

United States
Trade and Development
Program



Congressional Presentation
Fiscal Year 1991

United States International Development Cooperation Agency



U.S. TRADE AND DEVELOPMENT PROGRAM
Washington, D.C. 20523

February 20, 1990

To the United States Congress:

I am pleased to transmit the Congressional Presentation of the United States Trade and Development Program (TDP), an independent federal agency within the International Development Cooperation Agency, for Fiscal Year 1991.

This agency is administered under the authority of Section 661 of the Foreign Assistance Act of 1961, as amended, and the Omnibus Trade and Competitiveness Act of 1988.

The agency plays a unique role in implementing foreign policy objectives by promoting U.S. trade in international development. The cultivation of free market principles in emerging economies is a U.S. Government priority. This is the heart of the TDP program.

A handwritten signature in black ink that reads "Priscilla Rabb-Ayres". The signature is stylized and cursive.

Priscilla Rabb-Ayres
Director
U.S. Trade and Development Program

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Summary of Actual and Expected U.S. Exports
Related to Trade & Development Activities by Country
November 1989 (millions of dollars)

Country	Actual Exports	Poss. Exports	Total Exports
Africa			
Congo	3.5	55.0	58.5
Gabon	35.0	177.4	212.4
Ivory Coast	3.2	75.0	78.2
Kenya	23.9	190.5	214.4
Madagascar	0.0	6.3	6.3
Malawi	0.0	60.0	60.0
Mozambique	0.0	31.5	31.5
Nigeria	99.0	84.0	183.0
Region-Africa	0.0	395.0	395.0
Senegal	0.0	20.0	20.0
Sierra Leone	0.0	6.1	6.1
Togo	0.0	0.0	0.0
Zimbabwe	10.0	345.0	355.0
<u>Subtotal</u>	174.6	1445.8	1620.4
Asia			
Bangladesh	2.8	3.0	5.8
China	358.8	2650.5	3009.3
India	10.8	1964.5	1975.3
Indonesia	318.4	2334.5	2652.9
Korea	0.3	339.5	339.8
Malaysia	26.6	332.2	358.8
Micronesia	0.0	94.6	94.6
Nepal	29.0	625.0	654.0
Pakistan	6.5	175.0	181.5
Philippines	296.6	366.2	662.8
Region-Asia	31.1	27.5	58.6
Singapore	17.7	200.0	217.7
Sri Lanka	0.4	0.0	0.4
Taiwan	378.6	2500.0	2878.6
Thailand	589.7	1796.8	2386.5
<u>Subtotal</u>	2067.3	13409.3	15476.6

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Summary of Actual and Expected U.S. Exports
Related to Trade & Development Activities by Country
November 1989 (millions of dollars)

Country	Actual Exports	Poss. Exports	Total Exports
Latin America			
Belize	4.6	0.0	4.6
Bolivia	0.0	1.8	1.8
Chile	32.5	13.0	45.5
Colombia	135.0	360.5	495.5
Costa Rica	1.0	2.5	3.5
Dom. Republic	24.2	171.7	195.7
Ecuador	0.0	61.8	61.8
Guatemala	3.0	35.0	38.0
Haiti	0.0	16.0	16.0
Honduras	0.5	19.0	19.5
Jamaica	3.9	10.0	13.9
N Antilles	1.1	77.0	78.1
Peru	2.2	18.3	20.5
Region-L.A.	52.6	1149.7	1202.3
St. Lucia	6.0	15.0	21.0
Trinidad/Tobago	57.0	0.0	57.0
Uruguay	0.0	3.7	3.7
Venezuela	38.6	0.0	38.6
<u>Subtotal</u>	362.2	1955.0	2317.2
Middle East & Europe			
Algeria	34.0	80.0	114.0
Greece	0.0	0.0	0.0
Ireland	0.0	174.5	174.5
Morocco	13.1	52.5	65.6
Oman	0.3	47.0	47.3
Portugal	0.4	300.0	300.4
Tunisia	19.0	45.0	64.0
Turkey	60.6	1280.0	1340.6
United Arab Emirates	0.0	15.0	15.0
Yemen	0.0	11.0	11.0
Yugoslavia	2.0	167.5	169.5
<u>Subtotal</u>	129.4	2172.5	2301.9
Worldwide			
Worldwide	17.4	678.8	696.2
Total	2750.9	19661.4	22412.3

I. EXECUTIVE SUMMARY

The Administration requests a budget of \$30 million for the U.S. Trade and Development Program (TDP) for FY 1991. Twenty-eight million dollars will support both operating expenses and program activities, and two million dollars of the six million dollars authorized in the Support for Eastern European Democracy (SEED) Act of 1989 will be allocated for projects in Poland and Hungary.

TRADE AND DEVELOPMENT PROGRAM

FY 1991 Budget Request
(\$ in Thousands)

	FY 1989 Actual	FY 1990 Estimated	FY 1991 Request
Total TDP Budget	\$25,000	\$32,000*	\$30,000

*Post Sequester Appropriation is \$31,499.

TDP has an exclusive mandate to promote U.S. exports for major development projects in middle-income and developing countries. The 1990s promise to be a decade of significant economic and political change, and TDP will respond quickly and effectively to U.S. Government initiatives and priorities in emerging democracies and developing economies.

The process of democratization and the development of market-based economies in Eastern Europe will present a vast range of opportunities for U.S. business. TDP will facilitate U.S. commercial access to these markets and will assist in the development of private enterprise in this region. TDP is currently active in Poland, Hungary and Yugoslavia, and will initiate programs in other Eastern European countries as U.S. policy allows.

TDP funds feasibility studies, reverse trade missions, training programs, conferences, and other project planning services related to major projects in middle-income and developing countries where there is a potential for exporting U.S. technology, goods and services. Contracts funded by TDP grants must be awarded to U.S. companies. In addition, TDP is authorized to administer a program of tied aid credits for U.S. exports in cooperation with the Export-Import Bank of the United States.

TDP supports priority projects in host country development plans. The host governments play an active role in developing the scope of work, selecting the U.S. company to carry out the study, and monitoring the progress of the endeavor. TDP's emphasis on host government participation combined with the high degree of professionalism, skill, and objectivity of U.S. companies ensures a satisfactory and useful product. This cooperation also engenders trust between the host country, TDP, and the U.S. business community that often extends to future projects.

TDP-funded projects provide a generous return to the U.S. economy. At the end of FY 1989, over \$2.8 billion of U.S. exports had been associated with TDP funded projects, and an additional \$20 billion in U.S. exports will result from those projects over the next ten years. To date, over 400 companies in 40 states and the District of Columbia have benefited from activities supported by TDP. U.S. business representatives who have participated in TDP-funded activities support them as important and practical ways to improve their marketing, exposure and networking for future business activities.

II. BUDGET REQUEST

For FY 1991, the Administration requests \$30 million for TDP. Twenty-eight million dollars will support operating expenses and program activities, and two million dollars of the six million dollars authorized in the Support for Eastern European Democracy (SEED) Act of 1989 will be allocated for projects in Poland and Hungary.* Table I presents TDP's appropriations from FY 1986 through FY 1990, and the FY 1991 budget request.

TABLE I						
TRADE AND DEVELOPMENT PROGRAM						
APPROPRIATIONS						
FY 1986-FY 1991						
(millions of dollars)						
	'86	'87	'88	'89	'90*	'91**
Appropriation	18.1	20.0	25.0	25.0	32.0	30.0
* Post Sequester Appropriation is 31.5						
**Proposed						

Historically, operating expenses have represented approximately ten percent of TDP's appropriated funds. This proportion is expected to remain relatively constant. Table II is a breakdown of TDP's appropriations for FY 1989 and FY 1990, and the FY 1991 request.

*The SEED Act authorizes to be appropriated \$6,000,000 for TDP over the three-year period beginning October 1, 1989. The two million dollars appropriated hereunder for FY 1990 will remain available until expended.

TABLE II
TRADE AND DEVELOPMENT PROGRAM
FY 1991 BUDGET REQUEST
(in thousands of dollars)

	FY 1989 Actual	FY 1990 Estimated	FY 1991 Request
TOTAL TDP (Appropriations)	25,000	32,000*	30,000
(Obligations)**	25,326	32,555	30,000
 PROGRAM FUNDS	 22,780	 29,755	 27,150
 OPERATING EXPENSES	 2,546	 2,800	 2,850
Personnel Services	1,282	1,415	1,465
Travel	133	195	195
Rent, Commun., Utilities	153	134	139
Printing & Reprod.	11	15	20
Other Services***	883	1,007	991
Supplies & Materials	10	8	10
Equipment	74	26	30

* *Post Sequester Appropriation is \$31,499*

** *Includes obligation of no-year monies from FY 1982-FY 1984*

*** *Reimbursable support to A.I.D. and State included*

TDP has an exclusive mandate to promote U.S. exports for major development projects in middle-income and developing countries. In the 1990s, TDP will be operating in a dynamic international market and will respond to U.S. Government initiatives and priorities in emerging democracies and developing economies.

In FY 1991, TDP will continue to fund those activities that promise a generous return to the U.S. economy and to promote the participation of U.S. businesses in the development process. In addition to funding feasibility studies and other project planning activities, TDP will fund a variety of complementary activities such as trade-related education and training programs, reverse trade missions, and conferences designed to stimulate the export of U.S. technology, goods and services. TDP will also pursue effective use of its tied aid authority. Under Section 607(a) of the Foreign Assistance Act of 1961, as amended, TDP will serve as the

coordinating and authorizing agency for the provision of U.S. technical assistance to friendly countries.

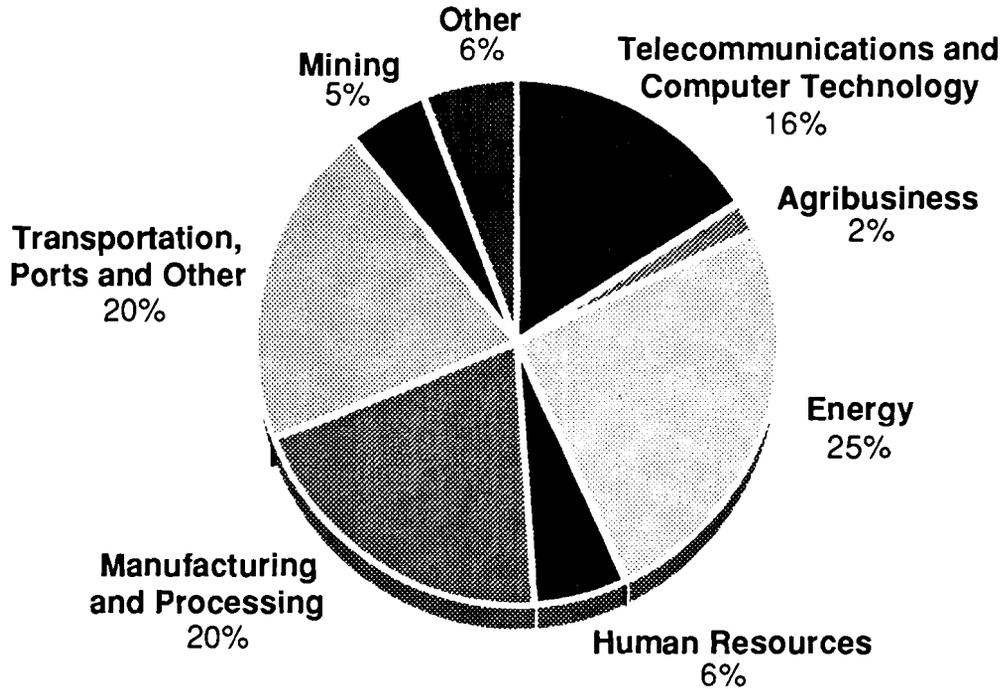
TDP will consider proposals in all industry sectors where U.S. companies are competitive in world markets, but intends to focus on those sectors in which the United States has a particular strategic interest and/or technical competitive edge. Such sectors include telecommunications, energy, transportation, waste management, trade-related training, water and air pollution, and other environmental concerns.

TDP will remain flexible and responsive to maximize the impact of its resources on U.S. exports.

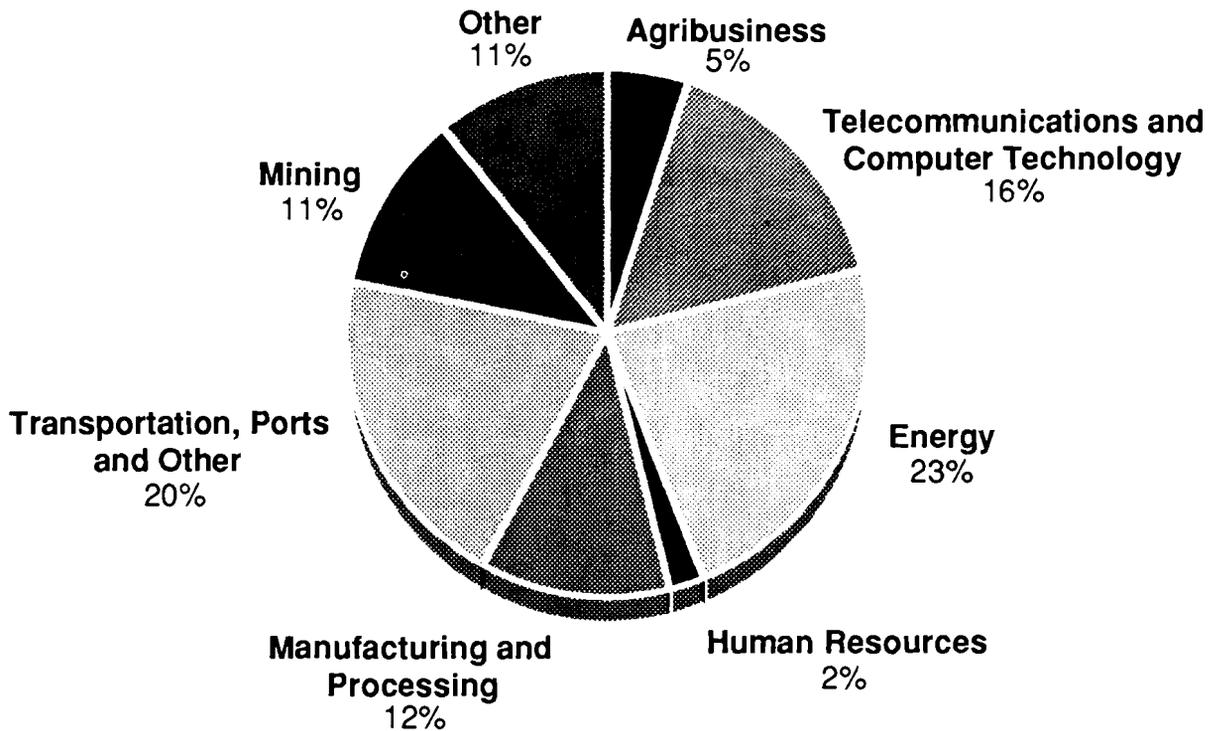
Sector concentration in FY 1988 and FY 1989 is shown in Chart I.

TDP Sector Concentration by Obligated Dollars FY 1988 & 1989

FY 1988



FY 1989



III. OVERVIEW

The U.S. Trade and Development Program (TDP) was established in 1980 as a component organization of the International Development Cooperation Agency (IDCA). The Omnibus Trade and Competitiveness Act of 1988 confirmed TDP's status as an independent federal agency within IDCA.

TDP plays a unique role in implementing U.S. foreign policy objectives by promoting U.S. trade in international development. TDP funds U.S. technical assistance in the planning stages of projects that are important to the development of the recipient countries and also represent significant U.S. export opportunities.

Feasibility studies funded by TDP increase the likelihood that U.S. goods and services will be procured in project implementation. Other activities, such as sponsorship of international conferences and funding of trade-related training and reverse trade missions, complement the feasibility study support. All TDP-supported activities are conducted by U.S. firms. Essentially, TDP serves as a catalyst to open markets to U.S. firms and to encourage U.S. private sector involvement in infrastructure development.

Although TDP grants are untied to procurement for project execution, projects for which TDP provided planning services have led to over \$2.8 billion in exports from U.S. companies. The full measure of exports to these projects is not yet clear because typically project implementation takes many years. It is estimated that over the next decade, the projects related to TDP activities financed to date are likely to receive an additional \$20 billion in exports.

Table III sets forth the growth of exports associated with TDP-sponsored projects funded through FY 1989. Cumulative exports have increased almost fourfold between 1986 and 1989.

TABLE III
TRADE AND DEVELOPMENT PROGRAM

Export Growth (Direct and Indirect)
December 1986 to November 1989
(millions of dollars)

Region	Actual Exports 12/86	Cumulative Exports as of 11/89	% Change 12/86- 11/89
Africa	\$101	\$174.6	73%
Asia	333	2067.3	521
Latin America	79	362.2	358
Middle East & Europe	80	129.4	62
Non Region-Specific	-	17.4	-
Total	563	2750.9	389

Appendix A shows the actual and anticipated exports by project, as of November 1989.

In addition to direct exports, there are significant indirect benefits that are not as easily quantifiable. U.S. companies that participate in TDP-funded feasibility studies are given the opportunity to demonstrate their skills and abilities to foreign officials in-country, and as a result win additional business. The business community has supplied TDP with numerous letters documenting such spin-off benefits. For example, as a direct result of a major U.S. engineering firm's work on a TDP-sponsored activity in Africa, a subsidiary of the firm won a \$10 million management contract at a power plant.

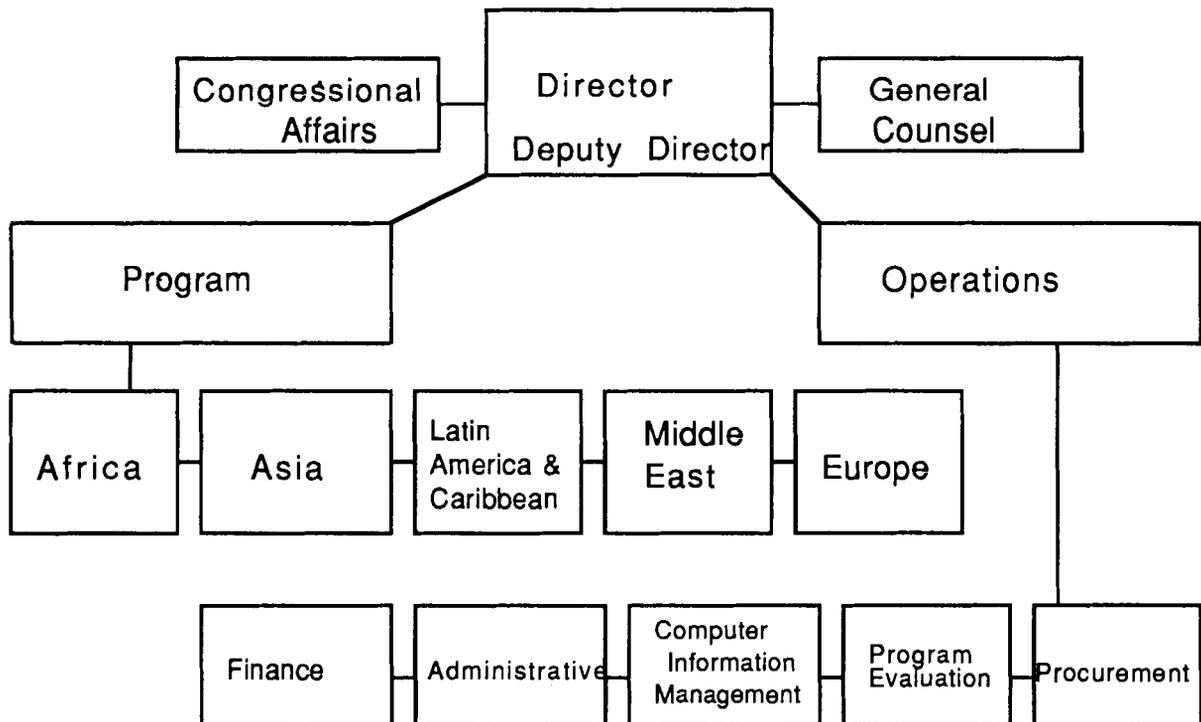
TDP is successful as a result of its unique characteristics and strengths. U.S. firms are actively encouraged to participate in sectors and markets that are new to them or otherwise difficult to penetrate without U.S. Government support. TDP's project selection criteria help ensure that projects are of sufficient priority to be implemented. The relationships established by TDP with foreign governments and multilateral development banks enable the U.S. private sector to become involved in the early stages of key development projects that promise substantial short- and long-term market opportunities for U.S. goods and services. Moreover, TDP is able to put into practice the importance placed by the U.S. Government on free market, private sector involvement in the implementation of development projects.

IV. ADMINISTRATION

TDP's program is carried out by a Washington-based staff of 26 professionals and support personnel. Regional officers are responsible for project identification, appraisal, execution, oversight and follow-up. A support staff handles contracting matters and monitors the evaluation and analysis of the program operations. Chart II shows the organizational structure of TDP.

**CHART II
TRADE AND DEVELOPMENT PROGRAM**

Organizational Chart



TDP activities are conducted in close coordination with the Departments of State and Commerce, the Export-Import Bank, the Agency for International Development, the Overseas Private Investment Corporation, and the Department of the Treasury, as well as other specialized government agencies such as the Transportation Department and the Environmental Protection Agency. The Department of Commerce's

Foreign Commercial Service and the State Department's Economic Officers at U.S. embassies provide critical local support for TDP's program.

TDP also maintains close contact with multilateral and regional development lending institutions, such as the World Bank, the Inter-American Development Bank, and the Asian and African Development Banks. This affords an exchange of important project information and keeps TDP apprised of critical opportunities for U.S. companies.

V. PROGRAM

In its ten successful years of existence, TDP has established its role as the U.S. foreign assistance agency uniquely able to stimulate foreign economic development and exports of U.S. goods and services in a manner consistent with U.S. foreign policy goals and objectives. TDP's efficient response to urgent assistance requirements in the emerging democracies of Eastern Europe demonstrates the value of TDP in carrying out U.S. foreign policy initiatives.

TDP is a small and streamlined agency that responds vigorously to the highly competitive demands of the international marketplace. In the 1990s, TDP is prepared to meet sophisticated new challenges.

Project Planning Activities

TDP's involvement in project planning is intended to underscore the responsiveness of the United States to the host country's development needs; enhance the position of U.S. suppliers in international competition for follow-on procurement; encourage untied procurement policies in developing countries; and demonstrate U.S. Government support for private sector involvement in development projects.

Project planning activities include:

Definitional Missions: Once a promising project is identified, TDP usually hires an assessment team made up of U.S. experts to conduct a definitional mission (DM). The purpose of the DM is to compile information for TDP critical to its internal selection process. This information includes: (1) the nature of the project; (2) the priority of the project to the host government; (3) the likely cost of the total project; (4) the nature of the likely financing of the project; (5) the need for a feasibility study and the requirements for such a study; and (6) the U.S. export potential and identification of U.S. sectors and companies which could compete for goods and services on the project. Based on the recommendation of the DM team, the advice of the U.S. Embassy in the country, and TDP budget capabilities, TDP determines whether to offer a grant for the feasibility study. Most DM studies are performed by small or 8(a) businesses.

Feasibility Studies: TDP funds studies to determine the technical, economic and financial feasibility of projects. Feasibility studies provide detailed data which support decisions on whether and how to proceed with project implementation. These studies provide sufficient engineering analysis upon which to base a reasonable firm cost estimate. Feasibility studies may include calculations of cost-benefit, market and cash flow assessments, plans for processing raw materials, plant operations analysis, marketing of final products and structure and sources of financing. TDP may also

fund master plans which lay out the broad parameters for subsequent project development in a particular sector.

Technical Symposia: TDP has sponsored a variety of technical symposia geared to the needs of specific export industries of the United States. Symposia are generally conducted in cooperation with, and co-funded by, industry and/or other U.S. Government agencies. These symposia are intended to familiarize foreign governments with U.S. goods and services as well as to encourage U.S. companies to export to the developing and middle-income world.

Orientation Visits: TDP funds reverse trade missions to the United States for high level foreign officials to familiarize them with U. S. goods and services. Typically these visits are associated with a particular project or sector and the officials selected are those responsible for procurement in areas where the United States is highly competitive. These activities are usually co-sponsored by U.S. industry.

Trade-Related Training: U.S. training has the potential to influence the attitudes of foreign buyers toward U.S. goods and services. Management and equipment training is often an integral component of a project and significantly enhances the competitiveness of U.S. companies.

Investor Assistance Program: The program provides cost-sharing for feasibility studies with U.S. investors to encourage investment in overseas projects which involve U.S. exports. In FY 1989, three loans were made under the Investor Assistance Program (IAP) to private U.S. businesses for overseas projects totalling approximately \$200,000. One study assessed the possibilities for the production of high quality seed for crops in Nigeria; a second studied a potential beef production operation in Pakistan; and a third study looked at a computer software, consulting, and repair facility for U.S. computer equipment in Portugal. The company involved with the computer software study has already exported \$400,000 of U.S. manufactured microcomputers to Portugal in FY 1989, and the company expects to export another \$15 million of computers by the end of calendar year 1992.

TDP plans to concentrate the IAP program in regions with an urgent need for private sector development, such as Eastern Europe.

TDP intends to promote more state participation in program activities. TDP has identified a number of activities such as reverse trade missions and technology seminars and conferences where state participation can enhance TDP's efforts and at the same time benefit state exports. For example, in FY 1989, TDP funded a symposium on petroleum refinery and petrochemical opportunities in Asia. This symposium was organized by the State of Texas, the East-West Center in Hawaii, and the University of

Houston's Small Business Development Center and provided significant planning information to U.S. exporters. TDP will also work closely with state development agencies as a prime mechanism to disseminate information on export opportunities to U.S. firms .

A broad indication of the impact of TDP activities on exports from individual states can be seen in Appendix C which provides a list of known suppliers that have exported goods or services to TDP-sponsored activities.

TDP is increasing its efforts to fund follow-on activities to feasibility studies in order to maximize the opportunities for U.S. firms and enhance the U.S. export return. For example, once a feasibility study has been completed, TDP will follow the progress of that project and, if appropriate, may fund a briefing or conference for U.S. exporters to familiarize them with the export opportunities related to the project. In one instance, TDP funded a feasibility study of a proposed transmission and substation project in Thailand. Following the study, TDP sponsored a business opportunities briefing to increase the awareness of U.S. manufacturers. Approximately \$12 million of U.S. exports have already been generated from this project, and market opportunities exist for an additional \$100 million.

In some cases it may be appropriate to fund the visit of host government officials to the United States to acquaint them with U.S. technology and equipment and give them an opportunity to meet with U.S. firms. Conferences and technology seminars serve to inform U.S. companies about export opportunities in a particular sector or region and/or to familiarize foreign officials with state-of-the-art U.S. technology. Appendix B is a listing of TDP project activities funded in FY 1989.

Selection Criteria:

Factors ranging from U.S. foreign policy objectives to overall budget limitations are considered in project selection. All TDP projects, however, must meet the following specific criteria:

Development Priority: TDP projects must be development priorities of the host country and likely to be implemented. TDP must receive a formal request from the host government, and the U.S. Embassy must endorse TDP's involvement in the proposed project.

U.S. Export Potential: Projects must present an opportunity for substantial sales of U.S. goods or services.

Untied Funding Availability: There must be assurance that untied funding for project implementation will be available and procurement will be open to U.S. firms.

VI. REGIONAL CONCENTRATION

TDP considers each proposal on its merits and does not allocate resources by region. The funds obligated to projects in any region tend to reflect the demand generated from that region, U.S. foreign policy priorities, and TDP budget limitations. Thus, regional concentration can be expected to shift from year to year.

Table IV sets forth the ten countries that have received the largest amount of TDP funds from FY 1981 through FY 1988, and the related number of projects. The actual and expected exports associated with TDP-funded projects by region are shown in Appendix D.

TABLE IV
TRADE AND DEVELOPMENT PROGRAM

Top Ten Countries Funded
and Number of Projects
FY 1981-FY 1989

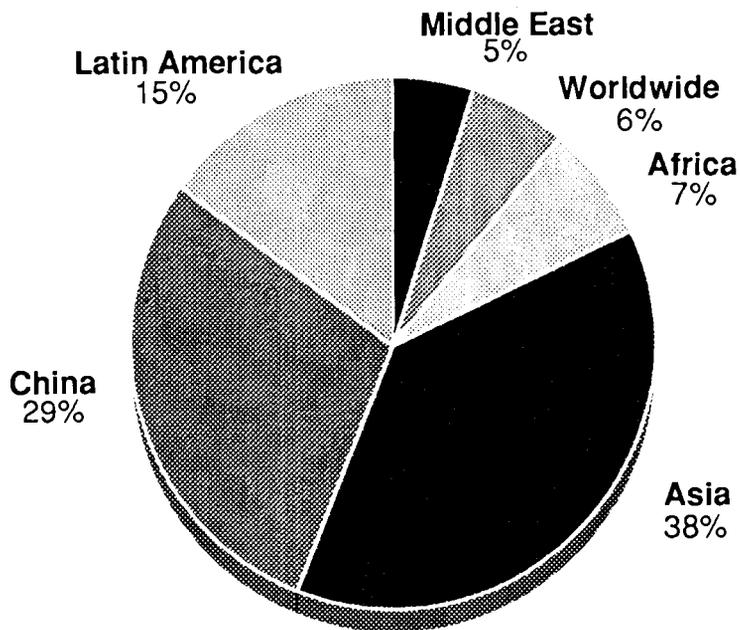
COUNTRY	OBLIGATED DOLLARS	NUMBER OF PROJECTS
China	\$23,840,133	79
Thailand	12,174,576	40
Philippines	5,912,151	25
Indonesia	5,292,342	18
India	5,139,199	17
Colombia	4,517,562	10
Turkey	4,680,496	20
Zimbabwe	3,589,578	5
Bolivia	3,500,103	4
Tunisia	2,464,344	14

Note: Table does not include definitional missions.

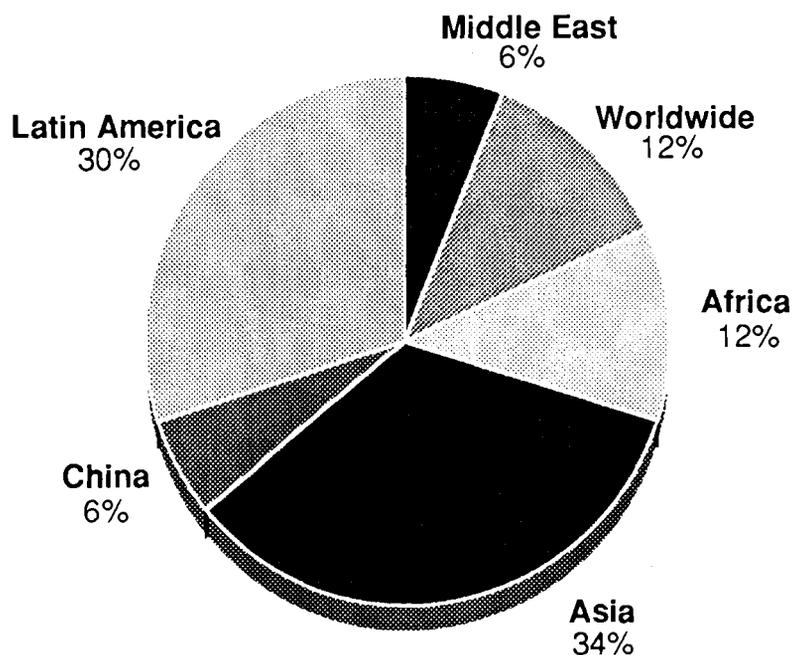
Funding by region for FY 1988 and FY 1989 is illustrated on a percentage basis in Chart III. Chart IV shows U.S. company exports associated with TDP-funded projects by region. Chart V highlights the twenty countries where the most projects have been funded.

TDP Regional Concentration by Obligated Dollars FY 1988 & 1989

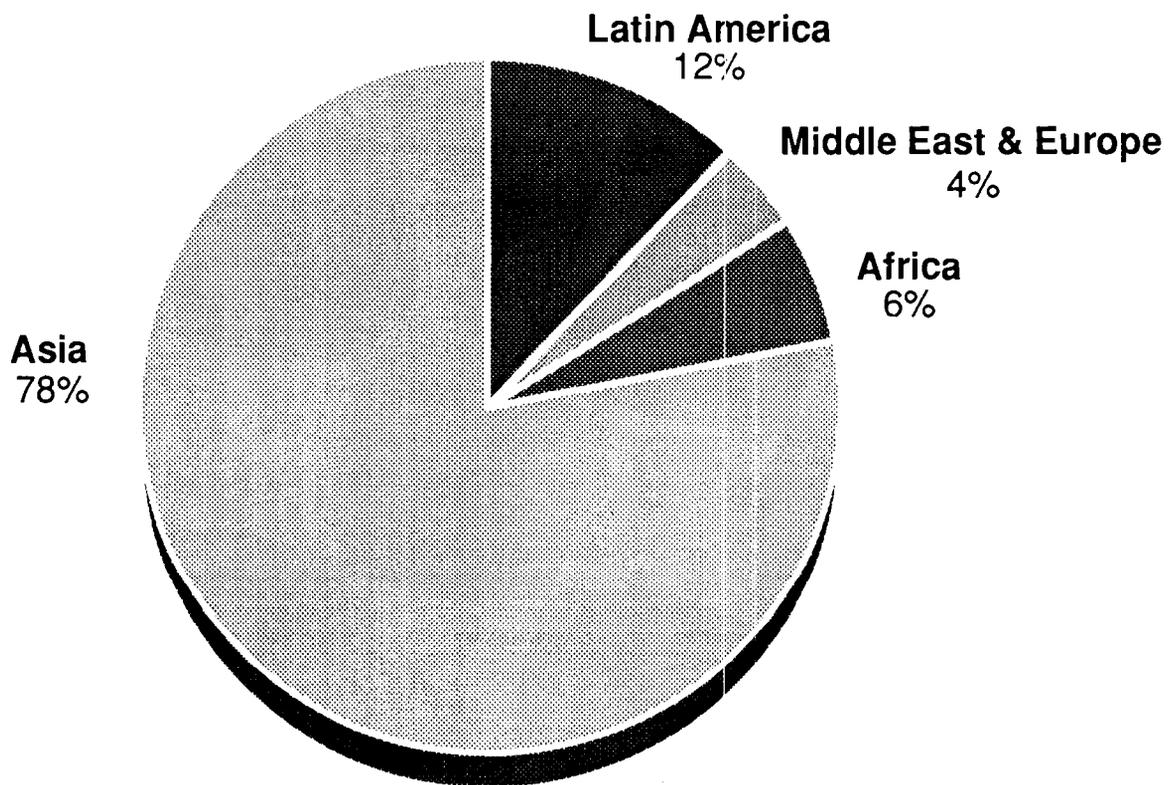
FY 1988



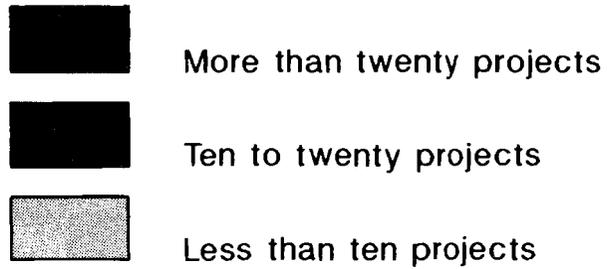
FY 1989



Exports Associated with TDP Funded Projects, by Region FY 1981-1989



**Top Twenty TDP Countries by Number of Projects
FY 1981-1989**



In FY 1989, the countries receiving the largest amount of TDP funds were Bolivia, Venezuela, India, and Thailand. Obligations increased substantially in Latin America and Africa from FY 1988 to FY 1989 because of TDP's concentrated effort in these regions. In response to President Bush's initiatives in Poland and Hungary, TDP obligated \$500,000 in Hungary in FY 1989, and is active in both countries. TDP participation in Eastern Europe is expected to expand significantly in FY 1990. Following is a summary of significant regional activities planned.

Asia:

TDP will continue to focus on the increasingly important industrial/economic sectors in Asia, such as telecommunications, energy, pollution control, and hazardous waste management. In FY 1989, approximately \$8 million in grants were obligated in Asia. TDP is currently reviewing over \$22 million of proposed projects for FY 1990 in this region.

TDP's program in Thailand has been and will continue to remain strong, especially as projects being presented to TDP for funding increase in size and complexity.

Because of the recent events in China, TDP has suspended all new obligations in that country since June 1989. TDP activities in China have opened new long-term markets to U.S. firms and introduced U.S. technology and products to China. There has always been strong support from the business community for the China program and the commercial benefits it provides.

As of November 1989, \$2.1 billion in exports from U.S. companies had gone to projects in the Asia region for which TDP provided planning activity funding. TDP projects an additional \$13.4 billion in exports to those projects, for a total of \$15.5 billion. Projects in five countries, China, Indonesia, the Philippines, Thailand, and Taiwan, have received 95 percent of the U.S. company exports to this region.

Eastern Europe:

TDP's primary focus for FY 1990 and FY 1991 will be on Eastern Europe. TDP is actively pursuing opportunities in Poland and Hungary in response to the U.S. Government's initiative and the strong U.S. business interest in market opportunities in these countries. Six million dollars was authorized in the Support for Eastern European Democracy (SEED) Act of 1989 for projects in Poland and Hungary for fiscal years 1990-1992. TDP will provide funding for a minimum of \$2 million each fiscal year for project planning activities in the following sectors: telecommunications, environmental protection, energy, transportation and industrial and financial development. Eastern European officials have expressed a strong

desire for U.S. goods and services. TDP anticipates incremental export returns well in excess of \$200 million to result from this funding.

In July 1989, TDP funded a \$750,000 project in Hungary, \$250,000 of which was contributed by the Government of Hungary, to study the downsizing of the metallurgy industry in Borsod County and the economic revitalization of that region, with emphasis on attracting foreign investment. The study was signed during President Bush's visit to Budapest in July 1989.

TDP has identified a number of promising projects in Poland, the most urgent of which is a telecommunications master plan. These activities have been favorably endorsed by the U.S. Embassy in Warsaw and by Polish officials.

It is expected that additional Eastern European countries will become strong candidates for TDP assistance and TDP will respond when appropriate.

Latin America and the Caribbean:

Latin America is a critical hemispheric neighbor and offers vast potential markets for U.S. goods and services as economic growth returns to the region. Therefore, TDP is giving increased attention to the Latin American region. This is reflected in the growth of TDP project funding from \$1.7 million in FY 1987 to over \$5 million in FY 1989. TDP anticipates spending approximately \$8 million on projects that will be eligible for funding in this region. TDP expects to focus on several Latin American countries such as Venezuela, Chile and Mexico during FY 1991.

To date, TDP's activities in Central America have been limited. In 1990, TDP will begin to place particular emphasis on Panama in coordination with the overall U.S. Government's efforts there. TDP expects to be active in both public sector infrastructure projects, as well as in promoting private sector investment in this country.

TDP projects that \$2.3 billion of exports from U.S. companies will occur as a result of projects receiving initial funding from TDP in this region. The level of exports associated with TDP-funded projects will increase further as TDP activity in the region increases.

Africa:

The various African economies are difficult for U.S. companies to penetrate for economic and political reasons, but African countries are likely to yield significant future opportunities for U.S. exporters and investors. Thus, TDP support is important from a long-term strategic point of view.

TDP anticipates FY 1990 obligations in Africa of approximately \$4.1 million, up from \$2.5 million in FY 1989. TDP estimates that approximately \$1.6

billion of U.S. exports will result in the long term from projects associated with TDP planning activities financed through FY 1989 in this region.

During the next few years, TDP will focus its efforts on those African countries making significant progress in structural adjustment and economic reform. Such countries will provide more stable markets for U.S. companies. They are also the most likely to have multilateral funding for major development projects. While individual country development priorities are diverse, TDP anticipates an emphasis on agro-industrial development, telecommunications, mineral development, energy and transport.

TDP will actively pursue projects in Francophone Africa. These countries have made overtures in recent years which indicate a new interest in U.S. business relationships that TDP hopes to encourage.

Middle East and Europe:

TDP's activities in this region have included a variety of the major technological sectors including power, mineral development, telecommunications, agribusiness, transportation and educational technology. TDP anticipates that environmental technology will be a growing area in this region in coming years.

TDP estimates that approximately \$2.3 billion in exports will be generated by projects associated with TDP-funded planning activities to date in this region.

VII. SUCCESS STORIES

The level of U.S. exports generated is the best measure of TDP's success. In addition to the dollar value of exports generated, TDP's success is reflected in its impact on development, on helping U.S. firms to penetrate new markets, and on building diplomatic and trade relations. The following examples illustrate TDP's success in these areas.

CTC SATELLITE GROUND STATIONS - CHILE:

In FY 1989, the Chilean Telephone Company (CTC) announced an award of a \$29 million contract to the U.S. firm Scientific Atlanta (SA) for the first phase of a \$700 million project. The project involves the construction of forty-three earth satellite stations slated for completion within three years. Scientific Atlanta fought strong competition from NEC of Japan and Alcatel of France. Scientific Atlanta's success is attributable to the company's efforts to meet the demands of CTC, as well as to U.S. Government support and coordination. In May 1989, TDP's Regional Director for Latin America became aware of the project during a visit to Chile. Within two weeks, TDP was able to offer a \$750,000 grant to CTC to make SA's offer more competitive. This grant, in conjunction with conventional Export-Import Bank financing and the U.S. Ambassador's support, resulted in SA being awarded the largest single international contract in the history of the company. In a letter to TDP's Director, the CEO stated that "TDP played a major role in neutralizing the support of the French and Japanese governments and allowed Scientific Atlanta to win the project on the technical merits of our equipment."

MANGALORE REFINERY PLANT - INDIA:

In FY 1988, the BIRLA group of India requested consultancy bids for the billion dollar Mangalore Refinery and Petrochemicals Project in India. The contract award could influence the source of some \$350 million in exports. Lummus Crest of the U.S. ranked first on the short list on technical grounds, and a French company ranked second. The French augmented their bid with a \$1.5 million offer for a feasibility study. At this point, Lummus Crest and the U.S. Embassy in India requested U.S. Government assistance. TDP provided \$900,000 and A.I.D. contributed an additional \$300,000, to bring the U.S. assistance up to \$1.2 million. This provided a 35% grant element for the U.S. offer and thus cleared the way for full U.S. Government approval of a concessional U.S. financing package. As a result of this effort substantial exports have been won by the United States. By the end of 1989, \$10 million of high-tech equipment have been procured from companies in New Jersey and Illinois. An additional \$120 million of U.S. exports is expected in the next five years.

NZIOA SUGAR MILL - KENYA:

In FY 1986, TDP provided a grant of \$55,000 to support the bid of Arkel International of Louisiana to conduct a feasibility study for the rehabilitation, modernization and expansion of the Nzoia Sugar Mill in Kenya. The Mill was operating at 50% capacity and as Kenya was not meeting its internal sugar demand it had to import 10% of its sugar. Arkel had been short listed in a competitive bidding procedure established by the Government of Kenya. Due to TDP's participation, Arkel was awarded the contract over several competitors. The feasibility study results were positive, and Arkel subsequently won the prime contract for the rehabilitation and expansion of the Nzoia Sugar Factory. As of December 1989, \$24 million in U.S. goods and services have been exported from 10 different states for this project. A second phase expansion is under discussion, which would entail an additional \$50 million of exports. A loan from the Export-Import Bank assisted in the financing of the U.S. exports for this project.

KAOHSIUNG/TAIPEI RAPID TRANSIT - TAIWAN:

TDP has provided a series of grants totalling \$1.2 million to different contractors for these two projects. The consortium, American Transit Consultants (ATC) which consisted of Kaiser Engineers, Bechtel and Parsons Brinckerhoff, conducted the feasibility study for the Kaohsiung Rapid Transit.

The ATC consortium subsequently won two \$50 million management contracts for Taipei as well as \$30 million of other follow-on activities. Approximately \$200 million of subway cars, built in Yonkers, New York, will be exported from the United States to this project and there are hundreds of millions of exports that are still pending.

Another U.S. consortium, lead by Louis Berger International of New Jersey, won a \$3.2 million contract for a related feasibility study which puts them in a favorable position to win a contract for the general engineering work for the \$2-3 billion mass rapid transit system.

BANG PAKONG POWER PLANT - THAILAND

In FY 1987, TDP provided a grant of \$350,000 to the Electricity Generating Authority of Thailand (EGAT) for a power plant study in Bang Pakong. Black & Veatch International of Missouri was selected to conduct the study during FY 1988. As a result of the excellent working relationship developed with EGAT during the study, Black & Veatch Engineering signed a follow-on engineering services contracts with EGAT worth \$30 million. In addition, because the Black & Veatch study ultimately set procurement specifications which strongly favored U.S. generator and gas turbine technologies, General Electric (G.E.) won the tender for two 300 MW gas turbine combined-cycle power plants valued at \$64.6 million. This put G.E. in a favorable position to supply a similar project in Rayong at Thailand's on-going Eastern Seaboard project.

Total exports from this project to date are valued at \$162 million. G.E.'s subcontractors represent numerous suppliers at 35 facilities from 28 different companies located in 23 states. In addition, a potential of \$180 million in indirect exports is expected in the future from this project.

APPENDIX A

Project-by-Project Assessment
of Actual Exports Generated & Possible Export Generation,
Showing Direct & Indirect, Short- & Long-run Exports
Related to Projects Supported by the U.S. Trade & Development Program
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Country	TDP No.	Project	Actual Direct Exports Genrtd	Poss. Exports Short Term	Poss. Exports Long Term	Actual Indirect Exports	Poss. Indirect Exports	Total Exports
(\$ Millions)								
Africa								
Congo	86024	Hydropower RGA	0.0	15.0	0.0	0.0	0.0	15.0
Congo	85009	NRECA/Utility Pole RGA	3.1	7.5	22.5	0.0	0.0	33.1
Congo	83004	Phosphates (UNDP) FS	0.4	0.0	10.0	0.0	0.0	10.4
Gabon	83005	Minerals Port FS	35.0	7.5	22.5	0.0	0.0	65.0
Gabon	85007	Strategic Minerals DM	0.0	57.4	0.0	0.0	90.0	147.4
Ivory Coast	86001	Satellite Telecommunications FS	3.2	75.0	0.0	0.0	0.0	78.2
Kenya	86022	Fonville/Agricultural RGA	0.0	5.5	0.0	0.0	0.0	5.5
Kenya	88015	Geothermal Power	0.0	0.0	0.0	0.0	0.0	0.0
		Assessment Trade Mission						
Kenya	81004	Mombassa Port Development FS	0.0	85.0	0.0	0.0	0.0	85.0
Kenya	86021	Nzoia Sugar Factory FS	23.9	62.5	37.5	0.0	0.0	123.9
Madagascar	87008	Ferrochrome Mine Rehabilitation FS	0.0	6.3	0.0	0.0	0.0	6.3
Malawi	83001	Kapachira Falls Hydro FS	0.0	0.0	60.0	0.0	0.0	60.0
Mozambique	88011	Maputo Water Supply DM	0.0	0.0	0.0	0.0	0.0	0.0
Mozambique	87007	Strategic Minerals DM	0.0	0.0	0.0	0.0	0.0	0.0
Mozambique	86026	TMI/Fisheries RGA	0.0	17.0	0.0	0.0	1.0	18.0
Mozambique	86014	Tenneco-Incomati Irrigation RGA	0.0	13.5	0.0	0.0	0.0	13.5
Nigeria	88018	Ag. Resources/Hybrid Seed IAP	0.0	3.5	5.5	0.0	0.0	9.0
Nigeria	No #	Agribusiness Development	97.5	0.0	0.0	0.0	0.0	97.5
Nigeria	00280	Immigration Training	0.2	0.0	0.0	0.0	0.0	0.2
Nigeria	86012	Labor Training OT	0.0	25.0	0.0	0.0	0.0	25.0
Nigeria	87006	Power Authority MIS (WB) DM	0.0	50.0	0.0	0.0	0.0	50.0
Nigeria	00178	Rural Development	0.8	0.0	0.0	0.0	0.0	0.8
Nigeria	No #	Tuna Fisheries	0.5	0.0	0.0	0.0	0.0	0.5
Region-Africa	86007	African Dev Bank FS Fund	0.0	350.0	0.0	0.0	0.0	350.0
Region-Africa	86016	WB-AFDB and Orientation OV	0.0	45.0	0.0	0.0	0.0	45.0
Senegal	87002	Minerals: Titanium DM	0.0	20.0	0.0	0.0	0.0	20.0
Sierra Leone	87004	Sierra Rutile/Agribus. RGA	0.0	6.1	0.0	0.0	0.0	6.1
Togo	88001	Strategic Minerals DM	0.0	0.0	0.0	0.0	0.0	0.0
Togo	88017	Telecommunication OV	0.0	0.0	0.0	0.0	0.0	0.0
Zimbabwe	82005	Chisumbanje Sugar/Ethanol FS	0.0	30.0	0.0	0.0	0.0	30.0
Zimbabwe	86011	Hwange Power 7 & 8 FS	10.0	300.0	0.0	0.0	0.0	310.0
Zimbabwe	87003	Power System Survey FS	0.0	15.0	0.0	0.0	0.0	15.0
<u>Subtotal</u>			174.6	1196.8	158.0	0.0	91.0	1620.4

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Asia								
Bangladesh	No #	Minerals Exploration	2.8	3.0	0.0	0.0	0.0	5.8
China	86334	Ansai Oil Field FS	0.2	0.0	0.0	3.8	1.0	5.0
China	87312	Baoshan Steel Mgmt Info Syst.FS	0.0	38.0	0.0	0.0	0.0	38.0
China	87375	Beilun Terminal	0.6	36.0	0.0	0.0	0.0	36.6
China	88360	Bohai Offshore Oil FS	0.0	263.0	0.0	0.0	0.0	263.0
China	00484	Coal Ministry Delegation OV	2.3	0.0	0.0	0.0	0.0	2.3
China	88359	E. China Sea Gas FS	0.0	0.0	0.0	0.0	0.0	0.0
China	84336	Everbright/Investor FS	7.0	0.0	0.0	0.0	0.0	7.0
China	86310	G.M./Automotive RGA	25.0	400.0	0.0	0.0	0.0	425.0
China	88409	Hainan Air Traffic Control FS	0.0	0.0	0.0	0.0	0.0	0.0
China	85308	Huangling No. 1 Coal Mine FS	12.1	250.0	500.0	0.0	0.0	762.1
China	82313	Hydropower ACEC Visit OT	2.0	0.0	0.0	0.0	0.0	2.0
China	87368	Jiangnan Cement Plant FS	0.0	10.0	0.0	0.0	0.0	10.0
China	88302	Johnson & Johnson/Tylenol RGA	0.0	50.0	250.0	0.0	0.0	300.0
China	86333	Liu Hu Oil Field FS	34.1	0.0	0.0	0.0	0.0	34.1
China	86306	Metallurgical EnergyConservat. FS	0.0	4.2	0.0	0.0	0.0	4.2
China	87366	Phosphate Ammonia Plant Trng. FS	6.0	10.0	0.0	0.0	0.0	16.0
China	87377	Qinghai Geophysical Analysis FS	0.0	15.0	0.0	0.0	0.0	15.0
China	88339	Regional Switching Training OT	4.2	4.0	0.0	0.0	0.0	8.2
China	00380	RiverDevel/Hydro Pro Engi.	0.8	0.0	0.0	0.0	0.0	0.8
China	87376	Shandong Jinan-Qindao Highway FS	0.0	45.0	0.0	0.0	0.0	45.0
China	87378	Shanghai Chemical Reagent Works FS	0.0	10.5	0.0	0.0	0.0	10.5
China	87379	Shanghai Medical Instruments FS	0.0	17.5	37.5	0.0	0.0	55.0
China	No #	Shanghai Metro	38.0	160.0	0.0	0.0	0.0	198.0
China	87304	Shanghai Transportation Planning FS	1.0	18.8	0.0	0.0	0.0	19.8
China	84312	Shanjiasi Heavy Oil Reservoir FS	5.6	2.5	0.0	0.0	0.0	8.1
China	85314	Shenzhen Airport FS	0.0	46.0	0.0	0.0	0.0	46.0
China	88313	Shidongkou Power OT	143.6	0.0	0.0	2.3	0.0	145.9
China	88301	Sichuan Chengdu-ChongqingRoad FS	3.5	30.0	0.0	0.0	6.0	39.5
China	84322	Silicon Material Plant FS	11.0	0.0	0.0	0.0	0.0	11.0
China	86352	Thysson/Building Systems RGA	0.0	6.0	0.0	0.0	12.0	18.0
China	87325	Tianjin Economic DevelopmentPlan FS	0.0	100.0	0.0	0.0	0.0	100.0
China	82314	Tien Sheng Qiao Hydropower OT	21.9	5.0	0.0	15.0	50.0	91.9
China	85328	Wujing Trigeneration FS	0.0	175.0	0.0	0.0	0.0	175.0
China	86305	Xinhua Information Processing FS	11.0	10.0	0.0	0.0	0.0	21.0
China	87311	Zhongyuan Pharmaceutical FS	7.8	50.0	37.5	0.0	0.0	95.3
India	87308	Coal Transport/Coastal Power Plant FS	0.0	1600.0	0.0	0.0	0.0	1600.0
India	89337	Engineering Plastics DM	0.0	0.0	0.0	0.0	0.0	0.0
India	89311	Inland Waterway Development DM	0.0	0.0	0.0	0.0	0.0	0.0

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India	83311	Kaiser Power (Orissa) RGA	0.0	7.5	0.0	0.0	0.0	7.5
India	86320	Luz International/Solar RGA	0.0	45.0	0.0	0.0	0.0	45.0
India	89335	Mangalore Downstream Products FS	0.0	70.0	0.0	0.0	0.0	70.0
India	88310	Mangalore Refinery FS	10.0	117.0	0.0	0.0	0.0	127.0
India	86317	SymbioticTechnologies/Photovolt.RGA	0.0	10.0	0.0	0.0	0.0	10.0
India	87305	TCIL Data Communications FS	0.8	17.5	0.0	0.0	0.0	18.3
India	88341	WB Industry Standards DM	0.0	87.5	0.0	0.0	0.0	87.5
India	88332	Waste Water Automation FS	0.0	10.0	0.0	0.0	0.0	10.0
Indonesia	88325	Alpha Omega/Food IrradiationRGA	0.0	11.0	0.0	0.0	0.0	11.0
Indonesia	88363	BLK Manpower Training Center	0.0	3.0	0.0	0.0	0.0	3.0
Indonesia	85330	Energy Assessment FS	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia	83317	Investment Survey (OPIC) OT	39.5	20.5	0.0	0.0	0.0	60.0
Indonesia	88357	Jakarta Waste Management FS	0.0	1600.0	0.0	0.0	0.0	1600.0
Indonesia	83316	Krakatau Steel Mill FS	20.0	410.0	0.0	0.3	0.0	430.3
Indonesia	87339	Manpower Orientation OV	0.2	0.0	0.0	0.0	0.0	0.2
Indonesia	83315	Nuclear Reactor Lab OT	6.1	0.0	0.0	0.0	0.0	6.1
Indonesia	88351	Paiton Power Plant Boiler Tenders OT	210.0	0.0	0.0	0.0	0.0	210.0
Indonesia	88305	Scott/Paper RGA	2.2	225.0	0.0	0.0	0.0	227.2
Indonesia	88311	Surabaya Waste Management FS	0.0	65.0	0.0	0.0	0.0	65.0
Indonesia	87334	Telecommunications Market Survey OT	0.1	0.0	0.0	0.0	0.0	0.1
Indonesia	85311	West Java Coal Transport FS	40.0	0.0	0.0	0.0	0.0	40.0
Korea	88403	Northwest Univ. Market Access OT	0.3	339.5	0.0	0.0	0.0	339.8
Malaysia	88408	MHA Highway Telecommunications DM & OV	0.0	14.2	0.0	0.0	0.0	14.2
Malaysia	No #	Mini Hydro	26.0	0.0	0.0	0.0	0.0	26.0
Malaysia	no #	Railway Training	0.1	0.1	0.0	0.0	0.0	0.2
Malaysia	86313	Terengganu Petrochemical Plan FS	0.0	0.0	0.0	0.0	216.0	216.0
Malaysia	85351	Toxic Waste FS	0.0	27.0	0.0	0.0	0.0	27.0
Malaysia	88328	Urban/Elevator RGA	0.0	1.4	0.0	0.0	0.0	1.4
Malaysia	86330	Vocational Training OV	0.5	73.5	0.0	0.0	0.0	74.0
Micronesia	85305	Timber and Wood Products FS	0.0	14.1	63.0	0.0	17.5	94.6
Nepal	86308	Arun 6 Hydropower FS	3.0	125.0	0.0	26.0	500.0	654.0
Pakistan	84309	Airport Projects Management FS	6.5	20.0	0.0	0.0	0.0	26.5
Pakistan	87321	Pyropower/Plant RGA	0.0	155.0	0.0	0.0	0.0	155.0
Pakistan	86326	WB Photovoltaic Study FS	0.0	0.0	0.0	0.0	0.0	0.0
Philippines	81306	Airports/Airways Development FS	0.4	125.0	0.0	0.0	0.0	125.4
Philippines	83322	Chromite DM	0.0	15.0	0.0	0.0	0.0	15.0
Philippines	87310	EMCON/Vegetable RGA	0.0	3.0	0.0	0.0	0.0	3.0
Philippines	83325	Himalian Coal FS	3.5	0.0	0.0	0.0	0.0	3.5
Philippines	No #	Illigan Steel	290.0	0.0	0.0	0.0	0.0	290.0
Philippines	87347	Investment Promotion OT	0.0	0.0	0.0	0.0	0.0	0.0
Philippines	No #	Mactan Airport	0.7	0.0	0.0	0.0	0.0	0.7

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Philippines	87322	Manila International Airport FS	0.0	0.0	0.0	0.0	0.0	0.0
Philippines	88343	Mariwasa Cogeneration Plant FS	0.0	30.5	0.0	0.2	0.0	30.7
Philippines	87384	NEDA Laguna Lake Toxic Waste FS	0.0	100.0	0.0	0.0	0.0	100.0
Philippines	87383	NEDA Manila Port Bulk Handling FS	0.0	0.0	0.0	0.0	0.0	0.0
Philippines	87343	NEDA Manila Solid Waste Management	0.0	12.5	0.0	0.0	0.0	12.5
Philippines	83321	Telecommunications FS	1.7	80.0	0.0	0.0	0.0	81.7
Philippines	83326	Youth Training OV	0.1	0.2	0.0	0.0	0.0	0.3
Region-Asia	88318	Aquaculture Conf Travel Funds TS	0.0	2.0	0.0	0.0	0.0	2.0
Region-Asia	88388	Aviation Trade MissionMA/VA/CA OV	1.2	0.0	0.0	0.0	0.0	1.2
Region-Asia	88402	Canal-Lining Training OT	0.0	0.0	0.0	0.0	0.0	0.0
Region-Asia	88330	Deep Ocean Resources Recovery FS	0.0	17.5	0.0	0.0	0.0	17.5
Region-Asia	86302	Pacif. Rim Telecommunicats. Conf.	26.1	0.0	0.0	0.0	0.0	26.1
Region-Asia	86346	Pacific Basin Housing Conference TS	3.8	8.0	0.0	0.0	0.0	11.8
Singapore	83330	CAD/CAM OT	17.7	200.0	0.0	0.0	0.0	217.7
Sri Lanka	No #	Irrigation Systems	0.4	0.0	0.0	0.0	0.0	0.4
Taiwan	86343	AIT Environmental OT	11.9	1650.0	0.0	1.6	0.0	1663.5
Taiwan	85332	Rapid Transit (85332 and 86311)	365.1	600.0	250.0	0.0	0.0	1215.1
Thailand	81324	Ao Phai Coal-Fired Power Plant FS	0.2	625.0	0.0	0.0	0.0	625.2
Thailand	87363	Bang Pakong Power Plant FS	132.0	7.9	153.5	30.0	24.8	348.2
Thailand	85338	Bangkok Solid Waste & Power	0.0	40.0	0.0	0.0	0.0	40.0
Thailand	84329	Don Muang/Bangkok Airport FS	17.8	12.0	0.0	0.0	1.7	31.5
Thailand	83334	EGAT Computer Requirements FS	11.6	20.8	0.0	0.0	0.0	32.4
Thailand	84316	EGAT Flood Control Plan FS	0.0	55.0	85.0	0.0	0.0	140.0
Thailand	84338	EGAT Mines and Equipment OV	225.0	10.0	0.0	0.0	0.0	235.0
Thailand	83337	Fluidized Bed Combustion (Krabi) FS	0.0	25.0	0.0	0.0	0.0	25.0
Thailand	86322	Frequency Modulation FS	0.0	10.0	0.0	0.4	0.0	10.4
Thailand	No #	Lignite Exploration	0.5	0.0	0.0	0.0	0.0	0.5
Thailand	83333	Loei-Upper Pasak Hydro FS	0.0	9.6	12.0	0.0	0.0	21.6
Thailand	87330	Mae Moh Lignite Mine Conveyor Sys. FS	2.0	16.4	0.0	0.0	0.0	18.4
Thailand	No #	Mae Moh Transmission	35.2	0.0	0.0	0.0	0.0	35.2
Thailand	87364	Mass Transit	0.0	10.0	52.5	0.0	0.0	62.5
Thailand	87317	N. Bangkok Power Plant FS	0.0	42.5	0.0	0.0	0.0	42.5
Thailand	No #	Offshore Natural Gas Pipeline	120.0	0.0	0.0	0.0	0.0	120.0
Thailand	No #	Potash Exploration	0.0	478.5	0.0	0.0	0.0	478.5
Thailand	87314	Provincial Electric Supply FS	12.0	100.0	0.0	0.0	0.0	112.0
Thailand	87315	SRT Computer Master Plan FS	0.0	4.6	0.0	0.0	0.0	4.6
Thailand	83332	Seaboard Fertilizer Plant FS	1.0	0.0	0.0	0.0	0.0	1.0
Thailand	88335	Telecomm Trade Show OV	2.0	0.0	0.0	0.0	0.0	2.0
<u>Subtotal</u>			1987.7	11139.3	1441.0	79.6	829.0	15476.6

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Country	TDP No.	Project	Actual Direct Exports Genrtd	Poss. Exports Short Term	Poss. Exports Long Term	Actual Indirect Exports	Poss. Indirect Exports	Total Exports
Latin America								
Belize	82501	Electric Transmission FS	4.6	0.0	0.0	0.0	0.0	4.6
Bolivia	88510	Laurel/Antimony Mining RGA	0.0	1.8	0.0	0.0	0.0	1.8
Chile		Scientific Atlantic	29.0	0.0	0.0	0.0	0.0	29.0
Chile	84515	Telecommunications FS	3.5	13.0	0.0	0.0	0.0	16.5
Colombia	85520	Airports and Airspace Systems Devt.	0.0	100.0	120.0	1.0	3.0	224.0
Colombia	84526	Eldorado Radar System FS	0.0	50.0	0.0	0.0	0.0	50.0
Colombia	84521	Telecom./Cellular Phone FS	134.0	27.5	60.0	0.0	0.0	221.5
Costa Rica	84518	Sealife Automation/SeafoodInv. RGA	0.0	0.0	0.0	0.0	0.0	0.0
Costa Rica	00585	Strawberry	1.0	0.0	0.0	0.0	0.0	1.0
Costa Rica	85531	Western Ag/Investor RGA	0.0	2.5	0.0	0.0	0.0	2.5
Dom. Republic	No #	Kelly Harrison Orchids	0.0	1.0	2.2	0.0	0.0	3.2
Dom. Republic	85518	Rosario Dominicana Mining FS	21.0	165.0	0.0	0.0	0.0	186.0
Dom. Republic	85506	Lockwood/Irrigation RGA	0.0	3.5	0.0	3.2	0.0	6.7
Ecuador	87514	Tracker/Fishmeal RGA	0.0	16.8	45.0	0.0	0.0	61.8
Guatemala	89326	Chixoy Medio Hydro FS	3.0	0.0	0.0	0.0	0.0	3.0
Guatemala	83504	Electric Load Center FS	0.0	35.0	0.0	0.0	0.0	35.0
Haiti	86512	CBC/Winter Vegetables RGA	0.0	2.5	13.5	0.0	0.0	16.0
Honduras	85514	Hydroelec.Project(ElNaranjito) FS	0.0	19.0	0.0	0.0	0.0	19.0
Honduras	86515	Tegucigalpa Water FS	0.0	0.0	0.0	0.5	0.0	0.5
Jamaica	No #	Agribusiness DevelopmentDM/OV	1.3	0.0	0.0	0.0	0.0	1.3
Jamaica	85509	Bechtel/Renewable Agricul.FuelRGA	0.0	10.0	0.0	0.0	0.0	10.0
Jamaica	82503	I.S. Joseph Co/SoybeansProduc.RGA	0.3	0.0	0.0	0.0	0.0	0.3
Jamaica	82511	Taylor-Cross/Rice ProductionRGA	2.3	0.0	0.0	0.0	0.0	2.3
N Antilles	85510	Tourism & Ind. Expansion PFS	0.0	74.0	0.0	1.1	3.0	78.1
Peru	82504	Cusco New Airport FS	2.2	13.3	0.0	0.0	0.0	15.5
Peru	81512	Port Renovation FS	0.0	0.0	5.0	0.0	0.0	5.0
Region-L.A.	00681	Caribbean Renewable Energy Exhibit	0.2	0.0	0.0	0.0	0.0	0.2
Region-L.A.	84528	COCESNA Air Navigation (FAA) FS	3.3	5.0	0.0	0.0	0.0	8.3
Region-L.A.	84514	Inter-American Housing Conference TS	49.1	0.0	15.7	0.0	0.0	64.8
Region-L.A.	86519	OAS Telecommunications	0.0	1129.0	0.0	0.0	0.0	1129.0
St. Lucia	83517	Geothermal FS	6.0	15.0	0.0	0.0	0.0	21.0
Trinidad/Tobago	00780	Medical Complex	57.0	0.0	0.0	0.0	0.0	57.0
Uruguay	00880	Biomass to Ethanol	0.0*	0.0	0.0	0.0	0.0	0.0
Uruguay	88514	UTU Technical Educ. FS	0.0	3.7	0.0	0.0	0.0	3.7
Uruguay	87506	World Tuna RGA	0.0	0.0	0.0	0.0	0.0	0.0
Venezuela	No #	Bauxite Mining	1.4	0.0	0.0	0.0	0.0	1.4
Venezuela	No #	Solid Waste Mgt.	37.2	0.0	0.0	0.0	0.0	37.2
<u>Subtotal</u>			356.4	1687.6	261.4	5.8	6.0	2317.2

* Actual exports equal \$40,000.

Project-by-Project Assessment
of Actual Exports Generated & Possible Export Generation,
Showing Direct & Indirect, Short- & Long-run Exports
Related to Projects Supported by the U.S. Trade & Development Program
November 1989

Country	TDP No.	Project	Actual Direct Exports Genrtd	Poss. Exports Short Term	Poss. Exports Long Term	Actual Indirect Exports	Poss. Indirect Exports	Total Exports
Middle East & Europe								
Algeria	85719	SIDER Refractory Production FS	0.0	30.0	0.0	0.0	0.0	30.0
Algeria	85718	Western Agri-Mgmt/CenterPivot RGA	34.0	50.0	0.0	0.0	0.0	84.0
Greece	89706	Computer Training Software OT	0.0	0.0	0.0	0.0	0.0	0.0
Ireland	88701	Central/Lumber RGA	0.0	45.8	128.7	0.0	0.0	174.5
Morocco	81718	Civil Aviation Design FS	0.0	30.0	0.0	0.0	0.0	30.0
Morocco	86709	Forbes/Fishing RGA	0.0	15.0	0.0	0.0	0.0	15.0
Morocco	No #	Oil Shale Symposium	13.1	0.0	0.0	0.0	7.5	20.6
Oman	85712	Manah Power Plant FS	0.0	47.0	0.0	0.3	0.0	47.3
Portugal	89709	TEAM Tech/Systems Integration IAP	0.4	300.0	0.0	0.0	0.0	300.4
Tunisia	83711	Djellabia Phosphate FS	1.3	45.0	0.0	0.0	0.0	46.3
Tunisia	00979	Groundwater	6.0	0.0	0.0	0.0	0.0	6.0
Tunisia	82711	Land O'Lakes/STUSID Marja Dairy RGA	1.9	0.0	0.0	0.0	0.0	1.9
Tunisia	83710	SRA Ouertane Phosphate Mine FS	9.8	0.0	0.0	0.0	0.0	9.8
Turkey	82712	Agribusiness Sales Investment OT	21.5	25.0	146.5	0.0	0.0	193.0
Turkey	87706	Bechtel Civil/Free Trade Zone RGA	0.0	0.0	0.0	0.0	0.0	0.0
Turkey	84717	Bechtel/Coal Plant RGA	0.0	350.0	0.0	0.0	0.0	350.0
Turkey	87710	Frequency Monitoring & Sys.FS	0.0	68.0	0.0	0.0	0.0	68.0
Turkey	No #	Highway Improvement	3.2	0.0	0.0	0.0	0.0	3.2
Turkey	86707	Istanbul Water FS	0.0	10.5	0.0	0.0	0.0	10.5
Turkey	86702	TEK Power OV	2.4	0.0	0.0	0.0	0.0	2.4
Turkey	84716	Tube Tunnel - Metro	5.5	510.0	0.0	0.0	0.0	515.5
Turkey	84711	Vocational Training and OV	28.0	100.0	0.0	0.0	70.0	198.0
Un.ArabEmirates	88712	Dubai Toxic & Hazardous Waste FS	0.0	15.0	0.0	0.0	0.0	15.0
Yemen	88710	MINEXPO Visitors OV	0.0	11.0	0.0	0.0	0.0	11.0
Yugoslavia	88705	Kosovo Power Plant DM	0.3	52.5	0.0	0.0	0.0	52.8
Yugoslavia	86715	Sisak Coke Plant FS	0.4	100.0	0.0	0.0	0.0	100.4
Yugoslavia	87707	TTL Power Rehabilitation FS	1.3	15.0	0.0	0.0	0.0	16.3
<u>Subtotal</u>			129.1	1819.8	275.2	0.3	77.5	2301.9
Worldwide								
Worldwide	88903	ASACI DM's/MarketingOT (&85901,85904)	7.9	43.3	0.0	0.0	0.0	51.2
Worldwide	87901	Iowa Food Processing Trade Fair	0.2	0.8	0.0	0.0	0.0	1.0
Worldwide	88907	Minerals Opportunity Study OT	0.0	0.0	0.0	0.0	0.0	0.0
Worldwide	89902	Oklahoma Export Database (ST) OT	2.3	187.2	0.0	0.0	0.0	189.5
Worldwide	88909	Renewable Energy Trade Missions (CA)	0.0	0.0	0.0	0.0	0.0	0.0
Worldwide	87905	U.S. Committee on Large Dams Sem.	6.5	400.0	0.0	0.0	0.0	406.5
Worldwide	86902	Vocational Educ. Market Survey	0.5	47.5	0.0	0.0	0.0	48.0
<u>Subtotal</u>			17.4	678.8	0.0	0.0	0.0	696.2
Total			2665.2	16522.3	2135.6	85.7	1003.5	22412.3

APPENDIX B

TDP Projects ObligatedFOR FY 1989

The following is the key to abbreviations used in the table below in identifying the types of projects TDP has funded.

- WS = Workshop (seminars, technical symposia, etc.)
- RGA = Reimbursable Grant Agreement (TDP shares cost with U.S. investor)
- DM = Definitional Mission (i.e. analysis undertaken on a project prior to TDP financing a feasibility study)
- FS = Feasibility study (study of a proposed project to assess feasibility)
- OV = Orientation Visit (trips to the U.S. by foreign officials interested in buying U.S. technology)
- TR = Training grants
- OT = Other Activities
- TS = Technical Symposia
- IAP = Investment Assistance Program

Region: AFRICA

<u>COUNTRY</u>	<u>PROJECT TITLE</u>	<u>DOLLAR AMOUNT</u>
<u>Congo</u>	<u>Urea Fertilizer Plant (DM)</u>	<u>19,090</u>
	Total for Congo	19,090
<u>Gabon</u>	<u>Gabon Ports (DM)</u>	<u>15,706</u>
	Total for Gabon	15,706
<u>Ghana</u>	<u>Dove Agriplex Soybeans (DM)</u>	<u>18,097</u>
	Total for Ghana	8,097
<u>Ivory Coast</u>	<u>Hotel Rehabilitation (DM)</u>	<u>22,424</u>
	Total for Ivory Coast	22,424
<u>Kenya</u>	<u>Kisumu Molasses Plant (FS)</u>	<u>240,000</u>
<u>Kenya</u>	<u>Sugar Mill Waste Biofertilizer (FS)</u>	<u>360,000</u>
<u>Kenya</u>	<u>Solar Pump (DM)</u>	<u>15,950</u>
<u>Kenya</u>	<u>Sugar Industry (Siaya & Nzoia) (FS)</u>	<u>225,000</u>
	Total for Kenya	840,950
<u>Madagascar</u>	<u>Chrome Refinery (Phase II)(FS)</u>	<u>500,000</u>
	Total for Madagascar	500,000
<u>Mozambique</u>	<u>Maputo Water Supply (FS)</u>	<u>75,000</u>
	Total for Mozambique	75,000
<u>Nigeria</u>	<u>Aircraft Management Facility (DM))</u>	<u>25,000</u>
	Total for Nigeria	25,000
<u>Regional</u>	<u>Trust Fund for US W. Bank Consult. (OT)</u>	<u>750,000</u>
<u>Regional</u>	<u>African Training Conference (TS)</u>	<u>125,000</u>
<u>Regional</u>	<u>Africa Reg. (Consultation)(OT)</u>	<u>15,928</u>
	Total for Regional	890,928
<u>Uganda</u>	<u>Kinyala Factory Rehab. (FS)</u>	<u>210,000</u>
	Total for Uganda	210,000
<u>Zimbabwe</u>	<u>Minerals Mining & Milling (DM)</u>	<u>1,900</u>
	Total for Zimbabwe	1,900
	Total for Africa	2,619,095

Region: ASIA

<u>COUNTRY</u>	<u>PROJECT TITLE</u>	<u>DOLLAR AMOUNT</u>
Bangladesh	Inlands Waterways Transport (FS)	695,000
Bangladesh	Civil Aviation Study (DM)	15,000
	Total for Bangladesh	710,000
China	Shanghai Transport Plng. Phase 2(a)(FS)	500,000
China	Computerize PICC (DM)	22,652
China	Computerize PICC (FS)	432,520
China	Aluminum Production Plant (DM)	24,992
China	Lua Shan River Clean-up (DM)	7,949
China	MOFERT Computer Training (TR)	220,000
China	Yellow River Modeling Seminar (TS)	36,700
China	Coal Utilization Consult. (FS)	71,000
China	Research Computer Study (FS)	18,500
	Total for China	1,334,313
India	Railroad Computers (FS)	415,000
India	Telecommun. Training (USTTI) (TR)	27,800
India	Coal Gasification (FS)	125,000
India	Coal Gas Power Gen. (Gujarat) (DM)	15,386
India	Inland Waterway Development (DM)	15,000
India	Mangalore Downstream (FS)	150,000
India	Engineering Plastics (DM)	21,872
India	Maharashtra Indus. Waste (FS)	32,027
India	Air Cargo Handling Modernization (DM)	16,611
India	Coal Mining Modernization (DM)	16,151
India	Iron Ore Slurry Pipeline (DM)	1,000
India	Iron Ore Slurry Pipeline (FS)	100,000
India	Rourkela & Vizag Steel MIS (FS)	850,000
India	Tata Jamshedpur Process (FS)	375,000
	Total for India	2,160,847
Indonesia	BLK Manpower Training Center (FS)	225,000
Indonesia	Institute of Gas Technology (OT)	300,000
	Total for Indonesia	525,000

Region: ASIA

<u>COUNTRY</u>	<u>PROJECT TITLE</u>	<u>DOLLAR AMOUNT</u>
Malaysia	Thermal Import/Export Sys. (FS)	390,000
Malaysia	Highway Officials (OV)	23,873
Malaysia	Information Tech. Market Study (DM)	6,295
Malaysia	Privatization Development (OV)	22,844
	Total for Malaysia	443,012
Marshall Isls.	Majuro Airport Expansion (FS)	11,250
Marshall Isls.	Majuro Airport Expansion (DM)	117,250
	Total for Marshall Islands	128,938
Pakistan	RBR/Beef Production (IAP)	42,450
	Total for Pakistan	42,450
Philippines	Geo-therm. Power Site Assessment (FS)	400,000
Philippines	Provinc. Rd. Rehab. & Maint. (DM)	12,300
Philippines	Rice Husks Pwr. Generation (FS)	27,000
Philippines	Power Plant Rehabilitation (DM)	14,754
Philippines	Power Plant Rehabilitation (FS)	450,000
Philippines	Roller-Compacted Consv. Dams (DM)	24,209
Philippines	Geothermal Gas Abatement (DM)	15,617
	Total for Philippines	943,886
Regional	Pacific Refining Industry (FS)	244,530
Regional	Shrimp Farm Study (FS)	210,000
Regional	Pac. Basin Hazard. Waste (TS)	27,800
Regional	Inland Waterway Trng. Course (OT)	200,000
Regional	Pac. Rim Steel Industry Assessment (DM)	24,429
	Total for Regional	706,759
Singapore	Biotechnology (DM)	25,000
	Total for Singapore	25,000
Taiwan	Kaohsiung MTS (DM)	4,500
Taiwan	Kaohsiung MTS (OV)	30,000
Taiwan	Electric Arc Furnace Dust (OT)	1,000
Taiwan	US/ROC Economic Council Conf. (OT)	1,000
	Total for Taiwan	36,500

Region: ASIA

<u>COUNTRY</u>	<u>PROJECT TITLE</u>	<u>DOLLAR AMOUNT</u>
Thailand	E.Seaboard Fertilizer Plant (DM)	1,184
Thailand	Evaluate Flood Control (DM)	24,680
Thailand	Bangkok Solid Waste & Power (OT)	14,700
Thailand	P.E.A. Bus. Opportunity (WS)	50,000
Thailand	Sam Sen Metro Water (FS)	375,000
Thailand	So. Thai Lignite Mine (DM)	20,999
Thailand	Petroleum Prod. Pipeline (FS)	123,000
Thailand	U-TAPAO Airport (FS)	450,000
Thailand	Satellite Telecom. (DM)	19,000
Thailand	Vehicle Registration Study (DM)	900
Thailand	OPIC Investment Conference (OV)	9,000
Thailand	Fluidized Bed Tech. (OV)	14,536
Thailand	J-Seam Lignite Tech. (EGAT) (FS)	500,000
Thailand	TV Broadcasting (DM)	17,795
Thailand	PTT-Offshore Gas Processing (DM)	1,000
Thailand	So. Thai. Port/Land Bridge (DM)	15,377
Thailand	P.E.A. U-2 (FS)	350,000
Thailand	EGAT Mining (OV)	36,592
Thailand	Eastern Seaboard Hi-Speed Rail (DM)	21,494
	Total for Thailand	2,045,257
	Total for Asia	9,101,956

Region: LATIN AMERICA

<u>COUNTRY</u>	<u>PROJECT TITLE</u>	<u>DOLLAR AMOUNT</u>
Bolivia	Oil Refinery Rehabilitation (DM)	20,032
Bolivia	Oil Refinery Rehabilitation (FS)	275,000
Bolivia	Boomerang Hills Oil & Gas (DM)	21,701
Bolivia	Oil & Gas Production (FS)	1,100,000
Bolivia	Minerals Assessment (FS)	2,000,000
	Total for Bolivia	3,416,733

Region: LATIN AMERICA

<u>COUNTRY</u>	<u>PROJECT TITLE</u>	<u>DOLLAR AMOUNT</u>
Chile	Water Treatment (DM)	11,540
Chile	Mining Reverse Trade Mission (OV)	29,860
Chile	Roll-on Roll Off (DM)	7,854
	Total for Chile	49,254
Colombia	Cellular Phones (OV)	12,000
	Total for Colombia	12,000
Guatemala	Cellular Telephone (DM)	15,000
Guatemala	Telecomm. Projects (DM)	10,543
Guatemala	Chixoy Medio Hydroelectric (FS)	75,000
	Total for Guatemala	100,543
Mexico	Photovoltaic Assembly Plant (DM)	5,566
Mexico	Locomotive Rehabilitation (DM)	14,850
	Total for Mexico	20,416
Regional	Pan Am Telecomm. Forum (OT)	1,625
Regional	South LA Communications Satellite (DM)	46,000
Regional	Renewable Energy Conference (OT)	650
Regional	Aviation Trade & Tech. (TS)	13,900
Regional	Water Proj. Mgmt. Tng. (OT)	10,000
	Total for Regional	72,175
Trinidad-Tobago	Cellular Radio (FS)	240,000
Trinidad-Tobago	Piarco Airport (FS)	475,000
	Total for Trinidad and Tobago	715,000
Uruguay	ITU Telecommunications (DM)	25,805
Uruguay	Water Projects (DM)	15,434
	Total for Uruguay	41,239
Venezuela	Aluminum Smelter (DM)	6,352
Venezuela	Power Plant Rehabilitation (DM)	16,418
Venezuela	Water Resources (DM)	21,737
Venezuela	Vexxal Aluminum Smelter (FS)	360,000
Venezuela	Alisa Aluminum Smelter (FS)	360,000
Venezuela	Water Resources (Hueque) (FS)	200,000

Region: LATIIN AMERICA

<u>COUNTRY</u>	<u>PROJECT TITLE</u>	<u>DOLLAR AMOUNT</u>
Venezuela	Cadafe Boiler Rehabilitation (FS)	150,000
Venezuela	Eneiven Boiler Rehab. (FS)	350,000
Venezuela	Las Mayas (FS)	600,000
Venezuela	Strategic Study (FS)	200,000
Venezuela	Elecar Boiler Rehabilitation (FS)	250,000
	Total for Venezuela	2,514,507
	Total for Latin America	6,941,867

Region: MIDDLE EAST & EUROPE

<u>COUNTRY</u>	<u>PROJECT TITLE</u>	<u>DOLLAR AMOUNT</u>
Cyprus	Paphos Sewerage (FS)	250,000
	Total for Cyprus	250,000
Greece	Computer Software Trng. (TR)	60,000
	Total for Greece	60,000
Hungary	Borsod Steel Restructuring (FS)	500,000
	Total for Hungary	500,000
Malta	Energy Officials Visit (OV)	17,000
Malta	Education Minister Visit (OV)	28,133
	Total for Malta	45,433
Portugal	Petrogal (DM)	5,000
Portugal	Petrogal (IAP)	350,000
Portugal	Team Tech./Systems (IAP)	70,000
	Total for Portugal	425,000
Qatar	Remote Sensing Center (OT)	5,400
	Total for Qatar	5,400

<u>COUNTRY</u>	<u>PROJECT TITLE</u>	<u>DOLLAR AMOUNT</u>
Turkey	ISKI Training Center (OV)	48,700
Turkey	Istanbul Waste Disposal (DM)	9,935
Turkey	Computer-aided Education (DM)	24,698
Total for Turkey		83,333

Total for Mid-East & Europe 1,369,166

Region: WORLDWIDE

<u>COUNTRY</u>	<u>PROJECT TITLE</u>	<u>DOLLAR AMOUNT</u>
Worldwide	Vocational Educational Follow-up (OT)	1,000
Worldwide	Pilot State Info. Dissem. (OT)	14,960
Worldwide	Minerals Conference (OV)	12,700
Worldwide	Pacific Rim Summit (TS)	225,000
Worldwide	Oklahoma Export Database (FS)	297,609
Worldwide	Wisconsin Integrated Database (OT)	12,940
Worldwide	Metal Structures Design (OT)	90,423
Worldwide	WB Environ. Consul. (OT)	500,000
Worldwide	Goodwill Games (OT)	250,000
Worldwide	NASDA State Network (FS)	99,716
Worldwide	89 IFC Technical Assistance (OT)	675,000
Worldwide	Indiana Training (OT)	424,000
Worldwide	State Export Program (OT)	1,000
Worldwide	APA Wood Products (FS)	144,000
Total for Worldwide		2,748,348

APPENDIX C

List of Companies
That Have Supplied Products and Services
To TDP-Sponsored Projects
As of November 1989

State	City	Company
AL		Altec
AL	Leeds	Anderson
AL	Birmingham	Combustion Engineering
AL	Birmingham	Harbert International
AL	Huntsville	Intergraph
AR	Texarkana	Rockwell International
CA	Compton	Allied Indl. Distributors
CA	SanFrancisco	Bechtel
CA	Los Angeles	Century Spring
CA	Palo Alto	Combustion Engineering
CA		Comsat
CA	Sunnyvale	Dionex Corporation
CA		Fluor
CA	Fremont	Gemini Research
CA	Bakersfield	General Electric
CA	Palo Alto	Geometrics
CA	Gilroy	Gilroy Foods, Inc.
CA	San Carlos	Harris Corp.
CA	Chula Vista	Hyspan Precision
CA	Santa Teresa	IBM
CA	Sunnyvale	ILC Technologies
CA	SanFrancisco	Kaiser
CA	Redwood City	Kentex International, Inc.
CA		M.K. Ferguson
CA	Winters	Mariani Nut Co.
CA	SanFrancisco	Morrison-Knudsen
CA	Bakersfield	PATRIC, Inc.
CA		Pacific Arepco
CA		Pacific Telesis
CA	Montebello	Peerless
CA	Palo Alto	Raychen
CA	Torrance	Semiconductor Matls. Inc.
CA	Menlo Park	Silicon International Inc
CA	San Jose	Silicon Valley Grp Intl
CA	Los Angeles	Southwestern Engr.
CA	Mtn. View	Tencor Instruments
CA	Anaheim	VERTEQ, INC.
CO		Bateman
CO	Golden	Coors
CO		Hydrotriad
CT		Combustion Engineering
CT	Stamford	Dorr-Oliver
CT	Berlin	Dwight Foote, Inc.
CT	Norwalk	Nash Engineering
CT	Oxford	Plastic Tooling
CT	Greenwich	Skaarup
CT	Portland	Skotch Inc.
CT	Enfield	Springborn Labs

List of Companies
That Have Supplied Products and Services
To TDP-Sponsored Projects
As of November 1989

State	City	Company
DC	Washington	Coopers & Lybrand
DC	Washington	Natl. Rural Electric
DC	Washington	Pannel, Kerr, & Forrester
DC	Washington	Teleconsult
DE	Georgetown	Delaware Tech.
FL	Miami	Flying Tigers Air
FL	Miami	Inter-Am. Transp. Eqpt. Co.
FL	Miami	Leventhal & Howath
FL	W. Palm Beach	Mepco
FL	Miami	Southern Rainbow
FL	FtLauderdale	Unaflex Rubber Corp.
FL		dairy farmers
GA	Atlanta	Bell South, Ltd.
GA		Comsat
GA		General Electric
GA	Conely	Koppers
GA	Sandersville	Lapp Insulator Co.
GA	Toccoa	Patterson Pump Company
GA		dairy farmers
HI	Honolulu	Film Services of Hawaii
IA	Davenport	Cartridge Pack
IA		Funk Seeds International
IA		Lewis Rich
IA	Cedar Rapids	Midimar
IA	Des Moines	Pioneer Hi-Bred Intl.
IA		Seed and Grain Co.
IA	Des Moines	Tones
ID	Boise	Morrison-Knudsen Eng.
IL	Lisle	AT&T
IL	Elgin	BW/IP Intl., Inc.
IL	Rockford	Cancer
IL		Caterpillar
IL	Glendale Hgt	Chicago Blower
IL		D.C. Associates
IL		DeKalb Agresearch
IL	Franklin Pk	Delta-Unibus Corp.
IL	Franklin Pk	Dresser Industries
IL	Rockford	Elco Ind.
IL		Essex Supply
IL	Batavia	Furnas Elec.
IL	Naperville	Goulds Pumps
IL	Chicago	Harza Engineering
IL	Aurora	Henry Pratt
IL	Chicago	Howe Corp.
IL		Interst. Producers Livesto
IL		John Deere
IL	RollingMeadw	Martin Tool Works
IL	Springfield	Noverico

List of Companies
That Have Supplied Products and Services
To TDP-Sponsored Projects
As of November 1989

State	City	Company
IL	Granville	S&K/AirPowerTool&SupplyCo
IL		S.A. Healey
IL	Chicago	Sargent & Lundy
IL	Skokie	Sargent-Welch
IL	Chicago	UOP
IL	Elmhurst	Val-Matic Valve&Mfg.Corp.
IL	Chicago	Westinghouse
IL	Skokie	Wm. Nugent & Company
IL	Wiles	X-L Engr.
IN	Valpariso	IG Tech.
IN	Lafayette	Richard Liu (Purdue Univ)
IN	Connersville	Roots-Dresser
IN		Whirlpool
KS	Lenexa	Aviation Sys. Inc.
KS	Abilene	Combustion Engineering
KS	Wichita	KochEngineeringCompanyInc
KS	Kansas City	Peerless Conveyors
KS	Olathe	Suburbia System
LA	Baton Rouge	C.F. Steel Co.
LA	Thibodaux	Cameco/Honiron
LA	FauquierCity	Effort
LA	Baton Rouge	Electrical Wholesalers
LA	New Orleans	Factory Sales & Eng.
LA	Baton Rouge	Goulds Pumps
LA	Baton Rouge	Means Industries
LA	Plaquemine	Nadler
LA	Baton Rouge	Rapco Associates
LA	Baton Rouge	Reiley Electric Supply
LA	Lafayette	Strat-A-Graph
LA	Geismar	Tubes, Inc.
MA	Newton	ADE Corporation
MA	New Bedford	Alberox
MA	Boston	Apollo
MA	Cambridge	Arthur D. Little
MA	N.Attleboro	AtlanticStainlessCo.,Inc.
MA	Holyoke	Atlas Copco
MA	Salem	Atwood & Morrill Co.
MA	Canton	BLH Electronics
MA		Belico
MA	Cambridge	Bio-Rad Semiconductor
MA		Deck
MA	Maynard	Digital Equipment
MA	Agawam	ED Tech Corp.
MA	Plymouth	Pixley Richards
MA		WANG
MD	Baltimore	Eastern Stainless SteelCo
MD	Baltimore	Mach. Craft
MD		NUS

List of Companies
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As of November 1989

State	City	Company
MD	Timonium	Teledyne E. Systems
MI		Asgrow Seed
MI	Richland	Calvert
MI	Flint	General Motors
MI	Durand	Gruendler
MI	Grandville	Harlo Control
MI	Winn	Morbark
MI	Temperance	Rolled Alloys, Inc.
MI		U.S. Equipment
MN	Minneapolis	Brownie Tank Mfg.Co.
MN	Sartell	DeZurik Corp.
MN	Minneapolis	Donaldson
MN	Minneapolis	Hurt Mfg.
MN	Minneapolis	Land O'Lakes
MN		Northrup King Co.
MN	St. Paul	Progress Foundries
MN	Minneapolis	Snyder General Corp.
MN		dairy farmers
MO		A.B. Chance
MO	Kansas City	Black & Veatch
MO	Massillon	Controlled Power Corp
MO	St. Louis	Fulton Iron Works
MO	O'Fallon	Hitchner Mfg.
MO	St. Louis	ITT Blackburn
MO	St. Louis	Lemco (Ralph Young)
MO	St. Louis	McDonald Douglas Autom.Co
MO	St. Louis	Monsanto
MO		Natl.Incl.Servs.Inc.
MO	St. Louis	Westinghouse
MS	Meridien	Miner
NC	Wilkesboro	Meadow Mills
NC	Lumberton	Muesco-MuellerSteamSpeclt
NC	Gastonia	Red Valve
NC	Fayetteville	Westinghouse
NH		General Electric
NH	Laconia	Lisega USA, Inc.
NH	Portsmouth	Simplex Wire & Cable
NJ		AT&T
NJ	Fairfield	AW Draghi
NJ	Union	American Products
NJ	Cedar Knolls	Art Wire/Daco
NJ	Clifton	Atlas Industrial Mfg.Co.
NJ	Lodi	Bergen Cable Tech.
NJ	E. Hanover	Bronner Mfg. & Tool
NJ	Fairfield	CE Connover
NJ	Mahwah	E. Fagan
NJ	Kenilworth	El Ewertsen
NJ	Belleville	Ewol Mfg.

List of Companies
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State	City	Company
NJ	Irvington	Foam Pack
NJ	S.Hackensack	General Rubber
NJ	Union	Graver Co.
NJ	Boonton	Helicoflex
NJ	W.New York	Hillcross
NJ	Newark	Hudson Tool
NJ	E.Rutherford	Insulfab Plastics
NJ	Mt. Laurel	Johnson & Towers
NJ	Fairfield	Koch Engineering Co, Inc.
NJ	Newark	L&H Screw
NJ		Lab Volt.
NJ	Union	Lehigh Prec.
NJ	Kenilworth	Lincoln Die
NJ	LittleFerry	Magna Flux
NJ	Newark	Martin Ind.
NJ	NewBrunswick	McMaster-Carr Supply Co.
NJ	E.Rutherford	Morris Abrams
NJ	Farmingdale	Part Makers
NJ	Wayne	Passaic Rubber
NJ	Linden	Platronics
NJ	Hillside	Rolex
NJ	Linden	Short Run Stamping
NJ	Oakland	Silicon Technology Co.
NJ	Totowa	Star Stainless Screw
NJ	Fairfield	Titanium Industries
NJ	Cedar Grove	Unicorn
NJ	Hackensack	Union Carbide
NJ	Port Murray	Zeroflex Corp.
NM	Corrales	Analytec Corporation
NV	Las Vegas	CER
NY	Olean	AVX
NY	Westbury	Brinkman Instruments
NY	Buffalo	Buffalo Forge Co.
NY	New York	Chemtex Fibers, Inc.
NY	Wellesville	Combustion Engineering
NY	Hudson	Craftech Ind.
NY	New York	Dravo
NY	Wellsville	Dresser Rand
NY	Amsterdam	Electrometrics
NY	Schenectady	General Electric
NY	Tonawanda	General Motors
NY		IBM
NY		Intl Sys Servs Corp
NY	Rochester	Kayex, of Genl.Signal
NY	LeRoy	Lapp Insulator Co.
NY	New York	Pan American
NY	New York	Parsons Brinckerhoff
NY	Bayshore	Plastic Assoc.

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State	City	Company
NY	Schenectedy	Power Technologies, Inc.
NY	N.Hyde Park	RG Precision
NY	Woodside	Schnoor Noise Disc
NY	Binghamton	Special Products
NY	Plainview	Veeco Instruments Inc.
NY	Rouses Pt.	Westinghouse
OH		Amatrol
OH	Lancaster	Arvin/Diamond Electronics
OH	Barberton	Babcock & Wilcox
OH	Cleveland	Brush Wellman
OH	Marietta	Connex Pipe Sys. Inc.
OH	Canton	ControlledPowerLtdPrtnsh
OH	Mentor	Cyberex, Inc.
OH	Cleveland	Derrick Co.
OH	Lancaster	Diamond Power
OH	Cincinnati	Dover Corp./OPW Division
OH	Massilon	Ecodyne
OH	Geneva	Geneva Rubber
OH	Hilliard	HDR Power Systems
OH	Bentonville	Midco/Van Leeuwen
OH	Colombus	Ohio State University
OH	Cleveland	Ore Sorters
OH	Cincinnati	REGO Company
OH	Cleveland	RalstonEngineeringSalesCo
OH	Twinsburg	Robert-James Sales, Inc.
OH	Worthington	SEI Engineers, Inc.
OH	ChagrinFalls	Stock Equipment
OH	Sandusky	The Mack Iron Works, Co.
OH	Cleveland	W.W.Sly
OH	Cincinnati	Weldco, Inc.
OH	Hamilton	Western States
OH	Orville	Westinghouse/CCD
OK	Tulsa	Big Chief
OK	Tulsa	Braden Steel
OK	OklahomaCity	Corken InternationalCorp.
OK	Tulsa	Weamco
OK	Tulsa	Yuba Corp.
OR	Portland	Coe, Inc.
OR	Portland	ESCO
OR	Portland	FNW Valve Company
OR	Portland	Turco
PA	York	A.C. Valve
PA	Pittsburgh	ADSCO Manufacturing
PA	Pittsburgh	Acme Scale and Supply Co.
PA	Easton	Acopian
PA	Pittsburgh	AlleghenyPipe&SupplyCo.
PA	Williamsport	Anchor/Darling Valve Co.
PA	Sewickley	Atlas Industrial Mfg. Co.

List of Companies
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State	City	Company
PA	Kulpsville	BBL Co.
PA	Coraopolis	BakerProcessEquip.Co.Inc.
PA	Pittsburgh	Blaw-Knox
PA	Carnegie	Brooks Instrument Divisn
PA	Lake City	Copes-Vulcan
PA	Pittsburgh	Crosby Valve
PA	Bethlehem	Damper Design
PA	Pittsburgh	Dezurik Corporation
PA	Pittsburgh	Dravo Wellman
PA	Pittsburgh	EG&G Flow Technology
PA	Reading	Exide
PA	Pittsburgh	F.R. Magill Company
PA	Coraopolis	Fab-Tec Industries, Inc.
PA	Carnegie	Face, Inc.
PA	York	Fuller Pump
PA	Shoemkersvil	GP Fasteners
PA	Malvern	General Electric
PA	Philadelphia	General Electric
PA	Pittsburgh	Goulds Pumps, Inc.
PA	Pittsburgh	Graybar Electrical Co.
PA	Pittsburgh	H. H. Robertson Company
PA	Boalsburg	HVP Intl. Ltd.
PA		Hill Manufacturing
PA	Pittsburgh	IndustrialValves&Fittings
PA	Phillipsburg	Ingersoll-Rand
PA	Pittsburgh	Jerguson Gage and ValveCo
PA	Bala Cynwyd	Johnson March
PA	Pittsburgh	Jos.T.Ryerson & Son, Inc.
PA	Pittsburgh	Leslie
PA	Pittsburgh	MS Jacobs and Assoc.,Inc.
PA	Pittsburgh	MSA
PA	Pittsburgh	Masonellan
PA		McGraw Edison
PA	Pittsburgh	Meriam Instruments
PA	Pittsburgh	Moody-Tottrup Intl., Inc.
PA	Reading	NGK Metals
PA	Pittsburgh	O'Brian Corporation
PA	Carlisle	P.R.Hoffman MachineProds.
PA	Pittsburgh	PetroliteEquip&Instr.Grp.
PA	Philadelphia	Philadelphia Gear
PA	Imperial	ProcessDevt&Control,Inc.
PA	Pittsburgh	Pulsafeed Pumps, Inc.
PA	Pittsburgh	RAM
PA	Lawrence	Spence Engineering Co.
PA	Greensburg	Telemechanique, Inc.
PA	Monroeville	The Foxboro Company
PA	Carnegie	Transmation, Inc.
PA	Jeanette	Tubing Specialists, Inc.

List of Companies
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State	City	Company
PA	Pittsburgh	USX Engineers and Conslts
PA	Pittsburgh	Wemco
PA	Pittsburgh	WestinghouseElecSupplyCo
PA	Montgomeryvi	Xnatech
PA	Monroeville	Yale Industrial Trucks
RI	Cranston	Grinnell Corp.
SC	Laurens	B.F. Shaw
SC	Greenville	General Electric
SC	N.Charleston	RM Engineered Prods.,Inc.
SC	Greenville	Westinghouse
SC	Colombia	Wilbur Smith
TN	Chattanooga	Combustion Engineering
TN	Chattanooga	Corley
TN	Greenville	Kaydon Corp
TX	Houston	A&F International
TX	Austin	ASOMA
TX	Houston	Brown and Root
TX	Houston	Browning Ferris Intntl.
TX	Amarillo	Clymer Labs
TX	Houston	Crystal Chemical
TX	Deer Park	Flexitalic Gasket Co.
TX	Houston	Houston Manuf. Syss.
TX	Longview	Industrial Filter Co.
TX	Houston	Kranco, Inc.
TX	Austin	Lacoste & Romberg
TX	Houston	Marlin Valve Co.
TX	Dallas	Peerless
TX	Houston	Port-a-Camp
TX	Austin	Radian
UT	Salt Lake C.	Jetway
UT		Logan Manufacturing
VA	Arlington	Airways Engineering Co.
VA	Merrifield	Comsat
VA		Equatorial
VA	Salem	General Electric
VA	Bristol	Ingersoll-Rand
VA		URS
VT	Williston	Velan Valve Corp.
WA		Freightliner
WA	Seattle	Racon
WA	Seattle	Robbins
WI		A.O. Smith
WI	Milwaukee	Boliden-Allis
WI	Milwaukee	Cleverbrooks
WI	Cudahy	Crane Manuf & Service
WI	Milwaukee	Deister
WI	Waukesha	Envirex
WI	Milwaukee	Great Lakes Instruments

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List of Companies
That Have Supplied Products and Services
To TDP-Sponsored Projects
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State	City	Company
WI	Racine	J.I. Case
WI	Milwaukee	Shadbolt & Bolt Company
WI	Madison	Warman International
WV	Wheeling	WheelingRubberProds., Inc.

APPENDIX D

APPENDICES

- APPENDIX A List of Exports Generated--by Project
- APPENDIX B List of FY 1989 TDP Projects Obligated
- APPENDIX C List of Companies that have Supplied Products
and Services to TDP-Sponsored Activities
- APPENDIX D List of Exports Generated--by Region
and Country

ACRONYMS

A.I.D.	-	Agency for International Development
DM	-	Definitional Mission
EGAT	-	Electricity Generating Authority of Thailand
FS	-	Feasibility Study
IAP	-	Investor Assistance Program
IDCA	-	International Development Cooperation Agency
LDC	-	Less Developed Country
OECD	-	Organization for Economic Cooperation and Development
OV	-	Orientation Visit
RGA	-	Reimbursable Grant Agreement
TDP	-	Trade and Development Program
TR	-	Training Grant
WS	-	Workshop