 480 TITLE I

Purpose: To provide balance of payments support to the Egyptian government by financing the import of U.S. agricultural commodities through loans granted at concessional rates. This assistance also encourages the Government of Egypt (GOE) to enact agricultural reforms.

Description: The PL 480 Title I program in Egypt provides low interest loans to purchase agricultural commodities, principally wheat and wheat flour. From 1975 through 1977, loan terms were 20 years repayment, including a two-year grace period, two percent interest during that grace period and three percent for the remainder of the loan period. Starting in 1978, the repayment schedule was extended from 20 to 40 years, including a 10-year grace period. The program is administered jointly by the U.S. Department of Agriculture (USDA) and USAID. The primary responsibility of USAID is the negotiation, monitoring and evaluation of self-help provisions of the loan agreement which require the GOE to take specific measures to strengthen the economy. Examples of required GOE policy interventions include increased producers' prices for major crops and reduced government subsidies. USDA is responsible for purchasing, shipping and providing quality control services for imported commodities. The primary Egyptian implementing agent is the General Authority for Supply Commodities (GASC).

<u>Current Status:</u>	Active
<u>Duration:</u>	Continuing (program initiated in FY 75)
<u>Funding to Date:</u>	\$2.87 Billion

Implementation Progress:

PL 480 Title I accounts for 15 percent of Egypt's wheat imports.

The GOE moved toward meeting some of the objectives of the self-help program:

- Procurement prices for agricultural crops are being raised in order to more accurately reflect world prices.
- Disincentives such as crop acreage regulations and procurement quotas are being phased out. Only three crops - cotton, sugarcane and rice - are still controlled; down from 13 in 1986.
- Efforts to reduce the consumer subsidy bill were underway. Bread prices are being raised through the introduction of a five piaster loaf to substitute for the two piaster loaf.
- Fertilizer prices were increased significantly in 1986, for the first time in five years.
- Efforts to expand the share of private marketing of agricultural inputs are continuing.

Implementing Office: Economics Office (PDS/E), extension 3220.

PL 480 TITLE II

Purpose: (a) To reduce infant and maternal mortality and morbidity by providing nutrients to infants during their weaning period and to their mothers; and (b) to provide nutritious meals to other young children at day care centers and orphanages and to Bedouin families in the Sinai.

Description: Title II food was provided through two private voluntary organizations, Catholic Relief Services (CRS) and CARE. Child feeding programs included:

- A maternal and child health (MCH) program, which distributed baby foods, vegetable oil and milk to mothers and infants through MCH centers operated by the Ministry of Health.
- Other child feeding (OCF) activities, which provided nutritious foods to children through day care centers and orphanages and directly to Bedouin families in the Sinai.
- The school lunch program (SLP), which, until FY 1985, provided a nutritious snack to improve the health status of school children in grades one to six and reduce school absenteeism.

The primary Egyptian implementing agent was a Government of Egypt interministerial committee responsible for receiving, warehousing and transporting commodities from the port of discharge to the feeding sites.

<u>Current Status:</u>	Complete
<u>Duration:</u>	FY 75 - FY 89
<u>Total Funding:</u>	\$179.0 Million

Implementation Progress:

Since the inception of the PL 480 Title II program in FY 1975, a total of 406,015 metric tons (MTs) of oil, instant corn-soy-milk powder, bulgur, flour, wheat and non-fat dried milk, valued at \$179 million, have been delivered to recipients of the three major programs.

From 1975 until it ended in 1985, the School Lunch Program reached an estimated 10.7 million children.

Since 1974, the MCH program has reached an estimated 11.4 million infants and mothers. In FY 1987 the MCH program, under CRS administration, received 8.4 thousand MTs of milk powder and vegetable oil to provide for 630,000 mothers and infants in maternal child health centers located throughout Egypt.

Since its inception in 1975, the OCF program reached an estimated 1,058,390 children and 1.6 million adult relief recipients. In FY 1987 the OCF, through CRS and CARE, provided 3.6 thousand MTs of food, including milk powder, bulgur wheat, flour and vegetable oil to 39.5 thousand children at day care centers and orphanages and to adult Bedouin family members.

Implementing Office: Program Office (PDS/P), extension 3216.

PL 480 TITLE III

Purpose: To assist the Government of Egypt (GOE) in mutually agreed upon programs in agriculture, rural development, family planning, health and nutrition.

Description: In 1979, the GOE, in cooperation with the U.S. Government, undertook a five-year Title III program to improve Egypt's rural infrastructure and provide basic village services to the rural poor. During the course of the program, USAID provided the GOE with food commodities, primarily wheat and flour, valued at \$71.952 million, under loan terms similar to those of the Title I program. These loans were "forgiven" as the local currency receipts from the commodity sales were earmarked by the GOE to provide financing to village councils for basic village services (BVS) such as potable water, village sanitation, village roads and other village infrastructure.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 79 - FY 83
<u>Total Funding:</u>	\$72.0 million

Project Accomplishments:

The project:

- Increased the number of BVS projects implemented by village councils.
- Supported the GOE's policy of decentralization of development-oriented services by strengthening design, management and maintenance services at the local level.
- Facilitated technical improvements in the design and management of the BVS program.

In 1980, the Title III program was merged into the Basic Village Services Project (263-0103). The BVS project reinforced and strengthened local governments of 21 governorates so they could more effectively support agricultural and rural development.

Implementing Office: Office of Local Administration and Development (DR/LAD), extension 3324.

COMMODITY IMPORT PROGRAM (CIP)

Purpose: To help Egypt meet the import requirements needed to sustain current levels of consumption, investment and production.

Description: Under the CIP program, grant or loan funds are allocated to government organizations to finance purchases of American made products and commodity-related services. Each recipient of funds justifies its specific import needs to the Ministry of International Cooperation (MIC), which controls the allocation process. Required import items must be identified in the organization's development plan and supported by local currency budgetary allotments. The buyer/importer makes an equivalent contribution in local currency to a special account when the allocation of U.S. dollars is approved and a tender is issued; if the local currency cannot be presented in cash, the buyer/importer must pay 25 percent down and agree to pay the remaining 75 percent in either five annual payments (for capital goods) or in two annual payments (for consumables, spare parts, etc.). Funds deposited in the special account are used to finance local costs of approved development activities. The program initially provided concessional loans to the Egyptian government, but grant funding has been provided since 1979.

<u>Current Status:</u>	Active
<u>Duration:</u>	Continuing since FY 75.
<u>Funding to Date:</u>	\$3.66 Billion

Implementation Progress:

- Since 1975, when the program was initiated, funds provided under the program have financed the importation of a total of \$3.6 billion in U.S. commodities, including such items as machinery, equipment, spare parts, raw materials, semifinished goods and consumables.
- The CIP program has significantly improved Egypt's balance of payments situation.

Implementing Office: Office of Commodity Management and Trade (TI/CMT), extension 3240.

PRIVATE SECTOR PRODUCTION (PSP) CREDIT
(263-0147)

Purpose: To increase investment in productive private sector enterprises.

Description: The project consists of two components. The first component, to provide short and medium-term credit to the Egyptian private sector to finance the importation of goods and equipment from the United States, was completed in 1986. Ten local private and public sector banks administered the loan program. The project also finances a \$1 million training and studies component for upgrading the level of administration and management of participating banks. The Egyptian implementing agent is the Ministry of International Cooperation (MIC).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 82 - FY 90
<u>Approved Total Funding:</u>	\$88 Million
<u>Funding to Date:</u>	\$88 Million

Implementation Progress:

- The project allocated \$87 million for credit activities. At the conclusion of the credit subactivity, 589 transactions valued at more than \$86.6 million had been approved. This program has established a good basis for continued and expanded Commodity Import Program (CIP) financing under follow-on projects.
- The credit program was used by a wide variety of companies to meet their production needs. A few examples are:
 - Union Carbide Egypt (a Law 43 Co.) - acetylene black manganese ore for manufacturing batteries.
 - Ramsis International Aviation Transportation and Agribusiness Company - agricultural spray aircraft and spare parts.
 - Express Washing Machine Company - electric motors for washing machines.
 - Bishara Textile Manufacturers - dye stuffs and yarns.
- Participating firms were generally new, modern, growing and import-dependent. They varied greatly in size, type of product or service and type of commodity imported under PSP. Fifty-six percent of PCP firms, excluding traders, were in industry, 25 percent in agriculture and 19 percent in other sectors, primarily health. Fifty-five percent produced consumer goods and services and 45 percent produced intermediate goods.

The project was extended for one year in June 1989 to help establish and formalize as an autonomous institution the Egyptian Bankers Training Institute (EBTI), a new bank training facility associated with the Egyptian Bank Association.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3247

PRIVATE SECTOR COMMODITY IMPORT PROGRAM
(263-0201.01)

Purpose: To expand investment in productive private sector enterprises.

Description: The Commodity Import Program - Private Sector (CIP-PS) provides short and medium-term credit and foreign exchange to the private sector to finance the importation of goods and equipment from the U.S. This program is a continuation and expansion of USAID's Private Sector Production Credit Project (263-0147). Primary implementation responsibility rests with 24 local private and public sector banks, and the program is coordinated by the Ministry of International Cooperation (MIC).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 86 - FY 93
Approved Total Funding	\$509.5 Million
Funding to Date	\$509.5 Million

Implementation Progress:

- Over 450 Egyptian private sector importers have used resources made available under the current and previous CIP-PS program. Likewise, 1,400 U.S. manufacturers and suppliers from 46 states have exported 110 different commodities to Egypt under the programs. These commodities range from raw materials to food items to capital equipment.
- About 1,000 transactions valued at over \$200 million have been approved under the current Private Enterprise Credit Project. A sample of transactions include irrigation systems, spares for agricultural spraying aircraft, copper wire and dental equipment.
- Though the program was hampered in 1987 after the sudden exchange rate revision that severely weakened the Egyptian pound against the dollar, the MIC issued a new General Operating Circular in March 1989, which has significantly boosted participation in the program. Transaction approvals currently exceed \$4 million per week. The Circular outlines more attractive terms for importers such as higher transaction ceilings, longer repayment periods and a set aside for the difference between U.S. and non-U.S. flag cargo services.
- In order to encourage private sector participation in the program, the restrictions on public ownership of a user firm have been tightened.
- The program has opened nine new banks, including seven in the Alexandria Governorate.

Implementing Office: Office of Commodity Management and Trade (TI/CMT), extension 3240.

CASH TRANSFERS

Purpose: To provide foreign exchange to help Egypt stabilize its economy, promote economic reform and relieve the balance of payments deficit.

Description: This program provides foreign exchange, which the Egyptian government can apply to its balance of payments deficits. Egypt lacks sufficient foreign exchange to repay its external debt and to import the goods and services needed to revitalize its economy.

This mode of assistance began in 1984 when USAID, in response to an appeal from the Government of Egypt (GOE), reprogrammed excess funds from existing projects and programs to finance a special grant. Subsequently, U.S. Congress has authorized cash transfers annually. These funds are used to support structural reform of the economy.

<u>Current Status:</u>	Active
<u>Duration:</u>	Earmarked annually since FY 1984
<u>Funding to Date:</u>	\$1041.9 Million

Implementation Progress:

USAID conducts cabinet-level dialogue on macroeconomic policy with the GOE. This has helped the GOE clarify the nature of many of the economy's problems, consider alternative adjustment strategies and, in general, create a more open environment for economic policy formulation.

USAID's policy dialogue with the government has been challenging, but not completely successful. Annual releases of funds have been delayed at times due to slow progress in policy reforms.

Implementing Office: Economics Office (PDS/E), extension 3220.

II. PROJECT ASSISTANCE

A. Improving Infrastructure

Projects presented in this section support Egyptian government efforts to develop the necessary foundation for increased production and facilitate the delivery of community services. They support the rehabilitation, modernization and expansion of Egypt's economic infrastructure.

These projects build or improve water and sewerage systems, energy generation and distribution and other infrastructure, including telecommunications and transportation systems and urban upgrading. They also support development of improved infrastructure by village and urban local governments as part of the Egyptian government's decentralization program.

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WATER AND WASTEWATER Sector profile

Since 1978, USAID has committed almost \$2 billion in support of water and wastewater system rehabilitation and expansion in Cairo, Alexandria, the Canal Cities of Ismailia, Suez and Port Said and the provincial cities of Minia, Fayoum and Beni Suef. USAID is increasingly shifting the emphasis of its support in the sector from construction of new facilities to institutional support and improved operation, maintenance and cost recovery of the systems.

Urbanization presents a formidable problem for Egypt. In Cairo the population has doubled in the past 25 years while urban infrastructure has expanded only fitfully. Overtaxing water and wastewater facilities combined with poor maintenance caused significant deterioration. In the mid-70's over 100 sewage flooding incidents occurred daily on the streets of Cairo. By contrast, Cairo streets are now nearly free of sewerage flooding. The USAID-financed rehabilitation of 51 subsidiary pumping stations and 39 ejector stations, construction of six new pumping stations and installation of 27 kilometers of force mains and gravity sewers have vastly improved the hydraulic capacity of the 80-year-old wastewater system.

Given the poor conditions of water and wastewater systems at the time USAID assistance began, rehabilitation had to precede expansion. Consequently, the major impact of the program to date has been on resolving system problems and improving services in areas currently included in the system, rather than expanding into new areas. For this reason the lowest income groups, many of whom live in informal settlements that have sprung up with rapid urban population growth, remain unserved by existing water and wastewater systems.

USAID is beginning to address the needs of people in the unsewered areas by expanding the system of laterals and house connections in two districts of Giza on the west bank of the Nile, and by assisting communities in their efforts to upgrade their houses, community infrastructure and services.

As an indication of Egypt's commitment and U.S. concern, the two governments signed a Memorandum of Understanding (MOU) in 1984 committing both countries to an ambitious five-year program to improve urban water and wastewater services. In return for the \$1.2 billion in capital assistance over six years, the Government of Egypt (GOE) agreed to undertake institutional changes such as improving operations and maintenance (O&M), increasing water and wastewater user tariff rates and upgrading and improving staff performance in the local water and wastewater organizations.

To support these efforts USAID has authorized a comprehensive multi-year management assistance effort for the major water and wastewater authorities. Water tariffs have been increased to cover over 50 percent of operations and maintenance costs; further rate increases will enable the full cost recovery by 1991. A 10 percent surcharge is added to the water tariff for sewer services. USAID is committed to continuing dialogue with the GOE to increase water and wastewater tariffs so that utilities can meet their recurrent costs, and to improve the operations and maintenance, planning and management of water and wastewater utilities and administrative agencies.

ALEXANDRIA WASTEWATER SYSTEM EXPANSION
(263-0100)

Purpose: To alleviate the serious health problems in the city of Alexandria resulting from waterborne diseases caused by sewage flooding in residential areas and disposal of raw sewage in recreational beach areas.

Description: This project finances the design, construction and start-up of a sewerage development program. The project includes the following activities:

- A review and analysis of the 1979 city master plan.
- Management advisory services to the Alexandria General Organization for Sanitary Drainage (AGOSD).
- Sewerage project design services.
- Construction engineering services.
- Construction of sewerage facilities.
- Provision of related equipment and supplies.

The primary Egyptian implementing agent is A/GOSD.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 79 - FY 93
<u>Approved Total Funding:</u>	\$262.4 Million
<u>Funding to Date:</u>	\$262.3 Million

Implementation Progress:

- The Wastewater Consultants Group (WWCG), consisting of CH2M Hill and Metcalf and Eddy Inc., has completed all design activities with the exception of the sludge disposal facility. A site for this facility has been approved by the Government of Egypt (GOE) and design of a mechanical dewatering system for primary sewage treatment is proceeding. WWCG continues its construction management role.
- The construction of five pump stations by Fischbach-Moore-Oman International is almost finished. The construction of the sewerage tunnel by McLean-Grove is about 90 percent complete. The use of state-of-the-art technology is allowing the majority of the tunnelling work to be done underground with minimal disruption to roads and traffic. Over a third of the work to expand and upgrade the East and West Treatment Plants by Fru-Con Construction is complete.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

PROVINCIAL CITIES DEVELOPMENT
(263-0127 and 263-0161.03)

Purpose: To help three provincial city governments (Fayoum, El Minia and Beni Suef) effectively plan, budget, build and maintain urban infrastructure and to improve the water and wastewater systems.

Description: The project finances technical assistance to the three provincial city governments and provides for operating and maintenance improvements in each city. Design and construction of selected urban infrastructure projects, particularly water and sewerage systems, are also undertaken. The water and sewerage projects emphasize improvement and extension of existing facilities. The Egyptian implementing agents are the Project Steering Committee comprised of the mayors and governors of the three provincial cities and governorates, along with the National Organization for Potable Water and Sanitary Drainage (NOPWASD) and the Ministry of Planning (MOP).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 81 - FY 91
<u>Approved total Funding:</u>	\$110 Million
<u>Funding to Date:</u>	\$110 Million

Implementation Progress:

- The U.S. firm Wilbur Smith and Associates has provided technical services and training to the three city governments in the development, financing and maintenance of urban infrastructure and public services.
- A major design-build contract for three water treatment plants of 300 liters per second, nine elevated tanks with a capacity of 4,000 cubic meters and related work in the three cities was signed in May 1988 between NOPWASD and L.A. Water for a total value of \$53 million and LE 13 million. The project will serve an estimated population of 800,000. Construction management of the design/build contract is by Montgomery/Harza. Construction of the ground water reservoirs is underway at all three sites.
- The local governments are engaging design consultants and construction contractors to design and build about 160 kilometers of water and wastewater lines and to rehabilitate existing pumping stations. So far 270 contracts for these subprojects have been awarded and over half have been completed. Subproject financing is through Fixed Amount Reimbursement (FAR) procedures.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

CAIRO SEWERAGE II
(263-0173)

Purpose: To expand the Cairo sewage collection system into the largely unsewered areas on the west bank of the Nile and to increase the capacity of the associated treatment plant.

Description: This project finances the rehabilitation of the Zenein treatment plant and the construction of a 400,000 cubic meter capacity plant at Abu Rawash. Nearly 20 kilometer of culverts and pumping stations will connect the main pumping stations at Boulak and the Pyramids to these treatment plants. The project will finance the construction of sewers in the previously unserved areas of Embaba and the Pyramids using Egyptian contractors. Training in management and operation will be provided to the Cairo General Organization for Sanitary Drainage (CGOSD). The Egyptian implementing agent is the Cairo Wastewater Organization (CWO).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 84 - FY 94
<u>Approved Total Funding:</u>	\$555.0 Million
<u>Funding to Date:</u>	\$531.8 Million

Implementation Progress:

- Construction of the culverts and the pumping stations by Fru-Con Construction Corporation and Fuller/Wallace will be complete by early 1990.
- Sadelmi-Raymond finished constructing a seven kilometer sewer system to relieve pressure on the Giza pumping station.
- The rehabilitated Zenein Treatment Plant will handle 330,000 cubic meters when finished by Sadelmi N.Y. in March 1990. Construction of the Abu Rawash Treatment Plant will start in early 1990.
- Harbert/Jones J.V. was awarded a \$115 million contract to construct collectors and sewers in Embaba and Mohandeseen on June 11, 1989.
- The first Egyptian contractor has begun sewer construction and five more contracts in the Pyramids and Embaba areas will be awarded soon.
- Training operations continue with the start of a program for the operation and maintenance for pumping stations.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

CANAL CITIES WATER AND WASTEWATER II
(263-0174)

Purpose: To further improve the delivery of water and wastewater services in the Canal Cities of Port Said, Ismailia and Suez.

Description: This project is a follow on to the Canal Cities Water and Sewerage Systems (263-0048), which financed the construction of sewage collection and water distribution systems in the three cities. This project will provide wastewater treatment facilities and expansion of water supply. The projects together serve about two million people.

Proposed project actions are:

- The construction of new wastewater treatment facilities in the three Canal Cities.
- Expansion of the city of Port Said's water supply source.
- Institutional development and training activities to ensure water and wastewater systems are properly managed, operated and maintained.

The Egyptian implementing agents are the Suez Canal Authority (SCA) and the National Organization for Potable Water and Sanitary Drainage (NOPWASD).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 87 - FY 97
<u>Approved Total Funding:</u>	\$380.0 Million
<u>Funding to Date:</u>	\$109.4 Million

Implementation Progress:

- A consultant partnership of Black & Veatch International, James M. Montgomery, Dames and Moore and the Egyptian firm Sabbour is providing technical assistance to the project. The partnership has completed a study recommending ways to achieve the pollution standards set by Egyptian Law 48.
- Three firms have submitted qualifying information for the design/build contracts for the water treatment plants.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

WATER AND WASTEWATER INSTITUTIONAL SUPPORT
(263-0176)

Purpose: To enhance the capability of the Ministry of Housing and Public Utilities (MHPU) and its executive agency, the National Organization for Potable Water and Sanitary Drainage (NOPWASD), in meeting municipal water and wastewater needs throughout Egypt.

Description: The project consists of three main components:

- Technical assistance to the MHPU and NOPWASD through long-term and short-term advisors to improve management, planning, budgeting, training and regulation of the water and wastewater sector.
- Assistance to NOPWASD and several municipalities in training personnel for the start-up operations of the water and wastewater treatment plants.
- General sector support through the provision of training aids and publications, spare parts, microcomputer hardware and software and applied research grants to academic institutions.

The primary Egyptian implementing agents are MHPU and NOPWASD.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 85 - FY 93
<u>Approved Total Funding:</u>	\$15.0 Million
<u>Funding to Date:</u>	\$10.0 Million

Implementation Progress:

- Procedures for providing the operation and maintenance training to the municipalities were agreed to.
- NOPWASD has selected the joint venture Boyle Engineering Corporation - National Education Corporation to provide technical assistance to both NOPWASD AND MHPU.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

CAIRO WATER SUPPLY II
(263-0193)

Purpose: To rehabilitate and expand the Cairo central city water transmission and distribution system.

Description: This project involves the installation or rehabilitation of 53 kilometers of distribution and transmission pipe and the construction of four ground level concrete reservoirs. Following from the recommendations of the Cairo Water Supply I project (263-0038), the institutional capacity of the General Organization for Greater Cairo Water Supply (GOGCWS) to operate and maintain the entire water supply system of Greater Cairo will be strengthened. The Egyptian implementing agent is the GOGCWS.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 88 - FY 94
<u>Approved Total Funding:</u>	\$104.0 Million
<u>Funding to Date:</u>	\$ 96.0 Million

Implementation Progress:

- CH2M-Hill, under the Technical Cooperation and Feasibility Studies Project (263-0102), has produced an engineering study to upgrade North Cairo's water distribution system.
- GOGCWS has selected and acquired the land for the four reservoirs in Abbassia and Darrassa.
- Under the Cairo Water Supply I Project (263-0038), James M. Montgomery has completed designs for the central laboratory and the training plan for the institutional support portion of the project.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

CAIRO WATER SUPPLY I
(263-0038)

Purpose: To rehabilitate and expand the southern portion of the Rod El Farag Water Treatment Plant in the city of Cairo.

Description: The project involved increasing the capacity of the Rod El Farag water treatment plant from 200,000 cubic meters per day to a rated capacity of 650,000 cubic meters per day; strengthening the management capability of the General Organization for Greater Cairo Water Supply (GOGCWS); and construction of about six kilometers of transmission pipelines. ES Parsons was the construction supervision engineer with construction performed by Howard-Harbert-Jones (HHJ). James M. Montgomery (JMM) supplied management consultant services. The Egyptian implementing agent was the GOGCWS.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 89
<u>Total Project Funding:</u>	\$97.4 Million

Project Accomplishments:

- The rehabilitation of the Rod El Farag treatment Plant by HHJ was completed in September 1986. ES Parsons provided training to GOGCWS personnel.
- The completed project produces potable water and provides service to about three million people.
- JMM completed its study of organizational improvements for GOGCWS, such as the design of a computerized financial system, inventory control system and a comprehensive training program for management, technical, clerical and operations and maintenance personnel. JMM also made recommendations for improving the planning and engineering activities of the organization and water waste reduction. These recommended improvements will be implemented in the Cairo Water Supply II Project (263-0193).

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

CANAL CITIES WATER AND SEWERAGE SYSTEMS
(263-0048)

Purpose: To provide urgently needed improvements to the water and sewerage systems of the three Suez Canal cities of Ismailia, Port Said and Suez.

Description: The project financed the rehabilitation and repair of water treatment plants, water distribution systems and sewage collection systems; and the expansion of sewage collection and water treatment and distribution systems to rapidly developing areas. The project also extended a water pipeline (the southwest transmission main) to the Suez Cement Company (SCC). The engineering consultant was Canal Cities Consultants. The construction contractor was Harbert & Jones. The Egyptian implementing agents were the Suez Canal Authority (SCA) for water improvements, and the National Organization for Potable Water and Sanitary Drainage (NOPWASD) for sewerage system improvements.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 78 - FY 88
<u>Total Project Funding:</u>	\$166 Million

Project Accomplishments:

- Construction of water treatment plants and water distribution systems is complete in Suez, Ismailia and Port Said.
- Construction of wastewater systems by the U.S. contractor is complete.
- Construction of the southwest transmission main to the Suez Cement Company is complete and the pipeline is fully operational.
- Operation and maintenance assistance was satisfactory in all three cities at the close of the project. This assistance will enable wastewater departments in the cities to manage, operate and maintain Phase I facilities.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

ALEXANDRIA SEWERAGE I
(263-0089)

Purpose: To upgrade public health conditions in Alexandria by improving, expanding and developing wastewater collection and disposal facilities.

Description: This completed project initiated the rehabilitation of the existing wastewater system in Alexandria. It established an improved collection and disposal system for solid wastes and toxic materials; cleaned existing sewers; repaired and replaced sewer lines; extended service into the Ras El Soda area; and imported selected sewer maintenance materials and equipment. The primary Egyptian implementing agent was the Alexandria General Organization for Sanitary Drainage (AGOSD). Camp Dresser and McKee was the primary contractor.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 84
<u>Total Project Funding:</u>	\$14.6 Million

Project Accomplishments:

- Three of the project's components were completed by the project's termination in FY 1984, while six are being completed under the Alexandria Wastewater System Expansion project (263-0100).
- Project components completed include:
 - (1) Repair and cleaning of existing sewers.
 - (2) Import of maintenance materials equipment.
 - (3) Design of sewer system expansion upgrading.
- Project components continuing under Project (263-0100) include:
 - (1) Expansion and upgrading of collection system.
 - (2) Construction and engineering for Sporting and Ras El Soda Pump Stations.
 - (3) Construction and engineering for additional pump stations.
 - (4) Construction and engineering for expansion and upgrading of two wastewater treatment plants.
 - (5) Construction and engineering for sludge management facilities.
 - (6) Operations and maintenance assistance for all newly constructed/rehabilitated facilities.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

CAIRO SEWERAGE I
(263-0091)

Purpose: To rehabilitate and expand the Cairo Sewerage System.

Description: The project: rehabilitated about 50 pumping stations; constructed collection system sewers; purchased pump stations and sewer cleaning equipment; drafted design plans for the rehabilitation of the Zenein Treatment Plant; developed a pilot program for unsewered areas; and set up a training program for the Cairo Wastewater Organization. AMERIC, a consortium of U.S.-British engineering firms, designed and supervised the project. Construction was performed by Howard-Harbert-Sadelmi. The Egyptian implementing agent was the Cairo Wastewater Organization (CWO).

Current Status: Completed
Duration: FY 78 - FY 88
Total Project Funding: \$129 Million

Project Accomplishments:

- The project rehabilitated five major pumping stations and 90 subsidiary pumping stations and constructed six new stations and 27 kilometers of force and gravity mains at 27 different locations. The rehabilitation work reduced sewage flooding caused by pumping station malfunction and clogged sewer pipes. Out of 67 neighborhoods previously subject to chronic flooding, 65 percent now report no incidents and 83 percent no major incidents.
- AMERIC completed designs for the four additional pumping stations on Rhoda Island and Tebeen, and for the renovation of the Zenein treatment plant. The work is being carried out under the Cairo Sewerage II Project (263-0173).
- A pilot program for unsewered areas demonstrated several low-cost mechanisms for sewage disposal in the low-income areas, however CGOSD has not accepted any of them for broader use.
- Residual funds (about \$6 million) were used in FY 1987 to partially fund the Zenein sewage treatment plant rehabilitation. The balance of required funding for this contract comes from project 263-0173 (Cairo Sewerage II).
- A sewer cleaning activity and a training program in operation and maintenance of the pump stations are completed.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

ENERGY

Sector profile

Energy use has grown rapidly in Egypt, revolutionizing the quality of life of most Egyptians and increasing production in the workplace. Consumption of natural gas and petroleum products has grown by 12 percent and electricity consumption by eight percent annually since the mid-80s; however growth in electricity has slowed to five percent annually with peakload about one percent. This expansion in energy use reflects rapid economic growth, increasing urban and rural electrification, introduction of energy-intensive industries and heavy subsidization of energy prices. In 1984, an estimated 75.3 percent of households had access to electricity. While long-term increases in energy use normally accompany economic development, current consumption levels are excessive as a result of price subsidies. These subsidies encourage inefficient use of energy, which threatens the country's current and potential status as an oil exporter.

Price subsidies also have distorted production patterns and investment decisions, and they are a heavy burden on the national budget. Electricity prices, currently at one-fifth of world market rates, must be raised.

The Government of Egypt (GOE) gives high priority to increasing electric power generation and improving the transmission and distribution systems. The GOE acknowledges the need to reform energy pricing policies to prevent the wasteful and inappropriate use of energy. The GOE plans to develop and expand various energy sources, and increase petroleum output to draw additional foreign exchange. To maximize petroleum exports, existing and new generation systems are being shifted to natural gas, a resource which was previously unexploited or wasted.

Though the GOE has taken some positive measures to adjust energy prices, over the past ten years energy price increases have lagged behind the overall inflation rate. USAID's policy is to relate funding levels for capital assistance to electricity projects to progress on rate increments.

Assistance to the energy sector is a part of USAID's overall strategy to assist the GOE in rehabilitating, modernizing and expanding the country's capital infrastructure base. Between 1975 and 1989, USAID has provided over \$1.2 billion in project and commodity assistance to support the GOE in the development of electric power. Power generation capacity has grown rapidly. Total installed capacity increased from 3,789 megawatts (MW) in 1976 to 10,734 MW in 1989. USAID assistance contributed to the installation of 2,576 MW of this additional generating capacity -- or nearly 25 percent of the total installed capacity in Egypt. Current projects in the energy sector emphasize expanded generation, a more rational price structure, energy policy planning, renewable energy technologies and energy conservation.

SHOUBRA EL KHEIMA THERMAL POWER PLANT
(263-0030)

Purpose: To increase the generation capacity of the thermal power plant at Shoubra El Kheima in Cairo.

Description: The project consists of the design and construction of a 1260 megawatt (MW) thermal power plant at Shoubra El Kheima in Cairo. The plant includes four steam generating units and is connected to the Egyptian Unified Power System. The project is supported by a USAID grant, as well as the Egyptian Government, World Bank, African Development Bank, Export Import Bank, Italy, France, Canada and Japan. USAID is financing the following for the four power units:

- (a) Design and construction management by Overseas Bechtel, Inc.
- (b) Four turbine generator sets provided by Westinghouse Electric Co.
- (c) Main system pumps provided by Transamerica DeLavat, Inc.
- (d) Condensers, heaters and accessories provided by Southwest Engineering Co.
- (e) Panels and controls provided by Westinghouse International Power Systems.

USAID is also financing reinforcing steel (Owen Steel Company) and water treatment systems (Infilco Degremont, Inc.) for Unit Four. The primary Egyptian implementing agent is the Egyptian Electricity Authority (EEA).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 79 - FY 91
<u>Approved Total Funding:</u>	\$263 Million
<u>Funding to Date:</u>	\$263 Million

Implementation Progress:

- Construction of all four generating units is complete. The first three units were synchronized to the EEA system by September 1985, and the fourth in September 1988; each is operating at its full design output of 315 MW.
- The Overseas Bechtel, Inc. contract has been amended to include consulting services for the transmission extension from Unit Four to the Tebbin substation.
- In addition to receiving long-term training on the design, operation and maintenance of the control system being installed on Unit Four, the EEA operators and maintenance staff for Unit Four completed "on-the-job" training at the Salt River Project Coronada Power Station in Arizona.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

URBAN ELECTRIC DISTRIBUTION
(263-0033)

Purpose: To rehabilitate and expand the capacity of electric distribution systems in the cities of Cairo, Alexandria, Shibin El Kom and Beni Suef.

Description: The project provides financing for engineering services and procurement of equipment needed to rehabilitate the existing electric distribution systems in the four cities of Cairo, Alexandria, Shibin El Kom and Beni Suef. Financing is also provided to expand the systems as necessary to meet current and projected increased demand. The consultant is Harza Engineering Company. There are 48 U.S. firms providing equipment and materials under the project including:

General Electric, Phelps Dodge, Pirelli Cable Co., EIL Instruments, New World Research, Grove International, Clark Equipment, Ebasco, Multi Amp, Southwire, Cedec Inc., American Export Group, Vermeer Corp., Ohm Corp., Ingersoll Rand, Raychem Corp. and American Curtis.

The primary Egyptian implementing agents are the Egyptian Electricity Authority (EEA) and the Alexandria Distribution Company (ADC) of the Ministry of Electricity and Energy (MOEE).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 77 - FY 91
<u>Approved Total Funding:</u>	\$97.2 Million
<u>Funding to Date:</u>	\$97.2 Million

Implementation Progress:

- Construction is complete in Cairo, Shibin El Kom and Beni Suef. Two major substations, one at Shibin El Kom and the other at Rod El Farag in Cairo, are complete and in operation. Harza stopped monitoring activities in Cairo, Beni Suef and Shibin El Kom in October 1985 with completion of the rehabilitation of these systems.
- The \$41 million rehabilitation of the Alexandria distribution system continues with 16 of the 19 contracts completed. Siemens Energy and Automation, Inc. is constructing three substations, which will be completed in late 1989. Cablec Corporation is supplying 66 Kilovolt (KV) cables to connect the substations to the EEA transmission network.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

ENERGY POLICY AND RENEWABLE ENERGY FIELD TESTING
(263-0123)

Purpose: To assist the Government of Egypt (GOE) in achieving efficient use of Egypt's extensive and increasingly complex range of energy resource options.

Description: Under this umbrella program, two subprojects have the common goal of strengthening Egypt's overall national energy planning and management capability. This improved capacity will enable the GOE to analyze various energy supply options, better identify and pinpoint energy demand and effectively design and implement appropriate energy programs. The primary Egyptian implementing agents are the Organization for Energy Planning (OEP), the Ministry of Petroleum and Mineral Wealth (MOPMW) and the New and Renewable Energy Authority (NREA) of the Ministry of Electricity and Energy (MOEE).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 82 - FY 90
<u>Approved Total Funding:</u>	\$32.6 Million
<u>Funding to Date:</u>	\$25.8 Million

Implementation Progress:

Two subprojects are being implemented. They are:

- 0123.01 Energy Policy Planning.
- 0123.02 Renewable Energy Field Testing.

Implementation progress of these two activities is described on their individual project sheets in section II.A.2 of this report.

Implementing Office: Office of Science and Technology (HRDC/ST), extension 3277.

REHABILITATION AND MODERNIZATION OF THE
ASWAN HIGH DAM HYDROELECTRIC POWER STATION
(263-0160)

Purpose: To enhance the reliability of the Aswan High Dam's electrical generating capacity.

Description: This project finances the rehabilitation and modernization of the 12 hydro-turbine generators of the Aswan High Dam and the replacement of protective relays on the 500 kilovolt (KV) transmission line. Replacement of the 500 KV circuit breakers and control instrumentation may be undertaken if the available funding is adequate. Since 10 turbines must remain in operation at all times to meet the current demand for power generation, the project is replacing two turbines each year for six years. Technical assistance during installation, testing and start up is provided by the U.S. Bureau of Reclamation. Voith-Hydro (formerly Allis Chalmers) is the U.S. turnkey contractor and manufacturer of the turbines. The primary Egyptian implementing agent is the Egyptian Electricity Authority (EEA).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 82 - FY 92
<u>Approved Total Funding:</u>	\$140 Million
<u>Funding to Date:</u>	\$140 Million

Implementation Progress:

- The contract for Protective Relaying Replacement was executed with Gilbert/Commonwealth International in May 1987. Relay system replacement engineering and procurement are on schedule.
- Thirty employees from the High Dam staff attended a training program at the turbine manufacturer's facilities in York, Pennsylvania. A second group attended courses at the control system in Rockford, Illinois, which included classroom and hands-on training in the operation and maintenance of the governor-type control system being installed in the Aswan units. EEA staff attended turbine runner and governor training classes in the U.S.
- Replacement of runners for the third pair of turbine runners began in January 1988 and the units were returned to service in January 1989, marking completion of six of the 12 turbines. Replacement of the fourth pair began in April 1989.
- All 12 turbines are scheduled to be completed in December 1991. Overall implementation of the project is progressing on schedule.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

ALEXANDRIA ELECTRICAL NETWORK MODERNIZATION
(263-0194)

Purpose: To improve selected areas of the electrical distribution network serving Alexandria and modernizing the control of Alexandria's subtransmission and distribution systems.

Description: The project addresses two areas of Alexandria's electrical distribution network:

- Rehabilitation of the existing distribution network by the installation of 250 kilometers of 11 kilovolt (KV) underground cables and twenty 11KV distribution points and by the renovation of 600 distribution transformer points and 17,000 service connection boxes.
- Modernization of the control and operation of the 66KV subtransmission network. This will be achieved by the installation of a dispatch control center and training in operation and maintenance.

The primary Egyptian implementing agents are the Egyptian Electricity Authority (EEA) and the Alexandria Distribution Company (ADC) of the Ministry of Electricity and Energy (MOEE).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 89 - FY 97
<u>Approved Total Funding:</u>	\$50.0 Million
<u>Funding to Date:</u>	\$15.5 Million

Implementation Progress:

- The project agreement was signed in the fourth quarter of FY 89 and is in the early stages of implementation.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

TALKHA COMBINED CYCLE PLANT
(263-0196)

Purpose: To increase the efficiency of the Egyptian Electricity Authority's (EEA) gas turbine generating facilities at Talkha by recycling wasted thermal energy and upgrading the eight gas turbines.

Description: The project consists of engineering and construction of a 110 megawatt (MW) thermal cycle addition to the 192 MW gas turbine plant at Talkha and upgrading eight gas turbines. The Talkha gas turbine plant had been constructed earlier with USAID financing under the Gas Turbine Generators Project (263-0008). The thermal cycle addition will include individual heat recovery steam generators (boilers) for each gas turbine; two steam turbine generators, each capable of producing 55 MW under normal operating conditions; and auxiliary equipment and controls. The primary Egyptian implementing agent is the Egyptian Electricity Authority (EEA).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 86 - FY 90
<u>Total Project Funding:</u>	\$65 Million
<u>Funding to Date:</u>	\$65 Million

Implementation Progress:

- Contracts were executed to Gilbert Associates (G/C) for consultant services and General Electric (GE) for design, supply, construction, testing and start-up of the plant. Both companies are mobilized at Talkha.
- Civil construction on the Talkha site is mostly complete. Upgrading the eight gas turbines is finished and the eight heat recovery steam generators have been assembled. The two 55 MW steam turbine generators have completed testing and have been turned over to EEA for commercial operation.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

POWER SECTOR SUPPORT
(263-0215)

Purpose: To support past and promote future continued Government of Egypt (GOE) progress in reducing electricity sector subsidies and in making other energy sector policy changes by providing capital infrastructure incentives to the GOE.

Description: The following infrastructure programs will add generating capacity, rehabilitate existing generation facilities and increase the use of natural gas as a fuel for generating electricity.

- Installation of a gas turbine, a steam turbine and a heat recovery system to the Cairo South Generating Plant. This will raise capacity by 150 megawatts (MW).
- Modernization of the boilers and turbine generators of The Cairo West Thermal Power Station and modification of the boilers so that natural gas can be used as an alternative fuel. Plant output will increase from 300 MW to 350 MW.
- Refurbishment of several gas turbine generating units and their installation in the Hurgada-Safaga coastal region.
- Expansion of EEA's microwave communication system from Cairo to the Suez area.
- Provision of spare and replacement parts and work equipment.
- Completion of electricity pricing strategy and loss reduction studies.

The primary Egyptian implementing agent is the Egyptian Electricity Authority (EEA)

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 89 - FY 94
<u>Approved Total Funding:</u>	\$136.0 Million
<u>Funding to Date:</u>	\$136.0 Million

Implementation Progress:

- The project agreement was signed in September 1989 and the project is in the early stages of implementation.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318

ELECTRIC POWER DISTRIBUTION
(263-0001)

Purpose: To provide electric distribution equipment to reconstruct the war-damaged power system in the Suez Canal cities of Suez, Ismailia and Port Said.

Description: This completed project financed procurement of equipment needed for reconstruction of the three power systems. Equipment included replacement and repair of underground cable, switchgear, transformers, distribution points, main distribution boxes, capacitor banks, tools and fittings. The Egyptian Electricity Authority was primarily responsible for project implementation. The U.S. consultant engineer was Sanderson and Porter and the U.S. equipment suppliers were Phelps Dodge Wire & Cable Corp., Westinghouse Electric Corp., Okonite Co., Abbot Power Corp., McGraw-Edison Co., Copperweld Industries, Kearney National Inc., Vermer Manufacturing Co., Pengo Equipment Co., General Cable Export and Burndy Co.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 75 - FY 80
<u>Total Project Funding:</u>	\$29.8 Million

Project Accomplishments:

All equipment was purchased and installed.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

GAS TURBINE GENERATORS (TALKHA AND HELWAN)
(263-0008)

Purpose: To alleviate the urgent demand for electricity in the cities of Helwan and Talkha.

Description: This completed project financed installation of a 120 megawatt (MW) gas turbine electric generating plant near the city of Helwan, just south of Cairo, and a similar plant of 180 MW near the city of Talkha, in Qalubeya Governorate. The primary Egyptian implementing agent was the Egyptian Electricity Authority. The U.S. consultant was Gilbert Associates, Inc. and the turnkey contractor was General Electric Company.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 76 - FY 81
<u>Total Project Funding:</u>	\$67.3 Million

Project Accomplishments:

- Both power plants are operational and supplying a significant portion of the electricity used in the cities of Helwan and Talkha.
- The Talkha Combined Cycle Plant project (263-0196) has added two 55 MW thermal cycle generators to utilize wasted thermal energy from the Talkha plant.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

ISMAILIA THERMAL POWER PLANT
(263-0009)

Purpose: To construct a 600 megawatt (MW) thermal power plant south of Ismailia along the Suez Canal.

Description: This project financed consulting services and construction of facilities to generate 450 MW of thermal power. Facilities for the generation of an additional 150 MW were financed by the U.S. Export-Import Bank. Electricity generated from this plant supplies Egypt's unified power system. The steam turbine generator units were designed to use fuel oil and/or natural gas. Supplier credits were provided by the General Electric Co. Consultant services included engineering, engineering administration and construction monitoring, and supervision of start-up and initial operation. Gilbert/Commonwealth Inc. was the consultant for this project. The primary Egyptian implementing agent was the Egyptian Electricity Authority (EEA).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 76 - FY 88
<u>Total Project Funding:</u>	\$259.6 Million

Project Accomplishments:

- The four thermal power units have been completed and accepted by EEA and are now supplying power to the national grid.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

NATIONAL ENERGY CONTROL CENTER
(263-0023)

Purpose: To improve the reliability and efficiency of the Egyptian Unified Power System (UPS) by establishing centralized control and monitoring.

Description: The project provided loans and grants to establish the National Energy Control Center (NECC) at the Egyptian Electricity Authority (EEA) dispatch office to replace the manual control system, which was no longer adequate for operating the UPS. The NECC is a sophisticated computer system including 38 remote terminal units located at selected power stations and substations throughout Egypt. A communications subsystem connects the NECC to the remote terminal unit sites.

With the aid of the computer system, all of EEA's steam, gas and hydro generating stations are centrally monitored for output and available reserve capacity. As load demand changes, the central control instantly increases and decreases production throughout the system to most efficiently meet demand. This can either be done manually, based on the computer generated recommendations, or directly by computer telelink. The result is a much more efficient use of generating capacity, as opposed to the former approach of keeping much of the reserve capacity operational, but unused, in anticipation of load peaks. The system greatly reduces failures and outages.

Control Data was the implementation contractor. General Electric had a significant subcontract for the communications subsystem. Gilbert/Commonwealth were consultants to EEA. The primary Egyptian implementing agent was the Egyptian Electricity Authority (EEA).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 78 - FY 87
<u>Approved Total Funding:</u>	\$42.5 Million

Project Accomplishments:

- The system is fully operational as designed including 38 remote terminal units.
- Thirty-five EEA employees were trained in the U.S. Thirty-one of the 35 employees trained had remained with the NECC at project completion.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

LOCAL DEVELOPMENT/DECENTRALIZATION

Sector profile

The system of responsible, elected local government councils was established in Egypt in 1960. However, it wasn't until the 1970s that local government units began to exercise the authority delegated to them. Principal reasons were lack of experience and lack of fiscal resources to get things done. From 1978 to the present, USAID has provided about \$800 million in support of the Government of Egypt's (GOE) shift toward locally initiated and managed development.

The overall objective for local government/decentralization is to improve and expand the capacity of local governments to plan, finance, implement and maintain locally chosen basic service projects.

Six of USAID's projects in this sector fall under the umbrella of the Decentralization Sector Support project (263-0161), including the Provincial Cities Project (263-0161.03) which is found in section II A 1. This program has been highly successful in helping the GOE strengthen democracy and pluralism through devolving certain central government responsibilities to popularly elected councils and local institutions.

Local councils have designed and implemented about 16,000 subprojects and are using more than 2,100 items of heavy equipment, such as trucks, graders and fire engines. Over 30 percent of the projects are potable water projects and 20 percent are village and urban feeder roads. Others include sanitary drainage, canal lining and maintenance, school construction and health clinics, vocational training workshops and hostels for youth and the elderly. The physical result of these projects is improved access to basic services, particularly potable water and farm-to-market roads.

More than 100,000 elected officials and local government staff have been trained in decentralized project planning and management. Linkages between local governments and the emerging private sector have been stimulated through contracts awarded by local authorities for project implementation. In addition, local councils have mobilized their own resources to upgrade infrastructure made possible by the USAID grants. They have expanded water and drainage systems, paved dirt roads and used the profits from local income-generating projects such as village fish ponds for further community investments.

Increasing the GOE's allocation of funds for operation and maintenance to local government units and finding new mechanisms for local revenue generation are major issues being addressed in order to ensure sustainability of activities.

The GOE has demonstrated its commitment to decentralization over the past 29 years by the transfer of authority and responsibility for local government to administrative and elected councils in villages, towns and governorates. Since the establishment of the Ministry of Local Administration in 1960, the local development program has claimed an increasing share of the central budget.

DECENTRALIZATION SUPPORT FUND
(263-0143 and 263-0161.04)

Purpose: To support and accelerate the process of administrative decentralization to rural governorates by increasing investment budgets under their jurisdiction.

Description: This project establishes a support fund that enables governorates to plan their needs for heavy equipment for local development programs. Each of the 21 rural governorates receives U.S. dollar budget support to purchase American equipment for local programs in public utilities, infrastructure and social services. The Egyptian implementing agent is the General Secretariat for Local Government (GSLG) of the Ministry of Local Administration (MLA).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 80 - FY 90
<u>Approved Total Funding:</u>	\$100 Million
<u>Funding to Date:</u>	\$100 Million

Implementation Progress:

- Solid links between governorates and suppliers have been established for basic training and equipment maintenance.
- \$94 million of equipment has been issued to the 21 rural governorates for use in such fields as sanitation, road maintenance, fire protection and water purification and desalination for potable water systems.
- Funding has been approved and bids received for the rehabilitation of the Qena/Safaga/Hurghada water transmission pipeline.

Implementing Office: Office of Local Administration and Development (DR/LAD), extension 3324.

SECTOR DEVELOPMENT AND SUPPORT
(263-0161.06)

Purpose: To augment and enhance Egypt's local development program and promote and strengthen decentralization, by financing activities bridging the other five discrete Decentralization Sector Support projects.

Description: This project provides the Government of Egypt (GOE) with a flexible fund for decentralization sectoral activities (other projects in the 263-0161 Decentralization Sector Support Fund finance discrete activities to support GOE decentralization objectives). The Sector Development and Support activity helps USAID expand and deepen the policy dialogue with the GOE and focuses on future governmental strategies for local development in Egypt. The activities financed under the project fall into the following four broad categories: training; systems development and improvement; institutional development; and evaluations, data collection and policy analysis. The activities will be continued under Local Development II (263-0182) upon completion of this project. The Egyptian implementing agent is the Ministry of Local Administration (MLA). Primary implementation and coordination of local development projects is the responsibility of the Local Development II Technical Secretariat within the MLA.

Current Status:	Active
Duration:	FY 82 - FY 91
Approved Total Funding:	\$10 Million
Funding to Date:	\$10 Million

Implementation Progress:

- A series of orientation seminars introduced the Local Development II (263-0182) program to senior GOE officials and local leaders.
- A water assessment study has led to recommendations for improving the use and distribution of water resources. The assessment concluded that the project has significantly improved quantity and quality of water in Egyptian villages.
- A training block grant program was jointly developed between USAID and the MLA. The purpose of the grant is to complement the financial and technical resources the governorates have available for local training. Wilbur Smith and Associates will develop training programs for the six urban governorates.
- A Pilot Small Scale Enterprise Credit Activity was designed by MLA and the National Bank for Development (NBD) with assistance from Agriculture Cooperative Development International (ACDI). The NBD has begun to disburse loans.

Implementing Office: Office of Local Administration and Development (DR/LAD), extension 3324.

LOCAL DEVELOPMENT (LD II)
(263-0182)

Purpose: To improve the quality of life of low-income residents in rural and urban Egypt by improving and upgrading the capacity of local government to build and sustain essential basic services.

Description: The Decentralization Sector Support Program (263-0161) has strengthened the capacity of local governments to provide basic services and to plan, organize, finance, implement and maintain small infrastructure projects. Democracy and pluralism have been encouraged through the greater role of the popularly elected councils under this program. A 1983 assessment of the sector and project evaluations revealed considerable progress toward sector goals. However, major constraints still exist. The LD II program, which is the successor to the Decentralization Sector Support Program (263-0161), will continue to provide funding for locally managed development activities, while focusing on:

- (a) Decentralization policy development.
- (b) Increased local contributions and cost sharing for projects through the generation, retention and utilization of more local resources.
- (c) Continued upgrading of management and technical skills of the elected and executive local councils, especially with regard to the operation and maintenance of basic services and infrastructure.
- (d) Stimulation of the local private sector by integrating it into local development activities and providing it with appropriate credit services.

The technical assistance contractor for the project coordinating committee is DAC International. The provincial technical assistance contractor is Chemonics and Wilbur Smith and Associates is the contractor for urban projects. The primary Egyptian implementing agents are the Ministries of Local Administration and Social Affairs and participating governorates.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 85 - 92
<u>Approved Total Funding:</u>	\$381 Million
<u>Funding to Date:</u>	\$341 Million

Implementation Progress:

- The revenue sharing system established under LD II, which matches funds put up by 26 urban and rural governorates, has completed its third annual cycle. Nearly 10,000 projects for water systems, access roads, clinics, schools and vocational training have been financed under this program. In addition 2,000 PVO projects have been implemented under the Ministry of Social Affairs.
- Several groups from the Ministries of Social Affairs and Finance, and from PVOs, have completed observational tours of the U.S.

Implementing Office: Office of Local Administration and Development (DR/LAD), extension 3324.

DEVELOPMENT DECENTRALIZATION I
(263-0021 and 263-0161.01)

Purpose: To increase the development capabilities and revenues of village councils throughout Egypt and to encourage cooperation between elected and executive councils during project selection, design and implementation.

Description: The project financed a Local Development Fund (LDF) within the Organization for Reconstruction and Development of the Egyptian Village (ORDEV). Related training and technical assistance funded under this project improved ORDEV's ability to manage the fund. The LDF provides small loans to village councils and to villagers (through the councils) for income-producing projects. The primary Egyptian implementing agent was ORDEV, a department of the Ministry of Local Administration (MLA).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 78 - FY 87
<u>Total Project Funding:</u>	\$26.2 Million

Project Accomplishments:

- LDF made 952 loans totaling LE 23 million from its inception to the close of the project. Local unit enterprises were funded by 727 of the loans, and 225 loans were made to private individuals with the council acting as guarantor. Local units contributed LE 7.5 million to the enterprises and private contributions totaled LE 9.1 million. Eighty-eight percent of repayments due had been received as of project completion.
- Over 20,000 elected and executive council members participated in project selection, design and management.
- More than 10,000 elected and executive councilors and their staff received project design, management and technical training.
- Subprojects studied by an evaluation team in December 1983 returned an average of 19 percent per annum on investment. Many subprojects acted as demonstration projects and are being replicated by local private entrepreneurs.
- ORDEV continues to emphasize loans to private businesses.
- The project caused major policy changes in the Egyptian implementing organization. For example, all future funds for rural economic projects financed by ORDEV will be provided as loans, not as grants as in the past.
- The project has contributed to the evolution of democracy and pluralism in Egypt by supporting participatory, democratically elected institutions.

Implementing Office: Office of Local Administration and Development (DR/LAD), extension 3324.

BASIC VILLAGE SERVICES (BVS)
(263-0103 and 263-0161.02)

Purpose: To decentralize decision-making on public investment projects and to strengthen the network of administrative processes and local management skills at village, district and governorate levels in all participating governorates. Twenty-two of the 26 governorates of Egypt are active participants in the project. Particular emphasis was placed on elected village councils, as opposed to appointed, executive officials, in project selection and implementation.

Description: The project provided a coordinated mix of technical assistance, training and block grants to 870 district councils representing about 3,700 villages in 22 governorates. The councils selected, designed and implemented small infrastructure projects such as potable water systems, feeder roads, small bridges, swamp filling and lining of canals. The U.S. consultant was Chemonics International. The Egyptian implementing agents were the Organization for Reconstruction and Development of the Egyptian Village (ORDEV) of the Ministry of Local Administration, and 22 governorates.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 80 - FY 88
<u>Total Project Funding:</u>	\$224.7 Million (Plus \$ 75 Million additional funding from P.L. 480 Title III)

Project Accomplishments:

- Over 5,000 subprojects have been completed in about 3,400 villages and satellite villages. These include providing about 19,200 kilometers (km) of water pipes, 1,075 pumps and 215 water wells, building 2,900 km of roads and providing ferry boats, small bridges, drainage systems and sewerage systems.
- Over 29,000 village council members and governorate staff have received training in subjects such as financial planning and basic maintenance.
- Over 840 person-months of direct, on-site technical assistance were delivered to villages, districts and governorates, along with 20,000 copies of 20 Arabic language manuals in support of this technical assistance.
- By emphasizing the role of popularly elected councils, the project contributed to the evolution of democracy and pluralism in Egypt.
- A March 1984 evaluation concluded that the Basic Village Services project is a major rural development success story.

Implementing Office: Office of Local Administration and Development (DR/LAD), extension 3324.

NEIGHBORHOOD URBAN SERVICES
(263-0153 and 263-0161.05)

Purpose: To decentralize decision-making on public investment projects and strengthen administrative processes and local management skills in low-income neighborhoods of Cairo and Alexandria and in the urban districts of Giza and Qalubeya.

Description: Public works programs and activities for Private Voluntary Organizations (PVOs) were jointly identified, developed and executed by local officials and the elected popular councils in each district. The Egyptian implementing agencies were the Cairo, Alexandria, Giza and Qalubeya Governorates.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 81 - FY 88
<u>Total Project Funding:</u>	\$89 Million

Project Accomplishments:

- Each of the twenty-four urban districts has identified, planned and implemented an average of 50 projects annually over the six years of the project. Over 10,000 local council members and their staffs and several hundred PVO staff were trained in project planning and implementation.
- Infrastructure subprojects included the following construction activities: 1.2 million square meters of street paving; 294,000 linear meters of street lighting; 42,000 meters of sewer lines; 29,000 meters of water lines; 72 community water taps; 10,300 vertical sewer pipes replaced for low-income flats; 27 solid waste projects, providing several hundred cleaning carts; and 30 public toilets installed.
- Health subprojects included: the construction of 52 new hospitals, clinics and waiting sheds; expansion and renovation of 45 existing hospitals and clinics; and the renovation and equipping of 251 PVO clinics and dispensaries.
- Nine hundred and seventy-four new classrooms were constructed.
- One hundred and seven new youth centers were renovated; 258 private and 23 government vocational training centers were equipped; 488 other facilities, including libraries, elderly and handicapped hospitals and cultural centers were equipped; and 332 nurseries and day care centers were equipped.
- Fifteen markets were constructed or renovated, and 17 food caravans were placed in low-income neighborhoods.

Implementing Office: Office of Local Administration and Development (DR/LAD), extension 3324.

**OTHER INFRASTRUCTURE
PROJECTS**

TELECOMMUNICATIONS I, II, III AND IV
(263-0054, 263-0075, 263-0117, 263-0177)

Purpose: To improve the telecommunications system of Egypt by strengthening the planning, management, operating and training functions of the Arab Republic of Egypt National Telecommunications Organization (ARENTO), and to rehabilitate and replace components of the system in the large population centers of Cairo and Alexandria.

Description: The first three telecommunications projects are being treated as one integrated project. A U.S. contracting firm, Arthur D. Little International, is assisting ARENTO with managerial and technical support services for all installation and construction activities and for improvement of ARENTO's operations. Additionally, ARENTO is receiving assistance from other U.S. firms, American Telephone and Telegraph International, Inc. and Ford Aerospace Communications International, Inc., to install electronic telephone exchanges in Cairo and Alexandria and to install the outside plant facilities and an expanded fiber optic junction network. The fourth project finances two additional telephone exchanges (for a total of 12 in the four projects) in crowded, growing areas of Cairo. The Egyptian implementing agency is ARENTO.

	<u>Project</u> <u>263-0054</u>	<u>Project</u> <u>263-0075</u>	<u>Project</u> <u>263-0117</u>	<u>Project</u> <u>263-0177</u>
<u>Current Status:</u>	Completed	Completed	Active	Active
<u>Duration:</u>	FY 78 - FY 83	Fy 79 - FY 86	FY 80 - FY 90	FY 88 - FY 93
<u>Approved Total Funding:</u>	\$40 Million	\$80 Million	\$122 Million	\$40 Million
<u>Funding to Date:</u>	\$40 Million	\$80 Million	\$122 Million	\$40 Million

Implementation Progress:

- Telecommunications III (263-0117) is nearing completion. All of the 10 project-financed telephone exchanges, financed under Phases I, II and III, are operational and are currently providing improved telephone service to about 170,000 subscribers in Cairo and Alexandria. ARENTO has increased telephone subscription by 66 percent and the installation rate by 50 percent.
- Telecommunications Phase IV has started and Teleconsult has been appointed as consultant to ARENTO.
- ARENTO's operations were upgraded by establishing improved systems in finance, accounting, payroll, personnel, fundamental planning, project planning and management.
- Ten Cairo and Alexandria exchanges and the Center of Operations and Maintenance (COM) established at Ramses vastly improved telephone service in these areas. Data from the COM allowed ARENTO to monitor and pinpoint trouble areas in the entire Cairo telephone network.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

SAFAGA GRAIN SILOS COMPLEX
(263-0165)

Purpose: To improve grain distribution by reducing losses in the offloading, storage and transshipment of grain destined for Upper Egypt.

Description: A 100,000 metric ton grain silo complex is being constructed at Port Safaga. Grant funds pay for consulting engineering services and construction and procurement services to erect the complex. The U.S. consultant is Black and Veatch International and the U.S. construction contractor is Harbert-Howard Co. (HHC). The Government of Egypt (GOE) will finance all local currency costs and is contributing land, channel and harbor improvements, quay extension, utilities and a 160-kilometer (km) rail link between Safaga and Qena. The Egyptian implementing agent is the Ministry of Supply (MOS).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 82 - FY 90
<u>Approved Total Funding:</u>	\$80.0 Million
<u>Funding to Date:</u>	\$71.3 Million

Implementation Progress:

- Construction of the silos was completed and approved by MOS.
- MOS contracted with HHC to provide operation and maintenance training for two years starting from November 1, 1987.
- The 160 km of railway linking Qena and Safaga are complete.
- Encorp finished constructing a diesel power station at Safaga and testing is now under way.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

SUEZ CANAL CLEARANCE EXTENSION
(263-0004)

Purpose: To clear the Suez Canal and its approaches so that maritime traffic may continue to use the Canal as a principal international waterway.

Description: This completed project provided ancillary project support for the United States Navy to clear the Suez Canal and its approaches. The primary Egyptian implementing agent was the Suez Canal Authority.

Current Status: Completed
Duration: FY 75 - FY 79
Total Project Funding: \$35 Thousand

Project Accomplishments:

- Clearing of the Suez Canal was completed.
- The Canal is used as a principal international waterway.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

ROAD BUILDING EQUIPMENT
(263-0007)

Purpose: To finance purchase of heavy road construction equipment required for the reconstruction of the Suez Canal area.

Description: This project procured heavy road construction equipment to reconstruct the Suez Canal area. The equipment included bulldozers, tractors, asphalt mixing plants and portable rock crushing plants.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 75 - FY 79
<u>Total Project Funding:</u>	\$13.9 Million

Project Accomplishments:

- All equipment was procured on schedule and used in reconstructing the Suez Canal area as planned. The equipment was then used by the Egyptian Government on construction sites throughout the country.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

ALEXANDRIA PORT AUTHORITY
(263-0014)

Purpose: To finance acquisition of equipment and related services to assist the rehabilitation and expansion of port facilities in the city of Alexandria.

Description: This completed project was jointly financed by the World Bank, USAID, and the Government of Japan. The USAID contribution to this phase of the rehabilitation and expansion of port facilities in Alexandria financed cargo handling, land transport equipment and related services, including storerooms for spare parts. The Government of Japan and the World Bank financed new berth construction, dredging, paving, floating equipment and related services. The primary Egyptian implementing agent was the Alexandria Port Authority. The U.S. consulting engineer was PRC Harris, Inc.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 76 - FY 81
<u>Total Project Funding:</u>	\$30.2 Million

Project Accomplishments:

- All USAID-financed project activities, including equipment delivery, were completed by 1981.
- Three spare parts storerooms were constructed and stocked. Card index inventory systems were established.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

GRAIN SILOS STORAGE
(263-0028)

Purpose: To reduce large product and monetary losses associated with importing and distributing food grains and to provide needed additional closed storage capacity.

Description: This completed project financed the construction of two 100,000 metric ton grain silo complexes, one at the Port of Alexandria and the second in the Shoubra district of Cairo, and two pneumatic ship unloaders for the Port of Alexandria. The primary Egyptian implementing agent was the General Authority for Supply Commodities (GASC). GASC's consultant was de Laureal Engineers, and Ibberson International supervised the mechanical/electrical installation. Thirty-nine U.S. firms supplied commodities. Firms having contracts valued at greater than \$1 million were:

Abbot Power Corp.: electrical substations.

Fuller Company: pneumatic ship unloaders.

Mid-West Conveyor Co.: belt elevators and bucket conveyors.

Stephens-Adamson: bulk grain conveyors.

CEA-Carter: dust collection systems.

Fenwall Corp.: explosion suppression systems.

U.S. Steel: rebar and fabricated structural steel.

Transoceanic Shipping: freight forwarding services.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 75 - FY 86
<u>Total Project Funding:</u>	\$53.6 Million

Project Accomplishments:

- Construction of the silos and installation of the ship unloaders were accomplished and the systems operational by 1986.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

GRAIN, TALLOW, OIL AND FATS STORAGE AND DISTRIBUTION
(263-0037)

Purpose: To construct a tallow and fats storage facility in the city of Alexandria and a transportable grain handling facility in the port of Alexandria.

Description: This completed project supported the Government of Egypt's effort to create an effective and efficient food grain storage and distribution system to meet the pressing needs of an increased urban population. A 60,000 metric ton tallow and fats storage facility in Alexandria and an 8,000 metric tons/day transportable grain handling facility in the port of Alexandria were constructed. The primary Egyptian implementing agent was the General Authority for Supply Commodities (GASC). Black and Veatch International was GASC's consultant; Harbert-Howard Company was the construction contractor.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 85
<u>Total Project Funding:</u>	\$35.6 Million

Project Accomplishments:

- The grain handling facilities constructed in Alexandria have been fully operational since January 1982.
- The tallow, oil and fats facility has been fully operational since September 1983.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

PORT OF SUEZ PROJECT
(263-0047)

Purpose: To rehabilitate and modernize Port Ibrahim, increasing the cargo capacity of the port from 644,000 metric tons to 1,615,000 metric tons a year, and to develop a new port at Addabyah.

Description: This completed project was originally designed to increase the cargo capacity of the Suez port facility by constructing four new multi-purpose deepwater berths, rehabilitating existing facilities and creating a new autonomous port authority. However, the project was later revised to concentrate USAID efforts on rehabilitating existing port facilities and the creating a new autonomous port authority. The Red Sea Ports Authority, using its own resources, proceeded with construction of two deepwater berths. The Red Sea Ports Authority was the primary Egyptian implementing agent. The U.S. contractors on this project were Wilde Manufacturing Co., Lorain Koehring, International Harvester, Cedec Inc., Morgan Equipment Co., Elgin Sweeper Co., Muring Corporation, American Export Group, Midestco Enterprises, Inc., General Electric Trading Co., Ferrostaal Inc., Clement Malki Associates and Intrade Inc. The Port of Suez Engineering Group, a consulting joint venture of Parsons Brinckerhoff International, Kaiser Engineers and Sabbour Associates, were consultants of the implementing agent.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 78 - FY 86
<u>Total Project Funding:</u>	\$10.1 Million

Project Accomplishments:

- Rehabilitation of Port Ibrahim, including two new deepwater berths, was completed.
- The USAID-financed cargo handling equipment, workshop tools and some navigational and other equipment are in use.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

LOW INCOME HOUSING AND COMMUNITY UPGRADING
(263-0066)

Purpose: To demonstrate that socially acceptable basic housing, public utilities and community facilities can be provided for low-income families at an affordable price that also allows a substantial recovery of the investment.

Description: This project sought to demonstrate the validity of the Government of Egypt's (GOE) new policy of developing urban housing in the city of Helwan, 30 kilometers south of Cairo. The project had two major components:

- (1) Development of the Helwan New Community with 7,000 fully serviced plots accommodating as many as 20,000 dwelling units, community organizations and other public facilities for a population of 100,000.
- (2) Community upgrading programs in seven existing low-income Helwan neighborhoods with a combined population of nearly 100,000. This program included provision of credit for housing and small enterprise development; provision of water, sewers, roads and public/community facilities; and community organization and vocational training.

The primary Egyptian implementing agent was the Executive Agency for Joint Projects (EAJP).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 78 - FY 88
<u>Total Project Funding:</u>	\$76 Million

Implementation Progress:

- In the Helwan New Community, construction of the planned model housing is complete. The neighborhood infrastructure, sewage treatment plant, water tank and electric substation are completed. The entire New Community was turned over to the GOE and by June 1989 EAJP had sold 1147 plots to Helwan factory workers. The GOE is constructing apartment buildings in half the neighborhoods, and individual workers will build their own homes on plots they purchase in the remaining neighborhoods. A local currency fund has been established to provide mortgage financing.
- In the seven upgrading communities, roads, sewers and other community infrastructure facilities were constructed.
- Nearly 3,000 families obtained home improvement loans in the seven upgrading communities. These loans ranged from LE 500 to LE 2,000 in value and totalled LE 5 million. The Small Enterprise Program has issued 325 loans since 1982 for a total value of LE 615,000. At project completion, 85 percent of the borrowers had repaid their loans.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

HYDROGRAPHIC SURVEY FOR THE SUEZ CANAL
(263-0071)

Purpose: To conduct a hydrographic survey and develop up-to-date, accurate nautical charts of approaches to the Suez Canal.

Description: This completed project financed a hydrographic survey and produced up-to-date, accurate maps of waterways into and out of the Suez Canal. The survey facilitated widening and deepening of the canal and its approaches by identifying the navigational obstacles to be removed. The project also provided training in modern hydrographic survey methods for Egyptian specialists. The Ministry of Maritime Transport was the primary Egyptian implementing agent.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 81
<u>Total Project Funding:</u>	\$7.1 Million

Project Accomplishments:

- All planned nautical charts and personnel training were completed.
- Maps developed under the project now assist international mariners and permit ships to navigate through the Canal with greater confidence, safety and efficiency.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

B. Developing Productivity

Projects presented in this section support Egyptian efforts to promote gains in agricultural and industrial productivity. The programs (a) encourage improvement of Egyptian government policies for these sectors; (b) promote private sector responses to economic needs; and (c) assist the development and dissemination of productive technologies.

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AGRICULTURE

Sector profile

The Government of Egypt (GOE) places a high priority on food security and agriculture. Agriculture is the largest sector in the Egyptian economy, accounting for 17 percent of Gross Domestic Product (GDP), employing about 40 percent of the workforce and providing about 10 percent of exports. However, the rising population and increasing demand for food in Egypt since the 1970s has led to food agricultural imports exceeding exports by about \$4 billion per year. While Egypt's agricultural productivity is already high by world standards and the available, irrigable land base is limited, opportunities exist for substantial increases in output. USAID's objective is to help eliminate constraints to high productivity through:

- Supporting liberalization measures that will allow market incentives to encourage farmers to grow more valuable crops and use inputs more efficiently.
- Increasing access to the technologies, inputs, credit facilities and water resources that may allow production to increase 25 to 100 percent, depending on the crop.

USAID has contributed \$772 million to the agricultural sector over the past 11 years for research, credit and improved water management. Through its agricultural sector projects and the PL 480 program USAID continues its policy reform dialogue with the GOE to encourage removal of production controls, reform of farm output and input prices and an increased role for the private sector. The overall pattern of land use has already shifted toward higher value fruits and vegetable crops. Price and production quotas, which covered 13 crops in 1986, are being phased out on the three remaining crops - rice, sugarcane and cotton.

Agriculture research has led to improved varieties for major cereal crops -- producing 35 percent more maize, 65 percent more wheat, 50 percent more sorghum, 50 percent more soybeans and 58 percent more rice in both research plots and farmers' fields. USAID is attempting to disseminate improvements and techniques developed at the research establishments to the farmers. However, remaining price distortions on some crops have discouraged farmers from adopting many of the improved varieties. Effective support to farmers in a deregulated agricultural sector depends on efficient access to credit at market rates and sound advice through the extension services.

Irrigation is fundamental to all agriculture in Egypt with assistance targeted at improving water management practices, restoring water control structures - 10,500 have already been replaced - and establishing a country-wide preventive maintenance program.

USAID pays considerable attention to helping the GOE minimize the recurring costs of agricultural research, extension and irrigation management while maximizing the benefits of such efforts. By removing price and marketing procurement restrictions and providing needed technical knowledge, access to inputs and credit, USAID hopes to give farmers the means and incentives to increase production and incomes.

IRRIGATION MANAGEMENT SYSTEMS
(263-0132)

Purpose: To help Egypt improve the operating efficiency of its irrigation system and to strengthen the Ministry of Public Works and Water Resources' (MPWWR) operational, maintenance and planning capabilities.

Description: The project supports (1) a country-wide structural replacement program for the irrigation system; (2) developing a major training program and a country-wide preventive maintenance program; (3) providing technical and financial assistance for the existing Regional Irrigation Improvement Project (RIIP) and the Water Research Center (WRC); (4) installing a telemetry system to monitor the Nile River and major canal flows; (5) developing a major training program and constructing training facilities; (6) developing computer models for the irrigation distribution system; and (7) preparing detailed topographic and aerial photography of the irrigated lands of Egypt. The Egyptian implementing agent is the MPWWR.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 81 - FY 91
<u>Approved Total Funding:</u>	\$340.0 Million
<u>Funding to Date</u>	\$250.0 Million

Implementation Progress

- The project expanded to include ten sub-projects with activities in all 19 Irrigation Directorates. MPWWR has established a monitoring office.
- Over 10,500 irrigation structures have been constructed or replaced out of the planned 11,500. The technical assistance consultant, Harza, is providing training in management and maintenance.
- Morrison-Knudsen Engineers (MKE) was appointed technical assistance consultant for the preventive maintenance program in December 1988. Gharbia Directorate will be joined by five other directorates to form a pilot project under this program.
- MKE/Louis Berger International replaced the Consortium for International Development as the technical assistance consultant for the RIIP. Detailed plans have been prepared for the improvement of 18,000 feddans. Water user organizations representing 3,100 farmers have been established.
- Training programs have been given to 4,000 engineers and 600 technicians. Over 250 persons have received training in the U.S. Computer courses were introduced for the first time and development of evening training programs is proceeding.

Implementing Office: Office of Irrigation and Land Development (AGR/ILD), extension 3206.

NATIONAL AGRICULTURAL RESEARCH
(263-0152)

Purpose: To improve Egypt's capability to provide farmers with productivity-increasing technologies in a supportive policy environment.

Description: The project is designed to enhance the effectiveness, as well as broaden the involvement, of a wide range of public and private institutions in Egypt's agricultural development. The five priority areas to be focused on are agricultural research, policy, technology transfer, seed technology and project management with new initiatives. The strategy emphasizes linking research and extension by involving extension workers with researchers in field trials and extensive demonstrations of improved technological packages. The primary technical assistance contractor is the Consortium for International Development (CID). The primary Egyptian implementing agencies are the Agricultural Research Center (ARC) and the Ministry of Agriculture and Land Reclamation (MALR).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 85 - FY 94
<u>Approved Total Funding:</u>	\$300 Million
<u>Funding to Date</u>	\$100 Million

Implementation Progress:

- The Government of Egypt (GOE) has established an executive office to administer and monitor the project. A small American (8A) firm provides long term consulting and works closely with this office.
- Nearly 100,000 days of in-country training have been performed. San Diego State University Foundation (SDSUF) was awarded an out-of-country training contract in November 1988. So far, 10 PhD and 17 post-doctoral trainees have been processed and an English training and testing program was established. Thirty long-term degree trainees financed under terminated agricultural projects have been transferred to the project to complete their degrees.
- Renovation of the national library and research stations is progressing. USAID awarded a contract to a U.S. vendor to supply books, journals and audio visual material to the project.
- Over 600 research proposals from Egyptian universities and institutes are being reviewed for project funding under the research grants program. The Ministry of Agriculture is also exploring collaborative research arrangements with the USDA and several U.S. Title XII institutions. Availability of research support funding will be triggered by achievement of preestablished goals.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

AGRICULTURAL PRODUCTION AND CREDIT
(263-0202)

Purpose: To assist the Government of Egypt (GOE) in deregulating the agricultural sector and to provide farmers with improved financial services and expanded access to inputs, such as new technologies, in a deregulated agricultural sector. Increased private sector participation in Egyptian agriculture is a primary goal of this project.

Description: The project has two elements:

- The capital component of \$100 million is to be transferred by installments to the GOE in support of agreed agricultural policy changes. The equivalent in Egyptian pounds will be made available to the Principal Bank for Development and Agricultural Credit (PBDAC) to expand its capital base so that it may provide the credit needs of small farmers and agriculturally related businesses.
- The capacity building component, \$23 million, provides technical assistance, training and equipment for the PBDAC. Concepts tested under the pilot Small Farmer Production project will be extended under this project to at least 350 village banks in 12 governorates. These concepts include full banking services, interest rates at near-market levels, rapid and efficient loan approval and increased extension services to the farmer. The Egyptian implementing agency is the Ministry of Agriculture and Land Reclamation (MALR).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 86 - FY 93
<u>Approved Total Funding:</u>	\$123 Million
<u>Funding to Date</u>	\$123 Million

Implementation Progress:

- Since 1986, the MALR has removed price controls and area and procurement quotas for 10 crops resulting in a 26 percent increase in area planted to these crops and productivity increases in nearly all of them. The remaining controlled crops are cotton, rice and sugar cane.
- Nearly 350 village banks have joined the small farmer loan program with 150,000 farmers receiving loans of up to L.E. 10,000.
- Over 6,400 bank personnel have received training from PBDAC.
- PBDAC has negotiated a subcontract between ACDI and Deloitte Haskins and Sells to develop the village bank accounting system and the general ledger system.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

WATER USE AND MANAGEMENT
(263-0017)

Purpose: To research, develop and demonstrate replicable water management practices that will increase the efficiency of the irrigation system and expand agricultural growth.

Description: The project financed small farm adaptive research activities in water and agricultural management at three field sites - Kafr El Sheikh, Mansoura and El Minya - which are located in the Delta and Middle regions of Egypt. The primary implementing agent was the Water Research Center in the Ministry of Public Works and Water Resources (MPWWR). Technical assistance was provided through a contract with the Consortium for International Development and included a broad range of activities related to water management, plant production and economic development.

Current Status: Completed
Duration: FY 76 - FY 85
Total Project Funding: \$13 Million

Project Accomplishments:

- All project objectives were achieved including:
 - (1) Development of replicable agronomic practices.
 - (2) Development of on-farm water management practices.
 - (3) Reorganization of water delivery systems.
 - (4) Development of farmer organizations to assist with the control and scheduling of water deliveries.
 - (5) Economic evaluations.
 - (6) Training of MPWWR staff.

- A final project evaluation was completed in March 1985. It recommended:
 - (a) Implementation of the methodologies and technologies developed under the project.
 - (b) Establishment of the necessary official role, guidelines and incentives for the organization of water user associations.
 - (c) Extrapolation of the economic cost benefits of large scale implementation of the projects findings.

- Project findings were acted upon by the Regional Irrigation Improvement Project, and research activities were continued by the Water Research Center. Both activities receive support through the USAID sponsored Irrigation Management Systems Project 263-0132.

Implementing Office: Office of Irrigation and Land Development (AGR/ILD), extension 3206.

PVC PIPE DRAINAGE
(263-0019)

Purpose: To establish facilities at Qena, Assiut and Beni Suef to produce poly vinyl chloride (PVC) drainage pipe to facilitate land reclamation in Upper Egypt.

Description: This completed project financed procurement of six PVC pipe manufacturing lines to produce PVC pipe for draining irrigated land. The pipe helps halt deterioration of land fertility caused by waterlogging and salinity and permits increased agricultural yields of 15 to 35 percent. Pipe installation is being financed by the World Bank as a part of a planned drainage program. The Egyptian implementing agent was the Egyptian Public Authority for Drainage Projects, the U.S. consultant was STV Engineers and the U.S. suppliers were Cincinnati Milacron and B.F. Goodrich.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 76 - FY 86
<u>Total Project Funding:</u>	\$19.1 Million

Project Accomplishments:

- The three pipe manufacturing plants, each including two PVC pipe manufacturing lines, were established in upper Egypt at Qena, Assiut and Beni-Suef.
- In areas where pipe produced under this project has been installed, improved drainage has increased crop production.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

RICE RESEARCH AND TRAINING
(263-0027)

Purpose: To improve the Egyptian capability for gathering, analyzing and disseminating information on rice production, seed processing and storage by establishing a national institute devoted to rice research and extension.

Description: This completed project provided grant financing to establish a National Rice Research and Training Center at the Sakha Research Station in Kafr El Sheikh. Construction of all physical facilities, equipment, supplies and training of staff for the center were financed from project resources. The focus of the new institute's efforts is identifying and eliminating constraints to rice production and increasing production by field testing high-yielding rice varieties and demonstrating project developed technologies. Small farm equipment such as portable pumps was introduced and tested by a mechanization unit established by the project. The primary Egyptian implementing agent was the Ministry of Agriculture and Land Reclamation. Technical assistance for the project was provided by the International Rice Research Institute and the University of California at Davis.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 87
<u>Total Project Funding:</u>	\$20.9 Million

Project Accomplishments:

- Project research continues under the USAID-sponsored National Agricultural Research Program (263-0152) begun in FY 1986.
- The breeding program has made remarkable progress towards developing high-yielding varieties of rice with short structure, early maturity, blast and stem-bore resistance, salinity resistance and appropriate grain quality. Eighty percent of the nearly 1 million feddans under rice cultivation in 1987 were planted with Giza 173, a variety developed under the project.
- Improved agronomic techniques were extended to, and utilized by, farmers. Yields increased by 25 percent in the project demonstration area compared to a five percent increase in Egyptian rice production.
- A permanent 90 feddan (about 90 acres) experimental site was developed at Sakha.
- The mechanization unit tested various small farm equipment. Portable pumps and a one-meter reaper are being locally manufactured.
- Construction of the National Rice Research and Training Center facilities was completed in 1986.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

AGRICULTURAL MECHANIZATION
(263-0031)

Purpose: To build the Egyptian capability to plan, implement and evaluate appropriate agricultural mechanization programs.

Description: This completed project supported Egyptian efforts to introduce selected agricultural mechanization activities and to create a sound planning, implementation and support base for future agricultural mechanization programs. Support was provided to public and private sector firms or organizations which had demonstrated the ability to carry out effective agricultural mechanization programs. The Egyptian implementing agent was the Ministry of Agriculture and Land Reclamation (MALR). The primary contractor was Louis Berger International and the MALR's consultant was Fintecs.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 79 - FY 87
<u>Total Project Funding:</u>	\$37.6 Million

Project Accomplishments:

- The project purchased \$7 million worth of mechanized equipment from U.S. sources for use in rural villages for soil improvement, field trials and demonstration training programs. A total of \$4 million in mechanized equipment was procured locally to be used in combination with the U.S. procured equipment.
- Loans were provided to private sector firms to construct 12 centers for the servicing of agricultural equipment. In addition, about 100 small village workshop owners received loans averaging LE 25,000 for improvement of their workshops.
- Long-term training in agricultural mechanization and agricultural economics was completed. Several groups of Egyptian trainees received short-term (three to six months) training in the U.S. and other countries in the techniques of technology transfer.
- In an effort to establish a local capability for farm machine manufacture, the project developed seed drills, threshers and land planes.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

CANAL MAINTENANCE
(263-0035)

Purpose: To procure equipment for dredging, earthmoving and general maintenance of irrigation canals to sustain agricultural levels in Egypt.

Description: This completed project addressed one of the major agricultural problems Egypt faces - a declining water flow in the irrigation canals caused by silting and weed growth. The 26,000 miles of canals and drains must be continuously maintained or a serious decline in food production could occur. Procurement of dredging, earth moving and general maintenance equipment under the project was undertaken to enable the Egyptian Government to reverse the declining water flow trend and thereby sustain agricultural production levels. The Egyptian Dredging Company was the primary Egyptian implementing agent. The U.S. consultant was Louis Berger International and the U.S. contractors were Dixie Dredge Co., Caterpillar, John Deere, International Harvester, U.S. Trucks, Cedec Inc., Lorain Koehring, Toyomenka, Rassow, International Trade Agency and U.S. International.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 84
<u>Total Project Funding:</u>	\$30.0 Million

Project Accomplishments:

- Procurement of all excavation and service equipment, with the exception of floating maintenance equipment, was completed and the equipment was put into operation. Following unsuccessful efforts to produce floating dredge maintenance equipment, the Egyptian Dredging Company decided not to procure the equipment. USAID then reprogrammed \$1 million provided under the project.
- Over the life of the project, over 100 million cubic meters of canal excavation was accomplished. This led to flow increases, in selected canals after cleaning, ranging from 25 to 90 percent.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

IRRIGATION PUMPING
(263-0040)

Purpose: To improve the reliability and efficiency of the irrigation system serving an agricultural area in Upper Egypt of about 128,000 feddans (123,000 acres) and about 39,000 farm families.

Description: This completed project provided for the installation of large centrifugal irrigation pumps at 37 stations along the Nile in Upper Egypt. The improved capacity of these stations makes possible three to four crop yields per year. The primary Egyptian implementing agent was the Ministry of Public Works and Water Resources (MPWWR). Patterson Pump Company (PPC) supplied and installed the pumps.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 85
<u>Total Project Funding:</u>	\$18.9 Million

Project Accomplishments:

- Civil works have been completed at all stations. All pumping equipment was delivered.
- Out of 36 pumping stations constructed 33 are operating, while the remaining three are not yet connected with electrical power.
- Defects still exist in some of the pumping stations. The MPWWR and PPC are assessing the status of each pump station with the objective of determining actions required to get all pump stations working.

Implementing Office: Office of Urban Administration and Development (D /UAD), extension 3318.

AGRICULTURAL DEVELOPMENT SYSTEMS
(263-0041)

Purpose: To strengthen the Ministry of Agriculture and Land Reclamation's (MALR) capability to plan and conduct development activities that encourage production and profitability in agriculture.

Description: This completed project financed about 35 research activities in agricultural economics and horticulture under a technical assistance contract between the MALR and the University of California. In addition, special feasibility studies were financed in agricultural statistics, libraries and livestock. The focus of the studies was on providing the MALR with recommendations for improving production and profitability in agriculture. The primary Egyptian implementing agent was the MALR.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 86
<u>Total Project Funding:</u>	\$14.9 Million

Project Accomplishments:

- The University of California at Davis, the original U.S. technical assistance contractor, worked closely with Egyptian officials and completed a range of studies focusing primarily on agricultural economics (19 studies) and horticultural research (16 studies). Special studies were carried out in the areas of agricultural statistics, agricultural libraries and livestock production.
- Improved varieties of horticultural crops including tomato, garlic, grape, mango, citrus and cucurbits were developed and introduced to farmers. It is estimated that the increase in farm income due to greater tomato production equals the total U.S. contribution to the project.
- A project evaluation confirmed the studies have made significant contributions to increasing both agricultural production and profitability, and a number of the research activities are worthy of continuation.
- Several Egyptian participants completed short-term training courses in the U.S.
- Three long-term Egyptian Ph.D. participants, two in agricultural economics and one in statistics, completed their training in 1986.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

POULTRY IMPROVEMENT
(263-0060)

Purpose: To assist the Government of Egypt in meeting its long-term goal of increasing egg and poultry meat production.

Description: This completed project was designed to assist the Ministry of Agriculture and Land Reclamation (MALR) in improving delivery of eggs and poultry meat in the rural communities of Egypt.

The principal project tasks were (1) improving the MALR capacity to assess production needs in the poultry sector; (2) improving three demonstration breeding/hatching farms; (3) providing recommendations for a national breed and hatchery improvement program; (4) making policy recommendations to the Egyptian General Poultry Company; (5) developing a plan to increase the availability of poultry pharmaceuticals; (6) conducting studies on the role of village chicken flocks in the poultry industry; (7) conducting a poultry vaccine and pharmaceutical domestic demand study; (8) developing and establishing a disease program for selected breeding/hatching farms and traditional hatcheries; and (9) providing commodities, training and technical assistance to establish three additional breeding/hatching poultry farms.

The U.S. contractor Experience Incorporated provided technical assistance to the primary Egyptian implementing agent, the MALR.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 84
<u>Total Project Funding:</u>	\$5.4 Million

Project Accomplishments:

- Several parts of the project were successfully completed and have assisted MALR in increasing egg and poultry meat production. Multi-story, brick poultry houses, using improved breeds, are replacing small village flocks and raising production levels.
- A study of poultry vaccine and pharmaceutical demand was completed. A disease control program for selected breeding/hatching farms and traditional hatcheries was developed and established.
- Procurement of materials and equipment for improving the three demonstration breeding/hatching farms was completed. Construction of three additional breeding/hatching farms was begun, but work progressed so unsatisfactorily that USAID discontinued support for the activity.
- A project evaluation conducted in September 1983 was unfavorable, and USAID terminated its involvement in the project in September 1983 with less than half the original objectives achieved.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

AQUACULTURE DEVELOPMENT
(263-0064)

Purpose: To develop the economic capacity for sustained development of the fish farming industry by improving the aquacultural institutions responsible for planning and coordination, applied research, training and extension.

Description: The project established a National Aquaculture Center (NAC) at Abbasa in the Sharkia Governorate to conduct training and applied research and to provide extension services to the Egyptian aquaculture industry. The project provided funding for technical assistance, construction, commodity procurement and an extensive program of training. The Egyptian implementing agent was the Ministry of Agriculture and Land Reclamation (MALR). Transcentury Corp. provided procurement services to the MALR.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 78 - FY 88
<u>Total Project Funding:</u>	\$22.6 Million

Project Accomplishments:

- Aquaculture research activities began at the National Aquaculture Center at the end of 1986.
- USAID-funded construction, including staff housing and the research and training facility, is now complete. The National Aquaculture Center (NAC) was formally dedicated in March 1987.
- Under the project, 26 Egyptians attended U.S. universities in preparation for working with NAC.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

MAJOR CEREALS IMPROVEMENT SYSTEM
(263-0070)

Purpose: To provide small farmers in selected areas with improved agronomic technology to increase cereal production by 25 percent and legume and forage production by 20 percent. To establish an Egyptian capacity for continuing to develop and extend such technology.

Description: This completed project developed improved methods and practices for increasing the production of cereal grains, grain legumes and forages through improving Egyptian research, training and extension capabilities. With technical assistance from a U.S. contractor, Consortium for International Development, the project concentrated on developing and extending to farmers packages of improved agronomic methods and practices. The project also strengthened the Ministry of Agriculture and Land Reclamation's (MALR) ability to develop and extend the use of these technical packages. Accordingly, project efforts focused on research, extension, training, seed production and mechanized processing. The MALR was provided with the technical services, improved physical facilities, supplies, equipment and training necessary to improve its capacity to develop and extend improved agronomic methods and practices. The primary Egyptian implementing agent was the MALR.

<u>Current Status</u>	Completed
Duration:	FY 79 - FY 87
Total Project Funding:	\$52.2 Million

Project Accomplishments:

- Research showed that improved packages of agronomic methods and better varieties of seed could increase yields by over 45 percent. The slow rate of adoption by farmers increased significantly after prices were raised to near free-market levels; since 1986 wheat production has increased by 47 percent.
- Four seed processing plants were constructed and are now operational.
- More than 60 Egyptians received training on operation of the seed processing plants.
- One hundred and fifty Egyptians received training in such fields as agronomy, soils utilization and plant breeding.
- The agricultural machinery manufacture component of the project developed seed drills, threshers and land planes that are currently being tested. This component of the project was aimed at establishing local capability for farm machinery manufacturing.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

SMALL FARMER PRODUCTION
(263-0079)

Purpose: To develop and apply an improved and replicable pilot agricultural credit and farm production input system.

Description: This project assisted the Principal Bank for Development and Agricultural Credit (PBDAC) in improving its delivery system for production inputs, expanding its short, medium and long-term credit facilities and strengthening bank administration and related customer services. The project provided technical assistance, training, capitalization of loan funds, construction of facilities and support for evaluation and analysis. The U.S. contractor was Agricultural Cooperative Development International (ACDI). The primary Egyptian implementing agent was the PBDAC.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 79 - FY 87
<u>Total Project Funding:</u>	\$49 Million

Project Accomplishments:

- ACDI worked closely with the PBDAC to develop a highly effective credit and extension system, now operational in 79 village banks in three governorates. The PBDAC has issued 150,000 loans valued at about LE 95 million to 90,000 farmers, with a delinquency rate of less than one percent.
- The PBDAC has been strengthened by: a) unifying the credit delivery system on a district basis; b) improving the bank's management information and accounting systems; c) incorporating a farm management program; d) upgrading the training program at the governorate level; e) broadening lending policies and procedures; and f) improving other bank services to both rural customers and farmers.
- The project has been very successful in demonstrating that the proper mix of credit and farm management advice can significantly increase incomes to small farmers. The PBDAC and the Ministry of Agriculture are replicating this approach in at least eight other governorates. The system pioneered in this project is being further refined under the Agricultural Production and Credit project (263-0202).

Implementing Office: Office of Agricultural Credit and Economics (AGR/ACE), extension 3207.

AGRICULTURAL COOPERATIVE MARKETING
(263-0095)

Purpose: (a) To increase the efficiency and effectiveness of Egyptian agricultural marketing cooperatives; (b) to provide sufficient capital for production credit to stimulate a 30 percent increase in fruit and vegetable production; and (c) to establish an institutional capability in the cooperative network to provide marketing guidance, cooperative development and management assistance to farmers and other pilot cooperatives.

Description: This completed project provided assistance to establish alternative approaches to managing cooperatives in Egypt. The project was designed based on joint USAID-IBRD funding. When IBRD declined to participate, USAID agreed to finance the production credit component and provide limited technical assistance, through the Cooperative League of the U.S.A. (CLUSA). The primary Egyptian implementing agent was the Ministry of Agriculture and Land Reclamation.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 79 - FY 83
<u>Total Project Funding:</u>	\$4.7 Million

Project Accomplishments:

- Limited progress was made in the provision of credit to seven fruit and vegetable cooperatives, primarily in the Delta region of Egypt.
- Only marginal progress was made in developing marketing structures for cooperatives and conducting related surveys.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

SMALL SCALE AGRICULTURAL ACTIVITIES
(263-0096)

Purpose: (a) To introduce and adapt technologies appropriate to small farmers and the rural community; (b) to develop the capacity in the Ministry of Agriculture and Land Reclamation for addressing appropriate technology concerns and needs in rural communities; and (c) to increase rural employment opportunities through the expansion of small rural based agribusiness enterprises.

Description: This completed project's original focus was on modification of farm equipment to increase efficiency and output. This focus was later expanded to include introduction of small scale technology such as biogas generation and farm employment generating activities such as silk weaving. Literacy and other community improvement programs were also components of the project. Activities were implemented in the Delta, Upper Egypt and the Sinai. The primary Egyptian implementing agent was the MALR.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 79 - FY 84
<u>Total Project Funding:</u>	\$1.6 Million

Project Accomplishments:

- The project exceeded its target in terms of the numbers of appropriate technology sub-projects it sponsored. Fifty-two sub-project technologies in six different areas (food processing, rural development, pest control, plant production, animal production and irrigation/soil preparation) were introduced. Most were favorably evaluated on the basis of appropriateness, replicability, cost effectiveness, adoption and effective use. However, limited follow-on resulted in a low level of adoption and little impact on rural employment.
- The appropriate technologies introduced included biogas generation for household heating, machinery repair, beekeeping and silkworm rearing.
- Through limited project assistance to the MALR, an interest in and focus on appropriate technology was encouraged and developed. This interest led to the establishment in 1984 of an appropriate technology division in the Ministry's Agricultural Mechanization Research Institute.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

AGRICULTURAL MANAGEMENT DEVELOPMENT
(263-0116)

Purpose: To improve the Ministry of Agriculture and Land Reclamation's (MALR) management development through the establishment of a Center for Agricultural Management Development (CAMD).

Description: Few of the MALR's more than 150,000 employees had received any systematic training in management of personnel and other resources. To address this problem, this completed project financed and established the Agricultural Management Development Center. The project expanded training programs developed under an earlier pilot project, financed by USAID, designed to improve management skills of over 3,000 middle-level managers in eight Egyptian governorates. Internal management analyses were also conducted to help solve the Ministry's operational management problems. The project provided technical assistance, physical construction of a new training center at the Barrage area north of Cairo and equipment and supplies in support of the program. Training was provided through the U.S. Department of Agriculture (USDA) and the University of Miami. The primary Egyptian implementing agent was the MALR.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 80 - FY 86
<u>Total Project Funding:</u>	\$4.1 Million

Project Accomplishments:

- Construction of office and dormitory buildings for the center and refurbishment of the main center building and of other existing facilities is complete.
- During the project, the basic management training course for mid-level managers was refined and expanded, shifting from English to Arabic and drawing case studies from Egyptian agriculture. Further courses were developed for senior managers. The CAMD library is considered a valuable source of management development materials with over 3,000 volumes.
- CAMD staff received short and long-term training at the USDA and long-term training (Masters level) at the University of Miami. CAMD continues to provide management training for both MALR and the staff of other ministries.
- At the request of the MALR, the project added five additional governorates to the area served by the project, bringing the total number of participating governorates to 13.
- An evaluation conducted in 1985 concluded that the CAMD is a successful training center and that its activities are having a positive impact on national agricultural programs.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

AGRICULTURAL DATA COLLECTION & ANALYSIS
(263-0142)

Purpose: To improve the capacity of the Ministry of Agriculture and Land Reclamation (MALR) to collect and analyze agricultural economic data, and to upgrade policy formulation efforts through the use of improved information.

Description: This project assisted the MALR in improving its data collection and analysis capability by providing technical assistance and other support to the Ministry's Agricultural Economics and Statistics Undersecretariat and to the Agricultural Economics Research Institute (AERI). Specifically, the project financed:

- Short-term planning teams to assist in solving data analysis problems of the MALR.
- Extensive training in data collection and analysis for MALR and AERI staffs.
- Limited procurement of equipment.
- Local consulting services.

The U.S. Department of Agriculture (USDA) provided technical assistance and Winrock International was a consultant to the primary Egyptian implementing agent, the MALR.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 80 - FY 88
<u>Total Project Funding:</u>	\$5.0 Million

Project Accomplishments:

- USDA has successfully provided technology transfer in the design and conduct of data collection and analysis from project activities, through technical assistance and training. The USDA is continuing its activities under the National Agricultural Research project (263-0152).
- Winrock International teams completed policy reports on meat production and alternatives, horticulture marketing, irrigation in the new lands, analysis of the seed industry and agricultural mechanization. The MALR has accepted all but the horticulture and mechanization recommendations.
- Site preparation and installation of a central computer system for national data collection is complete. A resident USDA computer advisor was responsible for installation and initial operations of the system.

Implementing Office: Office of Agriculture (AGR/A), extension 3214.

INDUSTRY

Sector profile

The Government of Egypt (GOE) regards industry as a key sector for generating new jobs in the rapidly expanding labor force and for increasing exports to generate foreign exchange. The GOE pledged renewed commitment to expanding both private sector productive activities and public sector production. While there is growing interest in increasing the opportunities for private entrepreneurs, there is also strong, lingering support among many GOE policy makers for a dominant public sector role in production and employment generation.

To make the industrial sector vibrant, government regulations and controls on businesses must be relaxed to allow private sector firms to compete on equal terms with public sector firms; prices of industrial inputs and outputs should be moved toward free market levels and banking and credit policies should be reformed. Since interest rates for industrial and agricultural investment are relatively lower than those for commercial loans, banks prefer lending to the latter. Strong government controls over new industrial investment applications also discourage new private sector investment. Excessive collateral requirements from banks discourage small-scale enterprise lending.

A basis for optimism is the exchange rate reforms of May 1987 and recognition the private sector's critical role. For example, the current five-year plan targets new private sector investment at LE 18 billion (\$8.2 billion), or 50 percent of total planned investment. Also, privatization is being discussed publicly by government officials as a mechanism for increasing productivity.

USAID projects are designed to promote the role of the private sector, including small and micro enterprise, in Egyptian industry and commerce by: a) improving productivity and expanding production in selected private sector industries through innovative finance mechanisms; and b) developing systems for provision of foreign exchange term credit to private businesses. Though USAID has supported productivity improvements in key public sector industries in the past, future project assistance will be offered to improve investment opportunities for private sector industries.

Current USAID projects in the industrial sector are focused on improving the business climate and supporting private sector investor services. Participant training programs will improve management and support for basic education will encourage long-term investment in the labor force.

PRIVATE INVESTMENT ENCOURAGEMENT (PIE) FUND
(263-0097)

Purpose: To provide resources for medium to long-term credit for private sector projects with co-financing and guarantees provided by participating banks. The objective is to stimulate local private sector investment for increased production and productivity.

Description: The Private Investment Encouragement Fund (PIEF) offers medium to long-term credit for private sector medium to large scale start-up or expansion projects, on a co-financing basis through authorized participating banks. The fund provides credit for the importation of U.S. equipment and essential services. The primary Egyptian implementing office was originally the General Authority for Investment and Free Zones (GAFI). However, recently the project has been redesigned, with short-term credit as well, and with loan procedures streamlined along the lines of the Private Enterprise Credit Project (263-0201). The new implementing agent is the Ministry of International Cooperation.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 79 - FY 91
<u>Approved Total Funding:</u>	\$33 Million
<u>Funding to Date:</u>	\$33 Million

Implementation Progress:

- Under the original project design, eight loan applications have been approved by the PIEF Advisory Board and USAID for total loan commitments of \$17 million. Total investments in these projects exceed L.E. 157 million and have resulted in 2,700 new jobs.

Major new investments which have utilized PIE Fund loans include the Misr Pioneer Seed Company in Menoufiya Governorate, which produces high-quality corn seed and the General Motors of Egypt truck plant.

- Participating banks have been encouraged to engage in long-term lending and have developed the skills and capabilities in project appraisal and long-term finance.
- The approved Private Enterprise Credit project (263-0201) now incorporates PIE Fund activities and follow-up private sector term credit funding will be disbursed under this project.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3247.

INDUSTRIAL PRODUCTION
(263-0101)

Purpose: To assist the Ministry of Industry (MOI) in the planning, design and implementation of subprojects aimed at rehabilitating, modernizing and expanding public industrial companies in Egypt.

Description: The project provides financing for the Government of Egypt's efforts to modernize and expand existing public sector industrial companies. Funds are also provided under the project to improve environmental control and reduce harmful emissions from existing plants. Training is being provided for about 825 MOI personnel and plant managers in project planning and implementation, industrial operations analysis and pollution control. The primary Egyptian implementing agent is the General Organization for Industrialization (GOFI).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 78 - FY 90
<u>Approved Total Funding:</u>	\$145 Million
<u>Funding to Date:</u>	\$130 Million

Implementation Progress:

- A total of \$129.6 million has been provided to public sector firms through GOFI in support of subprojects aimed at rehabilitating, modernizing and expanding these firms.
- 0101.03 - El Nasr Steel Pipes and Fittings. All construction is complete and production of welded steel pipe began in April 1988. The plant has a capacity of 60,000 tons per year with half scheduled for export.
- 101.04 - Egyptian Company for Refractories. Long lead items such as a calcinating plant, tunnel kilns, dryers and presses have been delivered to site and erection is underway.
- 0101.06 - Sinai Manganese Co. Construction of a 300,000 tons per year calcinated gypsum plant is finished and production is about to start.
- 0101.07 - National Metal Industries Co. Installation of two 35 tons/hour electric arc furnaces and a continuous casting facility to raise steel billet output to 160,000 tons/year is finished and commissioning is underway.
- 0101.10 - Industrial Pollution Control. Improvements in pollution control are in progress at five industrial locations.
- The capability of the MOI for planning, design and implementation of the subprojects has been continually strengthened by the provision of managerial and other technical assistance and training by the U.S. contractors Weston International and the American University in Cairo.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3336.

PRIVATE SECTOR FEASIBILITY STUDIES
(263-0112)

Purpose: To stimulate and encourage U.S. private sector investment in Egypt.

Description: USAID originally granted \$5 million to provide the General Authority for Investment and Free Zones (GAFI) with technical assistance and funding to undertake several activities to promote and encourage investment in Egypt. Recently implementation responsibilities were shifted from GAFI to the U.S. Investment Promotion Office (USIPO), a private sector business organization. The principal activity is sharing the financial costs with U.S. firms and investors of undertaking reconnaissance visits or feasibility studies for possible investments in Egypt.

Bonafide U.S. applicants may be reimbursed up to a maximum of \$150,000 on a "cost sharing" basis for pre-approved study costs. Only direct costs, not overhead and profit, related to the visit or study will be reimbursed by the project. The applicant, which must be a U.S. company or an investor, can undertake the feasibility study with its own resources or subcontract for part or all of the study effort. Funds are also available to Egyptian firms for the development of investment profiles or prospectuses and reconnaissance visits to the U.S. The Egyptian implementing agent is USIPO.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 79 - FY 91
<u>Approved Total Funding:</u>	\$8 Million
<u>Funding to Date:</u>	\$8 Million

Implementation Progress:

- In the early years the project financed sectoral studies of selected industries to provide information and targets of opportunity for potential investors. A three man GAFI staff was trained and assigned to manage the program.
- In 1986 a targeted investment promotion approach involving the development of prospectuses on investment opportunities was instituted and resulted in increased U.S. investment interest and activity. In 1988 the management of the project was transferred to USIPO.
- The revised strategy has resulted in the identification of some 104 projects for joint venture promotion. Prospectuses have been completed for 39 projects. Some 25 reconnaissance visits have been completed, 22 feasibility studies have been finalized and 10 are in process. To date three joint ventures have come on stream and four more are pending. As a result of project assistance to Egyptian investors other investments without a U.S. partner have been stimulated.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3247.

PRIVATE ENTERPRISE CREDIT
(263-0201)

Purpose: To expand investment of productive private sector enterprises and increase the private sector's contribution to Egyptian productive output.

Description: The project's credit facilities build upon previous experience with Production Credit (263-0147) and the Private Investment Encouragement (PIE) Fund (263-0097). There are three credit components:

- \$509.6 million Private Sector Commodity Import Program (263-0201.01), to finance the importation of raw materials, intermediate capital equipment and imported equipment needs for project financing.
- The Project Finance Facility (PFF; 263-0201.02), will support the start-up or expansion of medium to large-scale companies.
- The \$40.4 million Small-Scale Enterprise (SSE) Credit Guarantee Fund, will encourage Egyptian banks to use Egyptian Pounds to support small-scale enterprises.

The primary Egyptian implementing agents are the Ministry of International Cooperation (MIC) and the recently-organized Credit Guarantee Corp. (CGC).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 86 - FY 93
<u>Approved Total Funding:</u>	\$510 Million
<u>Funding to Date:</u>	\$510 Million

Implementation Progress:

- Implementation progress of the Private Sector Commodity Import Program (263-0201.01) is presented in section I.B. of this report.
- Ten Egyptian banks have formed the Credit Guarantee Corporation and have pledged L.E. 200,000 each to establish the SSE fund. MIC will provide the corporation with a L.E. 60 million soft loan. Loans will be in the range L.E. 25,000 to L.E. 250,000 and the CGC will guarantee up to 50 percent of the loan principal.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3247.

SMALL AND MICRO ENTERPRISES
(263-0212)

Purpose: To increase employment and profitability among small (six to 15 employees) and micro (one to five employees) enterprises in Cairo and Alexandria.

Description: The project will supply credit and technical assistance to two private foundations that will be established to manage the delivery of credit, technical assistance and training to small entrepreneurs. Small and micro enterprises, while an important employer of large numbers of low-income urban Egyptians, have been constrained in development by lack of access to credit and technical services. The Foundations will establish collateral funds with local banks and use overdraft privileges to make loans, leveraged on a ratio of two to one, once credit worthiness is established. The primary Egyptian implementing agents are the Alexandria Businessmen's Association and the Egyptian Small Enterprise Development Foundation in Cairo.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 88 - FY 95
<u>Approved Funding to Date</u>	\$20.0 Million
<u>Funding to Date:</u>	\$10.0 Million

Implementation Progress:

Both foundations have been officially registered and executive directors have been appointed. Both foundations have received initial funding from USAID.

NCBA/Environmental Quality International is providing technical assistance to the project. Peat Marwick will develop accounting systems for both foundations.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3247.

MEHALLA TEXTILE PLANT REHABILITATION
(263-0010)

Purpose: To increase the supply of competitively priced textile products to local and foreign markets.

Description: This completed project financed the renovation and expansion of the Misr Spinning and Weaving Company textile complex at Mehalla El Kubra. Financing the replacement of obsolete spinning, weaving and finishing equipment, the project also funded the dollar costs of a new spinning mill and garment manufacturing plant and power and water treatment facilities. Furthermore, the project financed extensive managerial and technical assistance and staff training. The primary Egyptian implementing agent was the Misr Spinning and Weaving Company.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 76 - FY 84
<u>Total Project Funding:</u>	\$91 Million

Project Accomplishments:

- Cotton Spinning: one new mill producing cotton yarns and cotton/polyester blends and one rehabilitated mill have been in operation since 1981.
- Cotton Weaving: one weaving mill with 650 looms and various other equipment has been in operation since 1981.
- Cotton Finishing: various bleaching, dyeing, printing and finishing equipment has been operational since 1983.
- Wool Operation: about 144 wool looms and various other equipment have been in operation since 1981.
- Apparel: 212 industrial sewing machines have been operating since 1982.
- Power and Water Treatment Plants: the water treatment plant has been in full operation since May 1983; one 22 megawatt (MW) turbine has been operating commercially since 1983, and the second 22 MW unit since April 1984.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3336.

SUEZ CEMENT PLANT
(263-0012)

Purpose: To furnish a major share of the cement requirements for the Suez and Sinai regions.

Description: This project financed the design and supply of equipment for the construction of a portland cement plant capable of producing one million tons of cement per year for the Suez Cement Company (SCC). The plant site is 60 kilometers south of Suez, adjacent to the area that supplies the raw materials. Contractors were the Fuller Corporation, Catasauqua, Pennsylvania, and H.K. Ferguson International, Cleveland, Ohio. The Egyptian implementing agencies were the Suez Cement Company and the Egyptian Electric Authority (EEA).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 76 - FY 88
<u>Total Project Funding:</u>	\$104.6 Million

Project Accomplishments:

- Construction of the plant was completed in September 1983, and performance guaranty testing was completed in May 1984.
- A final \$5 million added in FY 1986 financed spare parts, equipment modification and training.
- The plant is now in commercial operation, supplying portland cement through the Egyptian Cement sales office and private channels. Production has achieved the design capacity.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3247.

DEVELOPMENT INDUSTRIAL BANK I
(263-0018)

Purpose: To support the evolution of a modern, efficient private industrial sector by providing medium-term financing to Egyptian public and private sector firms to purchase U.S. equipment and related services.

Description: This completed project provided the Development Investment Bank of Egypt (DIB) with foreign exchange funds to support expansion of productive business activities in Egypt. USAID funds purchased U.S. equipment and related services while DIB foreign exchange from other sources procured non-U.S. goods used in priority industrial development projects. The DIB used its own resources to finance the local currency components of these projects. In addition to appraising the technical, economic and financial feasibility of the projects, the DIB examined the economic benefits to ensure consistency with Egypt's overall economic development goals. The primary Egyptian implementing agent was the DIB.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 76 - FY 84
<u>Total Project Funding:</u>	\$30.2 Million

Project Accomplishments:

- All funds, with the exception of a small residual amount, were disbursed as planned for the purchase of U.S. equipment.

Implementing Office: Office of Finance and Investment (TI/PI), extension 3247.

DEVELOPMENT INDUSTRIAL BANK II
(263-0045)

Purpose: To improve the Development Investment Bank's (DIB) ability to provide financing for Egypt's industrial sector, with particular emphasis on support to the private sector.

Description: This completed project provided assistance to improve operational management of the DIB. It focused on reorganizing the bank's operations, training bank personnel in the methods of other development institutions and providing needed equipment, including the installation of a mini-computer and other required hardware by the U.S. contractor Price Waterhouse, Inc. The primary Egyptian implementing agent was DIB.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 78 - FY 86
<u>Total Project Funding:</u>	\$1.70 Million

Project Accomplishments:

- This project was slow in starting due to a reorganization of the DIB, which had to be completed prior to project start-up.
- Emphasis of the project was on computerization to improve loan processing, monitoring and internal operations and administration.
- A computer system was installed with the assistance of Price Waterhouse, Inc.
- The project was completed in February 1986.

Implementing Office: Office of Finance Investment (TI/FI), extension 3247.

QUATTAMIA CEMENT PLANT
(263-0052)

Purpose: To furnish a large share of the cement requirements for the greater Cairo and Delta areas.

Description: This project financed the construction of a cement plant capable of producing 1.4 million tons of cement a year. The site location for the plant is about 30 kilometers east of the Cairo suburb of Maadi on the Quattamia Road, close to the site of raw materials. The American contractors were Polysius Services, Inc. of Atlanta, Georgia and M.K.- Ferguson International of Cleveland, Ohio. The primary Egyptian implementing agents were the Suez Cement Company (SCC) and the Egyptian Electricity Authority (EEA).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 78 - FY 88
<u>Total Project Funding:</u>	\$98.3 Million

Project Accomplishments:

- Plant construction is complete.
- The plant is operating at design capacity.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3336.

PORT SAID SALINES PLANT
(263-0072)

Purpose: To increase the production of salt for domestic and export markets.

Description: This completed project finances the reconstruction and modernization of the Port Said Salines Plant, which was partially destroyed during the 1967 and 1973 wars with Israel. The improved plant has an output of about 194,000 metric tons per year of various types of salt used in industries such as food processing, chemicals, paper, textiles, petroleum and leather tanning. The primary Egyptian implementing agent was El Nasr Salines Company. The U.S. contractors were STV Engineering and Foster Wheeler, Inc.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 85
<u>Total Project Funding:</u>	\$12.9 Million

Project Accomplishments:

- Plant construction was completed in early 1985.
- The plant was commissioned and performance testing was completed at the end of 1985. The plant is in full commercial operation.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3336.

INDUSTRIAL PRODUCTIVITY IMPROVEMENT
(263-0090)

Purpose: To improve industrial productivity by transferring American business know-how in management, manpower and production technology and by expanding indigenous institutional capacity to provide consulting services in these fields.

Description: This was an umbrella program with four subprojects designed to address constraints to increased industrial productivity in Egypt. The four subprojects were:

1. Management Development for Productivity (263-0090.01)
2. Vocational Training for Productivity (263-0090.02)
3. Industrial Technology Application (263-0090.03)
4. Innovative Productivity Activities (263-0090.04)

Current Status: Completed
Duration: FY 80 - FY 88
Total Project Funding: \$33.8 Million

Project Accomplishments:

Subprojects 263-0090.01, 263-0090.03, and 263-0090.04 have been completed and their status reports will be found among the completed projects at the end of this section. Subproject 263-0090.02, Vocational Training for Productivity, is presented in the Education and Training section of this report.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3336.

MANAGEMENT DEVELOPMENT FOR PRODUCTIVITY
(263-0090.01)

Purpose: To improve management in selected public and private sector industrial organizations and to increase the supply of and demand for effective management and organization development services in Egypt.

Description: Under this completed subproject, about 30 industrial firms received up to one year of intensive, hands-on, consulting, training and diagnostic services. In addition to increasing the productivity and managerial performance of these firms, subproject resources were used to develop training and public education programs geared to improving productivity. Consulting services were provided by Westinghouse, American Management Association, TEAM MISR and Delta Business Consultants.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 80 - FY 87
<u>Total Project Funding:</u>	\$7.6 Million

Project Accomplishments:

- Several clients serviced by the subproject have dramatically improved their productivity as a result of project services. For example, one firm is realizing annual savings of LE 5 million, another increased its production level by 35 percent, while reducing costs. An innovative management information system was installed to improve productivity and save costs in another firm.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3336.

INDUSTRIAL TECHNOLOGY APPLICATIONS
(263-0090.03)

Purpose: To increase the productivity of industrial firms by improving the selection and use of production technologies.

Description: This subproject provided industrial extension services to individual firms in the form of plant visits, diagnosis of productivity problems and provision of technical assistance and information to solve the problems identified. These activities were supplemented by a specialized technical library, general training programs and task force visits to the U.S. Through increasing reliance on Egyptian expertise, the project expanded Egyptian capacity to provide appropriate industrial extension services. The Georgia Institute of Technology was the U.S. contractor assisting with the implementation of the project. Egyptian and American short-term experts complemented the professional staff of the implementing agency, the Industrial Design and Development Center (IDDC).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 80 - FY 87
<u>Total Project Funding:</u>	\$8.1 Million

Project Accomplishments:

- The project provided for extension services to industry involving information, diagnosis of technical impediments to productivity improvements, observation visits to U.S. plants and training institutions and problem-specific technical assistance by U.S. and Egyptian consultants.
- The project conducted research and development on production in specific factories.
- During the first three years of the project, more than 290 separate engineering diagnoses for client firms were conducted.
- The project's specialized library and information center has responded to nearly 1,700 requests from client firms and remains in active use in the IDDC.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3336.

INNOVATIVE PRODUCTIVITY ACTIVITIES
(263-0090.04)

Purpose: To support modest-size approaches to improving industrial productivity, emphasizing the role of the private sector.

Description: Under this subproject, private and public sector Egyptian agencies responsible for industrial productivity collaborated with U.S. advisors to identify appropriate activities for financing. Activities were supported if they showed potential for improving industrial productivity with a moderate investment of additional resources, especially when the investments encouraged participation of the private sector. The primary Egyptian implementing agencies were the Industrial Design Development Center (IDDC) and the Federation of Industries. U.S. contractors included Kurt Salmon Associates, A.T. Kearney, Ralph Simms and Associates, the International Executive Service Corps (IESC) and Peat Marwick Hassan and Company.

Current Status: Completed
Duration: FY 81 - FY 87
Total Project Funding: \$1.9 Million

Project Accomplishments:

The Egyptian Federation of Industries received support for the following activities:

- A study on the potential role of and strategy for private sector suppliers to the ready-made garment industry.
- A similar study and strategy for the automotive feeder industry, with a follow-on prefeasibility analysis of the production of a small passenger vehicle in Egypt.
- Technical assistance in the design and testing of a prototype modest size clay brick factory.
- Development of a quality-improvement training program offered by the American University Cairo for members of the Federation of Industries.
- The project supported start-up of the IESC, which provides technical advisors to industrial firms from a pool of retired executives recruited internationally. This activity was also funded through the Business Support and Investment Project (263-0159) and is now continuing under the Technical Cooperation and Feasibility Studies Project (263-0102).
- A local consulting firm (Peat Marwick Hassan and Company) developed a design for a management information system for the Egyptians Abroad for Investment and Development Company, a new financial institution supporting private sector industrial firms. A contract was awarded for procurement of computer hardware and related services required for the MIS. All work was completed by July 1987.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3336.

BUSINESS SUPPORT AND INVESTMENT
(263-0159)

Purpose: To accelerate real growth of the Egyptian private sector and promote increased private investment.

Description: The project was to assist the Egyptian government in improving the business and investment climate in Egypt. Project activities assisted selected private firms through:

- Institutional development for the Capital Market Authority.
- Support to the General Authority for Investment and Free Zones (GAFI).
- International Executive Service Corps. (IESC) assistance to Egyptian businesses.
- Improvement of accounting and auditing standards.

The primary Egyptian implementing agent was GAFI.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 83 - FY 88
<u>Total Project Funding:</u>	\$3.5 Million

Project Accomplishments:

- Implementation of capital market activities, including technical assistance, commodities procurement and a training program, is complete.
- A program of training, technical assistance and equipment procurement to improve the capability of the GAFI to assist private sector firms was completed.
- Eighty Egyptian firms worked with advisors supplied by the IESC to increase their productivity and profitability. The Egyptian IESC program is now the largest in any country. The three sub-activities under IESC (Volunteer Executive, ABLE, and Joint-Venture assistance) are being continued under the Technical Cooperation and Feasibility Studies Project (263-0102) and are well-received by the GOE and the Egyptian private sector.
- An Egyptian Institute of Accountants and Auditors was established to provide professional continuing education programs. Accounting and auditing standards were revised.

Implementing Office: Office of Finance and Investment (TI/FI), extension 3247.

SCIENCE AND TECHNOLOGY

Sector profile

Egypt has a sizeable and well-trained Science and Technology (S&T) community. Most research and development (R&D) activities take place in Egypt's more than 260 public sector research institutes. A sizeable commitment to S&T is also evident in Egypt's 12 public universities. However, linkages between Egypt's S&T community and the R&D needs of productive enterprises in both public and private sectors are still relatively undeveloped. Within the S&T community there are also gaps in expertise and a bias toward basic or fundamental, as opposed to applied, research. Despite examples of institutional excellence and individual research achievements, Egypt's S&T community does not yet fulfill its potential contribution to national economic development. With structural economic reform and the evolution of a new set of price incentives, however, producers should begin to demand more productive technologies.

Over the past ten years, support for science and technology in meeting Egypt's needs in industry, energy, agriculture, health and infrastructure development has been growing. The GOE recently formulated a national science and technology policy, and has provided initial funding for portions of the Academy of Scientific Research and Technology's (ASRT) five-year plan for S&T. The United States is a world leader in scientific and technological fields, and Egypt is eager to accept U.S. scientific advice and to adopt American technologies. However, the GOE gives high priority to short-term direct investments in productive capacity and infrastructure. USAID S&T projects seek to highlight the utility of longer term indirect investments in productivity through building S&T capabilities.

Current S&T capabilities need to be focused on key national development problems. Research and development efforts must be based on end-use goals and needs. Coordination among the most seasoned Egyptian research groups should be increased; and they should give greater attention to key S&T areas such as energy conservation, efficiency and productivity.

USAID continues to encourage the GOE to undertake structural economic reform so that price signals will encourage producers to demand more productive technologies. At the same time, USAID is assisting the GOE in pinpointing critical problems and structuring comprehensive S&T projects to develop both technological solutions and their practical application. Current projects emphasize resolving a limited number of development problems that meet important and well-defined end-user needs. This key departure from a focus on broad-based capacity building provides a framework that is development-oriented, rather than driven by scientific disciplinary interests. End-users will identify needs, design and manage projects and, eventually, finance S&T efforts to fill those needs.

TECHNICAL COOPERATION AND FEASIBILITY STUDIES (263-0102)
and the A.I.D ACTIVITY TRUST ACCOUNT (FT 800)

Purpose: To assist the Egyptian government in identifying, developing, testing and implementing priority activities and in making appropriate investment decisions to meet long-term development needs.

Description: Project 263-0102 finances the dollar costs of feasibility and technical studies, general and sector surveys, preproject and project design activities, and evaluations and sector assessments. The project also finances technical assistance activities and selected Private Voluntary Organization (PVO) programs that address areas of concern not covered by other projects. The local currency costs of activities funded under project 263-0102 are financed by Egyptian Pounds in the USAID Activity Trust Account. This money is generated through sales of commodities provided by the Commodity Import Program. The primary implementing agent for this project is the Ministry of International Cooperation (MIC). Other technical ministries and agencies implement specific activities that have been approved by MIC.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 83 - FY 92
<u>Approved Total Funding:</u>	\$50.0 Million
<u>Funding to Date:</u>	\$39.1 Million

Implementation Progress:

More than 80 activities have been financed with project funds. Forty-five activities are already completed. Typical activities include:

- A major engineering study to upgrade north Cairo's water distribution system.
- A feasibility study for a 1200 megawatt power plant.
- A feasibility study on the Cairo - Assiut highway.
- A feasibility study on fertilizer marketing and distribution.
- A special assessment on the impact of selected USAID projects on women.
- A seismic stability assessment of the Aswan High and Low Dams (split-funded with project 263-0042).
- A two-year Joint Health Working Group program of 20 bio-medical research and development activities.
- The continuing activities of the International Executive Service Corps described under the Business Support and Investment project (263-0159).

PVO activities include: Fisheries development at the Aswan High Dam - CARE; and institutionalization of the Assiut Nursing Institute - HOPE.

American contractors currently involved in project activities include:

- Stone and Webster (power plant feasibility study)
- U.S. Department of Health and Human Services (bio-medical research and development activities)

Implementing Office: Program Office (PDS/P), extension 3216.

MINERAL, PETROLEUM AND GROUNDWATER ASSESSMENT
(263-0105)

Purpose: To improve the availability and usefulness of data gathered by the Government of Egypt (GOE) on existing and potential mineral, petroleum and groundwater resources and to encourage greater private sector participation in their development.

Description: The program will provide assistance to the four GOE geological institutions to: (1) improve the organization of current data on potential mineral, petroleum and groundwater resources; (2) compile reports on newly surveyed areas; and (3) improve the GOE's capacity to acquire, organize, analyze, retrieve and disseminate data on potentially commercial mineral and petroleum resources. The Egyptian implementing agents are: the Egyptian General Petroleum Corporation (EGPC), the Egyptian Geological Survey and Mining Authority (EGSMA), the Desert Research Institute (DRI) and the Remote Sensing Center (RSC).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 80 - FY 90
<u>Approved Total Funding:</u>	\$37.2 Million
<u>Funding to Date:</u>	\$33.7 Million

Implementation Progress:

- EGPC is computerizing its petroleum agreements working sheet and is developing an electric well log data base. EGSMA, DRI and General Petroleum Co. are establishing an information system for geological data. The RSC is currently producing the Landsat Atlas of Egypt.
- An aeromagnetic/radiometric survey, to identify petroleum basins and buried minerals in the eastern Desert by the U.S. contractor - Aero Service Division of Western Geophysical Company of America, has been completed and a survey of the western desert is underway. The generated data assisted ESSO in acquiring a petroleum concession. Geosource has conducted seismic surveys in the Aswan/Qena Area of the eastern desert and the Guindi basin in the western desert.
- An enhanced oil recovery (EOR) feasibility study has been completed by Improved Petroleum Recovery. A pilot test in North Bakr is using these enhanced recovery techniques.
- EGSMA has prepared minerals prospectuses for gold, limestones and clays and is distributing them to mineral investors. DRI has completed a groundwater survey in the eastern desert and has discovered three new aquifers in the Ras Ghareb-Hurghada region which could be used to process minerals found in the area.
- Seventy participants from EGSMA and DRI underwent training in the U.S. in geology, hydrology and remote sensing, organized by the U.S. technical assistance contractor, Bendix Field Engineering Corporation.

Implementing Office: Office of Science and Technology (HRDC/ST), ext. 3277.

UNIVERSITY LINKAGES
(263-0118)

Purpose: To mobilize and supplement the applied research activities of Egyptian university professors by financing their efforts to solve priority Egyptian development problems under subprojects carried out jointly by Egyptian and American universities.

Description: The project helps Egypt improve its applied research capacity and to use the research and analysis skills of key contributors in the development process. This provides a practical base for capacity building and supports proposed and ongoing problem-solving needs, while at the same time improving critical research and analysis skills areas. Assistance is provided in establishing linkages between Egyptian and U.S. institutions and researchers. The Foreign Relations Coordination Unit (FRCU) of the Egyptian Supreme Council of Universities acts as the central disbursement agent and program manager for the research subprojects supported by this project.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 80 - FY 90
<u>Approved Total Funding:</u>	\$27.5 Million
<u>Funding to Date:</u>	\$27.5 Million

Implementation Progress:

- A total of 365 joint research ventures, or "linkages," between Egyptian universities and U.S. universities are underway. Fifty-three grants aimed raising the capability of Egyptian faculty members to do applied research have been completed. Out of 263 problem-solving linkages over 70 percent are complete. These linkages included five "maxi-linkages," involving broad multi-disciplinary applied research activities between Egyptian and U.S. universities. The maxi-linkages have been in the areas of desert development, sugar beets, liver diseases, citrus seedlings and energy.
- The project has involved 1,700 faculty members from 11 Egyptian universities, 240 U.S. counterparts and 300 end-user participants.
- Many of the joint research projects have contributed to considerable savings in industrial processes. In the priority area of industry, promised annual savings are of the magnitude of \$2.3 million. A mini-linkage investigating the Suez oil refineries has resulted in annual savings of \$600,000. Another linkage involving the Cairo Power Generation Stations promises a 30 percent savings in operating costs. Linkage with the food production area has produced a new cattle fodder, certified by the Ministry of Agriculture and Land Reclamation, that will bring about savings of over LE 100 million a year.

Implementing Office: Office of Education and Training (HRDC/ET), ext. 3262.

ENERGY POLICY PLANNING
(263-0123.01)

Purpose: To strengthen the Government of Egypt's (GOE) capability to undertake integrated energy supply/demand analysis, data collection and management in support of national energy planning and policymaking.

Description: The specially-created Office of Energy Planning (OEP) will develop and use indigenous and imported energy resources to support overall national economic and social development plans. Analysis and institution-building efforts will develop original data from field measurements, provide a basis for national energy balance sheets, analyze energy use and pricing, assess the implications of alternative plans and projects, develop realistic strategies to conserve energy and develop a long-term capacity to analyze Egyptian energy uses and plans. The primary Egyptian implementing agents are the Office of Energy Planning (OEP), and the Ministry of Petroleum (MOP). The management contract is with Meta Systems.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 82 - FY 90
<u>Approved Total Funding:</u>	\$8.5 Million
<u>Funding to Date:</u>	\$8.5 Million

Implementation Progress:

- The OEP has been established and staff recruitment is virtually complete. Initial training sessions for OEP personnel and other agencies/companies were completed on industrial energy conservation, energy planning techniques and national planning. OEP is conducting at its expense monthly training programs on energy conservation for plant managers and operators. Over 1,500 personnel have been trained.
- Detailed work descriptions for planned special studies in conservation, national energy analysis and transportation have been completed and approved by OEP's executive board.
- Eleven comprehensive energy audits have been completed, with recommended improvements saving an estimated \$35 million in annual energy costs and a payback on investment in 1.4 years. Further audits are in progress.
- A cogeneration study of 13 factories identified 431 megawatts of potential capacity at a production cost of half that of conventional thermal plants.
- Data on economic activities, imports, exports, investments and family budget at household level has been supplied to Massachusetts Institute of Technology (MIT) to develop a macroeconomic model with energy interactions.

Implementing Office: Office of Science and Technology (HRDC/ST), ext. 3277

RENEWABLE ENERGY FIELD TESTING
(263-0123.02)

Purpose: To strengthen Egyptian public and private sector capability to design, procure, install, operate, maintain and evaluate renewable energy technologies that have potential for commercial use throughout Egypt.

Description: The project has three major components: 1) to develop a data base and associated information system on renewable energy systems (solar, wind and photovoltaics) that can be readily used by public and private sector enterprises in Egypt; 2) to improve the capabilities of the public and private sectors to evaluate renewable energy system applications, economics and market-substitution possibilities; and 3) to design, install, operate and maintain the systems. Field tests are an integral part of the project and will serve as the central focus for the Government of Egypt's (GOE) efforts to design and operate renewable energy systems and develop data to use in an information system for both public and private sector interests. The prime technical assistance contractor is IDEA. The primary Egyptian implementing agent is the Egyptian Renewable Energy Development and Utilization Authority (NREA) of the Ministry of Energy and Electricity (MOEE).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 82 - FY 90
<u>Approved Total Funding:</u>	\$24.1 Million
<u>Funding to Date:</u>	\$17.3 Million

Implementation Progress:

- The GOE has established the Egyptian New and Renewable Development and Utilization Authority (NREA).
- The U.S. contractor Solarex has finished construction of a photovoltaic ice making plant. Mueller Associates is about to start construction of a solar heating and energy conservation system at the Helwan Textile plant. NREA is finalizing designs for a similar system at the Heliopolis poultry plant.
- The wind resource assessment continues with over three years of published data for eight sites; five on the Red Sea coast and three on the Mediterranean Sea coast. The wind resource assessment task will continue to be expanded in order to collect data from areas with the most promising commercial resource potentials. Wind field test facilities have been constructed at Ras Gharab.

Implementing Office: Office of Science and Technology (HRDC/ST), extension 3277.

SCIENCE AND TECHNOLOGY FOR DEVELOPMENT
(263-0140)

Purpose: To enable the Egyptian Science and Technology (S&T) community to solve national development problems through applied research and technology in the fields of health, productivity, and science and technology.

Description: This project brings together Egyptian and USAID resources in solving complex problems in health, land use, energy and industrial productivity. It emphasizes development problem-solving techniques to meet end-user needs. The primary Egyptian implementing agent is the Academy of Scientific Research and Technology (ASRT).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 86 - FY 98
<u>Approved Total Funding:</u>	\$136.8 Million
<u>Funding to Date:</u>	\$ 55.0 Million

Implementation Progress:

The subprojects under this umbrella program are:

- Science and Technology Cooperation (263-0140.01). Grant programs in S&T research directed at priority development problems.
- Schistosomiasis Research (263-0240.02). A comprehensive program of schistosomiasis research and the development of vaccine agents.
- Energy Conservation and Efficiency (263-0240.03). Improved energy use through energy-efficient technologies.
- Energy Manpower Development (263.0240.04). Improving the technical and managerial capabilities of the petroleum and electricity sector.

Implementation progress for the subprojects is described on their individual project sheets on the following pages.

Implementing Office: Office of Science and Technology (HRDC/ST), extension 3277.

SCIENCE AND TECHNOLOGY COOPERATION
(263-0140.01)

Purpose: Redirecting Egyptian Science and Technology (S&T) programs to solving priority development problems that have the greatest effect on end-users and building S&T capacities in selected technologies.

Description: The project funds about 40 grants for research in predefined, high-priority problem categories and is open to Egyptian universities, research centers and private and public sector firms. The project is divided into three major components:

- The National Research Program (NRP), focusing on solving limited, but well defined national development problems.
- The Local Development Program (LDP), addressing local/rural development problems arising from the governorates and regions of Egypt.
- The Advanced Technology Program (ATP), for advanced applications in biotechnology and computer-based technology.

The Egyptian primary implementing agent is the Academy of Scientific Research and Technology.

<u>Status:</u>	Active
<u>Duration:</u>	FY 87 - FY 96
<u>Approved Total Funding:</u>	\$36.0 Million
<u>Funding to Date:</u>	\$ 8.1 Million

Implementing Progress:

- The Project Steering Committee is selecting problem areas to be addressed and research topics for each component. The U.S. consultant IDEA is providing technical and managerial assistance.
- Areas already identified include industrial minerals and chemicals under NRP; water and wastewater treatment and small-scale industries under LRP; and micro-electronics and biotechnology under ATP.

Implementing Office: Office of Science and Technology (HRDC/ST), extension 3277.

SCHISTOSOMIASIS RESEARCH
(263-0140.02)

Purpose: To control schistosomiasis by developing tools, methods and information through directed research and to help increase the capability of medical research institutions to conduct practical, control-oriented research.

Description: The project will fund research in predefined, high-priority categories through a grant program available to Egyptian Universities, research centers and U.S. and Egyptian private and public sector groups. The categories are: vaccine development; improved diagnostic methods; better chemotherapeutic regimens; epidemiology of schistosomiasis; socio-economic factors that affect the disease; and operations research to develop systems for delivering appropriate interventions. U.S. contractors are NAMRU-3, Lowell University and Medical Service Consultants International (MSCI). The Egyptian primary implementing agent is the Ministry of Health (MOH).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 88 - FY 98
<u>Approved Total Funding:</u>	\$39.7 Million
<u>Funding to Date:</u>	\$18.0 Million

Implementation Progress:

- Lowell University is working on a biological material facility in association with the Theodore Bilharz Research Institute.
- MSCI is providing management and technical assistance to the project.
- NAMRU-3 and MIH are preparing research proposals; so far nine research proposals have been presented for review. MOH is also soliciting proposals as part of the Young Scientist Award program funded by the project.

Implementing Office: Office of Science and Technology (HRDC/ST), extension 3277.

ENERGY CONSERVATION AND EFFICIENCY
(263-0140.03)

Purpose: To promote and accelerate the adoption of improved commercial technologies, processes and practices for saving energy and increasing energy efficiency. To improve the capabilities of Egyptian institutions in promoting and implementing energy-saving and productivity-enhancing investments.

Description: The project will fund about 60 applications of energy-efficient technologies and practices in both private and public sector facilities. About 1,250 engineers and other personnel from the Development Research and Technological Planning Center (DRTPC), the Tabbin Institute of Metallurgy (TIM) and the Federation of Egyptian Industries (FEI) will undergo training. The primary Egyptian implementing agents are DRTPC, TIM and FEI.

<u>Status:</u>	Active
<u>Duration:</u>	FY 88 - FY 96
<u>Approved Total Funding:</u>	\$49.5 Million
<u>Funding to Date:</u>	\$21.0 Million

Implementation Progress:

- Hagler-Bailly is providing technical and management assistance to DRTPC and TIM. Four feasibility studies are underway; two are in the private sector for the Seven-up Beverage Company and the Ramsis Hilton; and two are in the public sector at Kafr El Zayat Pesticides and the Egyptian Copper Plant in Alexandria.
- DRTPC and FEI have begun a promotional campaign to encourage private sector companies to participate in the project. So far 80 private companies have expressed interest.

Implementing Office: Office of Science and Technology (HRDC/ST), extension 3277.

ENERGY MANPOWER DEVELOPMENT
(263-0140.04)

Purpose: To improve the technical and managerial capabilities of the petroleum and electricity sectors through manpower planning, training, institution building and pilot demonstrations.

Description: The project consists of two interrelated components:

- Capacity building to improve technical and management skills focusing on: a technical and management training program; training of instructors; and improving training facilities.
- The introduction of manpower planning and development systems into the Egyptian General Petroleum Corporation (EGPC), the Egyptian Electricity Authority (EEA) and the Electrical Distribution Authority (EDA).

The primary Egyptian implementing agents are EGPC, EEA and EDA.

<u>Status:</u>	Active
<u>Duration:</u>	FY 88 - FY 94
<u>Approved Total Funding:</u>	\$8.6 Million
<u>Funding to Date:</u>	\$5.0 Million

Implementing Progress:

- The Institute of International Education (IIE) is preparing training master plans and will conduct training programs.
- The first two out of 50 Egyptian instructors are undergoing training in the U.S.

Implementing Office: Office of Science and Technology (HRDC/ST), extension 3277.

TECHNICAL AND FEASIBILITY STUDIES I, II, & III & IV
(263-0003, 263-0013, 263-0025 & 263-0042)

Purpose: To help the Egyptian government identify, develop, test and execute priority development activities and make appropriate investment decisions to meet long-term development needs.

Description: These completed projects provided grant funds for technical and feasibility studies that assisted in the identification and development of specific projects for USAID financing. Funds were also used for evaluation studies, sector assessments, preproject design work and technical assistance and to support selected Private Voluntary Organization (PVO) activities. The primary implementing agent for this program was the Ministry of International Cooperation (MIC), with the participation of other technical ministries.

Current Status: Completed

<u>No.</u>	<u>Title</u>	<u>Total Project Funding</u>	<u>Duration</u>
263-0003:	Technical and Feasibility Studies I	\$.9 Million	FY 75-78
263-0013:	Technical and Feasibility Studies II	\$14.6 Million	FY 76-78
263-0025:	Technical and Feasibility Studies III	\$17.8 Million	FY 77-82
263-0042:	Technology Transfer and Feasibility Studies IV	<u>\$27.1 Million</u>	FY 78-86
	TOTAL	<u>\$60.4 Million</u>	

Projects Accomplishments:

These projects financed the dollar costs of project design and preproject activities related to a large number of USAID-financed projects, particularly infrastructure and industrial sectors. Examples are:

- Feasibility and project studies: \$35 million Grain, Tallow, Oils, and Fats Storage and Distribution project (263-0037); \$29.7 million Mineral, Petroleum and Groundwater Assessment project (263-0105); \$49 million Small Farmer Production project (263-0079); \$94.7 million Quattamia Cement Plant project (263-0052); and \$140 million Aswan High Dam Rehabilitation project (263-0160).
- A sector study for the \$242 million telecommunications program (Phases I, II and III).
- A master plan for the \$262.3 million Alexandria Wastewater project.
- An environmental study for two power projects that were later financed by USAID, the Ismailia Steam Power Plant (\$250 million) and the Helwan and Talkha Gas Turbines (\$67.3 million).

The four projects also have financed PVO activities in income generation, health care and rural development. U.S. PVOs include CARE, Catholic Relief Services, HOPE and Save the Children.

Technical assistance activities financed by these projects include installation of medical equipment at Al Azhar University hospital and an automated information system at the Arab Maritime Academy.

Implementing Office: Program Office (PDS/P), extension 3216.

APPLIED SCIENCE AND TECHNOLOGY RESEARCH
(263-0016)

Purpose: To improve the capability of the Egyptian Science and Technology (S&T) community to develop and manage research programs for solving priority development problems.

Description: This program saw improvements in the capability of the Egyptian S&T community to develop and manage research programs in sectors of the economy that address development issues. These programs included three research demonstration projects, seven research and development (R&D) projects and three projects to strengthen the S&T community in the areas of: (1) access to information; (2) availability of maintenance and repair expertise for research equipment; and (3) development of standards and quality control regulations. The project was supervised by the Joint Consultative Committee (JCC) composed of five U.S. and five Egyptian scientists.

U.S. contractors included the U.S. National Academy of Sciences (NAS), the U.S. National Institutes of Health (NIH), the University of Wisconsin, Georgia Institute of Technology and the U.S. National Bureau of Standards. The primary Egyptian implementing agent was the Egyptian Academy of Scientific Research and Technology (ASRT).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 88
<u>Total Project Funding:</u>	\$22.5 Million

Project Accomplishments:

- The NAS assisted in a number of S&T policy studies, which have culminated in a draft technology policy for Egypt by ASRT. NAS also provided (1) consulting services; and (2) on-the-job training in R&D management and research and development of demonstration projects.
- The NIH and the University of Wisconsin established an instrumentation technology unit in the Scientific Instrumentation Center at the National Research Center in Cairo. Maintenance and repair centers were also established at eight universities in Egypt.
- The Georgia Institute of Technology established an S&T information center at each of five Egyptian ministries (Petroleum, Health, Agriculture, Scientific Research and Industry).
- The U.S. National Bureau of Standards introduced new methods of quality control and standardization at the Egyptian Organization of Standardization, the Egyptian National Institute of Standards, and the Weights and Assays Authority.

Implementing Office: Office of Science and Technology (HRDC/ST), extension 3277.

DEVELOPMENT PLANNING STUDIES
(263-0061)

Purpose: To create a permanent institutional framework through which Egyptian applied research and training capabilities can strengthen the capacity of Egyptian government ministries to carry out development programs and project planning activities.

Description: The project was implemented by Cairo University (CU) through a contract with the Massachusetts Institute of Technology (MIT). MIT assisted Cairo University in establishing a semi-autonomous applied research training institute, the Development Research and Technological Planning Center (DRTPC). One role of this institute is to improve the willingness and capacity of Cairo University and participating ministries to work together in the identification and solution of key Egyptian development problems. Efforts in the final phase of the project were dedicated to enhancing the working relationships between Cairo University and GOE ministries through faculty and staff exchanges, joint research efforts, provision of computer services and training. The DRTPC was rapidly developing the capacity and attracting sufficient non-USAID funding to continue such activities on a sound basis beyond the project's completion. The Egyptian implementing agents were the DRTPC and CU.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 1978 - FY 1988
<u>Total Project Funding:</u>	\$22.8 Million

Project Accomplishments:

- Two hundred staff members were trained at MIT, and 500 ministry personnel attended seminars, workshops and short-term courses at the DRTPC in such areas as transport, investment policy, water resource development and energy.
- Over 20 joint CU/MIT research projects were completed. Over 25 totally Egyptian funded research projects were complete, with many more ongoing. Several research projects resulted in appreciable savings or helped government agencies improve their performance in areas such as; energy policy, improved performance of the prefabrication industry and freight service planning and marketing.
- Fourteen GOE ministries, four governorates, and 11 public sector companies had signed research and/or training contracts with DRTPC at project completion.
- At the close of the project, the DRTPC was becoming financially self-sufficient as it was able to charge more clients fees that cover full costs, including its administrative overhead.

Implementing Office: Office of Education and Training (HRDC/ET), extension 3262.

SINAI PLANNING STUDIES
(263-0113)

Purpose: To assist the government in identifying, investigating, and evaluating priority reconstruction and development programs in the Sinai.

Description: This completed project funded technical assistance, planning and feasibility studies. The project also provided for equipment and supplies directly related to the identification, investigation and evaluation of priority reconstruction and development programs in the Sinai. The project was administered by the Ministry of Development, which supervised the research efforts of the U.S. consultant Dames and Moore.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 79 - FY 85
<u>Total Project Funding:</u>	\$2.7 Million

Project Accomplishments:

- The Dames and Moore consultant report was printed in late March 1985.

Implementing Office: Office of Urban Administration and Development (DR/UAD), extension 3318.

C. Building Human Resources

This section includes family planning, health and education projects that directly support the development of human resources and improve the living standards of the Egyptian people.

Population/family planning projects are directed at reducing Egypt's high fertility rate through the delivery of modern family planning services. The projects support services delivered by both public and private sector organizations.

In education, USAID resources continue to finance construction of rural, primary schools and to underwrite extensive training programs to meet Egypt's requirements for professionally qualified personnel.

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POPULATION

Sector profile

Egypt is hard pressed to expand services and employment opportunities fast enough to keep pace with its rapid population growth. The population, now at 55 million people, has more than doubled in the past 30 years, and at the current birth rate will double again in another 25 years.

USAID, the largest single donor to Egypt's population program, accounts for about 75 percent of all donor assistance. In the decade since USAID assistance began, contraceptive use by married women has increased modestly (from 26 percent in 1974/75 to 38 percent in 1988) and total fertility (average number of births per mother) has declined. Even so, during the same period the population growth rate rose from 2.4 percent to 3.0 percent because of the recent remarkable achievements in reducing infant mortality.

Many Egyptian leaders believe that economic development, rather than family planning programs, will solve Egypt's population growth problems. As a result, GOE investment in family planning services has been inadequate. In recent years, however, President Mubarak has elevated the program's priority by creating a National Population Council (NPC), and has spoken strongly in support of the need for family planning. The NPC has been given a central management role, with responsibility for policy, planning and coordination, while the Ministry of Health and Ministry of Social Affairs, through the Egyptian Family Planning Association, implement programs. These institutions require further strengthening, however, if they are to provide high-quality family planning services throughout the nation.

USAID's population/family planning assistance aims at increasing contraceptive use by expanding and improving the quality of family planning services through a wide range of organizations, both governmental and private sector. USAID supports the family planning service programs of the Ministry of Health through its system of health centers in 21 governorates, the Egyptian Family Planning Association in 18 governorates and the Health Insurance Organization, a medical insurance plan serving 3.2 million industrial workers. The USAID-financed Family of the Future program provides retail sales of contraceptive commodities through 7,500 pharmacies and most private physicians all over the country. This program accounts for more of the country's contraceptive use than the entire government program.

USAID also provides assistance to the National Population Council in improving its program operations and the national statistical organization to improve its demographic measurement and predictive capabilities. USAID helps the government's information services to broadcast prime time messages on child spacing and family planning through the mass media. This program has increased awareness of the need for family planning services, as well as specific contraceptive methods, through television and radio, printed materials and the endorsement of village opinion leaders.

POPULATION
(263-0144)

Purpose: To strengthen family planning services and increase the availability and variety of contraceptive devices nationwide so that more couples practice family planning.

Description: Implementing organizations are: the State Information Service, the Cairo Demographic Center, the Ministry of Health (MOH), the National Population Council (NPC), the Central Agency for Public Mobilization and Statistics (CAPMAS), Family of the Future (FOF), the Egyptian Family Planning Association (EFPA), the Ministry of Social Affairs (MOSA), and other government and private agencies. These organizations implement activities to expand and improve the administration and outreach of Egypt's family planning program. This second grant program (263-0144) is a continuation of activities initiated under the previous Family Planning program (263-0029).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 83 - FY 93
<u>Approved Total Funding:</u>	\$102.6 Million
<u>Funding to Date:</u>	\$ 84.0 Million

Implementation Progress:

- In January 1985, President Mubarak created the National Population Council to coordinate all population/family planning activities. The first NPC meeting was in January 1986.
- Promotion and distribution of contraceptive devices through pharmacies and private physicians is encouraged through a social marketing program conducted by Family of the Future, a private sector agency. This subproject now provides over 30 percent of all the contraceptive protection in Egypt.
- MOH activities have expanded in the areas of IUD training and clinic refresher training. Coordination with the Egyptian Health Insurance Organization in the area of family planning has proven to be a success. The organization opened 15 new family planning clinics in February 1989.
- The project director and other senior staff have been recruited for the MOSA/EFPA's new Clinic Improvement Project. Training and technical assistance for the project are underway. The first 12 primary center clinics have started operation.
- Contraceptive use by married women of reproductive age has increased from 30 percent in 1984 to 38 percent in late 1988.

Implementing Office: Office of Population (HRDC/P), extension 3273.

POPULATION/FAMILY PLANNING RESEARCH
(263-0006)

Purpose: To conduct operations research in family planning service delivery.

Description: The Office of Population in A.I.D./Washington provided funding to the American University of Cairo Social Research Center to conduct operations research in family planning service delivery in the Minufiya Governorate. The project, which was begun with A.I.D./Washington central funds and was originally referred to as A.I.D./NESA 547, included household distribution of contraceptives and surveys of knowledge, attitudes and practices of contraception. This activity was continued with bilateral funds in project 263-0029, commencing in 1977.

<u>Current Status:</u>	Completed
<u>Duration</u>	FY 75 - FY 77
<u>Total Project Funding:</u>	\$130 Thousand

Project Accomplishments:

An operations research study was completed. Findings of the study were introduced into follow-up project design considerations of project 263-0029.

Implementing Office: Office of Population (HRDC/P), extension 3273.

FAMILY PLANNING
(263-0029)

Purpose: To strengthen family planning services and increase the availability and variety of contraceptive devices nationwide so that more couples practice family planning.

Description: The program was coordinated by the National Population Council (NPC) and implemented by the Ministry of Health (MOH), Ministry of Social Affairs (MOSA), the State Information Service (SIS), Central Agency for Public Mobilization & Statistics (CAPMAS), the private sector Family of the Future (FOF), and other organizations. Subactivities were designed to improve the administration and outreach of Egypt's Family Planning program, and demographic data collection and analysis. Project activities continue under the Population Project (263-0144).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 87
<u>Total Project Funding:</u>	\$65.1 Million

Project Accomplishments:

- A family planning information education and communication program initiated by the State Information Service has been promoting family planning awareness through mass media on a nationwide basis. A recent evaluation concludes that this program has effectively spread knowledge of the need for family planning and the available contraceptive methods throughout the country.
- A social marketing program conducted by Family of the Future supported promotion and distribution of contraceptive devices in the commercial sector. Originally a Cairo-based urban program, FOF now operates throughout the country covering virtually all of Egypt's 7,500 pharmacies and most private physicians. Family of the Future has demonstrated that contraceptive social marketing is an efficient and cost-effective means for delivering family planning products to couples.
- Thirty-eight percent of married couples of reproductive age now use contraception, as compared to 26 percent in 1975. The crude birth rate stands at about 39 per thousand in 1988.

Implementing Office: Office of Population (HRDC/P), extension 3273.

HEALTH AND NUTRITION

Sector profile

Health standards are a serious problem in Egypt, reducing productivity, depressing the quality of life and, ultimately, reducing life expectancy. Debilitating parasitic (schistosomiasis), bacterial (typhoid, trachoma, TB) and viral (hepatitis) diseases are endemic among the adult population. Waterborne gastrointestinal diseases strike all age groups. Prior to the current national rehydration program, 50 percent of all deaths were in children under age five, and half of those were due to diarrhea. Acute respiratory infections are the second greatest cause of death in children. Schistosomiasis is the leading cause of morbidity for all age groups. While malnutrition has been greatly reduced through the Government of Egypt's (GOE) policy of subsidies on basic foodstuffs, there is still significant malnutrition among mothers and children due to iron deficiency, poor weaning practices and intestinal disease.

The GOE has long given high priority to the provision of public health services. Over 3,200 clinics, nearly 500 community hospitals, and about 50 modern urban hospitals give almost all Egyptians access to some sort of health care. The ratio of doctors to population is among the best in the developing world. But the quality of the public health care system is considered poor, especially in the primary care clinics, and as a result, public health facilities are underutilized. The GOE has acknowledged that its health services must be improved and is moving to bring about change. Preventive health programs, particularly child survival programs such as oral rehydration therapy (ORT) are gaining priority. The Ministry of Health plans to introduce cost recovery mechanisms and shift certain government health programs to the private sector. In the current five-year health plan (1987-1992), the GOE emphasizes the importance of preventive health programs and states its intention to more aggressively implement programs in diarrheal disease control, immunization and other interventions that combat major childhood diseases. USAID's projects in this sector encourage increased attention on preventive care, including oral rehydration therapy, immunizations, treatment of acute respiratory infections, child nutrition and child spacing.

Since the National Control of Diarrheal Disease project began in 1984, significant progress has been made in reducing child mortality from diarrheal disease. A major contributing factor to this reduction has been the education of Egyptian mothers in the use of Oral Rehydration Treatment (ORT) through television messages. In 1986, over 96 percent of the 4.5 million mothers of children under three years of age reported knowing about the benefits of ORT and 70 percent reported using it when needed. In 1983, before the media campaign, less than three percent of mothers knew about ORT or had used it. The campaign has been especially effective in reaching illiterate women and those in rural areas. The project succeeded by going directly to mothers with a basic health message.

In order to ensure the sustainability of improved medical care, USAID is helping the GOE to establish a rational health financing system for health services, emphasizing cost recovery and greater participation of the private sector in the provision of health services.

CONTROL OF DIARRHEAL DISEASES
(263-0137)

Purpose: To reduce infant and child mortality due primarily to dehydration caused by diarrhea by making rehydration services widely available through a national program.

Description: The project trains public and private sector health personnel in rehydration therapy, establishes rehydration centers in all governorate health centers and hospitals, produces and distributes rehydration materials and promotes the use of rehydration through a mass media campaign. The contractor is the John Snow Public Health Group, Inc. The Egyptian implementing agent is the Ministry of Health (MOH).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 81 - FY 91
<u>Approved Total Funding:</u>	\$36 Million
<u>Funding to Date:</u>	\$36 Million

Implementation Progress:

- The project achieved its purposes by 1987, but due to its phenomenal success has been extended by three years in order to institutionalize Oral Rehydration Therapy in the MOH services.
- A national Oral Rehydration Therapy (ORT) campaign is now in its sixth year. ORT clinics have been established in 85 percent of the 3,000 MOH clinics nationwide, and all MOH clinics have stocks of Oral Rehydration Salts (ORS). ORT training is being carried out in 30 teaching hospitals nationwide, and 30,000 physicians and nurses have received training.
- The ORT campaign is supported by television commercials shown daily on national television.
- ORS being produced by a public sector firm in Egypt. Production increased from 5 million sachets in 1983 to 75 million sachets in 1986. ORS is available in 98 percent of Egyptian pharmacies.
- Johns Hopkins/American University in Cairo is conducting a study on the project's impact on diarrhea mortality in Menoufiya governorate.
- Studies have found impressive levels of knowledge and use of ORT among mothers. 98 percent of mothers are aware of ORT, 96 percent can mix ORS correctly and 51 percent used ORS during the last episode of diarrhea.

Implementing Office: Office of Health (HRDC/H), extension 3269.

COST RECOVERY PROGRAMS FOR HEALTH
(263-0170)

Purpose: To establish a sound financial structure for the health sector emphasizing cost recovery systems.

Description: The project will concentrate on three areas:

- Implementation of policy changes to allow a fee structure for curative care and provide greater financial autonomy to curative care facilities, and financing of needed physical renovations to convert selected hospitals and clinics to fees-for-service facilities.
- Management Improvement of two health insurance systems currently operating in Cairo and Alexandria on a cost-recovery basis, with the intent of increasing their financial viability and expanding their services to a larger number of beneficiaries.
- Encouragement of private health care by providing credit guarantees for establishment of individual rural medical practices, developing prepaid group practices and improving management capabilities of private physicians.

The U.S. consultant Emrey Associates/Taylor Associates is providing technical assistance. The primary Egyptian implementing agent is the Ministry of Health (MOH).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 88 - FY 96
<u>Approved Total Funding:</u>	\$95.0 Million
<u>Funding to Date:</u>	\$20.0 Million

Implementation Progress:

- A draft handbook on policy reform guidelines has been prepared for fees-for-services facilities.
- Experience gained under the Urban Health Delivery Systems Project (263-0065) is being used to develop the management improvement program for the two health insurance organizations.
- Ten banks have expressed an interest in becoming part of the program to provide credit to private health care facilities. This activity is to be implemented through the small-scale credit guarantee program operated by the Credit Guarantee Corporation. This program has been developed in the private Enterprise Credit Project (263-0201).

Implementing Office: Office of Health (HRDC/H), extension 3269.

CHILD SURVIVAL
(263-0203)

Purpose: To reduce morbidity and mortality in infants, children and women of childbearing age.

Description: The Child Survival Project is focused on four interventions that deal with the major causes of illness and death of infants and young children: (1) immunization for six major childhood diseases; (2) early diagnosis and treatment of acute respiratory infections; (3) child nutrition; and (4) child spacing.

The project emphasizes practical, cost-effective interventions that address childhood health problems and practical field testing of vaccines that prevent major childhood diseases. The interventions include improved and expanded services in the private sector through use of mass media to create demand for preventive health services; training private sector providers such as the "daya" (traditional birth attendant); and development of private sector products such as weaning food supplements, disposable syringes and locally manufactured medical equipment. Atlanta University is the American contractor and the primary Egyptian implementing agent is the Ministry of Health (MOH).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 85 - FY 93
<u>Approved Total Funding:</u>	\$54.9 Million
<u>Funding to Date:</u>	\$26.0 Million

Implementation Progress:

- "Daya" training materials are complete and the training program is progressing.
- A national Acute Respiratory Infections (ARI) workplan is being developed. A World Health Organization training manual for doctors on ARI is being revised. Another for nurses and health workers is also being prepared.
- The project publishes regular educational messages in four magazines with nationwide readership.
- Under a national immunization campaign in 1987 Eighty-two percent of all children under five received the full series of DPT, 88 percent received the full series of polio, and 76 percent received the measles vaccine. Due to the phenomenal success of this program, Egypt now ranks second in the developing world (after Turkey) in achieving such a high coverage rate for immunizations. After a national campaign in 1988 tetanus toxoid coverage reached 90 percent of pregnant women.

Implementing Office: Office of Health (HRDC/H), extension 3269.

**STRENGTHENING RURAL HEALTH DELIVERY
(263-0015)**

Purpose: To assist the Ministry of Health in improving the health status of the Egyptian people and reducing the population growth rate through the development of replicable health and family planning services in rural areas.

Description: This completed project developed and tested health and family planning delivery services expected to have a significant impact on the long-term improvement of health in the rural Egyptian population. Examples of services developed include an improved health/family planning supervisory system; an outreach program for health services in villages; tetanus immunizations; and an Oral Rehydration Therapy (ORT) program for the reduction of the high rate of diarrheal deaths in the infant population. The primary Egyptian implementing agent was the Ministry of Health. The prime U.S. Contractor was Westinghouse Health Systems.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 76 - FY 87
<u>Total Project Funding:</u>	\$13.3 Million

Project Accomplishments:

- The project trained over 3,500 Egyptian physicians, nurses, sanitarians and laboratory assistants in Egypt and about 75 Egyptians in the United States and other countries.
- The successful test results of the project-developed ORT program led to a separate \$26 million project (Control of Diarrheal Diseases, 263-1037) aimed at decreasing infant mortality by 40 percent nationwide.
- A program of all the proven interventions developed under the project was tested in the four governorates of Assuit, Fayoum, Dakahliya, and Beheira.
- The project ended with the receipt and distribution of equipment packages to rural health units throughout Egypt in March 1987.

Implementing Office: Office of Health (HRDC/H), extension 3269.

INTEGRATED SOCIAL WORK CENTERS
(263-0020)

Purpose: To help the Ministry of Social Affairs (MSA) expand and improve social services.

Description: This completed project was designed to find ways in which social services, such as child care centers and vocational training, could be made more responsive to community needs. A center for the training of social workers in the town of Tanta in the Delta region of Egypt was established. The center focuses on producing trained social workers who can identify community needs and recommend and implement appropriate responses to these needs. The U.S. contractor was the University of North Carolina (UNC). The primary Egyptian implementing agent was the Ministry of Social Affairs.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 83
<u>Total Project Funding:</u>	\$2.4 Million

Project Accomplishments:

- A model demonstration training center in Tanta was established and is fully operational.
- A full range of training programs was designed and implemented.
- A UNC team provided technical guidance to introduce and establish a wide range of training programs for the Tanta Center. The Ministry of Social Affairs is now conducting in-service courses begun as a result of the project.
- Short and long-term training in social work and community development was carried out in the U.S. at UNC for MSA staff members.

Implementing Office: Program Office (PDS/P) extension 3216.

URBAN HEALTH DELIVERY SYSTEMS
(263-0065)

Purpose: To improve delivery and utilization of urban primary health care services, particularly maternal and child health (MCH), in the cities of Cairo and Alexandria.

Description: The project provided training; technical assistance; community outreach programs; support for the delivery of health services in the most needy neighborhoods; physical improvements or construction of health facilities; and cooperation between the health services of the Ministry of Health, Cairo University and the Health Insurance Organization.

U.S. contractors included Westinghouse Health Systems (technical assistance), DMJM/KIDDE (architecture and engineering and construction supervision), Price Waterhouse (management information systems), Emrey Associates (technical assistance) ARMCO (construction), ENCORP (construction), and AEGIS (procurement services).

The Egyptian implementing agents were the Ministry of Health (MOH), Cairo University (CU) and the Health Insurance Organization (HIO).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 79 - FY 89
<u>Total Project Funding:</u>	\$44.1 Million

Project Accomplishments:

- Health service improvements in the project's new clinics included improved record keeping; bacterial sterilization; drug packaging; nutrition education; oral rehydration therapy; community outreach; organization and management; and family planning.
- Twelve documentation manuals and four training video-tapes were prepared on improving specific services. These increased the autonomy of local clinics.
- A computerized management information system was developed and now registers up to three million patients and maintains drug use and inventory regulation for the Health Insurance Organization in Alexandria.
- Over 3,000 physicians, nurses, midwives and other health workers in the project areas received training in Egypt.
- The renovation and commissioning of 15 clinics in Cairo and 11 in Alexandria was completed. Construction of eight new clinics is complete. Construction work on the Center for Social and Preventive Medicine in Cairo is complete.

Implementing Office: Office of Health (HRDC/H), extension 3269.

EDUCATION AND TRAINING

Sector profile

Egypt's educational system does not contribute as much as it should to rapid economic growth. Nor does it allow the majority of Egyptians to attain their full human potential. Some of the problems Egypt faces in this sector are: inadequate physical facilities; increasing enrollments without a commensurate increase in resources devoted to the educational system; inadequate access to schools, especially in rural areas; limited equipment and books available to students at all levels; and poor quality of instruction. This contributes to a high primary school dropout rate and poor learning at all levels. When USAID began project assistance in this sector, first grade enrollment was below 83 percent.

In his first speech after re-election in October 1987, President Mubarak identified educational reform as one of the four areas requiring major national efforts (the other three being health, housing and tourism). The Ministry of Education has embarked on a major effort to formulate a strategy for educational reform. The strategy is designed to provide sufficient funds for school buildings to reduce crowding, to enhance technical education at secondary and higher educational levels and to upgrade and train teachers.

USAID has provided \$375 million of education and training since 1975. In a major effort to increase primary school enrollments, USAID is building 1,800 schools in rural areas currently underserved (e.g. the nearest school is at least five kilometers away). Over 1,000 schools have been completed and new schools are being built at a rate of one per day. The impact on primary school enrollments is striking. In the three years since the first schools were completed, boys' first grade enrollment in those catchment areas increased 15 percent. Girls' first grade enrollment increased much more -- 29 percent. Dropout rates in grades two through six decreased at a rate of six percent for boys and 17 percent for girls. Dropout rates are reduced markedly as schools are built nearer to where children live.

Since 1975, USAID has financed over 8,500 participants in academic and technical training in the U.S. USAID's contribution to university education and research has been through the linking of U.S. and Egyptian universities for developmental research activities. The projects in this sector, and in the Science and Technology and Agriculture sectors, have helped develop relationships between U.S. and Egyptian scientists that strengthen the capabilities of Egyptian research institutions to engage in applied research.

The standard Egyptian medical school curriculum provides little exposure to patients or patient care, and none at all to primary health care services. In a significant break with tradition, the Suez Canal Area Medical Education and Health Services project has developed a six-year course of studies in the Suez Canal University Faculty of Medicine that provides greater student exposure to local health needs. First year students are placed in rural and urban health facilities. Patient health problems serve as basic learning units. As the students progress, they receive greater patient exposure and, ultimately, responsibility for diagnosing and recommending patient treatment. Out of 50 students who entered in the first year, 44 students or close to 90 percent graduated in 1988. Forty-five percent of the students are female.

PEACE FELLOWSHIPS PROGRAM
(263-0110)

Purpose: To strengthen and expand the availability of trained manpower to assist Egyptian development efforts.

Descriptions: The project provided scholarships for 1,900 potential Egyptian leaders to study in U.S. universities one or two years in disciplines critical to the country's economic growth. Project activities are continuing under the Development Training project (263-0125). The grant is administered by the Ministry of Higher Education (MOHE), whose Missions Department handles participant training for the Government of Egypt (GOE). The Ministry selects Peace Fellow candidates and directs the program through a Project Management Committee. A U.S. private voluntary organization, AMIDEAST, under contract with the Missions Department, placed Peace Fellowship candidates in U.S. institutions and provided counseling and financial management. AMIDEAST also provided technical assistance to the Missions Department to improve its operations.

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 80 - FY 90
<u>Approved Total Funding:</u>	\$60.0 Million
<u>Funding to Date</u>	\$60.0 Million

Project Accomplishments:

- Over 2,000 Peace Fellows (19 percent women) have completed training in the U.S. About 70 percent of the students pursued non-degree studies and of the remaining 30 percent, 18 percent pursued doctorates and 12 percent master's degrees.
- Sponsorship of Peace Fellows came from a mix of sources: universities (52%); ministries (20%); public companies (12%); private firms (10%); and research institutions (6%). Fields of study include; engineering and applied science (32%); health (31%); agriculture (11%); education and social science (10%); business administration (9%); architecture (4%); and economics (3%).
- An evaluation conducted in 1983, ongoing USAID observation/monitoring of the program and dialogue with Egyptian officials confirmed that the GOE of Egypt is pleased with the performance of the returned Peace Fellows and that skills acquired under the program can make a significant contribution to Egypt's development.
- The final funding (\$6 million in FY 1985) was part of a project amendment whereby project management responsibilities (except student placement) were transferred from the U.S. contractor AMIDEAST to the Ministry of Higher Education.

Implementing Office: Office of Education and Training (HRDC/ET), extension 3262.

DEVELOPMENT TRAINING
(263-0125)

Purpose: To provide cost effective education and training opportunities for key individuals in development sectors. The project also helps the Government of Egypt (GOE) rationalize the procedures for identifying training needs, select cost effective training opportunities and optimize the use of individuals trained.

Description: The proposed project integrates all non-project training activity into one project. It contains:

- Training: (a) a better focused Peace Fellowship Program as a successor to the current Peace Fellowship Program (263-0110); (b) non-project training opportunities as the successor to Technology Transfer and Manpower Development III project (263-0026); and (c) an expanded English language training program.
- Improved GOE capacity to rationalize training: technical assistance, commodities and training to key GOE agencies.
- Upgraded in-country training in selected areas: technical assistance, commodities and training to increase the capacity of fledgling Egyptian training institutions.

The primary Egyptian implementing agents are the Ministry of Education (MOE), the Ministry of Higher Education (MOHE) and the Ministry of Cabinet Affairs and Administrative Development (MCAAD).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 85 - FY 91
<u>Approved Total Funding:</u>	\$109.0 Million
<u>Funding to Date:</u>	\$ 42.0 Million

Implementation Progress: The MCAAD has organized a core staff to implement the project. Current efforts center on: (1) the new organization, the Management Development Center for Industry (MDCI); (2) identifying individuals for training in U.S.; (3) strengthening working relations with the Ministry of Higher Education in the English Language and Peace Fellows components; and (4) setting up a Board of Trustees (policy level).

Policy Committees have been formed for non-project training and for the Peace Fellows and English Language programs. Technical assistance services are being procured in the U.S. to assist in the development of the English Language Programs.

Fifty university lecturers and instructors attended summer programs in the U.S. through the Fulbright Commission.

Refurbishing of the MDCI facility in Agouza is complete.

Implementing Office: Office of Education and Training (HRDC/ET), extension 3262.

SUEZ AREA MEDICAL EDUCATION AND HEALTH SERVICES DEVELOPMENT
(263-0136)

Purpose: To develop an innovative problem-solving process of medical education for community physicians. Well qualified community physicians, competent in the management and delivery of basic community health services, can then provide effective primary and preventive health care.

Description: This project helps the Suez Canal University establish an innovative system of medical education at the university's new Faculty of Medicine. The project also integrates the resources of the Faculty of Medicine and the Ministry of Health (MOH) to support of community health programs in the governorates bordering on the Suez Canal. About 30 Ministry of Health facilities that collaborate in training medical students will be renovated. Technical assistance is being provided by Boston University through a cooperative agreement arrangement. The primary Egyptian implementing agents are the Ministry of Education (MOE) and the Ministry of Health (MOH).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 80 - FY 90
<u>Approved Total Funding:</u>	\$17.1 Million
<u>Funding to Date:</u>	\$15.9 Million

Implementation Progress:

- Thirty-one community health units in the Suez Canal governorates have been renovated and equipped.
- Detailed curricula and associated activities for the six-year medical program are completed. This six-year course of study, unlike traditional curricula, provides extensive exposure to patient care and primary health care services. First year students are placed in rural and urban health facilities. Patient health problems serve as basic learning units. As the students progress they receive greater patient exposure and, ultimately, responsibility for diagnosing and recommending patient treatment.
- More than 120 months of professional training have been provided to Faculty of Medicine and MOH officials. Permanent housing has been provided to faculty members and a self-sufficient faculty group practice has been established.
- A graduate degree program for core Faculty of Medicine personnel began in April 1985 and the graduating class of 1987 is being followed and evaluated. Out of 50 students who entered in the first year, 44 students or close to 90 percent graduated in 1988. Forty-five percent of the students are female.

Implementing Office: Office of Health (HRDC/H), extension 3269.

BASIC EDUCATION
(263-0139)

Purpose: To expand the capacity and increase the relevance, efficiency and effectiveness of basic education in Egypt.

Description: This project includes these major activities: (1) constructing primary and preparatory schools; (2) providing instructional materials; (3) providing technical assistance to the Ministry of Education in educational planning and management; (4) teacher training; (5) printing curricula; and (6) developing resource centers for handicapped children. Technical assistance is provided by the Academy for Educational Development. The Egyptian implementing agents are the National Investment Bank (NIB), and the Ministry of Education (MOE).

<u>Current Status</u>	Active
Duration:	FY 81 - FY 91
Approved Total Funding:	\$190 Million
Funding to Date	\$190 Million

Implementation Progress:

- Over 1,000 primary and preparatory schools have been constructed to date. Instructional materials and equipment, including maps, globes, overhead projectors, science equipment and carpentry tools totaling \$40 million have been procured and distributed among 15,000 primary and preparatory schools throughout the country.
- Teams of Egyptian and American technical advisors have produced studies to assist the Ministry of Education in educational planning and management. Specific recommendations have also been made for improvements in the curriculum and teacher training and for reducing the number of dropouts and repeaters. A microcomputer based planning and monitoring model has also been produced for use by Ministry officials in Cairo and in regional offices. Studies have been completed on in-service teacher training, education for the handicapped and organization of the Ministry.
- A total of 10,000 teachers and inspectors have now been trained in the use and maintenance of USAID-donated school equipment.
- A two-year contract for curriculum development has been awarded to Educational Development Center, Inc. Assistance to the MOE in educational planning will be performed by the Research Triangle Institute.

Implementing Office: Office of Education and Training (HRDC/ET), extension 3262.

PUBLIC FINANCE ADMINISTRATION
(263-0209)

Purpose: To improve the efficiency of tax administration and equity in the incidence, assessment and collection of taxes.

Description: The recent achievements in the Tax Administration Project (TAP) have encouraged the Ministry of Finance (MOF) to expand its activities to include administrative policy and operational programs in the four major functional tax areas: (1) income; (2) customs; (3) excise; and (4) special studies such as those on estate and property tax. The Public Finance Administration Project will improve administration and taxation policies, as well as operational methods and procedures. The information pooled from research and operational activities in the three major tax revenue departments will lead to improvements in overall Ministry of Finance fiscal and administrative policy and procedures. The beneficiaries will be the individual taxpayers and private sector commercial operations.

The American consultants are the U.S. Customs Services (PASA) and Peat Marwick. The Egyptian implementing agent is the Ministry of Finance (MOF).

<u>Current Status:</u>	Active
<u>Duration:</u>	FY 88 - FY 94
<u>Approved Total Funding:</u>	\$16.2 Million
<u>Funding to Date:</u>	\$ 5.0 Million

Implementation Progress:

- Mobilization for the new project is underway and includes: 1) preparing and translating basic laws, ministerial decrees and technical procedure manuals; and 2) providing logistical support for the technical assistance teams prior to their arrival.
- Comprehensive technical assistance for all the project's activities has been awarded to Peat Marwick, which has fielded the first visit of a high-level team of U.S. tax experts.
- The Egyptian Customs Commissioner and two officials made a field trip to the U.S.

Implementing Office: Office of Education (HRDC/ET), extension 3262.

TECHNOLOGY TRANSFER AND MANPOWER DEVELOPMENT I & II
(263-0002 and 263-0011)

Purpose: To update and improve the skills of Egyptian scientists and technicians to solve technical/managerial problems in both the public and private sectors.

Description: These completed projects provided grants to finance:

- Long and short-term visits to the U.S. for Egyptian technical experts and administrators.
- Technical assistance from the U.S. to support selected technicians/scientists.
- Purchase of critically needed equipment to demonstrate updated technological processes.

The projects supported technicians and scientists engaged in problem solving activities in: agricultural production; hospital administration; health services delivery systems; nutrition survey techniques; public administration; foreign investment promotion and negotiation procedures; civil aviation; navigation; and geological and mineral survey techniques. The primary Egyptian implementing agent was the Ministry of International Cooperation.

	<u>Project 263-0002</u>	<u>Project 263-0011</u>
<u>Current Status:</u>	Completed	Completed
<u>Duration:</u>	FY 75 - FY 78	FY 75 - FY 79
<u>Total Project Funding:</u>	\$0.9 Million	\$1.9 Million

Project Accomplishments:

- Projects 263-0002 and 263-0011 financed the training of 401 participants in a variety of disciplines in the United States and other countries.
- These projects were used for a wide variety of project support and contingency activities - notably technical assistance, conferences and miscellaneous service contracts which could not be funded under USAID's other, more limited, focus developmental projects.

Implementing Office: Office of Education and Training (HRDC/ET), extension 3262.

TECHNOLOGY TRANSFER AND MANPOWER DEVELOPMENT III
(263-0026)

Purpose: To update and improve the skills of Egyptian scientists and technicians to solve technical/managerial problems in both the public and private sectors.

Description: The project financed: (1) long and short-term visits to the U.S. for Egyptian technical experts and administrators; (2) technical assistance from the U.S. to support selected technicians/scientists; and (3) purchase of critically needed equipment to demonstrate updated technological processes.

Support was given to technicians and scientists engaged in problem solving activities in the following areas: agricultural production; hospital administration; health services delivery systems; nutrition survey techniques; public administration; foreign investment promotion and negotiation procedures; civil aviation; navigation; and geological and mineral survey techniques.

U.S. contractors included AMIDEAST, the American University of Cairo, the Fulbright Commission, the African American Labor Training Center (for training and technical assistance services in labor affairs), the Bureau of Reclamation of the U.S. Department of the Interior, the U.S. Department of Health and Human Services, the United States Geological Survey, the Federal Reserve System and the Internal Revenue Service - for training activities and technical assistance pertinent to their areas of expertise. The Egyptian implementing agent was the Ministry of International Cooperation (MIC).

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 77 - FY 88
<u>Total Project Funding:</u>	\$34.9 Million

Project Accomplishments:

- This project and predecessor general training projects gave some 2,300 senior and mid-level Egyptians the opportunity to visit and work with American counterparts in identifying and/or solving technical and managerial problems constraining Egyptian private and public sector development. The exchanges funded under this project have fostered linkages between American and Egyptian professionals and institutions.
- Training and technology transfers in scientific and managerial areas (through conferences, seminars and consultants) were provided for about 85 Egyptian organizations.
- Until 1981, Project 263-0026 was used for a wide variety of project support and contingency activities that could not be funded under USAID's other, more focused projects. Beginning in 1982, Project 263-0026 was narrowed to primarily fund training.

Implementing Office: Office of Education and Training (HRDC/ET), ext. 3262.

VOCATIONAL TRAINING FOR PRODUCTIVITY
(263-0090.02)

Purpose: To strengthen the capacity of the Ministry of Industry (MOI) to plan and implement vocational training programs to raise productivity.

Description: This project focused on training centers in the Alexandria and Middle Delta areas and the Instructor Training Institute in Amereya, Cairo. Training services were provided to individual companies to increase the productivity of their labor forces. Assistance to the MOI's vocational training arm, the Productivity and Vocational Training Department (PVTD), strengthened its ability to manage decentralized, user oriented, innovative vocational training systems. This assistance: (1) provided instructor training and upgrading; (2) developed skill standards and competency tests; (3) provided selected participant training in the U.S.; (4) established a management information system and an instructor training institute; and (5) increased employment opportunities for women in skilled trades. The contractor was RCA Service Company. The Egyptian implementing agent was the Productivity Vocational Training Department of the Ministry of Industry.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 81 - FY 88
<u>Total Project Funding:</u>	\$16.3 Million

Project Accomplishments:

- All of the 24 curricula are complete and the field testing for 15 of the 24 had been finalized at project completion.
- Various in-service activities were offered to improve performance of PVTD staff members and instructors, including job related training, development of instructional materials, pedagogical techniques and occupational skills.
- Seventy-eight participants were trained abroad.
- Substantial progress was made in encouraging women to enroll in non-traditional occupational programs and in their subsequent placement in industrial jobs.
- Software for student records was developed and the computer hardware was purchased. Substantial progress was made in the development of a management information system and in formulating trade standards and competency exams.
- Construction of an instructor training institute and instructional materials production center was completed.

Implementing Office: Office of Education and Training (HRDC/ET), extension 3262.

VEHICLE MAINTENANCE TRAINING
(263-0114)

Purpose: To establish a heavy vehicle maintenance training center to serve the training needs of nine large Egyptian public sector bus and truck transport companies.

Description: This completed project provided technical assistance, participant training and equipment and supplies to establish a vehicle maintenance training center in the Mataria District of Cairo. This project has upgraded the skills of the about 5,000 vehicle maintenance workers employed by the nine target public sector bus and transport companies. Implementation of the project was carried out under a contract between the Egyptian General Syndicate for Land Transport (GSLT), the primary Egyptian implementing agent and a U.S. service company, RCA.

<u>Current Status:</u>	Completed
<u>Duration:</u>	FY 80 - FY 85
<u>Total Project Funding:</u>	\$4.5 Million

Project Accomplishments:

- The GSLT Training Center became fully operational in August 1984 and now provides training in over 12 key vehicle maintenance occupation/trade areas. About 540 key maintenance workers are annually upgraded to the skilled mechanic level.
- Fifteen instructors attended U.S. vehicle maintenance training programs and seven others trained in-country.
- Twelve engineers received training at the new GSLT Training Center.
- A total of \$1.2 million in equipment for the training center has been installed and is fully operational.

Implementing Office: Office of Education and Training (HRDC/ET), extension 3262.

TAX ADMINISTRATION
(263-0115)

Purpose: To modernize the administration of the Government of Egypt's (GOE) personal and business income tax systems to achieve improved tax equity and additional tax revenues.

Description: The project improved the GOE's capacity to administer the tax collection program by establishing a Tax Training Institute (TTI), developing an independent automatic data processing (ADP) division and reorganizing the Tax Department in the Ministry of Finance. Project management was by the U.S. Internal Revenue Service (IRS) and consulting services performed by Syracuse University and the U.S. Customs Service. The Egyptian implementing agent was the Ministry of Finance (MOF).

Current Status: Completed
Duration: FY 80 - FY 88
Total Project Funding: \$3.4 Million

Project Accomplishments:

- Advisors for the IRS acted in a technical advisory capacity with the Ministry of Finance to improve the tax collection system in the country.
- The IRS project activity made the most progress in training. When the TTI was well established and functioning, including the off-site training center in Ismailia, the IRS concentrated its remaining training assistance on executive and mid-level management courses.
- A pilot examination program was begun to prioritize and generally make more efficient the auditing of tax returns.
- Automatic Data Processing (ADP) equipment was installed. Long-range planning for ADP was undertaken by the IRS ADP advisor. The two computer sites in Cairo and Ismailia were ready at project completion.
- New procedures in several operational areas of tax administration were implemented nationwide, including improved processing and distribution of forms and reports generated by ADP.
- A review of taxation in Egypt and areas of possible future USAID program activities was completed by the IRS, Syracuse University and the U.S. Customs Service. The information produced by the review was used in a new project expanding into other taxation areas such as customs, consumption and real estate.

Implementing Office: Office of Education and Training (HRDC/ET), extension 3262.

ANNEX

LIST OF PROJECTS

in Numerical Order

C = Completed

A = Active

- Note: (1) The name and/or number in parenthesis after some of the titles refers to a prior name and/or project number.
- (2) The full office name and office extension are given on the project description page.

<u>No.</u>	<u>Title</u>	<u>Office</u>	<u>Status</u>	<u>Page</u>
263-0001	Electric Power Distribution	DR/UAD	C	30
0002	Technology Transfer and Manpower Development I	HRDC/ET	C	122
0003	Technical and Feasibility Studies I	PDS/P	C	100
0004	Suez Canal Clearance Extension	DR/UAD	C	44
0006	Population/Family Planning Research	HRDC/P	C	107
0007	Road Building Equipment - Suez Canal Area	DR/UAD	C	45
0008	Gas Turbine Generators (Talkha-Helwan) (K-032)	DR/UAD	C	31
0009	Ismailia Thermal Power Plant	DR/UAD	C	32
0010	Mehalla Textile Plant Rehabilitation (K-033)	TI/FI	C	78
0011	Technology Transfer and Manpower Development II	HRDC/ET	C	123
0012	Suez Cement Plant	TI/FI	C	79
0013	Technical and Feasibility Studies II	PDS/P	C	100
0014	Alexandria Port Authority (K-031)	DR/UAD	C	46
0015	Strengthening Rural Health Delivery	HRDC/H	C	113
0016	Applied Science and Technology Research	HRDC/ST	C	101
0017	Water Use and Management	AGR/ILD	C	57
0018	Development Industrial Bank I (K-035)	TI/FI	C	80
0019	PVC Pipe Drainage (K-034)	DR/UAD	C	58
0020	Integrated Social Work Centers	PDS/P	C	114
0021	Development Decentralization I (see 0161.1)	DR/LAD	C	38
0023	National Energy Control Center (K-037)	DR/UAD	C	33
0025	Technical & Feasibility Studies III	PDS/P	C	100
0026	Technology Transfer and Manpower Development III	HRDC/ET	C	123
0027	Rice Research and Training	AGR/A	C	59
0028	Grain Silos Storage (K-028)	DR/UAD	C	47
0029	Family Planning	HRDC/P	C	108
0030	Shoubra El Kheima Thermal Power Plant	DR/UAD	A	23
0031	Agricultural Mechanization	AGR/A	C	60
0033	Urban Electric Power Distribution Equipment (K043)	DR/UAD	A	24

<u>No.</u>	<u>Title</u>	<u>Office</u>	<u>Status</u>	<u>Page</u>
263-0035	Canal Maintenance (K-040)	DR/UAD	C	61
0037	Grain, Tallow, Oils and Fats (K-041)	DR/UAD	C	48
0038	Cairo Water Supply (K-042)	DR/UAD	C	18
0040	Irrigation Pumping (K-039)	DR/UAD	C	62
0041	Agricultural Development Systems	AGR/A	C	63
0042	Technical and Feasibility Studies IV	PDS/P	C	100
0045	Development Industrial Bank II	TI/FI	C	81
0047	Port of Suez Project (K-049)	DR/UAD	C	49
0048	Canal Cities Water and Sewerage (K-050)	DR/UAD	C	19
0052	Quattamia Cement Plant (K-051)	TI/FI	C	82
0054	Telecommunications I (K-047)	DR/UAD	C	42
0060	Poultry Improvement	AGR/A	C	64
0061	Development Planning Studies	HRDC/ET	C	102
0062	Vocational Training for Productivity (see 0090.02)	HRDC/ET	C	124
0064	Aquaculture Development	AGR/A	C	65
0065	Urban Health Delivery System	HRDC/H	C	115
0066	Low Income Housing and Community Upgrading	DR/UAD	C	50
0070	Major Cereals Improvement System	AGR/A	C	66
0071	Hydrographic Survey for the Suez Canal	DR/UAD	C	51
0072	Port Said Salines Plant	TI/FI	C	83
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0089	Alexandria Sewerage I (K-044)	DR/UAD	C	20
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0091	Cairo Sewerage I	DR/UAD	C	21
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0096	Small Scale Agricultural Activities	AGR/A	C	69
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