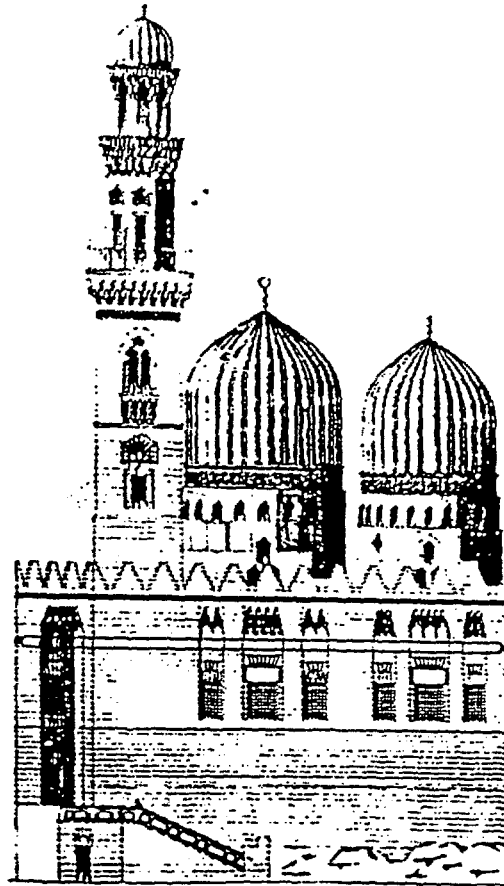


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**U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT**



**UNITED STATES  
ECONOMIC ASSISTANCE TO  
EGYPT**

**STATUS REPORT  
DECEMBER 1996**

## ABOUT THIS PUBLICATION

The USAID/Egypt Status Report contains overviews of all the active projects with title and number, the amount of funding provided to date, the amount of funding planned if the project is not yet fully funded, the fiscal year in which the project was initiated, and a brief description of the project including background and progress to date. (Note: For references to Egyptian pounds, the exchange rate is \$1.00 = LE 3.39.)

A listing of all USAID projects, active and completed, is provided as an annex. For more copies of this publication or additional information about the projects contact:

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## **USAID/EGYPT GENERAL BACKGROUND AND OVERVIEW**

The United States Agency for International Development, or "USAID," began its program in Egypt in 1975 during a period when Egypt was facing extreme economic and political challenges. The economy was at a standstill; much of its physical infrastructure had deteriorated; technical and scientific ties and relationships with the West had broken down; agricultural productivity was low; and basic health and welfare services were poor. A few years later in 1979, following the Camp David Accords and recognizing Egypt's moderating role in the Middle East, Egypt became one of the United States' largest economic assistance programs in the world. Since then, the United States Congress has provided on average \$815 million annually for this important program aimed at enhancing stability, democracy and prosperity in Egypt and the region.

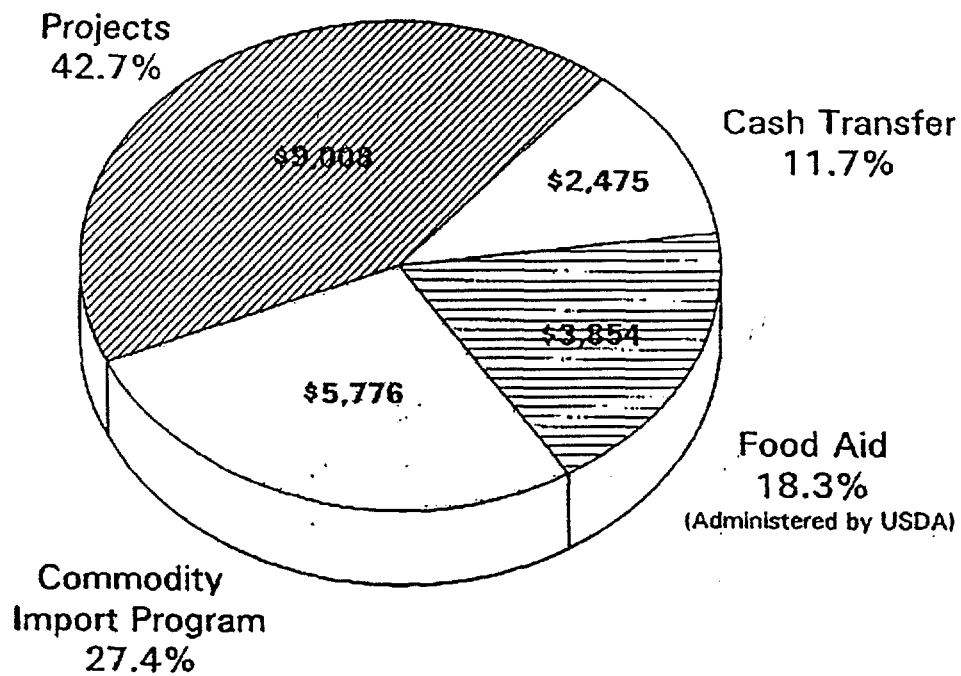
The challenges of sustainable development have been many. Egypt has been in transition, moving away from forty years of state intervention and the tight control of resource allocation. The more than \$20 billion in economic assistance provided by the United States over the past two decades have touched many lives, helping build a stronger, market-oriented economy, enhancing the quality of life for the Egyptian people, now 60 million strong.

Early assistance focused on the immediate needs of the economy, including clearing, repairing and reopening the Suez Canal to restore to Egypt and the world this important trade artery. Egypt's infrastructure also claimed early attention. Expanded electric power, water and wastewater, grain storage, telecommunications and port facilities became targets of assistance. Professional and institutional ties between Egypt and the United States were rebuilt. By the end of the 1970s, USAID had broadened its assistance to give greater attention to agriculture, health and basic education, addressing quality of life problems facing Egypt's people, particularly those in the rural areas, and promoting local development. USAID also began helping Egypt rebuild its industrial and commercial base through U.S. imports of commodities, equipment and intermediate goods. Working with the Egyptian government on structural adjustment and policy reforms opened up a greater role for the private sector and touched many enterprises both great and small. Whether the immediate target was regulatory changes and privatization or greater access to credit by small and micro entrepreneurs, the bottom line has been to facilitate market entry and increase the number of productive jobs.

Some results of these investments include dependable electricity, clean water, significantly improved health care, more schools, reliable telecommunications, improved village infrastructure and services, new technologies building a more efficient and diversified agricultural base, and expanded farmer access to credit, seeds and fertilizer. The portfolio of activities has shifted and grown, responding to Egypt's changing developmental needs based on our mutual goal to increase economic growth and the quality of life of Egypt's people. To deal more effectively with problems hindering rapid and sustainable economic growth, Vice President Gore and Egypt's President Mubarak launched the U.S.-Egyptian Partnership for Economic Growth and Development in September 1994 which broadens and deepens the economic relationship between our two countries and enhances linkages between the U.S. and Egyptian private sectors. USAID plays an important role in the network that supports the Partnership and receives valuable impetus from the Partnership for key USAID program objectives, such as the promotion of private sector-led, export-oriented economic growth.

# U.S. ECONOMIC ASSISTANCE TO EGYPT

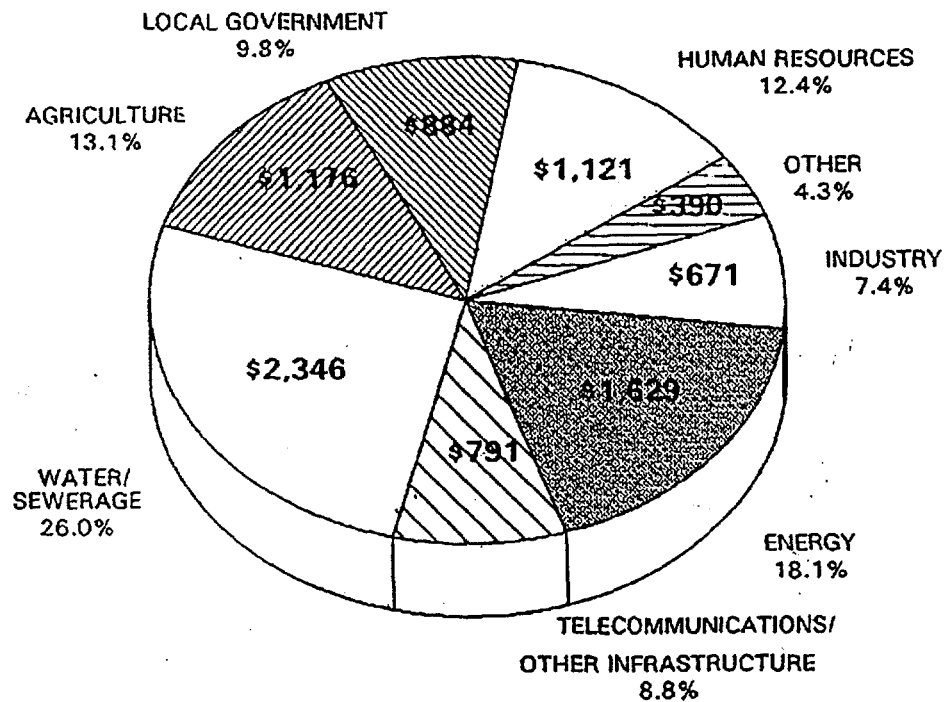
1975 - 1996 (\$ MILLION)



**TOTAL \$21,113**

# PROJECTS BY SECTOR

1975 - 1996 (\$ MILLIONS)



**TOTAL \$9,008**

# ECONOMIC GROWTH

## OVERVIEW

Egypt has used its strong political leadership in the Middle East to promote a broader peace between Israel, the Palestinians, and neighboring Arab states. Due to the slow growth of its economy and persistent structural imbalances, Egypt has not reached its true potential as a national or regional economic power. Moreover, slow economic growth has led to rising unemployment which threatens Egypt's long-term stability. Both the United States and Egypt recognize that for regional stability to continue, Egypt must be both prosperous and stable.

The United States and other donors, including the International Monetary Fund and the World Bank, have been working with the Government of Egypt (GOE) to promote a market-oriented economy where the means of production increasingly shifts from the public to the private sector through privatization, where competitive markets develop and thrive and private sector productivity increases, and where the private sector acts freely to promote its exports. USAID's number one strategic objective in Egypt is to support accelerated private sector-led, export-oriented economic growth.

A large share of U.S. economic assistance to Egypt is linked to economic growth objectives and covers a broad range of activities in the areas of sector policy reforms, commodity import programs, private sector encouragement, agriculture, telecommunications, power, and education.

Sector policy reform grants are used to help ease periods of difficult transition created by the reform movement. Policy reforms often involve complicated actions affecting legal, regulatory, judicial, institutional and tax structures which carry with them extraordinary costs, such as lost revenue or increased administrative burdens. Likewise, a thorough understanding of past, present and future linkages is required to ensure reforms are well thought out before adoption and implementation. Technical analyses are the lifeblood of the reform process.

Because of the complex nature of government holdings, which have dominated the Egyptian economy since the 1952 Revolution, special efforts were needed to promote privatization. Financial support is provided when reform actions are implemented. Technical assistance is also provided to analyze policy options, introduce advisory and merchant banking services, evaluate the marketability of properties and assist in their sale, and develop an outreach campaign to encourage greater understanding of privatization issues. Privatization is seen by many as the key signal to the international business community of Egypt's commitment to the establishment of a free market economy.

Other activities to strengthen the Egyptian economy include increasing access to credit for small entrepreneurs, commodity import assistance for medium to large private enterprises seeking to fill import needs with capital and non-capital goods from the United States, and assistance in public finance to promote an efficient, equitable tax base.

Reflecting many of the priorities set by the U.S.-Egyptian Partnership for Economic Growth and



Development, USAID activities promote the latest and most appropriate technology, market opportunities, management training, international quality standards, improved business links through computer information systems and facilities, and agribusiness partnerships with U.S. firms, among others.

Agriculture accounts for approximately 40% of Egypt's gross domestic product (including agricultural production, marketing and processing) and 50% of overall employment, as well as 22% of commodity exports. Agriculture's overall contribution to economic growth can be considerably enhanced by increasing the net value added of key crops. Towards that end, USAID is working with the GOE and the private sector, to further the adoption of technologies for the development of high-value horticultural crop exports. Critical technology constraints to the efficient production of Egypt's staple food crops are also being addressed.

Egypt has successfully adopted many reforms affecting the agricultural sector, opening up most major producer markets to private competition. Continuing constraints remain in areas related to food security, marketing and trade, water resources, private sector participation in agribusiness and the government's sector resource allocations. These areas will be the subject of further study and reform.

Infrastructure investments continue to ensure modern, reliable, and sustainable telecommunications services that support business expansion. Industry and business have also benefitted from USAID's large investments in power. Today, representative of new market strategies, the Egyptian government is considering proposals from private sector enterprises to build, operate and transfer power to the marketplace to supplement public sector generation.

Finally, USAID is investing in people through education. With one of the highest literacy gender gaps in the world and unacceptably low literacy rates for both males and females (63% and 34%, respectively), Egypt must do a better job of ensuring universal primary education to compete in the 21st century. USAID's current focus is on girls' education and improvements to early education such as outreach through educational television, both of which are strongly encouraged by the GOE.

## SECTOR POLICY REFORM

During the mid-1980's, external financing from Suez Canal tolls, expatriate remittances, oil exports, tourism and bilateral aid all decreased at a time when the price of oil fell. In response, the Government of Egypt initiated expansionary fiscal policies to maintain public sector outlays. These actions resulted in a worsening balance of payments situation, increased foreign debt and the depletion of international reserves. No longer able to borrow its way to growth, by 1990, Egypt faced a major crisis with a foreign debt of \$50 billion and no capacity to repay it. New opportunities for fundamental economic reform came during the Gulf War which provided Egypt with substantial debt relief and additional economic assistance. After signing agreements with the IMF and the World Bank in 1991, Egypt embarked on a serious reform effort.

USAID's partnership with Egypt attaches particular importance to the contribution policy reforms make in advancing economic growth. To promote specific changes in a range of sectors -- trade, fiscal, financial, enterprise and environmental -- USAID provides the Government of Egypt with a combination of cash transfers upon the adoption of agreed to reforms and in some cases technical and commodity assistance to facilitate their execution. About \$200 million of the \$815 million assistance package is reserved annually for cash transfers. Reforms supported under USAID's phase one sector policy reform program, now completed, included privatizing or liquidating state-owned enterprises, removing import bans and special import conditions, allowing foreign banks to operate in the domestic banking system, enacting a securities market law to revitalize the stock market, establishing a capital/asset ratio for commercial banks, implementing a global personal income tax which lowered marginal tax rates, removing price controls from the tourism sector, and decontrolling banking fees. Many of these represent incremental steps towards larger targets and therefore continue under the third phase of USAID support.

Title: **Sector Policy Reform III (SPR III)**  
Number: **263-K-634**  
Amount: **\$200 Million**  
Initiated: **FY 1996**

This is the third in a series of policy reform programs supporting Egypt's continued transition from a centrally-planned to a more open, market-oriented economy. Overall, policy reforms under this third phase continue to introduce greater competition and efficiency in the financial sector, reduce trade barriers, accelerate privatization, and focus needed attention on Egypt's environmental problems.

Background/progress:

See SPR II, 263-K-629, for progress. Examples of reforms planned under the new SPR III include:

Lower and reduced variance between effective rates of tariff protection and streamline administration of customs procedures;

Reduce costs of Egyptian air freight and continue breaking up monopoly in maritime transportation and services;

Reform legislation to allow entry and operation of foreign owned trading companies and import and export services companies;

Privatize 25 state enterprises, 1 public state bank and 1 state insurance company;

Reform commercial and civil codes to provide a modern system for using tangible assets as collateral.

Issue prudential standards for securities financial services;

Reform legislation to allow for greater freedom for profit and non-profit organizations and streamline and modernize the commercial registry to allow easy and quick registration for enterprises;

Improve access to key economic data;

Phase out leaded gasoline and reduce consumption of high polluting fuels;

Enforce air emission regulations for vehicles and stationary sources which are equally applicable to both public and private sectors;

Adopt and implement sustainable tourism in the Red Sea Coastal region.

Title: **Sector Policy Reform II (SPR II)**  
Number: **263-K-629/K-630**  
Amount: **\$400 Million**  
Initiated: **FY 1995**

This is the second of a series of USAID cash transfer programs supporting policy reform in Egypt. Cash transfers are extended to the Government of Egypt (GOE) in exchange for policy reforms in the financial, fiscal, trade, private enterprise and environment sectors. The overall objective of SPR is to support Egypt's continued transition from a centrally-planned to a more open, market-oriented economy.

Background/progress:

Significant economic reforms have been implemented by the GOE under the auspices of SPR II. These reforms have, among other things, introduced greater competition and efficiency in the financial sector, reduced trade barriers, accelerated privatization, and focused needed attention on Egypt's environmental problems. Reforms to be addressed during the remaining period of SPR II include:

- Continued reduction in state bank controlling ownership in joint venture banks;
- Privatization of at least 30 additional state enterprises;
- Expansion of the general sales tax to the retail level;
- Structural and administrative reform of the global personal income tax;
- Reduction in maximum import tariffs to at most 50%;
- GOE actions to streamline the system of standards and quality controls applied to imports and exports;
- GOE actions to introduce more competition in the provision of port services;
- Implementation of the new unified investment law;
- GOE adoption and initial implementation of a comprehensive plan to reduce lead emissions.

Examples of specific reforms implemented to date under SPR II include:

- Privatization of 15 state enterprises, 5 joint-venture banks, and one joint venture insurance company;
- Capital market reforms to encourage active trading on the stock exchange, allow new instruments, and free brokers' commissions;
- Reduction of maximum import tariffs from 70% to 55%;
- Simplified export procedures and the establishment one-stop-shops for exports;
- Legislation enacted to permit foreign majority ownership of joint venture and private banks;
- Streamlining of the temporary admission system for imports making it less costly to use.

Title: **Technical Support for Sector Policy Reform  
(TSSPR)**

Number: **263-0233**  
Amount: **\$35 Million**  
Initiated: **FY 1992**

The reform process requires a thorough understanding of past, present and future linkages to ensure reforms are well thought out before they are adopted and implemented. Technical analyses are the lifeblood of the reform process. Under TSSPR, USAID provides the GOE with technical assistance to develop, carry out, monitor and evaluate key elements of the reform program associated with the continuing phases of the Sector Policy Reform Program.

Background/progress:

Current activities include assistance to the following entities:

Ministry of Scientific Research to improve intellectual property rights;

Central Bank of Egypt (CBE) and Capital Market Authority to help reform the regulatory process;

Central Agency for Public Mobilization and Statistics to strengthen its statistical capability;

Egyptian Environmental Affairs Agency to develop a lead pollution reduction action plan and improve air quality regulations;

Ministry of Finance to help reformulate tax policy and implementation;

A consortium of research organizations to improve their ability to provide market-oriented research and communicate the results of that research to the Government of Egypt and the population at large.

Progress to date includes:

- Trademark and Industrial Design offices co-located to provide more efficient service to customers for intellectual property rights.
- Survey completed of 15,000 households allowing Egypt to update its economic statistics, including the Consumer Price Index (CIP).
- Procedures for CBE on-site and off-site banking operations have been modernized.

Title: **Public Finance Administration**  
Number: **263 - 0209**  
Amount: **\$31.3 Million**  
Initiated: **FY 1988**

An effort to promote fiscal stability by improving the efficiency, equity, elasticity and neutrality of the tax system is an integral part of the Government of Egypt's (GOE) economic reform program. USAID support is helping the Ministry of Finance (MOF) to:

Simplify and unify the direct tax system with a view to reducing overall tax rates;

Introduce a modern Value Added Tax (VAT) type system in the form of a General Sales Tax (GST) reaching to the wholesale and retail levels;

Modernize and streamline the administration of direct and indirect taxation to reduce administrative burdens on both the revenue authorities and the taxpaying community; and

Create more effective systems for collecting, analyzing and using fiscal and economic data.

Background/progress:

- A "global income tax" became effective January 1, 1994.
- Various stamp tax duties and capital gains tax charges previously imposed on financial transactions have been abolished.
- A general sales tax (replacing the consumption tax) extending to the manufacturing and importing levels, and to several key services, has been in force since 1991. GST revenues for 1995-96 were L.E. 10.5 billion compared with revenues of L.E. 2.8 billion in the last full year (1989-90) of the consumption tax. The GST has replaced customs as the second most important source of tax revenues.
- Tax administration procedures have been extensively automated to date (193 out of 212 direct tax district offices and 45 out of 60 sales tax district offices). Telecommunications networking of an initial 25 sales tax district offices is in progress. An "on-line enquiry" system for use on the sales tax network has been implemented and is undergoing further expansion and development.
- Training facilities and technical/managerial curricula have been significantly expanded to support administrative reform and automation. The capacity to design, develop and deliver training courses and materials of high quality has been institutionalized.
- Economic Research Departments have been established in the office of the Minister of Finance, the Tax Department and Sales Tax Department. Computer models for use in economic and fiscal analysis and forecasting have been developed and installed and relevant staff trained in the use of these models.

## **COMMODITY IMPORT PROGRAM (CIP)**

The Commodity Import Program (CIP) was initiated in 1975 in conjunction with the start-up of U.S. economic assistance to Egypt and has accounted for \$5.4 billion or about one-fourth of all assistance provided to date. At its inception, CIP was instrumental in helping Egypt to reduce its sizeable balance of payments deficits and in ameliorating Egypt's negative foreign exchange position. Today of the \$815 million in U.S. economic assistance appropriated for Egypt each year, the U.S. Congress provides \$200 million for the financing of commodities through the CIP.

Initially, the CIP financed public sector purchases of American made products to meet critical import needs of the Government of Egypt (GOE). Later, when USAID/Egypt's country strategy focused greater attention on the promotion of private sector participation in the economy, the CIP was expanded to support private sector enterprises as well. For the past several years, all new CIP financing has been directed to support the private sector.

Title: **Private Sector Commodity Import Program  
(PRCIP)**

Number: **263-0201/263-K-632/263-K-633**

Amount: **\$1.785 Billion**

Initiated: **FY 1986**

Key elements of the Government of Egypt's (GOE) efforts to restructure the Egyptian economy involve reforms aimed at the establishment of a healthy private sector-led, market-based economy. USAID has been a partner of the GOE in this effort. An early reflection of this partnership was the decision to create a Commodity Import Program exclusively focused on the needs of private sector enterprises. USAID's PRCIP presently provides \$200 million per year to Egyptian private sector business, accessible through twenty-three participating Egyptian commercial banks, for short-and medium-term trade and investment financing for the importation of equipment and materials from the United States.

Background/progress:

Interest-free grace periods and special financing terms provided by the PRCIP make possible an accelerated pace of private sector investment in Egypt. The importers' loan repayments in local currency are deposited into a special Central Bank account and used by the GOE to finance development activities mutually supported by USAID and the GOE.

Under the present PRCIP, financing is available for transactions valued as low as \$10,000, thereby encouraging small or emerging private sector businesses to participate and take advantage of the financing provided. Preferential terms are now available to encourage investments in Upper Egypt and businesses that predominately export their products.

A mid-term program evaluation revealed that sixty-two percent of survey respondents reported that the PRCIP helped increase their firms' sales and production. Thirty-five percent said it had increased their firms' employment. Of the participating U.S. suppliers contacted during the evaluation, forty-six percent were introduced to the Egyptian marketplace through PRCIP.

- About 1,100 Egyptian private sector importers have used PRCIP resources. Their transactions have involved 1,200 U.S. manufacturers and suppliers from 47 states, the District of Columbia, Puerto Rico and the Virgin Islands, and more than 1,110 different commodities. Categories of goods include equipment and machinery, intermediate goods and raw materials.
- During 1996, the program financed 678 individual commercial transactions totalling approximately \$210 million out of \$1.634 billion to date.



Title: **Public Sector Commodity Import Program (CIP)**  
Number: **Various**  
Amount: **\$ 3.889 Billion**  
Initiated: **FY 1975**

CIP for Egypt's public sector played a key role over the past two decades in helping the Government of Egypt (GOE) stabilize balance of payments. The sustained level of commodity support provided under the program during periods of severe economic strain contributed significantly to the underlying strength of the economy and permitted the GOE to undertake the massive economic restructuring efforts currently underway. Today, virtually all public sector transactions are completed. Now, all Commodity Import Program resources are provided in support of the private sector.

Background/progress:

Examples of CIP-financed commodities imported by the public sector and benefitting the country include:

- Fire trucks, construction equipment, garbage trucks, dump trucks, street sweepers, and buses for the Governorates of Cairo, Alexandria, Suez, Port Said, Ismailia, Giza and Sohag.
- Equipment for teaching hospitals at Cairo, Ain Shams, Tanta, Assuit and Sohag Universities.
- Magnetic Resonance Imaging (MRI) providing advanced clinical diagnostic systems for two university hospitals: Cairo and Ain Shams. Cat scanners for Al Azhar University and the university hospitals of Alexandria, Ain-Shams, Menoufia and Assiut.
- Telecommunications equipment upgrading telephone exchanges in Alexandria and Greater Cairo (Ramsis, Giza, Pyramids and Opera) adding over 60,000 lines to the national network.
- Spare parts (generators, cables, cranes, turbines, substation equipment) to keep various power plants operational (Aswan High Dam, Talkha, Abou Sultan and Sharm El Sheikh) and help maintain the electrical distribution network.
- Computers, laboratories, educational materials and equipment for the education system.

## **PRIVATE SECTOR**

For decades, Egypt pursued economic policies based on state intervention, centralized decision-making, public sector dominance of industrial production, import substitution and a highly regulated system of controls on private economic activity. The cumulative effect of those policies by the mid-1970s was a rigid, segmented, inefficient and slow-growing economy.

The Government of Egypt (GOE) announced an "Open Door Policy" in 1974 to attract foreign investment and included private sector-led growth objectives in all subsequent development plans. There was little incentive for fundamental change and progress was limited, however, the Egyptian economy was buoyant with oil exports at favorable prices, remittances, and generous inflows of foreign assistance. By the end of the 1980s, declining oil revenues and mounting economic difficulties led to a watershed for a new economic orientation and in 1991 the GOE embarked on a comprehensive economic reform and structural adjustment program. Over the past three years, significant achievements have been made, especially with respect to macroeconomic stabilization. However, much more remains to be done to ensure an environment within which private enterprise may flourish. The objective is to allow the private sector to achieve rapid, efficient, and sustainable growth.

Until 1992, due to major policy constraints and the absence of a viable private sector, USAID focused its private sector support mostly on the needs of small and micro enterprises (SMEs) using non-profit foundations to facilitate SME access to credit and loan guarantee programs from SMEs with the banking system. With the GOE's adoption of structural adjustment, USAID expanded its private sector program to help the GOE remove or alleviate the remaining regulatory and institutional constraints to private sector-led growth. The result of this new environment will be increases in investment and output; in productivity, competitiveness and global markets for Egyptian goods and services; and lower cost of goods and services for domestic consumers which will translate into sustainable increases in economic growth, employment, income and standards of living.

Title: **Growth Through Globalization (GTG)**  
Number: **263-0264**  
Amount: **\$36 Million (\$149 Million planned)**  
Initiated: **FY 1996**

GTG supports the efforts of Egyptian firms to become more competitive in the global economy through a set of activities that provides technical assistance to the private sector.

Background/progress:

To achieve broad-based economic growth that can be sustained and that can generate the level of jobs needed to overcome high unemployment and persistent poverty, Egypt must take steps to open the economy further, attract investment, increase competitiveness, increase productivity and spur exports. GTG supports those steps. Some GTG activities provide services directly to private sector firms. Others work to overcome obstacles that may adversely impact on a whole industry or the wider private sector.

GTG support is diverse. Its activities promote the adoption of improved products, technologies, and management practices; increasing access to market information; promoting better financial services; building strong private sector associations that can advocate reforms favorable to private sector-led economic growth; and liberalizing the rules of international trade and local markets. Its activities are characterized by synergistic relationships among the organizations involved. Its broad framework allows access to many private sector partners.

New and existing activities sharing mutual objectives are being brought together under the GTG umbrella. GTG partner organizations include the Egyptian Exporter Association, the Federation of Egyptian Industries, the American Chamber of Commerce, Agricultural Cooperative Development International, the President's Council established under the U.S./Egyptian Partnership for Economic Development, the Egyptian Center for Economic Studies (ECES - 263-0230) and the International Executive Service Corps (IESC - 263-0225). Individual reports on ECES and IESC representing carry-over activities can be found elsewhere in this report.

Title: **Privatization Support**  
Number: **263-0238**  
Amount: **\$35 Million**  
Initiated: **FY 1993**

USAID is assisting the Government of Egypt (GOE) with the sale of public enterprises and major assets through institutional development and related technical assistance. Progress in privatization is seen by many in the international business community as the key signal of the GOE's commitment to the establishment of a free market economy.

Background/progress:

The Government of Egypt announced its intention to broaden the ownership structure of 314 state-owned enterprises in 1991 and later added a goal of privatizing 23 joint venture banks to its program. USAID's support for GOE privatization provides technical assistance in four areas to accelerate implementation.

**Sales:** To increase their capacity to prepare privatization transactions, assistance is being provided to the Ministry of Public Enterprise, the Public Enterprise Office, GOE holding companies, affiliate companies, non-governmental organizations, and financial institutions. An anchor investor manual, guidelines for the various privatization methods, and a code of ethics are examples of technical assistance materials being developed to enhance sales.

**Public Relations:** To educate key audiences about the opportunities and benefits presented by privatization and to encourage their support, the Egyptian media and other organizations are involved in local and international public relations programs.

**Organizational Development:** To improve the planning, design and implementation of the privatization program, institutional capabilities of related GOE entities are being strengthened.

**Policy Support:** To address prevailing political policy, regulatory, and organizational impediments, policy reforms are encouraged. One example of a major reform grew out of recommendations concerning the level of public sector debt and the utilization of sales proceeds: A four-person ministerial committee has been appointed to manage the proceeds from privatization now deposited in a central account.

- With strong backing from both President Mubarak and the Prime Minister, and in tandem with numerous policy and regulatory reforms, privatization activity has increased significantly over the past year. As of December 1996, 42 companies and 13 joint venture banks have been privatized (measured by the transfer of over 50% ownership from the government to the private sector). These figures include liquidations. GOE ownership of a further 49 companies has been partially privatized (ranging in amounts from 5% to 50%).

Title: **Egyptian Center for Economic Studies**  
Number: **263-0230**  
Amount: **\$5.5 Million (\$8.5 Million planned)**  
Initiated: **FY 1993**

Recognizing the importance of having Egyptian institutions actively meeting informational, analytical and advocacy needs of the nascent private sector, USAID provides funding for the Egyptian Center for Economic Studies (ECES), an independent, non-profit research institution aimed at researching policy options and fostering dialogue on important economic and regulatory policy issues in Egypt.

Background/progress:

Led by a private sector Board of Directors, ECES has been chartered under Egyptian Law 32. The Center's research program is addressing domestic economic, regulatory and international policy issues of importance to Egypt.

ECES's institutional development is expected to result in a facility that will carry out research, analysis, public communications and attain long-term financial autonomy. The Center is becoming a key player in providing analytical/independent advice to policy makers and engaging the community in a productive dialogue with respect to economic issues.

- The Center has held a number of highly successful seminars including one on the technical aspects of the GATT which involved Egyptian public and private sector representatives, a seminar on economic reporting which provided insights into how to deal with economic issues more effectively, and a seminar for Egyptian non-governmental organizations (NGOs) which provided them with management tools and established an ongoing network between the ECES and the NGO community.

- In 1996 the Center organized six Distinguished Lecture Series (DLS), seven round table discussions, two conferences, and a special event on the International Monetary Fund-Egypt relationship. The Center has published seven working papers and four DLS issues papers. These publications covered a wide range of topics, including economic growth, exchange rate policy, transaction costs, regional agreements and integration, privatization, savings, the role of institutions in development, and pollution abatement. The Center has also co-published a volume on the outcome of the June 1996 conference on Egypt and the European Union agreement.

Title: **Small Enterprise Credit (SEC)**  
Number: **263-0228**  
Amount: **\$35 Million**  
Initiated: **FY 1991**

Efforts under SEC to address the short-term credit needs of small and micro entrepreneurs (SMEs) in the greater Cairo area resulted in USAID collaboration with the National Bank for Development (NBD). In September 1996, SEC expanded its lending program to the Credit Guarantee Corporation (CGC) to provide financial, technical assistance, training and other services to SMEs throughout Egypt using a national web of lending organizations including banks, non-governmental organizations and community development associations.

Background/progress:

Using the existing facilities of NBD's central office and thirteen branch offices, space was furnished and equipped to accommodate 250 full time SEC staff to work as SME loan officers, supervisors and support staff.

The principal features of the NBD loan program are:

**Loan Approval Process:** Loan officers regularly visit target neighborhoods seeking out potential borrowers, assisting them in calculating their loan requirements, and establishing their eligibility to participate in the program. Completed loan applications are delivered to the branch offices for processing. Approved borrowers are required to place ten percent of the requested loan amount into an NBD interest bearing savings account. Loan officers return to successful loan applicants in their place of business to deliver loan documents and funds. Periodic follow-up visits are made to target neighborhoods at least weekly.

**Eligible Borrowers:** Generally small entrepreneurs in the greater Cairo area, with less than 15 employees, and less than LE 25,000 (\$7,350 equivalent) in fixed assets, excluding land and buildings.

**Loan Size and Term:** LE 250 to LE 5,000 (\$73 - \$1,470 equivalent) for 4-12 months.

- NBD has established an efficient and effective SME lending program which is capable of sustaining and expanding its activities based on reflows of principal and interest into the fund.
- To date (December 1996) 88,000 loans valued at over LE 233 million (\$68.5 million equivalent) have been extended to Egyptian entrepreneurs in the greater Cairo area.

Title: **Export Enterprise Development**  
Number: **263-0226**  
Amount: **\$10 Million**  
Initiated: **FY 1992**

The Trade Development Center (TDC), a non-governmental organization under the U.S./Egypt Joint Business Council, was established with USAID support to stimulate nontraditional exports by the Egyptian private sector. Today TDC activities are effectively helping Egyptian firms increase their access to market information, accelerate their adoption of improved technologies and management practices, and improve the general export policy and regulatory environment in Egypt.

Background/progress:

TDC helps private Egyptian firms identify potential markets and market requirements abroad and develop and implement sound marketing strategies. They introduce Egyptian producers to foreign buyers at international trade shows, facilitate visits to the export marketplace, and encourage networking with foreign business representatives. Egyptian firms receiving TDC support represent light industries, e.g., ready-made garments, furniture, footwear, and processed food. Accomplishments include:

- Increased access to market information gained by 450 Egyptian firms and 80 foreign firms.
- Information on improved products and technologies transferred to 70 Egyptian firms.
- Technical assistance in management practices received by 60 Egyptian firms.
- The value of the client Egyptian firms' productivity level increased by \$62.5 million.

The positive returns of TDC contributions to the Egyptian economy have been well documented. As a result, USAID support will continue under Growth Through Globalization (see 263-0264), launched in FY 1996.

Title: **International Executive Service Corps (IESC)**  
(Funded under Technical Cooperation and Feasibility Studies)  
(Funded under Growth Through Globalization beginning in FY96)

Number: **263-0225; 263-0264**

Amount: **\$39.4 Million**

Initiated: **FY 1992**

The International Executive Service Corps (a U.S. private voluntary organization) and its volunteer executives deliver technical, managerial and training assistance to Egyptian private enterprises to improve the efficiency and productivity of Egyptian private sector firms under a number of USAID grants.

Background/progress:

IESC volunteers are working to improve management systems and organizational structures, enhance productivity, ensure quality control, develop market information, and assist in new product development.

- IESC completed over 200 service projects in 1996, with a total of 2,300 to date.

One example of a company that achieved beneficial results with IESC services is the El Roda Company, a grower/packager of table grapes. In 1994, the El Roda Company was unable to export grapes to Europe because of their poor quality. After implementation of four technical assistance projects in various areas of grape production, El Roda's exports to Europe increased to \$1 million in 1995 and \$2 million in 1996. Their operation is more cost efficient and worker conditions have improved. Other growers are now following El Roda's example.

Under the U.S./Egyptian Partnership for Economic Growth, USAID expanded the role of IESC, by establishing the Center for Quality Assurance (CQA) and Manufacturing Technology Centers (MTC) with their technical/administrative support. The centers are designed to provide services that will enable Egyptian private sector firms to become more competitive in the local and global markets. CQA provides technical assistance to help firms meet international quality standards for exports, known as ISO 9000. MTC services include needs assessments, technology identification, business connections, and on-going technology adaptation. Clients contribute on a cost-sharing basis for the services they receive from the centers.

- CQA: To date, four clients have received ISO 9000 certification; it is anticipated that an additional 45 will be certified in 1997. The Federation of Egyptian Industries is receiving support in establishing the Egyptian Society for Quality that will extend quality awards.
- MTC: 45 clients have received 78 different services; 13 opportunities for new technical assistance have been identified.



**Title: Small and Micro Enterprise Development (SMED)**  
**Number: 263-0212**  
**Amount: \$44 Million**  
**Initiated: FY 1988**

The use of non-profit foundations as financial intermediaries to create viable credit delivery systems for small and micro enterprises is another channel being supported by USAID to expand economic output and increase employment and earnings of low-income Egyptians. The foundations administer the funds in cooperation with local banks to facilitate the provision of credit to SMEs.

The principal features of the program are: (1) Eligible borrowers are generally existing, owner-operated small (6-15 employees) and micro (1-5 employees) enterprises. (2) Loans range in size from LE 500 to LE 5,000 (\$147 to \$1,470 equivalent) for micro enterprises (the average is LE 3,000/\$880 equiv.) and LE 5,000 to LE 15,000 (\$1,470 to \$4,410 equiv.) for small enterprises (the average is LE 8,000/\$2,352 equiv.). (3) Terms are 4-12 months for working capital loans and up to 24 months for fixed-asset loans. (4) Cost: Charges to borrowers are based on the prevailing commercial bank market interest rates plus the foundation's administrative costs. These foundations employ computerized loan tracking and accounting systems.

Background/progress:

- **ABA Foundation (Alexandria):** ABA has a head office located in the city of Alexandria and seven branches covering all parts of the governorate with seventy-five extension officers. ABA provides training for entrepreneurs, marketing support and research and maintains an exhibition center for client products. Thus far, 66,000 loans have been extended for 180 million (about \$53 million equivalent). About 10% of the 26,000 borrowers are women. ABA will initiate a program in Kafr El Shaik Governorate.
- **ESED Foundation (Cairo):** ESED, which officially started on November 14, 1990, later than ABA, has generated 38,000 loans in the amount of LE 114 million (about \$33.5 million equivalent). About 11% of the 21,000 borrowers have been women.
- **SEDAP Foundation (Port Said):** SEDAP started end-use lending in January 1995 and has generated 4,600 loans valued at LE 14 million (about \$4 million equivalent) to 1,700 borrowers.
- **ASBA Foundation (Assiut):** started end-use lending in January 1996 and has generated 3,600 loans, valued at LE 10 million (about \$3 million equivalent) to 1,600 borrowers.
- **Sharkia Business Association** joined the program in October 1996.
- **Loan repayments have exceeded 97%, demonstrating SME credit worthiness.**

## AGRICULTURE SECTOR

Egypt's exceptional resource endowment includes fertile soils, a temperate climate, year-round sunshine, an irrigation system that allows complete water control for all of agriculture, the absence of recurring natural disasters (drought, flood, frost) that reduce productivity, and a location near expanding markets in Europe, Africa and the Middle East.

Agriculture accounts for approximately 19% of Egypt's GDP, 36% of overall employment and 22% of commodity exports. Half of the Egyptian population live in rural areas where agricultural activities predominate. Related industry, including agricultural inputs (water, fertilizer, pesticides and seeds) and the processing and marketing of commodities, accounts for another 20% of GDP and a substantial portion of the work force.

Due to state intervention, agriculture sector growth during the early to mid-1980s was very poor with value of production growing at less than 1% per year. USAID has provided about \$1.26 billion for the development of the sector. To boost production and increase farmer incomes, USAID assistance has emphasized agriculture policy reform, support for agricultural research and grassroots activities to help improve financial services, the introduction of more appropriate farm management techniques, expanded access to improved inputs and new technologies, and the formation of water user associations to operate and manage local irrigation systems.

During the decade 1980-90, the real value of crop production (measured for 23 major crops) increased by 89%, or by 6.6% annually, leading to a significant increase in real farm income of approximately 24%. Total wheat production more than doubled from 1986 to 1992 as a result of a 38% growth in yields and an increase in the area cultivated by wheat. Rice production doubled over this same time; yields increased from 5839 kilos a hectare (kg/ha) in 1987 to 7710 kg/ha in 1993. This is an annual average increase of 313 kg/ha per year, the highest rate of growth in the world for the same period. Agricultural production overall began to slow in the early 1990s. Although by 1995, growth was estimated at 2.7%. Continued USAID support for the sector is essential. Greater emphasis will be placed on increasing net value added, including the production of more high value horticultural crops, and sector reforms needed to spur growth.

**Title: Agricultural Policy Reform Program (APRP)**  
**Number: 263-K631**  
**Amount: \$50 Million (\$245 Million planned)**  
**Initiated: FY 1995**

USAID is working with several Government of Egypt (GOE) ministries led by the Ministry of Agriculture and Land Reclamation to remove remaining policy barriers to private enterprise in agriculture, to create a liberal, competitive marketing system, and stimulate sustainable agricultural growth. The release of cash transfers supporting the sector will be linked to GOE performance toward established policy reform benchmarks including:

Reform of price and marketing policies in cotton, rice, sugarcane, livestock and fertilizer;

Privatization of marketing, processing and distribution functions;

Increased efficiency of public investment in research, land and water development, and improvement of the sustainability of agricultural investment;

Removal of general consumer subsidies;

Establishment of a targeted food security program; and

Reduced negative environmental impacts of agricultural growth.

Background/progress:

This program builds on earlier reform efforts supported by the Agricultural Production and Credit Project (APCP) which ended in 1996 (see Project 263-0202). The GOE has taken a number of steps to liberalize agricultural markets, e.g., by removing restrictions on farmers' production and marketing decisions, opening up fertilizer sales to private dealers and cooperatives, and enabling the private sector to participate in cotton marketing. The new program will encourage the GOE to stay the course and carry out additional reforms needed to strengthen the health of the sector and accelerate economic growth.

Title: **Technical Assistance for the Agricultural Policy Reform Program (TA/APRP)**

Number: **263-0219**

Amount: **\$30 Million (\$45 Million planned)**

Initiated: **FY 1995**

USAID will provide the Government of Egypt (GOE) with technical assistance to develop, carry out, monitor and evaluate key elements of reforms associated with the Agricultural Policy Reform Program (APRP - 263-K631).

Background/progress:

Since the reform program proposed for APRP is technically complex, six units/activities are being established for technical assistance support. These involve a Program Management Unit, a Reform Design and Implementation Unit, a Monitoring, Verification and Evaluation Unit, a Food Security Research Unit, a Water Policy Advisory Unit, and Water Policy Activities. Still in its initial, start-up phase, first year work plans under TA/APRP are being prepared to lay out such tasks as conducting policy studies, proposing approaches, including pilot activities to solve identified policy problems, evaluating progress toward carrying out policy reforms, establishing institutional mechanisms to support the policy process, and conducting training to meet identified needs.

Title: **Agricultural Technology Utilization and Transfer (ATUT)**

Number: **263-0240**

Amount: **\$25 Million (\$60 Million planned)**

Initiated: **FY 1995**

The latest addition to USAID agricultural sector support involves horticulture and food crop research. ATUT will (1) identify and transfer to the private sector new horticultural production, post-harvesting and marketing technologies, and (2) develop a carefully focused, collaborative strategic research program aimed at resolving the major constraints to increased productivity of four staple food crops: rice, corn, wheat and fava beans.

Background/progress:

(1) Horticulture: Activities are aimed at a select number of specific, high-value crops for export. Technical assistance includes trips, seminars and training courses for participating farmers and adaptive collaborative research grants based on private sector demands. The active participation of the private sector in setting the research agenda, reviewing research grants, and approving horticultural technology transfer activities is a key element of this initiative. Studies will be aimed at identifying new marketing activities, new commodities for export, and the analysis of constraints to increasing horticultural exports. Progress to date includes:

- Grapes, melons, strawberries, and mangos were selected as the primary ATUT horticultural crops out of fifty candidates analyzed for their export marketing opportunities, comparative advantage, and employment generation.
- Detailed commodity sector studies, including marketing opportunities, size of market, market window, break even prices, etc. for melons and grapes have been concluded.
- Twenty-five private sector grower/exporter ATUT participants attended the Produce Marketing Association International Convention in the United States.
- A team of thirty-one Egyptians, including government researchers and private sector grower/exporters, traveled to Chile to observe various aspects of table grape production.
- Numerous workshops and seminars have been held with private sector growers and exporters on a variety of topics including production, post-harvesting and marketing.

(2) Food Crops: Activities include strategic collaborative research grants involving international centers of excellence and U.S. universities. Research will focus on the highest priority problems associated with rice, wheat, corn, and fava beans to support Egypt's food security needs, and on-farm water management. Progress to date includes:

- Eighty-four collaborative research grants are under review.

Title: **Farmer to Farmer (FTF)**  
(Funded under Technical Cooperation and Feasibility Studies)  
Number: **263-0225**  
Amount: **\$3.574 Million**  
Initiated: **FY 1994**

With USAID support, the U.S. private voluntary organization Agricultural Cooperative Development International (ACDI) has conducted farmer-to-farmer technical assistance in fruits and vegetables, small ruminates and aquaculture in twelve governorates in the Delta, Upper Egypt and reclaimed desert areas. Although the primary beneficiaries were a core group of 703 leader-farmers, another 15,421 farmers received benefits through outreach. The activity ended December 31, 1996.

Accomplishments:

Over the life of the activity, 125 U.S. volunteers spent an average of four weeks each working with farmers, extension agents and conducting special on-farm training sessions. A total of 124 Egyptian farmers and extension agents went to the United States to visit farms, packing and processing facilities, university research centers, local trade shows, and produce and livestock markets.

In 1995, an in-country training program was initiated to facilitate the exchange of information between groups of farmers from different regions. A series of practical manuals were produced compiling recommendations from the reports of FTF volunteers. A total of 220 core farmers received "training of trainers" instruction. In total, these core farmers conducted nearly 1,000 training sessions with small groups of their neighboring farmers.

FTF also provided specialized equipment to existing cooperative and member-owned associations. This equipment included a bee disease diagnostic unit, a queen bee insemination unit, a water quality testing unit for an aquaculture association, a disease diagnosis laboratory for small ruminants, etc.

An impact assessment conducted in early 1996 showed that the FTF methodology was a cost-effective and highly efficient approach to the rapid transfer of appropriate technology. The assessment showed that FTF achieved a return on investment of nearly \$3 for every \$1 of USAID grant funds for the core farmers. If the financial impact of the non-core farmers is included, the return is raised significantly.

FTF has helped advance sustainable agriculture in Egypt by helping to improve water quality and demonstrating new irrigation methods to conserve water, by recommending reduction of pesticides and chemical fertilizers and introducing integrated pest management and organic farming techniques to reduce chemicals in food, and by inspiring cooperation between farmers.

Title: **Agricultural Production and Credit (APCP)**  
Number: **263-0202**  
Amount: **\$289 Million**  
Initiated: **FY 1986**

USAID support for deregulating the agricultural sector and strengthening the capacity of the Principal Bank for Development and Agricultural Credit (PBDAC) to deliver a range of financial services effectively and efficiently to farmers and other rural people began in 1986. APCP ended in September 1996.

Accomplishments:

During the period of heavy government intervention (1960-92) when agriculture suffered net taxation of over 44%, the government dictated the amount of acreage planted for key crops, controlled input use (water, fertilizer, pesticides and seed) and production practices, imposed farm-gate and retail price controls on agricultural produce, and exerted monopoly power over the marketing and processing of the main crops. For the most part, these constraints have been removed through APCP-supported policy reforms. Key accomplishments include:

- **Fertilizer:** All budget and exchange rate subsidies eliminated; private marketing and transport of all imported and locally produced fertilizers legalized (although some exceptions have existed for domestically produced nitrogen fertilizers); the bulk of PBDAC's fertilizer marketing activities privatized and related redundant employees in input distribution reduced.
- **Seeds:** All subsidies eliminated, except for experimental varieties and cotton; the public sector marketing monopoly over most seeds eliminated.
- **Pesticides:** All subsidies eliminated except for cotton; subsidy on pesticides for cotton reduced by 50%.
- **Other Pricing:** Competitive, non-subsidized rates established for the marketing of public-sector produced animal feed components (cottonseed cake, bran, molasses) to private and public sector feed mills. Majority of feed production taken over by private sector.
- **Cotton:** Mandatory planting and delivery requirements eliminated. Domestic trade of cotton liberalized. Private sector share in marketing and ginning growing.
- **Rice:** Mandatory farmer sales to the government and export restrictions on the private sector eliminated; private milling throughout the year legalized. Private share of milling and paddy rice exports increased significantly.

The transition of PBDAC from a specialized agricultural bank to a viable rural bank has involved staff training (about 25,000 in Egypt and 230 off shore in short-term technical training and observation tours); the installation of 18 minicomputers and 150 super micros at all governorate and district banks to improve loan processing and reporting; village bank improvements to enhance their delivery of financial services and increase their viability as rural financial institutions; the conduct of organizational/management studies and informal finance practices to help PBDAC resolve some of the remaining constraints.

Title: **National Agricultural Research (NARP)**  
Number: **263-0152**  
Amount: **\$197.2 Million**  
Initiated: **FY 1985**

Since 1977, USAID has invested over \$300 million through NARP and predecessor projects towards the generation and dissemination of productivity enhancing technologies. This long-term effort had four priority areas--agricultural research, technology transfer, seed technology and new initiatives--which emphasize the involvement of extension workers with researchers in field trials and extensive demonstrations of improved technological packages. This project was completed in August 1996.

Accomplishments:

- Over 2,000 field trails were conducted each year in farmers' fields throughout 19 governorates for crops such as rice, tomatoes, cotton, sorghum, clover, wheat, corn, sugar, barley, and onions as well as for farm mechanization and livestock management.
- 35 technological "packages" in the fields of horticulture, livestock, fruit and field crops were developed, tested, and disseminated to farmers. Packages included new varieties of wheat, barley, rice, corn and fava beans; inter-cropping and relay planting with traditional crops; and natural resources-based agricultural technologies which reduce reliance on costly inputs (e.g., pesticides/fertilizer).
- Technology extension/dissemination was assisted by the publication of 35 technical packages for winter and summer crops, 9 video training films, bi-monthly extension magazines, and special television programs developed with NARP assistance.
- 12 of 13 targeted crops exceeded target yield increases of 10%; 5 cereal crop yields had an average increase of 27%, almost three times more than expected.
- 1009 Egyptian researchers were trained in the United States in post-Doctoral, PhD, Masters, or short-term technical programs; over 500,000 extension agents and farmers have been trained in Egypt.
- Physical facilities/infrastructure were renovated at 5 research stations and 17 field sites and \$40 million of research equipment and supplies provided for labs at Egyptian universities and Egypt's Agriculture Research Center (ARC) institutions.
- Almost 300 research grants were made to ARC and other public and private research institutions covering a broad range of activities from animal disease control to molecular and genetic engineering, all of which seek to solve problems limiting production or income at the farm level.
- Linkages between Egyptian institutions and international research institutes (CIMMYT, ICARDA and IRRI) and U.S. universities were also supported.



Title: **Irrigation Management Systems (IMS)**  
Number: **263-0132**  
Amount: **\$336 million**  
Initiated: **FY 1981**

This large, long-term technical and capital assistance project was aimed at improving the operating efficiency of Egypt's national irrigation system working with the Ministry of Public Works and Water Resources (MPWWR). IMS ended in December 1996.

Accomplishments:

- One of the most pressing problems facing the system at the inception of the project was the backlog of structures needing replacement or rehabilitation. A total of 19,254 structures (intake regulators, head regulators, weirs, tail escapes, spillways, bridges and crossing structures) have been replaced/rehabilitated. Irrigation systems in nine pilot command areas were modernized. Modern maintenance capability has been provided for irrigation directorates responsible for half of Egypt's irrigated area.
- To improve MPWWR management capabilities, USAID financed a nation-wide telemetry data collection system to measure water levels at key locations that includes a voice and data communication system (VDCS) and automated pilot canal control. VDCS has been installed at the Delta Barrage; forty mobile water measuring units established (vehicles, boats and water measuring equipment); and 1,078 related staff trained.
- A National Forecast Center has been established that utilizes sophisticated hydrologic modeling and satellite technology to predict Nile River flows. Planning models have been developed for simulating the impact of upper Nile interventions, use of surface and groundwater and water distribution.
- Building on the human skills developed through extensive graduate degree training provided Water Research Center staff and related capacity-building innovations, a Water Resources Strategic Research activity has created a foundation for more appropriate water resource policy.
- A National Irrigation Training Institute has been constructed and equipped.
- Map production facilities have been renovated with computer based mapping and orthophoto map production systems installed.
- Some 1,000 water users associations were formed and registered, encouraging greater farmer participation in the operation of improved systems, a model that has resulted in better irrigation service.

## TELECOMMUNICATIONS

A series of USAID investments in Egypt's telecommunications sector is supporting the institutional strengthening of the Arab Republic of Egypt National Telecommunications Organization (ARENTO) and the improvement and expansion of telecommunications networks in Cairo and Alexandria. The benefits between 1978 and 1996 from four USAID completed telecommunications projects valued at \$324 million, and bilateral assistance from others, have been significant: the number of communities connected to the direct dial network increased from 7 to 251; the number of international circuits increased from 820 channels to 8,480 channels; the number of telephone lines increased from 50,000 to 4,050,000; the telephone density increased from 1.2 to 6.6 lines per 100 population; and centralized operational and maintenance centers have been installed. ARENTO has made changes in finance, accounting, payroll, personnel, planning, and management systems. Since 1980, telephone subscription and installation fees have been increased in an attempt to keep pace with rising expenses although tariffs for domestic service remain insufficient to recover costs. ARENTO's operating margins improved considerably because revenues from international service far exceed costs. For overall efficiency, further institution-building reforms are needed along with substantial new investment in telecommunications infrastructure to meet the enormous demand for new service.

Title: **Telecommunications Sector Support**  
Number: **263-0223**  
Amount: **\$178.9 Million (\$200 Million planned)**  
Initiated: **FY 1993**

The transformation of the Arab Republic of Egypt National Telecommunications Organization (ARENTO) into an autonomous utility capable of operating on a commercially sound, self-sustaining basis continues to be a target of USAID technical and capital assistance. In this project, capital improvements are conditioned on ARENTO institutional and policy reforms.

Background/progress:

The law establishing ARENTO provided the legal framework for an autonomous organization; however, in practice, the utility remains largely dependent on the Ministry of Transport, Communications and Maritime Transportation (MTCMT) for all major decisions involving finances, tariffs, and employment. To enhance ARENTO's sustainability and streamline management, market pricing, cost recovery for services and fiscal autonomy, ARENTO, MTCMT, and the Ministry of Economy and International Cooperation agreed to a set of institutional and policy reforms on June 2, 1994.

Reform efforts are producing the following results:

- Decrees were issued by the Minister of MTCMT establishing telecommunications policy and the regulatory board. Members of the board have been appointed and initiated actions.
- A new personnel performance appraisal and compensation policy was established.
- Substantial profits demonstrate increasing financial viability.
- All financial and technical benchmarks were met during 1996.
- The private sector is increasing its role in telecommunications in areas such as Internet, cellular vendors, and pay phones.

As reforms have been implemented by ARENTO, USAID funds were provided for the following capital improvements: 20 digital switching systems for network expansion and associated outside plant consisting of 365,000 lines, and a Network Operations Center (NOC).

The added switching systems and outside plant will provide additional access to the ARENTO network for nearly 1.8 million Egyptians.

The NOC will provide ARENTO's staff with network performance data to allow decisions to be made on a real-time basis to achieve optimum reliability in network operations.

Title: **Telecommunications IV**  
Number: **263-0177**  
Amount: **\$82 Million**  
Initiated: **FY 1988**

USAID has made a long-term commitment to institution-building for the Arab Republic of Egypt National Telecommunications Organization (ARENTO) and the capital investments necessary to improve telecommunications systems serving the large population centers of Cairo and Alexandria. The Telecommunications IV project was completed in June 1996.

Accomplishments:

This fourth project in USAID's telecommunications support financed the installation of seven central office digital switching systems (DSS) and a centralized operation and maintenance system for the seven switches and outside plant facilities in the areas adjacent to the Pyramids, the Citadel, Heliopolis, Maadi, Mokattam, Opera, Ramses, Giza and Alexandria. Funds for pricing, operation and maintenance, and sector support studies were also included.

- Digital switching systems and outside plant network have been completed for the above mentioned 9 locations. Telephone connections were made to 178,000 new subscribers in Cairo and Alexandria giving access to about 1,000,000 telephone users.
- An assessment of the ARENTO and the telecommunication sector identified regulatory, legal and institutional changes needed to enhance the commercialization of ARENTO and the sector.
- A study of ARENTO's operation and maintenance practices which devoted specific attention to: switching centers and their power supplies; network surveillance and control systems; outside plant; fiber optic and transmission systems; and
- A telecommunications Cost of Service/Rate Study which provided ARENTO with a basis for both designing and implementing an effective strategy for future telecommunications pricing.

## **POWER**

Since 1975, USAID has invested about \$1.6 billion for the construction or modernization of the electric utility infrastructure. Egypt's long-postponed infrastructure investments had severely tested the public utilities of Cairo, Alexandria and many other cities. USAID assistance is helping better the lives of the vast majority of Egyptians through improvements in access, efficiency, and reliability of electricity. Energy use has grown rapidly in Egypt, revolutionizing the quality of life of most Egyptians and increasing production in the workplace. An estimated 95% of the population now has access to electricity. Electricity consumption has increased by six percent annually since the mid-1980s. Total installed capacity increased from 3,789 megawatts (MW) in 1976 to more than 13,000 MW in 1996. This expansion reflects rapid economic growth, increased urban and rural electrification, and the introduction of energy-intensive industries. Today, the Government of Egypt (GOE) not only gives high priority to expanding electric power generation to meet future demand, improving the operating efficiency, introducing renewable energy technologies, and improving transmission and distribution systems, it is taking steps to expand the generating facilities through private investment and to reform energy pricing policies to prevent the wasteful and inappropriate use of energy. The GOE also plans to maximize its use of natural gas as a fuel, a resource which was previously unexploited or wasted.

Title: **Power Sector Support II**  
Number: **263-0224**  
Amount: **\$77.8 Million (\$200 Million planned)**  
Initiated: **FY 1994**

USAID assistance is being provided to the Egyptian Electricity Authority (EEA) to improve its planning and efficiency, strengthen its financial viability, increase its autonomy, and promote regulatory reform in the sector. This policy-based reform program will accelerate and enhance EEA's transformation into an autonomous utility capable of operating on a commercially sound, self-sustaining basis. Reform targets were approved by USAID, the EEA, the Ministry of Electricity and Energy, and the Ministry of Economy and International Cooperation on May 19, 1995.

Background/progress:

The following reforms have been accomplished to date:

- A new independent regulatory organization has been approved by the Cabinet.
- Business planning has been institutionalized.
- Staff training has been institutionalized under an EEA Deputy Chairman.
- Over 1000 professional staff have been trained in policy, institutional and organizational development.
- Executive management and leadership development programs are replacing management advancement based on seniority.
- Financial Management Systems are being installed, including inventory control and treasury functions.
- A preventative maintenance program to cover 100% of operations by 1998 is 50% complete.
- Efficiency improvements have saved the equivalent of nearly three million tons of fuel.
- The government's receptiveness to proposals from private enterprises to build, operate and transfer power to the marketplace to supplement public sector power generation is evolving. A private consultancy group is now providing advice and management services for these private investment opportunities.

Funding for capital investments cover engineering services, equipment and construction. As reforms are implemented by EEA, they leverage USAID funds for the following improvements:

Modernization of control room facilities at the Aswan High Dam Hydroelectric Power Station, Abu Sultan and Abu Qir Thermal Power Stations;

Installation of voltage controls on the transmission system;

Modernization of the High Voltage Test Laboratory.

Title: **Power Sector Support**  
Number: **263-0215**  
Amount: **\$461 Million**  
Initiated: **FY 1989**

This USAID program provides substantial capital infrastructure as incentives to the Egyptian Electricity Authority (EEA) to adopt sector policy changes that will bring about rational investment and consumption decisions.

Background/progress:

In 1989, the GOE embarked on a program to reduce subsidies on electricity. The average consumer price of electricity increased from 19 percent to 80 percent of its economic price between 1989 and 1994. There has been no increase in pricing since 1994.

USAID assistance includes:

- A 150 megawatt (MW) combined cycle unit has been installed at the Cairo South Power Plant.
- At Cairo West Power Station, the four 87.5 MW steam turbine-generators and boilers originally installed in the mid 1960's (three) and late 1970's (one) have been modernized and adapted for dual fuel operation (heavy oil and natural gas) and auxiliary equipment has been rehabilitated.
- Five 24 MW gas turbine-generators have been refurbished, moved and installed at Hurghada on the Red Sea to cope with the increasing power demand at this touristic area.
- The National Energy Control Center's microwave communication system is being expanded to collect operating data from six additional EEA stations between Cairo and the Suez Canal and the computer systems at the National Energy Control Center are being upgraded and expanded to monitor EEA's system performance from 200 locations.
- Consultant services and major equipment for two 600MW steam turbine-generators at El Kureimat are being financed by USAID and other bilateral and multilateral agencies. Construction on Unit 1 is well advanced and the unit is scheduled for initial operation by mid 1997. Unit 2 is planned for initial operation in late 1997.
- Regional Control Centers for the operational management of the Alexandria and Cairo Zones will also be constructed.

Title: **Alexandria Electrical Network Modernization**  
Number: **263-0194**  
Amount: **\$50 Million**  
Initiated: **FY 1989**

The rehabilitation of selected areas of Alexandria's electrical distribution network and the construction of a modern Regional Control Center in Alexandria are targets of this USAID assistance.

Background/progress:

In cooperation with the Alexandria Electricity Distribution Company (AEDC) and the Egyptian Electricity Authority (EEA), USAID is financing consultant services, equipment and materials to modernize and rehabilitate Alexandria's distribution network. A Regional Control Center is also being constructed to provide a facility where EEA will be able to more effectively manage, supervise and control sub-transmission and distribution in the Alexandria area.

- 283 kilometers of 11 kilovolt (KV) of underground cables have been installed and all 23 distribution points have been rehabilitated to provide improved reliable access to the distribution system.
- 669 transformer stations have been rehabilitated and brought up to current-day standards.
- 9,650 auxiliary boxes have been replaced to reduce the incidence of outages.
- 300 capacitor banks have been installed to improve the quality of service.
- The Regional Control Center is being constructed and an extensive communication network established linking the Center to more than 50 power stations and substations in the Alexandria area and along the north coast to collect and present operating performance data on the network and substations.

This project is providing enhanced electric service to the nearly 1.1 million customers in the Alexandria governorate and an estimated 100,000 customers living along the north coast between Alexandria and Mersa Matrouh.



## EDUCATION AND TRAINING

USAID support for Egypt's education and training needs has been ongoing since 1975. Since then, USAID has financed over 19,000 scholarships at U.S. academic and technical training programs. A major effort launched in 1981 to increase primary school enrollments concluded in 1994 following the construction of 1,947 rural schools in underserved areas (Basic Education - \$185 million). Egypt's education and illiteracy problems persist, however, with girls and women in particular lacking equal access to education. Female illiteracy is 66% compared with 37% for men and is getting worse because girls' attendance ratios lag behind boys'. As a result, USAID is adding a new initiative focused on basic education for girls. This portfolio also includes a research program which promotes university-to-university collaboration on key development problems.

Title: **Girls' Education**  
Number: **263-0259**  
Amount: **\$15 Million (\$65 Million planned)**  
Initiated: **FY 1996**

USAID is collaborating with the Government of Egypt to promote increased girls' participation in quality basic education in Egypt.

Background/progress:

Serious gender disparities in school enrollment and literacy for females exist in Egypt. Development experts often point out that investments in female education have the highest return of all educational investments. Responding to that need, Egypt is placing high priority on overcoming the problems that led to those disparities. It is clear that many of the constraints to girls participating in education are not within the manageable sphere of government and must be solved on the local level. In order to solve these problems, new relationships between government, non-governmental organizations, communities and families must be forged. The main objectives of the program will focus on increased access and demand for girls' education, and an improved national policy environment. Activities being developed include:

A multi-grade system to deliver a primary school curriculum suitable for the one-room classroom schools, using student-centered methodologies and emphasizing problem-solving and analytical skills;

Replicable training programs for facilitator/teachers and school administrators on the utilization of the multi-grade curriculum;

An Egyptian version of the "Sesame Street" educational television program to reach vulnerable preschoolers;

Technical assistance for non-governmental organizations to facilitate enhanced community involvement and support for primary schools and literacy programs;

Organization of a national initiative to mobilize religious, political, business, media and community leaders in support of girls' education and to develop national and local public awareness campaigns; and

Technical assistance for the development and implementation of policies that will enhance community participation in female education and achieve universal quality primary education.

Title: **Development Training II**  
Number: **263-0244**  
Amount: **\$59 Million (\$180 Million planned)**  
Initiated: **FY 1995**

USAID supports, through various mechanisms, the strengthening of management and technical capabilities of individuals and groups from Egyptian public and private sector entities, including universities, non-governmental and private voluntary organizations, and other key development institutions to promote sustainable development in Egypt.

Background/progress:

Development Training I, which ended in September 1995, provided \$100 million to carry out cost-effective training opportunities for Egyptians. Results from that effort included:

- Egyptian labor development carried out by the African-American Labor Center: 39 trained in the U.S.; 19,245 trained in Egypt.
- Short- and long-term academic and non-academic programs for the public and private sectors: 1,398 trained in the U.S.
- American University in Cairo English language testing/training services: 14,890 USAID training candidates tested for English language proficiency; 5,960 received English training in preparation for overseas training.
- Over 1,240 Peace Fellows received scholarships for training in the United States.
- The Binational Fulbright Commission trained 427 individuals in the U.S. and 17,462 in Egypt under the Integrated English Language Program.

Development Training II identifies human resource needs in Egypt and provides training opportunities in the U.S., third countries and Egypt to help alleviate constraints in areas associated with USAID's country program strategy: economic growth, female education, the environment, governance and civil society, family planning and health.

An integrated English language program continues to enhance the English language capabilities of Egyptian English teachers as well as their teaching methodologies. A pilot effort will be added looking at occupational English for persons who need to improve their English language skills to perform non-teaching jobs more effectively. English language testing and training continues to benefit USAID-training candidates to ensure proficiency requirements for overseas training are met.

Title: **University Linkages II**  
Number: **263-0211**  
Amount: **\$16 Million (\$18 Million planned)**  
Initiated: **FY 1992**

USAID is helping bring Egyptian universities together with U.S. universities to carry out applied research on key developmental and technological problems, a process that also promotes long-term relationships between participating institutions.

Background/progress:

- 102 seed grants have been awarded to date to fund exchange visits between Egyptian and U.S. universities to enable them to work on proposals for "linkage" grants. Thus far, fifty exchange visits have taken place: 15 trips by U.S. university professors to Egyptian universities and 35 trips by Egyptian professors to U.S. universities. These seed grants resulted in 84 full proposals which are being reviewed and developed into grants.

Title: **Girls' Scholarship Program**  
(Funded under Technical Cooperation and Feasibility Studies)  
Number: **263-0225**  
Amount: **\$.285 Million**  
Initiated: **FY 1995**

USAID has provided a grant to the U.S. Private Voluntary Organization Save The Children to carry out a program giving scholarships to primary girl students who would otherwise not go to school or be forced to drop out. This program is part of a larger effort to increase the participation of girls in quality basic education.

Background/progress:

The aim of this pilot scholarship program for primary school girls is twofold. It is helping (1) demonstrate the significance of economic constraints on girls' enrollment in primary school in the neediest areas of Qena, Sohag, Minya and Giza Governorates and (2) make recommendations on how these constraints might be overcome.

Girls do not have equal access to education for a myriad of reasons, the most important of which appear to be economic and cultural. Cultural constraints include parents' reluctance to allow girls to travel more than two kilometers to attend school, especially if teachers are male, and a lack of awareness of the importance of education for girls even if they do not seek employment outside the home. Financial constraints include both the direct costs of school (fees, books, supplies, clothing, etc.) and the indirect costs of the lost labor. Poor families with numerous children often choose to send their boys to school if they cannot afford to send all their children, because the investment in a boy's future labor potential is perceived to have higher returns.

This grant provides annual scholarships of 330 Egyptian pounds to 3,200 girls each year over three years and compares the attendance records of the girls in the program to a control population in similar socio-economic conditions. The economic constraints are being carefully studied to determine the extent to which they predominate parents' decision-making and in which regions of the country. This action research grant will enable more girls to attend school while also testing the importance of economic factors.

Save the Children is implementing the activity in collaboration with three Egyptian non-governmental organizations and training their staffs in implementation and data collection. The findings of the research will be provided to the government as input for policy development.

# POPULATION & HEALTH

## OVERVIEW

After two decades of work strengthening the Egyptian family planning program, the long-term accomplishments are dramatic. Contraceptive prevalence (the percentage of married women of reproductive age currently using contraception) reached 48% in 1995, almost double the 1980 rate. The total fertility rate (a measure of the average number of live births per woman during her lifetime) fell from 5.2 in 1980 to 3.6 in 1995. USAID continues to work towards Egypt's long-term objective of achieving a contraceptive prevalence rate of around 74%, at which point fertility is expected to reach the "replacement" level of 2.1 children per family.

During the late 1970s and early 1980s, USAID assistance in the health sector resulted in greatly expanded access to health services by the rural and urban poor. Substantial investments were made in training health personnel, upgrading the physical infrastructure, and improving the service delivery system. Since 1983, the focus of the program has been to reduce mortality and illness of infants and children.

The Egyptian child survival program has been a phenomenal success. The infant mortality rate was reduced 43% between 1980 and 1990; the child mortality rate declined 55% in the same period. However, in 1993, infant and under five child mortality rates remained unacceptably high at 63 and 81 per 1,000 live births, respectively. When regional and rural disparities are taken into account, a striking gap appears. In Upper Egypt, infant and under five child death rates for 1993 were 97.7 and 129.2 per 1,000 live births, respectively. Maternal mortality, which is also declining, is at 174 deaths per 100,000 live births nationwide, but regional disparities are even more striking. In one Upper Egyptian governorate, Assiut, the maternal mortality ratio is 544. An urgent need exists to target resources to narrow these regional gaps and to improve the health status of the poorest Egyptians throughout the country.

USAID, along with the Government of Egypt, non-governmental organizations and the private sector, is working to cut mortality rates further, expand and target maternal/child health services, and improve their sustainability. This is being done through a range of mechanisms including policy reforms, the promotion of quality assurance, decentralization, better resource allocation, and increased participation by the private sector and the community.

USAID health investments are also combatting endemic and emerging diseases. The application of results from USAID's earlier investments in schistosomiasis research have reduced the prevalence rate for this disease to the lowest levels in this century. Today, work is focused on the development of a vaccine to keep schistosomiasis from re-emerging in the future. An emerging disease is the Hepatitis C virus which causes severe liver damage, liver cancer, and increased risk of maternal mortality. USAID is responding to the urgent need for applied research to determine how to stop the spread of this deadly virus. Other diseases need to be studied and prevented, such as HIV/AIDS, to ensure Egypt does not become a victim of the global pandemic which is already crippling so many other nations.

Title: **Population/Family Planning III**  
Number: **263-0227**  
Amount: **\$60.6 Million**  
Initiated: **FY 1992**

USAID's continuing population sector assistance program is helping the Government of Egypt (GOE) and the private sector provide accessible, appropriate and high-quality information, services and commodities for population and family planning. The public sector role in the national family planning program is to provide services to those least able to pay. Support for the private commercial sector includes training for private physicians and pharmacists. Phase three supports eight activities managed by the three GOE entities indicated below:

Ministry of Health and Population (MOHP): Systems Development, Contraceptive Commodities, and the Teaching Hospital Organization.

National Population Council (NPC): Institutional Development, Regional Center for Training at Ain Shams University, and Clinical Services Improvement with the Egyptian Family Planning Association.

Ministry of Information: Family Planning Information, Education, and Communication with the State Information Service which produces mass media messages for demand creation and information.

Background/progress:

Since 1975, USAID has been helping the GOE establish an institutional framework for family planning, train Egyptian health personnel in family planning, promote and distribute contraceptive methods, and provide the needed research base (both operations and applied biomedical) to make quality services more available and accessible. This long-term support to Egypt's family planning program has paid off. Contraceptive use has risen dramatically, fertility has fallen, and unmet need has been reduced.

- Total fertility rate (the average number of children per woman) has been successfully reduced from 5.2 in 1980 to 3.6 in 1995.
- Contraceptive prevalence rate increased from 38% in 1988 to 48% in 1995.
- Extended use failure rate has fallen from 13% to 10% between 1988 and 1992.

Although family planning activities have attained substantial success, challenges remain. Service volume must be increased, first merely to maintain contraceptive prevalence at current levels, then to reach those women who are not currently using contraception but who want to. Service quality and user knowledge must be improved to increase contraceptive effectiveness. Improved information must also be made available to policy makers to take advantage of the comparative advantages that exist in Egypt and to reduce the large differentials that still exist in contraceptive use and fertility rates between urban and rural areas and between Upper and Lower Egypt.

Title: **Combatting Endemic and Emerging Diseases  
(CEED)**

Number: 263-0265

Amount: \$4 Million (\$10.5 Million planned)

Initiated: FY 1996

USAID is providing support in Egypt for the development and dissemination of new tools and approaches to combat selected endemic and emerging diseases. This will help ensure that current health improvements are sustained in the face of new disease threats.

Background/progress:

Schistosomiasis is the leading parasitic disease in Egypt. The Schistosomiasis Research Project (263-0140.02) has developed new tools and approaches which have helped Egypt's National Schistosomiasis Control Program to dramatically reduce the prevalence of schistosomiasis. The development of a vaccine is critical to keep this disease from re-emerging in the future.

Egypt also faces a new emerging disease, hepatitis C (HCV). Identifying the major modes of transmission of HCV is critical, both to interrupt the transmission of HCV and also to prevent the potential transmission of other blood-borne diseases such as HIV/AIDS. Egypt has a unique opportunity to prevent an HIV/AIDS epidemic from occurring here and avoid the death and suffering which have afflicted so many other countries. The main activities of CEED include:

Building on research capacity developed under the Schistosomiasis Research Project, CEED will provide continued support for development of a vaccine to prevent schistosomiasis.

CEED supports the continuation of an ongoing hepatitis C virus research grant to identify modes of transmission and potential preventive measures for this disease.

Support for applied research, information, and human capacity development needed to prevent an epidemic of HIV/AIDS from emerging in Egypt.



Title: **Technical Support for Health Policy**  
Number: **263-0254**  
Amount: **\$5 Million (\$20 Million planned)**  
Initiated: **FY 1996**

USAID's long-term commitment to health sector support in Egypt continues under a new phase working to overcome constraints that are susceptible to improvements through policy reforms.

Background/progress:

Egypt has made impressive strides over the past two decades in assuring that nearly all of its population has access to health care and in reducing infant and child mortality. Further efforts are required to sustain the gains made in maternal and child health and to strengthen health service delivery, particularly for high-risk groups. Greater effort is also necessary to promote health awareness and to improve health behavior at the household level.

Technical support for the development and implementation of health sector policy reforms to assure sustainability of progress and improve health sector efficiency and equity will be working through the following key program elements:

Support for a data-based policy process;

Technical assistance to monitor and verify policy measure achievements; and

Task forces to assist with targeted health policy reform areas.

This program will work with a number of partners including the Ministry of Health and Population, the Ministry of Economy and International Cooperation, the Ministry of Planning, the Ministry of Finance, the Health Insurance Organization, the Curative Care Organization, and a number of key stakeholders such as private sector providers, non-governmental organizations and university medical schools.

Title: **Healthy Mother/Healthy Child (HM/HC)**  
Number: **263-0242**  
Amount: **\$35 Million (\$70 Million planned)**  
Initiated: **FY 1995**

USAID's long collaboration with the Ministry of Health and Population (MOHP) to improve maternal and child health has entered a new phase focusing on the high risk governorates of Upper Egypt (Fayoum, Beni Suef, Minya, Assiut, Sohag, Quena, Luxor, and Aswan).

Background/progress:

Assistance to the health sector over the past ten years has led to several highly successful, nationwide child survival interventions, including the Expanded Program for Immunization (EPI), Acute Respiratory Infections (ARI), Control of Diarrheal Diseases (CDD), and the national neonatal care program, which continue today largely financed and managed by the MOHP. Despite substantive gains, important health problems persist, especially in Upper Egypt. There an integrated program will be established at the district levels with involvement sought from family members, the community, non-governmental organizations, and private providers. UNICEF, under a USAID grant, will collaborate in Minya, Assiut and Sohag, areas of Egypt where they already operate health sector programs. The new initiative brings together a basic package of high quality, essential health services which is expected to include:

- Prenatal care and counseling;
- Delivery and postnatal care;
- Newborn care;
- Promotion of immediate and exclusive breast feeding to improve chances of survival of the newborn;
- Child preventive services: immunization, nutrition, growth monitoring, oral rehydration therapy;
- Sick child case management (diarrheal disease, ARI);
- Reproductive health services (family planning, reproductive tract infections, education on harmful practices);
- Fortieth day integrated visit for mother and child which includes postnatal check-ups for mother and child, BCG (tuberculosis vaccination) for children, and family planning counseling;
- Counseling and health education on all of the above.

■ Other health sector support activities include the ongoing work of the U.S. Centers for Disease Control (CDC) which is collaborating with the Government of Egypt (GOE) to train qualified epidemiologists. These experts are already having a real impact in eradicating diseases (e.g., poliomyelitis, neonatal tetanus, measles) and health hazards (e.g., lead poisoning) in the country. Improvements in surveillance have contributed to reducing the number of new polio cases from 671 in 1992 to 70 in 1996. Their investigation of a poisoning outbreak in the Aswan area uncovered lead contamination in flour and resulted in a GOE policy decision to replace all granite grinding wheels nationwide with modern machinery.

Title: **Water and Sanitation in Rural Areas**

(Funded under Technical Cooperation and Feasibility Studies)

Number: **263-0225**

Amount: **\$2.6 Million**

Initiated: **FY 1993**

The U.S. private voluntary organization Save the Children Federation (SAVE) has carried out a number of activities in Upper Egypt serving rural community development and health needs with USAID financial assistance. Prior activities include approximately \$430,000 which strengthened community and local government participation through an activity incorporating animal production, micro enterprise, health care, education and agriculture; a \$150,000 child survival program reaching a target population of 50,000 which trained 115 female health workers; and a \$141,000 environmental health activity. This large Water and Sanitation activity was completed in December 1996.

Accomplishments:

SAVE's water and sanitation activity has improved access to and use of clean water and safe wastewater disposal systems in 30 villages in Upper Egypt where household slow sand filters for water purification, household water connections, and septic tanks for wastewater treatment were installed. Household water connections were added based on the results of a mid-term evaluation (September 1995). Hygiene education information has been provided to families and communities to promote sanitary practices and behaviors. This training included cleaning/disinfecting water sources and filtering unprotected water supplies.

Water and sanitation accomplishments include:

- Construction: 388 sand filters, 570 house water connections, 35 storage barrels, and 2,038 septic tanks were installed in Qena, Sohag, Minya, and Aswan governorates.
- Hygiene Education: 747 hygiene education sessions were held for women and 643 for children.
- Child-to-child program: 627 sessions were held with children to promote health and hygiene messages that can be passed on through children's networks.
- Quick Health Messages: 4,900 home visits were conducted to provide residents with quick health messages about the proper use and maintenance of both the slow sand filter and the septic tank.

Title: **Child Survival**  
Number: 263-0203  
Amount: \$67.6 Million  
Initiated: FY 1985

USAID has worked with the Ministry of Health and Population (MOHP) setting up programs to overcome the major causes of illness and death of infants and young children. Impressive results have been achieved under the Expanded Program for Immunization (EPI), Control of Diarrheal Diseases (CDD), Acute Respiratory Infections (ARI), and Maternal and Child Health (M/CH) services. Although the USAID project ended on August 15, 1996, the programs continue under the MOHP.

Accomplishments:

EPI: The program focused on maintaining coverage above 80% for six childhood vaccines, introducing hepatitis B vaccination, eradicating polio and eliminating neonatal tetanus.

- Child immunization coverage rates are being maintained at near 90% for all six vaccines compared to 54% in 1984. Hepatitis B immunizations, initiated in 1992, have reached 90% for all three doses.
- Reported confirmed cases of polio dropped from 671 in 1992 to 70 in 1996.
- Reported cases of tetanus among neonates dropped from 1,830 in 1992 to 790 in 1995 (in contrast to 7,256 cases in 1986).

CDD: Due to the widespread knowledge and use of oral rehydration therapy (ORT), diarrhea is no longer the primary cause of infant death in Egypt.

ARI: The World Health Organization case management protocol has been adopted in all health facilities and 80% of primary care physicians and nurses throughout the country were trained in the correct diagnosis and treatment of respiratory illnesses.

M/CH - Child Spacing: Over 9,000 traditional birth attendants were trained on safe delivery and referral to family planning services. Doctors and nurses were trained on neonatal care, prenatal, natal and postnatal services. One hundred neonatal care units are now operational to manage neonatal problems. The first national maternal mortality survey was conducted which has helped in planning key interventions to improve services to women. Mass media was used to promote services and to educate families.

- The infant mortality rate declined 42% from 108 (between 1978-82) to 63 (between 1991-95) deaths per 1,000 live births.
- The under-five mortality rate declined 48% from 157 (between 1978-82) to 81 (between 1991-95) deaths per 1,000 live births.

Title: **Cost Recovery Programs for Health**  
Number: **263-0170**  
Amount: **\$78.5 Million**  
Initiated: **FY 1988**

USAID is working with the Ministry of Health and Population (MOHP) to broaden and diversify approaches for the financing and delivery of personal health services in Egypt to promote sustainability in the health sector. This involves three focus areas: (1) the development and testing of cost recovery systems in select MOHP facilities as a model for country-wide application; (2) the promotion of improved management information systems (MIS) in two leading health care systems; and (3) the expansion of the private health care sector by guaranteeing loans to private practitioners and the development of prepaid and other managed practices.

Background/progress:

- **Pilot Testing:** Five hospitals located in Embaba, May 15th, Kafr El-Dawar, Shark El-Medina and El Kantara Gharb are participating. Over 80% of the design and implementation of new management and clinical operating systems has been completed. Training in the use of these systems will be continuous at all sites. New biomedical equipment (at a total value of \$5.9 million) has been delivered to all sites. Renovation work has been completed at Kafr El-Dawar, Kantara El Garb and May 15th. Renovation work at Embaba is ongoing. Marketing staff at all five facilities are conducting market research and executing marketing plans.
- **MIS:** A system for the collection and classification of expenditures in health care units has been finalized and a software guide prepared for the routine collection and incorporation of this information in the MOHP/Health Information System. For the Health Insurance Organization (HIO)/MIS, development work has been completed, data conversion problems resolved and implementation of the hardware and software initiated at headquarters and each of the four branches scheduled for full automation. A MIS department has been established at the Cairo Curative Care Organization (CCO), staff trained in department operations, and operational forms authorized and data fields standardized in preparation for the implementation of the planned CCO hospital MIS.
- **Loan Guarantees:** Nineteen banks are now participating in the Credit Guarantee Corporation, Medical Practitioner Loan Program and over 2100 guarantees have been issued.
- **Other activities** include a financial assessment and feasibility study of Suez Canal University's Faculty of Medicine proposal to establish a managed care system. Another involved an assessment of the Egyptian Medical Syndicate's request for support to expand its Health Insurance of the Medical Union program. That assessment also looked at the potential market for expansion and concluded that a very favorable climate exists. A business plan/proposal including human resources development and staffing plans, upgrading of the MIS, legal, market analysis, and capital investment plans are now being prepared.

Title: **Schistosomiasis Research**  
Number: **263-0140.02**  
Amount: **\$39.65 Million**  
Initiated: **FY 1988**

These resources are provided under the USAID umbrella project Science and Technology for Development which supports the Egyptian science and technology community's efforts to solve national development problems and constraints through applied research and technology in the fields of health, productivity, and science and technology. This sub-project focuses on schistosomiasis control to develop tools, methods and information through directed research and by improving the capability of medical research institutions to conduct practical, control-oriented research in the schistosomiasis field.

Background/progress:

Research grants have been provided to Egyptian and U.S. private and public sector groups in the categories of vaccine development, improved diagnostic methods, better chemo-therapeutic regimens, epidemiology of schistosomiasis, socio-economic factors that affect the disease, and operations research to develop systems for delivering appropriate interventions. This program is jointly managed by Egypt's Ministry of Health and Population (MOHP) and U.S. organizations: NAMRU-3, Lowell University, Medical Service Corporation International (MSCI) and the U.S. Centers for Disease Control (CDC). MSCI provides management and technical assistance, arranges for training in the U.S. for Egyptian researchers and procures research equipment and supplies. NAMRU-3 provides local training and scientific collaboration with Egyptian scientists.

- Egyptian and American scientists currently are working collaboratively under 90 project research grants.
- The GOE Theodore Bilharz Research Institute and Lowell University have established an internationally-acclaimed laboratory facility to provide grantees with the biological materials needed for their research.
- MOHP and CDC have established a National Reference and Diagnostic Laboratory to improve immuno-diagnostic methods for the detection and treatment of schistosomiasis.
- World-class scientists participate in the project's annual technical seminars. Research is underway to develop candidate vaccine agents and effective new diagnostic tests.
- Primarily as a result of capacity developed under the project, Egypt has been selected as a field test site for candidate schistosomiasis vaccines selected by the World Health Organization.

# PROMOTING DEMOCRACY

## OVERVIEW

Egypt's strengths -- the relative freedom of the print media, the existence of representative groups, such as the two legislative bodies, the People's Assembly and the Shura Assembly, and the proliferation of special interest groups -- have provided USAID with a framework for constructive engagement in democracy, working with the Egyptian Parliament and civil society organizations (CSOs), including local government.

The history of Egypt's Parliament dates back to the 1860's. In the modern era, its functions have been increasingly impeded by the inadequacy of its information services. To overcome this serious constraint, USAID is cooperating in a five-year activity to expand the Egyptian Parliament's information resource base and provide its members with the needed level of research and analysis skills.

To date, a series of in-country and overseas training programs have been offered, in part through the U.S. Library of Congress/Congressional Research Services. About 625 staffers from parliamentary committees and their research, library and computer centers have benefited. The training focused, *inter alia*, on the role of information services in decision making; the methodology of objective, non-partisan research and analysis; economics; political science; law; budget and finance; data gathering; public policy formulation and evaluation; and library use and information technology development. USAID will continue to support technical and institutional capacity building for Parliament's information services.

Leadership, planning, management and team building skills are essential for CSO development. Training and technical assistance is being provided by USAID to targeted CSOs to help them gain these skills. This kind of assistance will be expanded to special interest groups engaged in lobbying and advocacy. Egyptian non-governmental organizations (NGOs) are also being encouraged to network between one another and with government agencies at the local regional and central levels. A CSO institutional strengthening fund has been established to provide resources for operational support, grants and seed money for NGO development activities and training and technical assistance in improved advocacy skills.

A policy-based program has recently been initiated with the Egyptian Government to increase devolution of authority to local government and to increase local government participation in the rural development process.

Title: **Administration of Justice**  
Number: **263-0243**  
Amount: **\$3 Million (\$17.3 Million planned)**  
Initiated: **FY 1996**

This program is working with the Ministry of Justice to develop automated information services and train judges in new civil and commercial trends.

Background/progress:

The delivery of appropriate judicial services in a more timely fashion will help attract foreign and public investment in the private sector and advance its growth. Raising the quality of judicial decision making through a more efficient and responsible judiciary will also strengthen public confidence in the role of law and thereby advance the growth of democracy.

Planned activities include automation of two pilot civil courts; training programs for court personnel; identification of procedural reforms; and training in the use of an automated legal database.

Support at the National Center for Judicial Studies includes curriculum development and training for career-long judicial education; clinical court training; legal English; judicial exchanges; and assistance to strengthen the administration of training programs.



Title: **Participatory Rural Governance**  
Number: **263-K635/263-0251**  
Amount: **\$10 Million (\$30 Million planned - Program)**  
**\$4 Million (\$5 Million planned - Technical Assistance)**  
Initiated: **FY 1996**

USAID is collaborating with the Government of Egypt (GOE) in the Egyptian National Program for Integrated Rural Development, commonly known as "Shrouk," which promotes greater participation and decentralized governance at the village level.

Background/progress:

For successful local development to occur, strong community participation is required. Shrouk works towards that end. This involves decentralization to empower local decision makers and provide local people the opportunity to develop a stake in their own future. When village citizenry actively participate in setting their own development priorities and share the responsibility for financing and implementing their own development projects, local development is accelerated and democracy strengthened.

USAID supports Shrouk through technical assistance and program support. Technical assistance is provided for the organizational and institutional development needs of the Ministry of Local Administration/Organization for the Reconstruction of the Egyptian Village and to help that Ministry address implementation issues related to special Shrouk concerns such as the role of women in community development, the environment, operations and maintenance, among others.

Program support is provided for measures that alleviate policy and institutional constraints in the Egyptian system of local governance through cash transfers to the GOE upon the achievement of mutually agreed upon policy reforms. Technical assistance to monitor progress and verify compliance with policy reform benchmarks, and to evaluate program impact on the devolution of authority, is also included. Examples of planned reforms are:

Roles and responsibilities for community participation, including the roles of elected popular councils in rural development, defined and formalized.

Finances decentralized in local accounts controlled by village Shrouk committees.

Transparent policies and procedures institutionalized.

Operation and maintenance (O&M) budgets assured and procedures adequate for continuing needs of village projects.

Adequate financial support provided in the GOE budget for the expansion of Shrouk development activities throughout rural Egypt.

Title: **Decision Support Services (DSS)**  
Number: **263-0231**  
Amount: **\$8.3 Million (\$12 Million planned)**  
Initiated: **FY 1993**

USAID is supporting the People's Assembly and the Shura Council to build on and improve the effectiveness of their legislative and administrative processes. The assistance is focused on developing and improving existing parliamentary information services and expanding the demand for and use of these services.

Background/progress:

Legislatures play a crucial role in the development of democracy by representing public opinion in decision-making. The provision of relevant and reliable information services and the expanded use of information based on solid research enhances the quality and impact of the legislative, advisory and oversight functions carried out by the legislature.

DSS training programs and seminars for information services staff (researchers and librarians) cover areas such as computer and data management skills, policy analysis, the utilization of government and other resources, and library skills. Observational study tours are also provided to expose staff to model services.

- 625 information services staff have received in-country and overseas training in areas such as economics, political science, law, research methodology, public policy formulation, budgeting and financial analysis, data gathering, library use, organizational behavior, and computer literacy and manipulation.
- The Library and Computer Center have received technical assistance to help develop and support their role in information services delivery.
- Six members from the People's Assembly and Shura Assembly went to the United States on a two-week observation tour looking into the use of information services at the State and Federal levels.

Title: **Community Resource Mobilization (CRM)**

(Funded under Technical Cooperation and Feasibility Studies)

Number: **263-0225**

Amount: **\$8.4 Million**

Initiated: **FY 1994**

With USAID financial support, the U.S. private voluntary organization Cooperative for Assistance Relief Everywhere (CARE) is helping local community groups become effective development organizations and encouraging the growth of small and micro enterprises.

Background/progress:

Local community development has been an important component of USAID's contribution to Egyptian society. The Community Resource Mobilization (CRM) activity, located in Upper Egypt, builds on an earlier \$3.9 million Community Initiated Development (CID) project carried out by CARE which assisted approximately 120 Egyptian non-governmental organizations (ENGO) in Aswan, Qena, Sohag, and Fayoum governorates acquire the skills needed to plan and manage community development activities. A major achievement of CID was the establishment of self-sustaining, revolving loan funds to provide credit to low-income members of the community. Approximately \$2.8 million was disbursed to approximately 19,000 borrowers, of whom over 38 percent were women.

Under CRM, CARE is working with ENGOs to increase the long-term level of resources available to them. CARE has selected 105 ENGOs to participate in capacity-building activities, including identifying community problems and determining the actual causes and most appropriate solutions.

- 94 community-based development projects were initiated, designed and implemented by the ENGOS.
- 31 community development training workshops for local NGOs have been conducted.
- ENGOS identified and mobilized resources (cash and in-kind) generating LE 3,533,447 from various sources for project activities.
- Four partner organizations were established in Qena, Sohag, Fayoum, and Aswan associated with the development of small business entrepreneurial activities.
- 1,115 loans were disbursed to entrepreneurs in the amount of \$375,205.

Title: **Partnership Project for Girls and Young Women**  
(Funded under Technical Cooperation and Feasibility Studies)  
Number: **263-0225**  
Amount: **\$2.6 Million**  
Initiated: **FY 1994**

USAID, working with private voluntary organizations and local leaders, is helping develop model programs in education, health and development for girls and young women to promote gender equity and to encourage community participation in the planning, implementation and evaluation of community-based programs.

Background/progress:

This project finances the work of the U.S. private voluntary organization Center for Development and Population Activities (CEDPA) in the three governorates of Minya, Beni Suef and Fayoum, sites selected because of their low female literacy rates and early childbearing norms. These areas were also selected because of the potential non-governmental organization (NGO) partners that existed in each area. All three governorates have active and committed Governors' Councils of Women which offer bases for advocacy activities. CEDPA's key objectives in this project are to:

Mobilize leadership at the national, governorate and community level to close the gender gap in education and health;

Improve life skills, self-confidence and social competence in girls and young women;

Improve health and reproductive health of girls, young women and young couples; and

Strengthen the capacity of local institutions to plan and implement sustainable programs.

Accomplishments to date include:

- 106 community leaders and 77 youth leaders trained in advocacy for young women;
- A "New Horizons" life skills training program developed in collaboration with local Egyptian community leaders;
- 106 teaching units cover a spectrum of issues including adolescence, marriage, reproductive health, child development, first aid, violence against women, environment, income savings and generation;
- 25 Girls' Learning Centers reaching 459 girls with awareness classes and 184 with literacy classes;
- 30 Egyptian NGO staff trained in materials development and testing;
- Scholarships provided to 640 girls to enable them to attend primary school.

Title: **Private Voluntary Organizations (PVO)  
Development**

Number: **263-0220**  
Amount: **\$18.5 Million**  
Initiated: **FY 1991**

The quality of life for many poor and disadvantaged groups in Egypt can be enhanced through community self-help activities. USAID, is helping establish models that will reduce the constraints on Egyptian PVOs (EPVO) which hinder their ready access to financial resources and technical assistance.

Background/progress:

Collaboration is being encouraged between U.S. and Egyptian PVOs for the advancement of EPVO institutional development, support for functional partnerships, and the joint implementation of development activities. To date, 28 grants have been provided to U.S. and Egyptian PVO's.

The U.S. PVO National Council of Negro Women (NCNW) is serving as an institutional umbrella working with E/PVOs in particular to help them improve their management and technical capacity. Some examples are:

- 26 EPVOs received technical assistance and training for institutional strengthening.
- 35 workshops/seminars were conducted covering topics such as: financial management; project development and design; project planning, monitoring and evaluation; and fund raising.
- Community Development in Sayeda Zeinab (\$215,000) to facilitate the sustainable development of a poverty stricken area and enhance the potential of three community associations. (Coptic Evangelical Organization of Social Services)
- Expansion of polyclinic services at El Arish (\$95,000). (Moslem Young Women's Association)
- Health care of families and adolescent girls (\$108,000) in the Zabaleen area of Mokattam. (Association for the Protection of the Environment)
- Developing and upgrading the health education services and management information system (\$35,000). (El Haram Islamic Center)

# **PROTECTING THE ENVIRONMENT**

## **WATER AND WASTEWATER**

Since 1975, USAID has invested over \$2 billion in urban water and wastewater infrastructure benefitting about 22 million Egyptians. Population density, together with long-postponed infrastructure investments, had severely overwhelmed the water and wastewater services of urban areas throughout Egypt, creating numerous environmental health hazards. In 1996, several of the more recent investments were completed with the following results: 2,000,000 residents in the poor Cairo neighborhoods of the Pyramids and Embaba received sewer hook-ups; more than 500,000 residents of Suez were connected to the new wastewater treatment plant funded by USAID and, in Cairo, the three major potable water reservoirs serving the heart of the city at Darassa were put into service providing improved water supplies to three million people.

Institutional reforms in public water/wastewater utilities have included presidential decrees granting institutional autonomy to the utilities in seven governorates allowing them to operate as economic entities on a cost recovery basis. Tariff collection rates have increased in Cairo and Alexandria and separate bank accounts were established which give these utilities a degree of flexibility in planning their operations. Utilities in both Cairo and Alexandria are being encouraged to make more progress in increasing the level of tariffs towards cost recovery. In smaller urban areas, tariff reform for water/wastewater is already well advanced.

Title: **Secondary Cities Development**  
Number: **263-0236**  
Amount: **\$82 Million (\$215 Million planned)**  
Initiated: **FY 1994**

USAID is expanding water and wastewater infrastructure investments to reach the communities of Mansoura, Nuweiba, Luxor, and the Aswan group of Nasr City, Kom Ombo and Darawo City. Water and wastewater treatment works will include collection/distribution pipeline networks, pump stations and storage tanks. The release of funds for these capital improvements will follow the implementation of reforms at central and local government levels critical to the operation of autonomous local utilities, including tariff increases needed to cover operation and maintenance costs and full revenue retention. Action Plans have been developed and agreed to in advance by all parties covering reorganization, targets and timing of reforms.

Background/progress:

USAID assistance covers:

- Institutional support: Technical assistance and training to assist in the design and implementation of reforms has been provided. Action Plans have been established and approved by the Government of Egypt, including reforms necessary for local water/wastewater authorities to achieve institutional autonomy and financial viability.
- Preparation of final design packages, including construction drawings and specifications as well as preparation of environmental assessments, have commenced for each site.
- Associated construction/rehabilitation will include water leak detection programs and wastewater system operations plans for each of the communities.

Title: **Cairo Water Supply II**  
Number: **263-0193**  
Amount: **\$145 Million**  
Initiated: **FY 1988**

This project builds on the rehabilitation and expansion of the southern portion of the water treatment plant at Rod El Farag (\$97.4 million - Cairo I). The second phase Cairo II involves the installation of 53 kilometers of distribution and transmission pipe in central Cairo, the construction of four ground level concrete reservoirs, construction of two pumping stations, the rehabilitation of four pumping stations, and the establishment of a central water quality laboratory. Technical assistance to strengthen the institutional capacity of the General Organization of Greater Cairo Water Supply (GOGCWS) to operate and maintain the entire water supply system is included.

Background/progress:

- Central water quality laboratory constructed, equipped and laboratory staff trained.
- 30 kilometers of distribution pipeline completed.
- 23 kilometers of ductile iron transmission pipelines, 4 prestressed concrete water reservoirs with a total capacity of 120,000 cubic meters, construction of 2 pumping stations, and rehabilitation of four pumping stations completed.
- Four million Cairo residents now benefit from a more reliable and safer water supply service.
- Institutional development has been carried out in five areas with GOGCWS: (1) financial viability, (2) managerial development, (3) technical support for operations and maintenance, (4) materials management and procurement, and (5) project management and administration. Both quantitative performance indicators and managerial policies are serving as guides for GOGCWS actions and decisions as its management moves the organization forward toward financial viability and autonomy.



Title: **Canal Cities Water and Wastewater II**  
Number: **263-0174**  
Amount: **\$380 Million**  
Initiated: **FY 1987**

The Canal Cities of Suez, Ismailia and Port Said were the locale of USAID assistance for the rehabilitation of sewage collection and water distribution systems (\$169 million) serving about two million people. Canal Cities II supports wastewater treatment facilities for Suez, Ismailia and Port Said and the construction of a pump station at Qantara to increase the raw water supply to Port Said along with related institutional development and training.

Background/progress:

The following investments are supporting sustainable water and wastewater services in the three cities bordering the Suez Canal:

■ Construction of new wastewater treatment facilities:

The Suez treatment plant is completed. The operation and maintenance program will continue until August 1997.

The Ismailia treatment plant is completed. The operation and maintenance activities will continue until January 1998.

Work on the Port Said treatment plant and raw water pump station at Qantara is scheduled for completion in early 1997.

A rehabilitation program for the existing collection system and pump stations is also ongoing in the three cities.

■ Construction of a raw water pump station at Qantara to upgrade the city of Port Said's raw water supply source from its capacity of 150,000 cubic meters per day to 320,000 cubic meters per day is nearing completion.

■ Institutional Development and Training Activities:

The Suez Canal Authority (SCA) is operating and maintaining the two wastewater treatment plants in Suez, Ismailia and the Ataka pump station in Suez. SCA has also accepted operating the wastewater treatment plant in Port Said and the Qantara Raw Water Pump Station. Training of operation and maintenance (O&M) trainers is completed and the process institutionalized by ongoing programs conducted by SCA staff.

Title: **Cairo Sewerage II**  
Number: **263-0173**  
Amount: **\$771 Million (\$784 Million planned)**  
Initiated: **FY 1984**

Sustainable wastewater collection, treatment and disposal facilities are being financed by USAID for the West Bank of Cairo along with institutional and operations and maintenance (O&M) technical assistance. USAID is also providing institutional support to the Cairo General Organization for Sanitary Drainage (CGOSD) to enable it to better operate and maintain its physical facilities and to become a financially viable, autonomous organization.

Background/progress:

The enormous pressures of a burgeoning population coupled with the lack of proper maintenance contributed greatly to the deterioration of Cairo's wastewater system. Backed-up sewers and overflowing sewerage vaults were frequent occurrences in Cairo's poorer (and not so poor) neighborhoods as well as some outbreaks of cholera attributable to sewerage contamination of the water supply. Beginning in 1979, British, U.S. and GOE financing was dedicated to upgrade and expand the wastewater system. While the British effort is confined to improving the system on the East Bank of the Nile, the USAID-financed program has involved major projects on both sides of the Nile but is now concentrated on the West Bank. Since the completion of the first phase in 1986, Cairo has not experienced a major sewerage flooding incident due to system failure.

- A massive sewerage connection program is well underway on the West Bank providing service connections to about two million people previously unserved by piped service. Work in Zenein, the Pyramids area and adjacent villages has been completed, however, work is continuing in Embaba.
- The rehabilitation of the Zenein Wastewater Treatment Plant (\$73 million), just south of Embaba, now is able to remove 95% of the pollution that would have been discharged into the Nile through the Nahya Drain. The expansion of the West Bank collection system has provided more than 300 miles of additional sewers (\$115 million), eight new pumping stations (\$79 million), and has constructed the Abu Rawash Primary Treatment Plant (\$114 million) and its innovative sludge handling facility (\$42 million) in the desert outside Cairo. Well over \$100 million has been invested to construct additional facilities to increase the overall reliability and capacity of the system.
- An operation and maintenance (O&M) technical assistance component is providing system start-up services and training to GOE employees responsible for the newly constructed facilities.
- A permanent GOE training center was established at the Zenein wastewater treatment plant, and a large-scale program of staff training is on-going to make certain that the wastewater system will be well operated and maintained in the future.

Title: **Provincial Cities Development**  
Number: **263-0161.03**  
Amount: **\$104 Million**  
Initiated: **FY 1981**

The three provincial cities of Fayoum (population 332,000), Beni Suef (220,000), and Minya (262,000) are receiving USAID support to improve their water and wastewater systems and to improve their capacity to plan, implement, and maintain urban infrastructure. Construction covers water treatment plants and supporting facilities in each city and improvements and extensions of the existing water and sewage disposal systems. Technical assistance is included to help each utility improve their institutional ability to manage water and wastewater infrastructure.

Background/progress:

- Construction of the three water treatment plants in Fayoum, Beni Suef and Minya is complete. Each has been operating for over two years at their design flow rate (300 liters per second). Nine, one million gallon elevated storage tanks have been constructed and three water treatment plants have been rehabilitated.
- Construction of about 190 kilometers of water and wastewater lines is complete; sixteen existing pumping stations have been rehabilitated; six new pumping stations have been constructed; and 36 pressure reducing/sustaining valve chambers have been installed. This work was carried out by local firms under approximately 270 contracts.
- In 1995, project activities shifted toward institutional support which had not been previously addressed. Institutional support is being provided to help the utilities plan for autonomy and self-sufficiency focusing on needs related to the operating and maintenance budget and revenue retention. A plan was formulated to help move the utility entities towards autonomy and financial viability.
- In late 1995, a Presidential Decree established economic general authorities for water supply and sanitary drainage in seven governorates, including the governorates of the Provincial Cities.
- In 1996, technical assistance helped these new authorities begin their transformation to self-sustaining utilities. A water metering program of high volume users was implemented in August 1996, and is increasing revenues over 150 percent and encouraging the new general authorities to pursue other institutional changes.

**Title: Alexandria Wastewater System Expansion**  
**Number: 263-0100**  
**Amount: \$425 Million**  
**Initiated: FY 1977**

Working with the General Organization for Sanitary Drainage of Alexandria (AGOSD), USAID has financed the design, construction and start-up of a sewerage system for approximately 75% of the city.

Background/progress:

A major program was undertaken in Alexandria for comprehensive improvements in the city's sewerage collection and pumping system including the sewerage of new areas, the construction of over 211 kilometers of sewers, seven new pump stations and four rehabilitated, two treatment plants east and west of the city, one sludge dewatering and disposal facility, and the disposal of primary treated effluent to Lake Maryout. A comprehensive operations and maintenance (O&M) training program was set up for the line operators of the facilities as was an institutional training program for management personnel.

- The expanded system began operating in October 1993 virtually eliminating sewage flooding of the residential areas served by the system, eliminating the majority of sewage discharges into the Mediterranean, improving the quality of life for residents of the sewerage areas and decreasing the incidence of water-borne disease.
- A Presidential decree was issued in March 1994 providing AGOSD with the legal framework of an economic organization, moving it towards becoming a self-sustaining autonomous entity.
- The preparation of feasibility designs of selected alternatives for the next phase, environmental assessments and the continuation of O&M and institutional programs are underway.

## **AIR POLLUTION**

Urban air pollution is another major environmental problem which jeopardizes Egypt's economic development and its citizens' health. Urban air quality is seriously degraded as a result of industrial emissions, vehicles, construction, garbage burning, and natural dust from surrounding deserts. Levels of suspended particulate and lead pollution in Cairo are the highest among the world's megacities and cause an estimated 10,000 to 25,000 additional deaths per year. Children reared in Cairo are particularly vulnerable to the higher than average lead pollution which lowers IQ by four to five points.

USAID industrial energy and environment activities are helping reduce the discharge of industrial pollutants and promote energy conservation. Energy efficiency activities have eliminated the following accumulated pollutants from urban air expressed in metric tons (M/T): 25,200 M/T of sulfur oxide; 4,000 M/T of nitrogen oxide, and 7,800 M/T of carbon monoxide. A new Cairo air quality activity initiated in 1995 is working with the Government of Egypt in a number of areas: reducing lead emissions from local smelters and in gasoline; instituting a vehicle emissions testing and certification program; and introducing natural gas-fueled buses to reduce diesel emission particulate pollution, using support from the U. S. private sector.

Title: **Cairo Air Improvement Project (CAIP)**  
Number: **263-0250**  
Amount: **\$35 Million (\$60 Million planned)**  
Initiated: **FY 1995**

Among the world's largest cities, Cairo has the worst air pollution in terms of suspended particulates and lead. The Government of Egypt (GOE) made a significant commitment to address air pollution in its Environmental Action Plan which was adopted in 1992 and the promulgation of a new environmental law (Law 4 of 1994). USAID has joined forces with the Egyptian Environmental Affairs Agency (EEAA), the Ministry of Petroleum's Office of Energy Conservation and Planning, other donors, and the private sector seeking solutions to institutional and technical constraints in an attempt to improve air quality through a reduction of emissions that have proven to be the greatest health risks.

Background/progress:

CAIP is designed to include activities that have some immediate impacts on reducing vehicular emissions, total suspended particulates (TSP) and lead, while setting the stage for a long-term effort through demonstrations and pilot tests of alternative technologies, increased public awareness and training. The following CAIP interventions will deal with the most crucial air pollution problems amenable to USAID support:

Improve fuel efficiency and reduce exhaust emissions of gasoline motor vehicles by instituting a vehicle emissions testing, tune-up and certification program drawing on lessons learned from a successfully completed pilot effort;

Promote the conversion of diesel-fueled, public sector municipal bus fleets to compressed natural gas to reduce total suspended particulate emissions;

Reduce the concentration of airborne lead in and near lead smelters;

Institute air quality monitoring of CAIP-funded interventions that will complement the monitoring network being introduced by other donors for their interventions;

Initiate a public awareness and communications campaign.

The start-up phase places heavy emphasis on training. Over the past year, extensive short-term training through workshops and observations tours has been arranged for key Egyptian partners to familiarize them with technical issues related to the above interventions: vehicle emission regulations and enforcement, compressed natural gas, and lead smelters. In addition, the EEAA developed a Lead Smelter Action Plan which is now ready for implementation with CAIP assistance.

Title: **Energy Conservation and Environment (ECEP)**  
Number: **263-0140.03**  
Amount: **\$67.5 Million**  
Initiated: **FY 1988**

This USAID-supported demonstration, training and promotion activity is helping accelerate the use of technologies and practices aimed at improving energy efficiency and preventing pollution at participating Egyptian industrial and commercial facilities which simultaneously increase company profitability. The El Tabbin Institute for Metallurgical Studies (TIMS) of the Ministry of Industry, the Development Research and Technological Planning Center (DRTPC) of Cairo University, and the Federation of Egyptian Industries (FEI) are collaborators.

Background/progress:

- Technical assistance and some \$19 million worth of equipment have been provided to over 150 industrial and commercial facilities. Some 30 demonstrations of different energy efficient technologies in public and private sector industries have been completed, resulting in annual energy cost reductions for participating companies of around \$14 million.
- Demonstrations have touched all major industrial sectors as well as the institutional and commercial sectors, i.e., from tourism to health care; from the bread baking industry to promoting automobile vehicle tuning in the Greater Cairo area.
- To create greater understanding and knowledge of program objectives, routine contact is maintained with over 4,500 organizations and individuals through an outreach program. Over 5,000 practicing engineers and professionals countrywide have received related training in Egypt and about 100 received specialized training overseas.
- Cumulative energy savings are in excess of \$30 million.
- Avoided emissions of "greenhouse" gases include:
  - 6,000 tons of Carbon Monoxide--48% reduction
  - 3,000 tons of Nitrogen--22% reduction
  - 17,000 tons of Sulphur Dioxide--28% reduction
  - 700,000 tons of Carbon Dioxide--7% reduction.

ECEP is in its final phase and is focusing increasingly on sustainability, setting the stage for the widespread replication of its approach. Initiatives include developing a cadre of energy management training specialists within 50 or more industrial companies and increasing outreach to policy decision makers in key entities. This includes the Ministries of Electricity, Petroleum and Natural Resources and the Egyptian Environmental Affairs Agency as well as the financial and banking community to encourage a supportive policy framework and continued funds availability.

Title: **Science and Technology Cooperation (STC)**  
Number: **263-0140.01**  
Amount: **\$23.18 Million**  
Initiated: **FY 1987**

USAID assisted the Egyptian science and technology community to help solve national development problems through applied research and technology in the fields of environment, health, productivity, and science and technology. Critical production problems of public and private sector industries were the targets of STC. STC ended in June 1996.

Accomplishments:

During the course of STC, Egyptian universities and research institutions collaborated closely with participating companies or service agencies, the end users. Overall, priority was placed on research proposals dealing with environmental pollution problems. Problems addressed included recycling wastes and the development of improved industrial processes and products for greater efficiency and reduced pollution. Support was also given to the Egyptian National Scientific and Technical Information Network (ENSTINET) and its extension to regional universities. The network enabled Egyptian researchers to tap into computerized bibliographies and databases located throughout the world.

The economic impacts of STC research have been evaluated and documented as have their social and environmental benefits. Towards the end of STC, a promotional effort, including technical reports, case studies and workshops, informed both the research and industrial communities of the benefits of scientific and technical collaboration. STC research outputs include:

- 81 research contracts covering over 70 end users (public enterprise companies, private sector companies, governorates, and government ministries) were completed involving topics such as:
  - Cleaner production and waste minimization
  - Industrial minerals and chemicals
  - Construction materials
  - Small-scale industries
  - Water and wastewater treatment
  - Lake ecosystems
  - Computer-aided industrial production and process control
  - Biotechnology.
  
- A special unit was created within the Ministry of Scientific Research to carry on similar activities following the completion of STC.



## **SUSTAINABLE TOURISM**

Serious environmental degradation constrains Egypt's achievement of sustainable development and jeopardizes the health and livelihood of its citizens. Protecting the environment is also vital to sustaining Egypt's tourism industry, which is the country's second highest foreign exchange earner. A new activity in sustainable tourism, which grew out of the U.S.-Egyptian Partnership for Economic Growth and Development, focuses on the preservation of both natural (e.g., coral reefs) and cultural (e.g., antiquities) national treasures that are two keys to the continued health of the tourism sector.

Title: **Promotion of Environmentally Sustainable Tourism**  
(Funded under Technical Cooperation and Feasibility Studies)  
Number: **263-0225**  
Amount: **\$5.35 Million**  
Initiated: **FY 1996**

Under the U.S.-Egyptian Partnership for Economic Growth and Development, USAID has been helping the Government of Egypt introduce environmentally sustainable development policies and programs for the tourism industry. Tourism, one of the fastest growing sectors of the Egyptian economy, threatens the very attractions for which Egypt is famous. Uncontrolled development along the Red Sea Coast has resulted in coastal landfills, pollution from urban and industrial sources, resource allocation conflicts, and the improper disposal of solid wastes. The coral reefs are also being damaged by careless anchoring of boats and other irresponsible behavior. Egypt's antiquities have not fared any better and are suffering rapid degradation, unprecedented in their history.

Background/progress:

This is a pilot activity designed to foster sustainable growth in tourism while protecting the natural and cultural sites upon which tourism is based and to contribute to long-term economic growth and job creation in Egypt. Its approach encourages linkages among the public sector, private sector, and non-governmental organizations having interests in the sites. Major elements include (1) the creation of a Marine Park Sanctuary along the Red Sea coast to protect coral reefs (2) improvement of the culture tourism potential of St. Paul's and St. Anthony's Monasteries in the desert west of Hurghada; (3) restoration of the Islamic Fort of Quseir; (4) development of a suitable plan for the touristic presentation for the Tomb of Seti I in the Valley of the Kings; and (5) development of an Environmentally Sustainable Tourism Strategy for the Red Sea Coast.

To date:

- A new Marine Park Sanctuary has been established which protects all of the islands and coral reefs off the Red Sea coast. Park rangers have been hired and are currently being trained; mooring buoys have been installed; and enforcement of tough new environmental laws by the rangers will begin in early 1997.
- Wall painting conservation and museum development are underway at St. Anthony's and studies to improve the sanitary drainage system at St. Paul are being conducted.

Title: **Preservation and Restoration of Egyptian Antiquities**

Number: --

Amount: **Egyptian LE 50.4 Million (\$15 Million Equivalent)**

Initiated: **FY 1994**

The American Research Center in Egypt (ARCE), in close coordination with the Egyptian Supreme Council for Antiquities, is administering a program to conserve Egyptian antiquities using Egyptian currency generated under USAID policy reform and commodity programs.

Background/progress:

Various U.S. and Egyptian specialized institutions including Chicago House, Friends of the Fulbright Commission, American University in Cairo, California Academy of Sciences, and University of Pennsylvania have received sub-grants. Their work touches on a number of periods including Neolithic, Pharaonic, Greco-Roman, Coptic, and Islamic. Sub-grants provide funds for restoration, documentation and at times institutional development. Thirty-two separate activities are underway, with a total budget of LE 34.8 million, of which the following are examples:

- Zawiya Ibn Barquq Mosque: Photographic, architectural and historical documentation is complete and preliminary cleaning has been initiated. Conservation work will be tendered in the fall of 1997.
- American Research Center in Egypt Field School: Thirty-four Supreme Council of Antiquities inspectors have been trained in architectural excavation techniques.
- Museum management: Sixteen employees of the Supreme Council of Antiquities have returned from a six-week training course in the United States.
- Marine Conservation Laboratory: The laboratory supports marine archaeology and conservation of wet artifacts retrieved from sunken ships or buried in ground water. The upgrading of laboratory buildings is now complete.
- Coptic area of Cairo: Site presentation plan is underway and analysis of groundwater

problem continues.

- **Bayt ar Razzaz:** An existing conditions report has been completed. Currently emergency shoring of rooms in danger of collapse is underway. Photographic documentation will begin in the fall of 1997.
- **Luxor Temple:** A small laboratory and storage area will be built to treat fragments of the temple that are waterlogged.

## **OTHER**

The USAID portfolio contains support that cuts across sectors, providing general resources aimed at facilitating program design and development and the testing of assistance modes.

Title: **Technical Cooperation and Feasibility Studies (TCFS)**  
Number: **263-0225**  
Amount: **\$69.85 Million**  
Initiated: **FY 1992**

TCFS resources are helping meet three broad U.S. economic assistance program development and implementation needs: (1) analysis associated with the identification, development, testing, and evaluation/monitoring of projects being funded by USAID, (2) greater private voluntary organization (PVO) involvement in U.S.-funded development activities, and, more recently, (3) support for initiatives promoted by the U.S.-Egyptian Partnership for Economic Growth and Development.

Background/progress:

The following are typical of the feasibility and technical studies, general and sector surveys, pre-project and project design activities, evaluations and sector assessments funded under TCFS:

- Technical assistance from the Center for International Private Enterprise to the Federation of Egyptian Industries for institutional development;
- Design work for a major initiative in girls' education;
- Assessment of flood damage in Upper Egypt in November 1994;
- A special study on the prevalence and prevention of Hepatitis C infection in Egypt \*

Support through private voluntary organizations includes:

- Community Resource Mobilization - CARE;\*
- Farmer to Farmer program - ACDI;\*
- Improving technical and managerial capabilities of Egyptian businesses - IESC;\*
- Water and sanitation - SAVE;\*
- Partnership projects for girls and young women - CEDPA\*.

Support for the U.S.-Egyptian Partnership for Economic Growth and Development includes:

- Environmentally Sustainable Tourism: Promotes the preservation of natural (i.e. coral reefs) and cultural (i.e. antiquities) sites in areas of the Sinai, Red Sea Coast and Upper Egypt.\*
- Female education through a girls' scholarship program.\*
- Private sector promotion through business technology centers to upgrade technologies and a business information highway to link the major business associations of Egypt with businesses around the world using the International Business Exchange and the U.S. Chambers of Commerce.

\*Separate sheets on these activities appear in other sections of this report under related technical headings.

**ANNEX**

**ACTIVE AND COMPLETED PROJECTS LISTS**



**LIST OF ACTIVE PROJECTS  
IN NUMERICAL ORDER  
(\$ Millions)**

<i>263 No.</i>	<i>Title</i>	<i>Amount</i>
0100	Alexandria Wastewater System Expansion	424.924
0132	Irrigation Management Systems	336.000
0140	Science and Technology for Development	2.945
0140.02	Schistosomiasis Research	39.650
0140.03	Energy Conservation and Environment	67.500
0161.03	Provincial Cities Development	104.140
0170	Cost Recovery for Health	78.500
0173	Cairo Sewerage II	771.000
0174	Canal Cities Water and Wastewater II	380.000
0193	Cairo Water Supply II	145.000
0194	Alex. Elec. Network Modernization	50.000
0201	Private Enterprise Credit CIP	1,384.350
0201.03	Private Enterprise Credit	.648
0202	Agricultural Production and Credit	289.000
0209	Public Finance Administration	31.300
0211	University Linkages II	16.000
0212	Small and Micro Enterprise Development	44.000
0215	Power Sector Support	461.000
0219	Technical Assistance for Policy Reform	30.000
0220	PVO Development	18.500
0223	Telecommunications Sector Support	178.900



<b>0224</b>	<b>Power Sector Support II</b>	<b>77.800</b>
<b>0225</b>	<b>Technical Cooperation &amp; Feasibility Studies II</b>	<b>69.845</b>
<b>0226</b>	<b>Export Enterprise Development</b>	<b>10.000</b>
<b>0227</b>	<b>Population/Family Planning III</b>	<b>60.643</b>
<b>0228</b>	<b>Small Enterprise Credit</b>	<b>35.000</b>
<b>0230</b>	<b>Egyptian Center for Economic Studies</b>	<b>5.500</b>
<b>0231</b>	<b>Decision Support Services</b>	<b>8.300</b>
<b>0233</b>	<b>Technical Assistance for Policy Reform</b>	<b>35.000</b>
<b>0236</b>	<b>Secondary Cities Development</b>	<b>82.099</b>
<b>0238</b>	<b>Privatization Support</b>	<b>35.000</b>
<b>0240</b>	<b>Agricultural Technology Utilization and Transfer</b>	<b>25.000</b>
<b>0242</b>	<b>Healthy Mother/Healthy Child</b>	<b>35.000</b>
<b>0243</b>	<b>Administration of Justice</b>	<b>3.000</b>
<b>0244</b>	<b>Development Training II</b>	<b>59.000</b>
<b>0250</b>	<b>Cairo Air Improvement</b>	<b>35.000</b>
<b>0251</b>	<b>Participatory Rural Governance Program</b>	<b>4.000</b>
<b>0254</b>	<b>Technical Support For Health Policy</b>	<b>5.000</b>
<b>0259</b>	<b>Girls' Education</b>	<b>15.000</b>
<b>0264</b>	<b>Growth Through Globalization</b>	<b>36.000</b>
<b>0265</b>	<b>Combatting Endemic and Emerging Diseases</b>	<b>4.000</b>
<b>0629</b>	<b>Sector Reform II</b>	<b>200.000</b>
<b>0630</b>	<b>Cash Transfer for Sector Reform</b>	<b>200.000</b>
<b>0631</b>	<b>Agriculture Policy Reform</b>	<b>50.000</b>
<b>0632/33</b>	<b>Private Sector CIP</b>	<b>400.000</b>
<b>0634</b>	<b>Sector Policy Reform III</b>	<b>200.000</b>
<b>0635</b>	<b>Participatory Rural Governance Program Support</b>	<b>10.000</b>

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**LIST OF COMPLETED PROJECTS  
IN NUMERICAL ORDER  
(\$ Millions)**

<i>263 No.</i>	<i>Title</i>	<i>Amount</i>
9996	Review Assistance Program	.195
9997	Suez Canal Clearance	21.991
9998	Helicopter Transfer	3.000
9999	Port Said Mine Sweep	2.590
0001	Electric Power Distribution	29.834
0002	Technology Transfer and Manpower Development	0.934
0003	Technical and Feasibility Studies I	0.895
0004	Suez Canal Clearance Extension	0.035
0006	Population/Family Planning Research	0.130
0007	Road Building Equipment - Suez Canal Area	13.888
0008	Gas Turbine Generators - Talkha-Helwan (K-032)	67.299
0009	Ismailia Thermal Power Plant	249.576
0010	Mehalla Textile Plant Rehabilitation (K-033)	91.020
0011	Technology Transfer and Manpower Development II	1.895
0012	Suez Cement Plant	104.537
0013	Technical and Feasibility Studies II	14.574
0014	Alexandria Port Authority (K-031)	30.190
0015	Strengthening Rural Health Delivery	13.306
0016	Applied Science and Technology Research	22.460
0017	Water Use and Management	12.995
0018	Development Industrial Bank I (K-035)	30.176

<i>263 No.</i>	<i>Title</i>	<i>Amount</i>
0019	PVC Pipe Drainage (K-034)	19.137
0020	Integrated Social Work Centers	2.389
0021	Development Decentralization I	26.200
0023	National Energy Control Center (K-037)	42.296
0025	Technical and Feasibility Studies	17.787
0026	Technology Transfer and Manpower Development III	34.863
0027	Rice Research and Training	20.892
0028	Grain Silos Storage	53.635
0029	Family Planning	65.022
0030	Shoubra El Kheima Thermal Power Plant	261.503
0031	Agriculture Mechanization	37.574
0033	Urban Electric Power Distribution Equipment (K-043)	97.128
0035	Canal Maintenance (K-040)	29.960
0037	Grain, Tallow, Oils and Fats (K-041)	35.540
0038	Cairo Water Supply (K-040)	97.265
0040	Irrigation Pumping (K-039)	18.906
0041	Agricultural Development Systems	14.839
0042	Technical & Feasibility Studies IV	27.046
0045	Development Industrial Bank II	1.679
0047	Port of Suez Project (K-049)	10.125
0048	Canal Cities Water and Sewerage (K-050)	165.332
0052	Quattamia Cement Plant (K-051)	98.339
0054	Telecommunications I (K-047)	40.000
0060	Poultry Improvement	5.354
0061	Development Planning Studies	22.302
0064	Aquaculture Development	22.576
0065	Urban Health Delivery System	43.065
0066	Low Income Housing and Community Upgrading	75.583
0070	Major Cereals Improvement System	52.127

<i>263 No.</i>	<i>Title</i>	<i>Amount</i>
0071	Hydrographic Survey	7.068
0072	Port Said Salines Plant	12.899
0079	Small Farmer Production	80.000
0089	Alexandria Sewerage I (K-044)	48.925
0090	Industrial Productivity Improvement	14.639
0090.01	Management Development for Productivity	7.572
0090.02	Vocational Training for Productivity	15.881
0090.03	Industrial Technology Applications	8.034
0090.04	Innovative Productivity Activities	1.864
0091	Cairo Sewerage I	128.275
0095	Agricultural Cooperative Marketing	4.730
0096	Small Scale Agricultural Activities	1.608
0097	Private Investment Encouragement Fund	32.799
0101	Industrial Production (K-048)	120.039
0102	Technical Cooperation & Feasibility Studies	41.873
0103	Basic Village Services	69.933
0105	Mineral, Petroleum & Groundwater	33.417
0110	Peace Fellowships Program	59.668
0112	Private Sector Feasibility Studies	4.451
0113	Sinai Planning Studies	2.688
0114	Vehicle Maintenance Training	4.499
0115	Tax Administration	3.331
0116	Agricultural Management Development	4.065
0117	Telecommunications III	121.063
0118	University Linkages	26.559
0123	Energy Policy Planning	20.856
0125	Development Training	96.323
0127	Provincial Cities Development	19.913
0136	Suez Community Health Personnel Trg.	15.892
0137	Control of Diarrheal Diseases	33.882

<i>263 No.</i>	<i>Title</i>	<i>Amount</i>
0139	Basic Education	184.078
0140.01	Science & Technology Cooperation	23.175
0140.04	Energy Manpower Development	8.470
0142	Agricultural Data Collection and Analysis	4.801
0143	Decentralization Support Fund	50.000
0144	Population	110.987
0147	Production Credit	87.267
0152	National Agricultural Research	197.202
0153	Neighborhood Urban Services	19.998
0159	Business Support and Investment	3.356
0160	Aswan High Dam Power Station	140.000
0161.02	Basic Village Services	154.708
0161.04	Decentralization Support Fund	49.711
0161.05	Neighborhood Urban Services	68.986
0161.06	Sector Development and Support	7.173
0165	Safaga Grain Silos Complex	70.208
0176	Water and Wastewater Inst. Dev.	13.500
0177	Telecommunications IV	81.770
0182	Local Development II	401.143
0196	Talkha Combined Cycle Plant	64.674
0201.03	Private Enterprise Credit	.648
0203	Child Survival	67.595
Various	Commodity Import Program	3,889.503
Various	Cash Transfers	1,814.949

3. **ACTIVITY:** North Jordan Valley Wastewater.

**ACTIVITY OBJECTIVE:**

The activity would contribute to environmental goals to advance the cleanup of the Jordan River, and alleviate the problem of disposal of septage that the GOJ suspect are dumped in the waterways or drains to the Jordan Valley. Treated wastewater will be used for irrigation, thus contributing to the water shortage in irrigated agriculture.

**DESCRIPTION:**

The proposed activity will provide a wastewater collection system, and a wastewater treatment plant for residents of North Shunna area, serving a population of 78,000 in the year 2010. The activity will include the following elements:

- a. Prepare final engineering design and provide engineering supervision services for the construction of the facilities.
- b. Construction of a wastewater collection system and pumping stations to serve the population residing in Northern Jordan Valley area extending from Sleikat to Adasia.
- c. Construction of a wastewater treatment plant to provide secondary treatment for 9,000 cubic meter per day.

**BACKGROUND AND DISCUSSION:**

To comply with the terms of the peace treaty with Israel, which states that both countries are to make efforts to protect the Jordan River from sources of pollution and to rehabilitate the riverine ecology, a Canadian consulting firm prepared for WAJ a feasibility study of Jordan Valley Rural Sanitation. The study was funded by CIDA, and proposed three wastewater collection and treatment systems for the Jordan Valley, one serving the northern valley area, the second serving the middle valley around Deir Alla, and the third serving the southern valley. Implementation of this activity will help Jordan to meet its commitments under the peace treaty towards cleaning the north sector of the Jordan Valley. Disadvantage of constructing the system is the high capital cost estimated at \$3,000 per unit connected, while annual operation cost includes depreciation amounted to \$120 per unit connected. Compared with other projects recently implemented in Jordan, these rates are high due to the low population density. However, the indirect benefits of the Project to Jordan water resources and Jordan compliance with the peace agreement make the project more attractive.

**ESTIMATED COST:**

The construction and engineering supervision cost of the wastewater system is

estimated to cost approx. \$19 million. The final engineering design is estimated to cost an additional \$1.2 million.

**IMPLEMENTATION SCHEDULE:**

<u>Activity</u>	<u>Date</u>
Finalize SOW for the consultancy services to evaluate the feasibility study, and prepare final Eng. design documents.	9/1/1997
Advertise in the CBD and receive proposals	10/15/1997
Evaluate, negotiate and award a HC contract to conduct the Final Design.	12/1/1997
Final design and Tender documents completed	7/1/1998
Contractors prequalification completed, and IFB distributed to those qualified.	8/1/1998
Award a HCC for construction supervision services.	8/15/1998
Construction bids received	10/15/1998
Bids evaluated, and HC construction contracts are awarded.	12/1/1998
Construction started, and notice to proceed issued	1/1/1999
Construction completed (duration 18 months)	7/1/2001