

AGENCY FOR INTERNATIONAL DEVELOPMENT

**Fiscal Year 1978
Submission to the Congress**

By Appropriation Account

OTHER APPROPRIATION ACCOUNTS

March 1977

AMERICAN SCHOOLS AND
HOSPITALS ABROAD

American Schools and Hospitals Abroad

Program Summary (In Millions of Dollars)			
FY 1976 Actual	TQ Actual	FY 1977 Estimated	FY 1978 Proposed
16.7	5.6	19.8	7.5

The American Schools and Hospitals Abroad (ASHA) program provides grants to American sponsors of private institutions in foreign countries to help demonstrate American ideas, practices, and progress in education and medicine.

- American schools and hospitals overseas increase mutual understanding between the people of the United States and the people of other countries and present a favorable image of the United States abroad.
- U.S. foreign assistance grants under Section 214 of the FAA supplement the preponderantly private income which, in most cases, these institutions earn or receive from U.S. and foreign sources.

The FY 1978 request is \$7.5 million plus \$7 million equivalent in U.S.-owned Egyptian local currency.

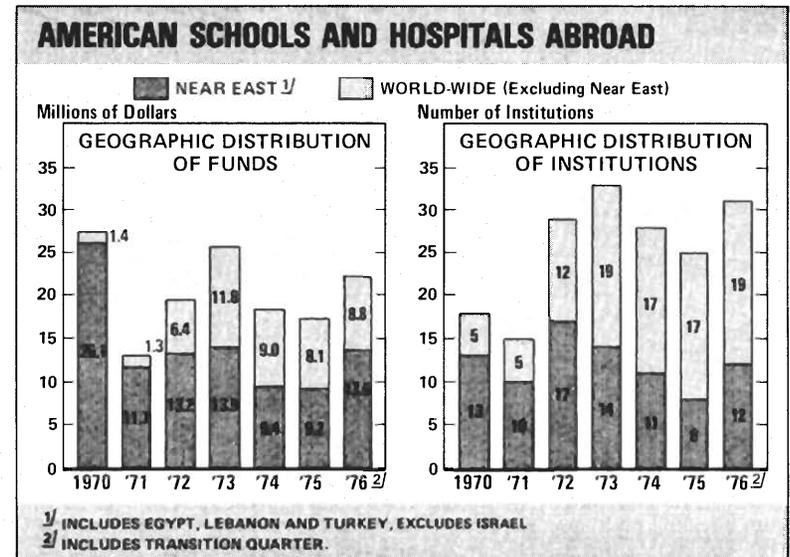
The Egyptian currency equivalent of \$7 million is requested to supplement funds provided in recent fiscal years to replenish the endowment fund of the American University in Cairo (AUC) and for operating budget support not to exceed half the above sum.

Geographic Dispersion of the ASHA Program

- For historical and political reasons, the ASHA program has been concentrated in the Near East.

-- Consistent with Congressional intent, A.I.D. has diversified the ASHA program geographically in recent years despite approximately the same yearly budget and continuing requirements for institutions in the Near East.

- ** In FY 1970 and FY 1971, when the Congress made specific line item appropriations for the ASHA program, 90% of ASHA funds were granted for institutions in the Near East.
- ** From FY 1972 through FY 1976, including the Transition Quarter, ASHA funds obligated by A.I.D. for projects in the Near East averaged 57%.
- ** The budget proposed does not provide the latitude for diversification of the program as all available funds will be required to maintain ongoing activities.



CONTINUING ACTIVITY

Table IV

Country: SER INTERREGIONAL PROGRAMS				
TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
American Schools and Hospitals Abroad	American Schools and Hospitals Abroad	FY 78	7,500	
NUMBER	PRIOR REFERENCE	INITIAL OBLIGATION	ESTIMATED FINAL OBLIGATION	ESTIMATED COMPLETION DATE OF PROJECT
GRANT <input checked="" type="checkbox"/> LDAN <input type="checkbox"/>	FY 1977 Interregional ASHA, p. 223	FY 1959	FY Continuing	FY Continuing

Purpose: The objectives of the American Schools and Hospitals Abroad (ASHA) program are to ensure that selected institutions overseas which are continuously identified as American serve as effective cultural presence centers and foster a favorable image of the United States. To achieve these objectives grants are made to help institutions demonstrate the best U.S. ideas and practices in education and medicine and thereby increase mutual understanding between the people of the United States and the people of other countries.

Major Outputs: Section 214 assistance permits American sponsored institutions overseas to meet the costs of improvements necessary for maintaining standards of excellence in education and medicine, e.g. new libraries/ learning centers, medical, teaching and scientific equipment, new classrooms, dormitories and medical facilities.

Each year thousands of students and medical patients abroad directly experience American ideas and practices in medicine and secondary, undergraduate and graduate level education.

The ASHA program has assisted 68 institutions in 24 countries. In Israel 33 institutions have been assisted.

Institutions of Higher Learning	15
Medical Centers	19
Secondary and Technical Schools	34
Total Institutions	68
(Cumulative as of 9/30/76)	

Recipient Institutions and Other Donors: U.S. foreign assistance grants under Section 214 supplement the preponderantly private income which, in most cases, institutions earn or receive from U.S. and foreign sources, tuition and fees.

Progress Toward Geographic Diversification: Of the total number of institutions receiving assistance each year, in the 1970s, more institutions in the Near East received assistance through FY 1972 than the rest of the world combined. More institutions in areas of the world other than the Near East have received Section 214 assistance each year beginning with FY 1973.

In terms of distribution of funds, a comparison of FY 1970 and FY 1971 with subsequent fiscal years (FY 1972-FY 1976) indicates that the amount of funds going to institutions in the Near East has been reduced 33%.

FY 1978 Program: The budget proposed does not provide the latitude for diversification of the program as all available funds will be required to maintain ongoing activities.

DISASTER RELIEF

INTERNATIONAL DISASTER ASSISTANCE

Disaster, natural and man-made, has emerged as one of the major global challenges.

During the 12-year period 1965 to 1976 inclusive, the United States Government provided relief assistance for 483 foreign disasters. As a result of these catastrophes:

- 3.6 million people died;
- 474 million were seriously affected;
- property damage exceeded \$18 billion;
- in-country self-help amounted to more than \$5.9 billion;
- total external relief assistance exceeded \$3.6 billion;
- the United States Government contributed \$1.6 billion;
- the U.S. private sector contributed \$129 million.

U.S. disaster responses since the beginning of FY 1976 are indicated on the accompanying map.

The most disturbing aspect of disaster is the frequency with which it afflicts those countries which can least afford it. Seventeen of the 26 poorest countries of the world (those with annual per capita incomes of less than \$150) required international disaster help between 1972 and 1976. Material losses from disasters outpace per capita development gains in many countries. Consider alone the toll wreaked by the devastating Guatemala earthquake of February 1976, wherein:

- Approximately one-sixth of Guatemala's six million people were left homeless.
- The supply artery from Guatemala's main port was cut off, with connecting bridges either damaged or destroyed and roads covered with landslides.

- Overall damages amounted to one-third of Guatemala's 1975 Gross National Product of nearly \$3 billion.

To alleviate suffering of the Guatemalans, the United States has provided more than \$44 million to meet food, medical, and shelter needs and to reopen Guatemala's link to its main supply ports.

Relatively developed countries have also suffered serious setbacks caused by disasters. Since 1975, Lebanon has suffered immense human and economic losses as a result of continuing civil strife:

- Sixty percent of the one million people remaining in Lebanon require care in the form of shelter, food and clothing.
- The reconstruction needs are vast--the Government of Lebanon currently estimates between \$2.5 and \$3.0 billion (January 1977).
- U.S. aid to Lebanon was \$7.03 million in FY 1976 and the TQ combined with a separate \$20 million FY 1977 appropriation to help meet food and medical needs.

While it is impossible to predict the frequency and magnitude of worldwide disasters based on disaster histories, one cannot be optimistic that disasters are on the decline.

During the next 15 to 20 years, the Third World will be increasingly vulnerable to disasters due to the combined effects of overpopulation, food scarcity or maldistribution, the energy gap, and meteorological/geological disturbances.

For example:

- In the first ten months of 1976, earthquakes

killed more people than in any year since 1556--the year of the devastating earthquake in Hsensi Province, China. In 1976 alone, earthquakes killed approximately:

- ** 23,000 in Guatemala;
- ** 8,000 in the Philippines;
- ** 922 in Italy;
- ** 863 in Indonesia;
- ** 3,294 in Turkey;
- ** 655,000 in China (unconfirmed).

In order to conduct effective international disaster preparedness, relief and rehabilitation programs, the Administration is requesting a permanent replenishable fund of \$25 million.

- Such a permanent authorization would permit the President to respond quickly to disaster abroad by eliminating the need to obtain specific authorizations when it is necessary to replenish the disaster assistance account. In the case of the recent Guatemala and Italy relief efforts, the Congress had to appropriate funds on both occasions to meet the relief and rehabilitation needs. Fortunately, the international disaster assistance account had funds on hand in order to start up relief efforts. However, if the account were at a low level at the times of these disasters, valuable time would have been lost in the request for additional funds to meet the relief needs.
- Congress will retain control over the level of the funds through the appropriation pro-

cess. The fund will be replenished through supplemental budget requests. The authorizing committees will be kept fully and currently informed of any supplemental requirements as well as the status of major U.S. disaster relief efforts.

As was the case in FY 1976, it is possible that disasters will occur which exceed the financial resources now available in the International Disaster Assistance account. During one four-month period, the Congress appropriated:

- \$25 million for Italy earthquake relief;
- \$25 million for Guatemala earthquake relief;
- \$20 million for Lebanon civil strife relief.

The Administration, therefore, feels that a permanent replenishable fund of \$25 million is required to ensure the availability of adequate funds at all times to meet the unpredictable scope of disaster relief and rehabilitation requirements around the world.

The thrust of the FY 1978 program concentrates on the areas identified in the attached project papers. Following is a summary of these projects:

Disaster Relief and Rehabilitation

- Funds made available will support emergency relief and rehabilitation operations. Assistance provided will be of the highest caliber--both in terms of quality and quantity. It may range from LANDSAT Satellite imagery or high altitude "U-2" aircraft reconnaissance for assessment purposes on the one hand to rapid delivery of cots, tents, medical supplies and food on the other.

International Training: Disaster Preparedness and Technical Assistance

- \$350,000 will be devoted to strengthening the capabilities of disaster-prone developing countries to respond effectively to natural and man-made disasters.
- A major component of this program will be a seven-week seminar held in Washington to provide preparedness training to approximately 25 senior officials from disaster-prone less-developed countries.
- A new thrust of the program will be the expanded procurement of such selected equipment as tiltmeters to apply prediction, preparedness and assessment technologies in lesser developed disaster-prone countries.

In FY 1976, an initial step in this area was taken when the Government of Ecuador was provided with remote sensing devices needed to monitor potentially dangerous volcanic activity.

Regional Disaster Supply Stockpiles

- \$850,000 have been programmed to maintain and upgrade four worldwide regional stockpiles located in Guam, Singapore, Panama, and Italy.
- During FY 1976 and thus far in FY 1977, these stockpiles were critical in responding to the Guatemala, Indonesia, Italy and Turkey earthquakes. Tents, cots, and blankets released from these stockpiles provided relief to thousands of victims.

- FY 1978 funds will be used for storage and administrative costs, new items, and increased levels of common use items.

Disaster Related Applied Research

- \$600,000 have been programmed to increase the beneficial application of the world's technologies to international disaster prediction, preparedness, planning, relief and rehabilitation.
- In FY 1976, funds in this area were used to:
 - ** develop a computerized management information system to help facilitate the decision-making process in the early hours of a disaster;
 - ** establish, through the National Academy of Sciences, a high-level Committee on International Disaster Assistance which will help identify appropriate forms of technology to be used in international disaster assistance efforts;
 - ** develop for the first time a pre-flood LANDSAT imagery map of the highly flood-prone country of Bangladesh.
- Funds will be used to pay for the services of such organizations as the National Oceanic and Atmospheric Administration to provide such disaster vulnerability assessments as demonstrated in the table below.

GUATEMALA CLIMATE NATURAL DISASTER PROBABILITIES

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<u>% Probability of:</u>													
Hurricanes/Tropical Storms	-	-	-	-	-	4	6	19	6	3	-	-	38
Floods	-	-	-	-	1	1	3	7	3	1	-	-	16
Droughts	1	1	2	2	3	1	1	-	-	-	-	1	12
Tsunamis	-	-	-	-	-	-	-	-	-	-	-	-	< 3
Earthquakes (Magnitude ≥8)	-	-	-	-	-	-	-	-	-	-	-	-	< 3
Volcanoes	-	-	-	-	-	-	-	-	-	-	-	-	< 3
Total Probabilities	1	1	2	2	4	6	10	26	9	4	-	1	66

Resources Support Agreement

A \$40,000 resource support agreement with the Department of Health, Education and Welfare's Office of International Health will provide a highly specialized resource of advice and information on medical matters involved in disaster preparedness and operations.

-- Assistance from a full-time public health officer proved to be invaluable during response to:

- ** the civil strife in Lebanon;
- ** the Guatemala earthquake;
- ** the recent African hemorrhagic fever epidemic.

Grant to the United Nations Disaster Relief Office

-- A grant of \$250,000 will be made to the United Nations Disaster Relief Office (UNDRO) to help UNDRO strengthen its effectiveness in the coordination of international disaster assistance.

-- This grant is a follow-on to past grant support (1.25 million) given or programmed for UNDRO since 1975.

Lebanon Relief and Rehabilitation

In addition to the permanent \$25 million replenishable disaster assistance fund, an increase of \$20 million for Lebanon relief and rehabilitation is required beyond that already authorized in FY 1977 pursuant to Section 495C.

Statistics now available are beginning to show the scope of the destruction, damage, and suffering:

- 50,000 Lebanese are estimated to have been killed in the course of the war;
- 800,000 people are homeless.

Whether Lebanon in FY 1978 will require a continuation of emergency aid or whether its need will be in the field of crucial rehabilitation, it is clear that a minimum of \$20 million will be required. This contribution would

represent a small percentage of the total needs of Lebanon for external assistance in FY 1978.

Rehabilitation needs include:

- the expeditious repair of hospitals, clinics, schools, homes, and ports;
- repair of infrastructure such as water, electricity, telephone and transportation networks;
- reestablishment of sanitary and health services.

An Assessment Team has been assembled and it is hoped will depart for Lebanon in early January 1977. This Team will be instrumental in identifying the specific objectives of U.S. relief and rehabilitation assistance to Lebanon.

**Foreign Disaster Assistance
FY 1976-1977**

(As of December 3, 1976)

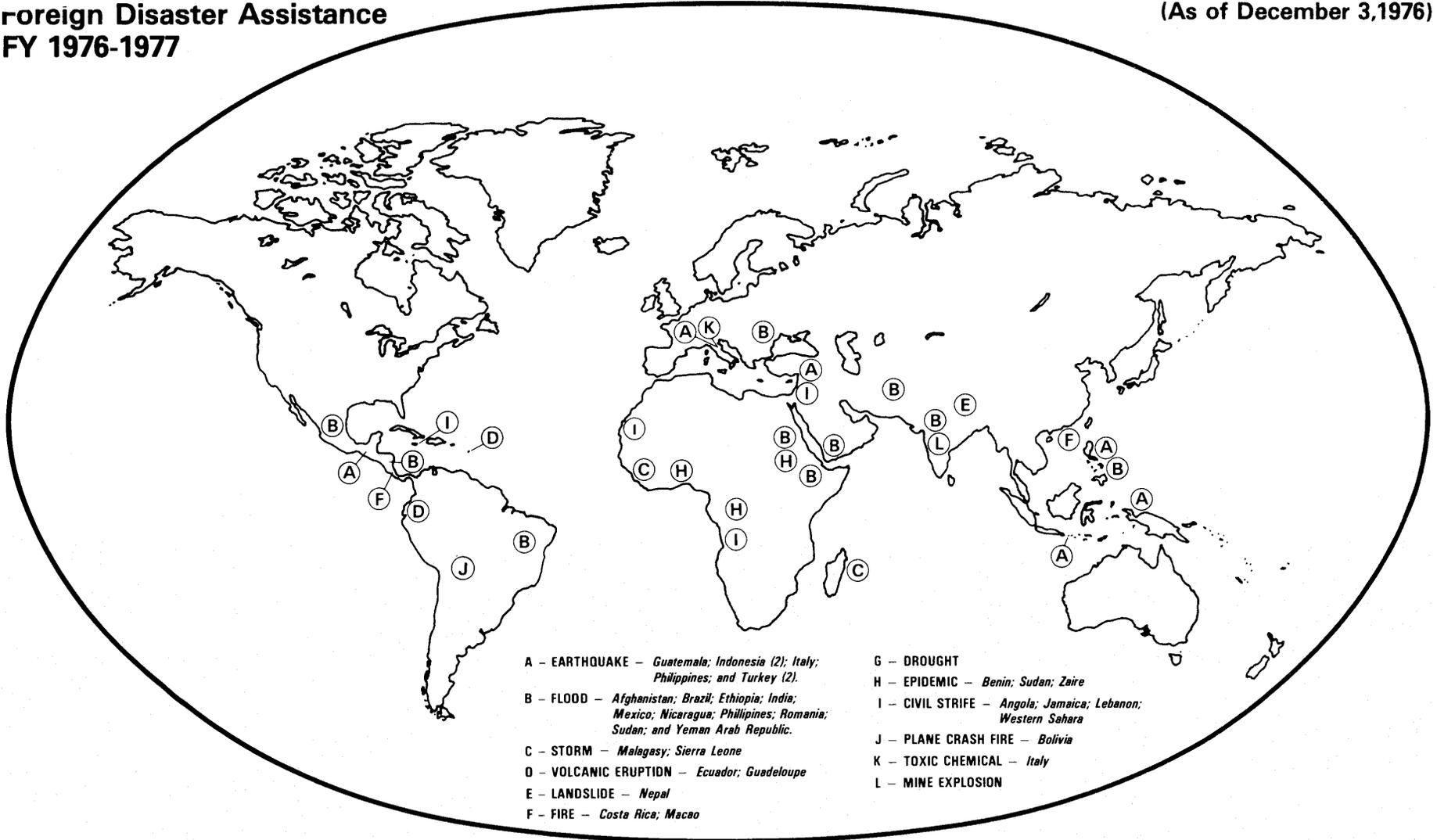


TABLE 1

SUMMARY OF UNITED STATES GOVERNMENT INTERNATIONAL DISASTER ASSISTANCE
FISCAL YEARS 1976 and 1977
(as of December 3, 1976)
BY DISASTER TYPE

Disaster Type	Number	Number Dead	Number Victims	Obligations of International Disaster Assistance Funds (Thousands)				
				Fiscal Year 1976	Transitional Quarter	Fiscal Year 1977 (3 Mos.)	Total	% of Obligations
Earthquakes	9	38,387	1,731,647	\$44,764.1	\$ 630.5	\$3,675.8	\$49,070.4	72%
Civil Strife	4	60,000	871,797	9,956.2	2,381.3	4,230.7	16,568.2	24
Floods	9	884	18,206,500	1,497.8	50.0	-	1,547.8	2
Volcanoes	2	-	72,000	8.5	174.2	-	182.7	*
Epidemics	3	290	424	1.0	-	150.0	151.0	*
Storms	4	1,000	62,000	49.9	14.5	-	64.4	*
Accidents	3	476	1,313	50.0	1.5	75.0	126.5	*
Drought	1	50	300,000	62.4	-	-	62.4	*
Fire	2	-	614	30.0	-	-	30.0	*
Landslide	1	1	1,324	4.0	-	-	4.0	*
Total All Types	38	101,088	21,247,619	56,423.9	3,252.0	8,131.5	67,807.4	100%

*Less than .5%

Region	Number	Number Dead	Number Victims	Obligations of International Disaster Assistance Funds (Thousands)				
				Fiscal Year 1976	Transitional Quarter	Fiscal Year 1977 (3 Mos.)	Total	% of World Total
Latin America	11	24,258	2,248,406	\$21,966.6	\$ 240.0	\$ 158.8	\$22,365.4	33%
Europe	4	984	762,207	23,495.2	40.6	-	23,535.8	35
Near East	5	55,697	992,794	2,662.8	2,380.0	7,822.7	12,865.5	19
Asia	7	9,859	17,020,191	559.0	591.4	-	1,150.4	2
Africa	10	10,290	224,021	7,740.3	-	150.0	7,890.3	11
Total Worldwide	38	101,088	21,247,619	56,423.9	3,252.0	8,131.5	67,807.4	100%

TABLE 2

UNITED STATES GOVERNMENT INTERNATIONAL DISASTER ASSISTANCE
FISCAL YEARS 1976 and 1977
(as of December 3, 1976)

Country and Disaster	Number Dead	Number Victims	Obligations of International Disaster Assistance Funds (Thousands)			
			Fiscal Year 1976	Transitional Quarter	Fiscal Year 1977	Total
<u>LATIN AMERICA</u>						
Bolivia Air Crash	104	206	\$ -	\$ -	\$ 75.0	\$ 75.0
Brazil Floods	96	600,000	169.1	-	-	169.1
Costa Rica Forest Fire	-	-	25.0	-	-	25.0
Ecuador Volcano	-	-	8.5	-	-	8.5
Ecuador Earthquake	8	20,000	-	-	83.8	83.8
Guadeloupe Volcano	-	72,000	-	174.2	-	174.2
Guatemala Earthquake	23,000	1,200,000	21,654.6#	-	-	21,654.6
Haiti Drought	50	300,000	62.4	-	-	62.4
Jamaica Civil Strife	-	1,200	47.0	1.3	-	48.3
Mexico Hurricane	1,000	50,000	-	14.5	-	14.5
Nicaragua Flood	-	5,000	-	50.0	-	50.0
LATIN AMERICA TOTAL	24,258	2,248,406	21,966.6	240.0	158.8	22,365.4
<u>EUROPE</u>						
Italy Earthquakes (2)	922	111,472	22,850.5#	39.1	-	22,889.6
Italy Gas Explosion	-	735	-	1.5	-	1.5
Romania Floods	62	650,000	644.7	-	-	644.7
EUROPE TOTAL	984	762,207	23,495.2	40.6	-	23,535.8
<u>NEAR EAST</u>						
Afghanistan Flood	51	76,500	25.0	-	-	25.0
Lebanon Civil Strife	50,000	764,000	2,358.8	2,380.0	4,230.7*	8,969.5
Turkey Earthquake (1975)	2,300	40,000	259.0	-	-	259.0
Turkey Earthquake (1976)	3,294	62,294	-	-	3,592.0	3,592.0
Yemen Flood	52	50,000	20.0	-	-	20.0
NEAR EAST TOTAL	55,697	992,794	2,662.8	2,380.0	7,822.7	12,865.5

#Obligations as of December 3, 1976 against appropriation of \$25,000,000

*Obligations as of December 3, 1976 against appropriation of \$20,000,000

TABLE 2 (Continued)

UNITED STATES GOVERNMENT INTERNATIONAL DISASTER ASSISTANCE
FISCAL YEARS 1976 and 1977
(as of December 3, 1976)

Country and Disaster	Number Dead	Number Victims	Obligations of International Disaster Assistance Funds (Thousands)			
			Fiscal Year 1976	Transitional Quarter	Fiscal Year 1977	Total
<u>ASIA</u>						
India Flood	349	14,000,000	\$ 25.0	\$ -	\$ -	\$ 25.0
India Mine Explosion	372	372	50.0	-	-	50.0*
Indonesia Earthquakes						
Bali	443	103,881	-	212.1	-	212.1
Irian Jaya	420	15,000	-	254.3	-	254.3
Macao Fire	-	614	5.0	-	-	5.0
Nepal Landslide	1	1,324	4.0	-	-	4.0
Philippines Flood	274	2,720,000	475.0	-	-	475.0
Philippines Earthquake	8,000	179,000	-	125.0	-	125.0
ASIA TOTAL	9,859	17,020,191	559.0	591.4	-	1,150.4
<u>AFRICA</u>						
Angola Civil Strife	10,000	35,000	4.0	-	-	4.0
Angola Repatriation (Portugal)	-	31,597	7,446.4	-	-	7,446.4
Benin Polio	1	8	1.0	-	-	1.0
Ethiopia Flood	-	30,000	12.0	-	-	12.0
Malagasy Cyclone	*	*	25.0	-	-	25.0
Mauritius Cyclone	**	**	.3	-	-	.3
Sierra Leone Windstorm	-	12,000	24.6	-	-	24.6
Sudan Flood	-	75,000	127.0	-	-	127.0
Sudan Epidemic	77	161	-	-	25.0	25.0
Western Sahara Displaced Persons	*	40,000	100.0	-	-	100.0
Zaire Epidemic	212	255	-	-	125.0	125.0
AFRICA TOTAL	10,290	224,021	7,740.3	-	150.0	7,890.3

*Not reported

**Carry over FY 75

SUMMARY OF ACTIVE AND PROPOSED PROJECTS
(In thousands of dollars)

COUNTRY: INTERREGIONAL

Project Title	*	Project Number	FY of Initial Obligation/Date of Loan Authorization	Grant						Future Year Obligations
				Through 9/30/76		Estimated FY77		Proposed FY78		
				Obligations	Expenditures	Obligations	Expenditures	Obligations	Expenditures	
<u>Section 491</u> Foreign Disaster Relief and Rehabilitation	*		1964	47,630 ^{1/}	21,244	23,010	44,396	22,910	22,910	**
Regional Disaster Supply Stockpiles	*	932-0001	1968	2,700	2,700	500	500	850	850	**
International Training - Disaster Preparedness and Technical Assistance	*	932-0002	1970	450	450	250	250	350	350	**
Disaster-Related Applied Research	*	932-0003	1976	400	400	940	940	600	600	**
Grant to United Nations Disaster Relief Office (UNDRO)	*	AID/OTR-G-1360	1975	1,000	1,000	250	250	250	250	**
Resources Support Service Agreement	*	HEW/OIH-4-74	1974	120	120	50	50	40	40	**
<u>Section 495C</u> (Lebanon Relief and Rehabilitation)	*					(20,000)	(20,000)	(20,000)	(20,000)	
Total				52,300	25,914 ^{2/}	25,000	46,386	25,000	25,000	-

*Detailed project narrative-See Table IV
**Continuing projects

^{1/}Prior to FY 75, obligations and expenditures were from the Contingency Fund.

^{2/}Expenditures, over \$13 million, still in process to International Committee of the Red Cross (ICRC) and United Nations High Commissioner for Refugees (UNHCR).

Country: INTERREGIONAL

CONTINUING ACTIVITY

Table IV

TITLE Foreign Disaster Relief and Rehabilitation	FUNDS International Disaster Assistance	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	22,910	
NUMBER	PRIOR REFERENCE FY 1977	INITIAL OBLIGATION FY 1964	ESTIMATED FINAL OBLIGATION FY Continuing	ESTIMATED COMPLETION DATE OF PROJECT FY Continuing
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>	Interregional Programs, p. 161			

Purpose: To respond with emergency assistance to disaster-stricken nations that request U.S. help following natural or man-made disasters. The Office of Foreign Disaster Assistance (OFDA) coordinates all U.S. humanitarian efforts.

Major Outputs: Responded to 36 disasters in FY 1976 and TQ, involving 17 million victims and 99,104 deaths.

Progress to Date: The United States Government responded to a wide number of disasters, providing not only such badly needed commodities as tents and blankets but also utilizing such sophisticated technology as satellite imagery. For example:

- In responding to devastating earthquakes which struck Guatemala, Indonesia, Ecuador, Turkey and Italy, the United States provided enough tentage and blankets to meet the shelter needs of thousands of people.
- In the Guatemala and Italy relief efforts, U.S. helicopters in the early hours of the disaster conducted search and rescue, evacuation and food air-drop missions.
- When Zaire and Sudan were struck by a killer epidemic, U.S. commodities and skilled epidemiologists played a major role in isolating the virus and keeping the epidemic under control. A distinctive aspect of this effort was the contingency plan

developed for evacuating American technicians wherein a space module was held in reserve to be used for isolation purposes.

-- In an effort to ensure that the best available U.S. technology was being devoted to the Guatemala relief effort, assistance from such U.S. agencies as National Aeronautics and Space Administration, U.S. Geological Survey, and National Oceanic and Atmospheric Administration made a significant contribution.

-- U.S. assistance was channeled to a great extent through such international organizations as the International Committee of the Red Cross (ICRC) and American voluntary agencies. In the Lebanon relief effort, the United States provided \$4 million in grant assistance to the ICRC to help meet the medical and food needs of the population, in addition to substantial direct relief support.

FY 1978 Program: The unpredictable nature and frequency of disasters render any advance determination of level of assistance impossible. The funds in this project will provide, however, a reliable base from which the United States Government can respond quickly and effectively. These project funds may be supplemented by special appropriation when so required.

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	47,630	21,244	26,386	
Estimated Fiscal Year 1977	23,010	44,396		
Estimated through September 30, 1977	70,640	65,640	-	
		Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1978	22,910	-	-	

Country: INTERREGIONAL

CONTINUING ACTIVITY

Table IV

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Regional Disaster Supply Stockpiles	International Disaster Assistance	FY 78 850		
NUMBER 932-0001	PRIOR REFERENCE FY 1977	INITIAL OBLIGATION FY 1968	ESTIMATED FINAL OBLIGATION FY Continuing	ESTIMATED COMPLETION DATE OF PROJECT FY Continuing
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>	Interregional Programs, p. 162			

Purpose: To maintain regional stockpiles of disaster relief supplies overseas.

Major Outputs: During FY 1976, relief supplies from the four strategically placed disaster supply stockpiles in Panama, Italy, Singapore, and Guam aided in mitigating the suffering of tens of thousands of disaster victims. Medicines and blankets from the Panama stockpile were dispatched to aid the victims of the Guatemala earthquake. In Italy, 1,000 tents were rushed to provide temporary shelter to 6,000 homeless victims of an earthquake. From the Singapore stockpile, tents were provided in response to the devastating earthquake in Bali, Indonesia. From the Guam stockpile, relief supplies were made available, at cost, to the Federal Disaster Assistance Administration to assist in its relief efforts for the victims of a typhoon which struck that island.

Progress to Date: The four stockpiles save lives and money. Suffering is reduced as relief response time is significantly shortened when disasters strike. Costs are reduced by use of ships instead of planes to carry basic relief items across the oceans in advance of disasters. From the stockpiles to the near-by disaster area, then, is a quicker, lower cost flight. Before the stockpiles were established, U.S. relief goods had to be flown from the United States to the disaster scene. In FY 1977, the effectiveness of the stockpiles is being enhanced by increas-

ing the inventories of common-use items--tents, cots, etc. - to reduce dependence on emergency flights from the United States. Management of the stockpiles is being supported by a computerized system.

FY 1978 Program: A.I.D. will continue the ongoing expansion of the stockpiles to increase savings of time and money. Basic items will be gradually increased and some new items added based on continuing review of needs and experience. This year common-use hand tools will be added to the inventory.

A.I.D.-financed Inputs
(\$ Thousands)

FY 1978

<u>Commodities:</u> Increase inventory of tents, tent flies; add new items: double-deck cots, hand tools and other items. Note: costs of replacement commodities are charged to the obligations established for disaster relief.	700
<u>Other Costs:</u> Storage, maintenance of equipment, and administrative costs.	<u>150</u>
Total	850

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES Department of Defense (Guam, Panama, Italy); Crown Pacific (Singapore)
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	2,766	2,766	---	
Estimated Fiscal Year 1977	500	500	---	
Estimated through September 30, 1977	3,266	3,266	---	
		Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1978	850	-	-	

CONTINUING ACTIVITY

Table IV

Country: INTERREGIONAL					
TITLE International Training - Disaster Preparedness and Technical Assistance		FUNDS International Disaster Assistance	PROPOSED OBLIGATION (In thousands of dollars)		
NUMBER 932-0002		PRIOR REFERENCE FY 1977	FY 78	350	
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>		Interregional Programs, p. 163	INITIAL OBLIGATION FY 1970	ESTIMATED FINAL OBLIGATION FY Continuing	ESTIMATED COMPLETION DATE OF PROJECT FY Continuing

Purpose: To strengthen the capabilities of disaster-prone developing countries to react effectively to natural and man-made disasters.

Major Outputs: Many developing countries lack the administrative apparatus and technical skills to prepare for natural and man-made disasters, estimate emergency relief requirements, and coordinate internal and external assistance efforts. Through this continuing project activity, A.I.D. has, for the past seven years, conducted annual seminars for senior officials of disaster-prone countries to improve their capabilities. Technical assistance in the preparation of disaster plans and operations is also offered.

Progress to Date: The International Disaster Preparedness Seminar, started in 1969 with five participants and presently attended by 25, has trained 105 high level disaster officials from 35 countries. As a result, most disaster-prone countries now have made some progress towards enactment of disaster legislation and emergency planning.

Technical assistance has been provided to 14 countries and two regional disaster organizations. Such assistance included the development of country disaster plans, of mass evacuation plans, selected demonstration and use of disaster-preparedness commodities, and in-country training. The fifth annual conference with representatives of 17 voluntary agencies working in the field of disaster relief was

held in October 1976.

FY 1978 Programs: The annual International Disaster Preparedness Seminar will train 25 foreign disaster officials, and regional disaster seminars will be held; an expansion in the technical assistance programs is planned, including the purchase of selected equipment to demonstrate preparedness technologies in lesser developed disaster-prone countries. Development of improved disaster assessment methods will be stressed. The annual voluntary agency conference will emphasize coordination at disaster sites. FY 1978 funding of \$350,000 will provide for:

<u>A.I.D.-financed Inputs</u> (\$ Thousands)	<u>FY 1978</u>
Seven-week International Disaster Preparedness Seminar for 25 participants, regional seminars	125
Disaster-preparedness commodities, e.g., tilt meters, stream gauges, etc.	100
Seminar with U.S. voluntary agencies, general support, short-term translators, administrative costs	<u>125</u>
Total	350

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	447	447	-	
Estimated Fiscal Year 1977	250	250	-	
Estimated through September 30, 1977	697	697	-	
		Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1978	350	-	-	

Country: INTERREGIONAL

CONTINUING ACTIVITY

Table IV

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	ESTIMATED FINAL OBLIGATION	ESTIMATED COMPLETION DATE
Disaster-Related Applied Research	International Disaster Assistance	600	FY Continuing	FY Continuing
NUMBER 932-0003	PRIOR REFERENCE	INITIAL OBLIGATION	ESTIMATED FINAL OBLIGATION	ESTIMATED COMPLETION DATE
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>	FY 1977 Interregional Programs, p. 164	FY 1976	FY Continuing	FY Continuing

Purpose: To increase the beneficial application of the world's technology to international disaster prediction, preparedness, planning, relief and rehabilitation.

Major Outputs: (Illustratively)

- the successful gathering of pre-flood LANDSAT imagery for the entire disaster-prone Bangladesh;
- the implementation of a computerized management information system consisting of four sub-systems, viz; historical analysis, disaster-prone country profiles, procurement and logistics, and operations.
- through the National Academy of Sciences the formation of a high level Committee on International Disaster Assistance to advise A.I.D. regarding program directions and priorities, applicable high technologies, and state of the art of disaster disciplines.

Progress to Date: Emphasis has been placed on ways in which disaster mitigation could be enhanced through technological applications, including advanced technology.

- Computer support: 50% of the disaster-prone developing countries' data profiles have been completed; disaster historical analyses for developing nations are well advanced; the procurement and logistics sub-system has been completed; an interim operations sub-system has been developed and was tested during a major disaster; and the feasibility of a disaster simulation model was explored.

- Bangladesh pre-flood LANDSAT imagery provides for the first time a basis for assessing an entire flood-prone nation's flood condition against a "normal" base. Similar bases will be developed for other disaster-prone developing nations if cost and relief benefits are realized.
- Used for the first time U-2 aircraft high altitude assessment capability to a major disaster, the wide-sweeping reconnaissance mission quickly identified remote locations needing emergency aid, landslides blocking important relief accesses and new, menacing natural dams.

FY 1978 Program: A.I.D. continues its activities to expand applications of technology to disaster assistance.

A.I.D.-financed Inputs
(\$ Thousands) FY 1978

Evaluation and application of related technology, state of art of related scientific/technical fields, guidance for research priorities	200
Research and development contracts	200
Computer models, data banks, and program assists	100
Feasibility studies of applicability of remote sensing, telemetry, imagery to flood assessment	<u>100</u>
Total	600

U.S. GRANT FINANCING (In thousands of dollars)			PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	
Through September 30, 1976	399	399	National Academy of Sciences, National Photographic Interpretation Center, National Oceanic and Atmospheric Administration, U.S. Geological Survey, National Aeronautics and Space Administration
Estimated Fiscal Year 1977	940	940	
Estimated through September 30, 1977	1,339	1,339	
		Future Year Obligations	
Proposed Fiscal Year 1978	600	-	Estimated Total Cost

CONTINUING ACTIVITY

Table IV

Country:					
TITLE Grant to United Nations Disaster Relief Office (UNDRO)		FUNDS International Disaster Assistance	PROPOSED OBLIGATION (In thousands of dollars)		
			FY 78	250	
NUMBER AID/OTR-G1360	PRIOR REFERENCE FY 1977	INITIAL OBLIGATION FY 1975	ESTIMATED FINAL OBLIGATION FY Continuing	ESTIMATED COMPLETION DATE OF PROJECT FY Continuing	
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>	Interregional Programs, p. 166				

Purpose: This program will help the United Nations Disaster Relief Office (UNDRO) strengthen its effectiveness as a disaster information clearing house, and build its capability for disaster prevention and pre-disaster planning consistent with United Nations General Assembly Resolution No. 3243 (XXIX), dated November 29, 1974.

Based on past difficulties experienced in coordinating international responses to major disasters, it is essential that the UNDRO serve as an international clearing house on information relative to disaster assessments, relief requirements, and resource availabilities for all donor nations and agencies. The GAO affirms this and supports U.S. efforts to strengthen its capability.

Due to an initiative taken by the United States, UNDRO has developed a three-year plan establishing priorities, planning 60% of its resources for disaster assessments and relief coordination and 40% for preparedness and prevention.

Progress to Date: UNDRO receives funds from two sources: (a) the regular budget of the United Nations, used to support administrative and staff costs of the "Core Program," and (b) a trust fund comprised of voluntary contributions from selected donor nations, used to support the additional "Core Program" expenses and preparedness and prevention activities. Since 1975 when the United

Nations General Assembly authorized UNDRO to receive contributions made voluntarily to the trust fund from donor nations, these nations have contributed \$2,766,625 of which the United States has contributed \$1,000,000. U.S. funds have been used substantially for improving facilities and staff support enabling UNDRO to achieve the capability to carry out its mandate. UNDRO has played an important role in coordinating the international donor response to a number of disasters, most notably the recent devastating earthquakes in Turkey and Indonesia.

FY 1978 Program: UNDRO's three-year plan proposed \$2.1 million for Core Program costs for 1978, of which the United Nations regular budget is expected to fund one half. The United States Government plans to contribute a fair share of the other half, which, based upon 25%, would amount to \$250,000. This contribution, which may be increased, would continue to help strengthen UNDRO's capability as required by the UN General Assembly.

U.S. GRANT FINANCING (In thousands of dollars)			PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	
Through September 30, 1976	1,000	1,000	-
Estimated Fiscal Year 1977	250	250	
Estimated through September 30, 1977	1,250	1,250	
		Future Year Obligations	Estimated Total Cost
Proposed Fiscal Year 1978	250	300	-

Country: Interregional

CONTINUING ACTIVITY

Table IV

TITLE		FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Resources Support Service Agreement		International Disaster Assistance	FY 78 40		
NUMBER	HEW/OIH-4-74	PRIOR REFERENCE	INITIAL OBLIGATION	ESTIMATED FINAL OBLIGATION	ESTIMATED COMPLETION DATE OF PROJECT
		FY 1977	FY 1974	FY Continuing	FY Continuing
GRANT <input checked="" type="checkbox"/>	LOAN <input type="checkbox"/>	Interregional Programs, p. 167			

Purpose: To provide the Office of U.S. Foreign Disaster Assistance with the capability to respond to the medical requirements of disaster relief operations.

FY 1978 Program:

A.I.D.-financed Inputs
(\$ Thousands)

Major Outputs: The Department of Health, Education and Welfare's (HEW) Office of International Public Health (OIPH) provides the resource to:

FY 1978

- advise on medical matters involved in disaster preparedness and operations;
- provide information regarding stockpiling of medical supplies and equipment;
- review requests for emergency medical assistance;
- provide liaison with the medical community.

Technicians: 12 p.m.

40

Progress to Date: The availability of this public health resource makes it possible for A.I.D. to respond quickly and effectively to medical requirements of disaster situations. It also increases the capability to handle medical matters involving disaster preparedness and planning activities. This resource has been essential in responding to such disasters as the Guatemala earthquake, Lebanon civil strife, and the Zaire/Sudan hemorrhagic fever outbreak.

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	116	116	-	
Estimated Fiscal Year 1977	50	50	-	
Estimated through September 30, 1977	166	166	-	
		Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1978	40	-	-	

Country: Lebanon

CONTINUING ACTIVITY

Table IV

TITLE Lebanon Relief and Rehabilitation	FUNDS International Disaster Assistance	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	20,000	
NUMBER	PRIOR REFERENCE	INITIAL OBLIGATION FY 1977	ESTIMATED FINAL OBLIGATION FY 1978	ESTIMATED COMPLETION DATE OF PROJECT FY -
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Purpose: To respond to the emergency relief and rehabilitation of Lebanon.

Major Outputs: Since November 1975, the United States has provided some \$18.8 million in grant assistance to help alleviate the suffering of the victims of ongoing civil strife in Lebanon. Of this amount, \$11.9 million has been provided from the Foreign Disaster Assistance account, while the remaining \$6.9 million has been provided under PL 480 and other programs.

For FY 1977, the Congress appropriated \$20 million for emergency assistance to Lebanon to be funded under the provision of 495C, Chapter 9, "International Disaster Assistance." To date approximately \$4.8 million of this \$20 million appropriation has been expended to meet emergency needs. The United States and the International Red Cross estimate that approximately 50,000 people have been killed in the war in Lebanon; 800,000 people have been left homeless; and 1,350,000 presently are in need of supplementary food aid.

Progress to Date: The total of \$18.8 million in humanitarian assistance provided to Lebanon as of January 1, 1977, has supported the activities of the following organizations:

- International Committee of the Red Cross (ICRC):
\$7.0 million. ICRC, until very recently, has been

the only international relief organization operating in Lebanon. ICRC's principal activities have been confined to the provision of medical care and food. ICRC states that it has reached approximately 400,000 people in its assistance programs.

- The American University Hospital of Beirut (AUHB):
\$6.5 million. The United States has provided the bulk of its assistance in the form of urgently needed medical supplies in order to keep the hospital functioning. As of October 25, 1976 AUHB has treated approximately 7,900 victims of the civil strife.
- Catholic Relief Services (CRS): \$4.2 million. With the lull in fighting, which occurred in December 1976, CRS was able to initiate a food provision and housing restoration program in Lebanon. Of the \$4.2 million grant to CRS, \$3.5 million was in Title II food commodities and \$700,000 was provided in cash assistance for housing repair and other non-food relief requirements, and administrative support of the program.
- United Nations (UN): \$1 million. The United Nations in February 1976 issued an appeal for \$50 million to undertake a relief program in Lebanon. However, due to the intensive fighting in Lebanon, the UN had to suspend the planned Lebanon program until November

	U.S. GRANT FINANCING (In thousands of dollars)			PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	-	-	-	
Estimated Fiscal Year 1977	20,000	20,000	-	
Estimated through September 30, 1977	20,000	20,000	-	
		Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1978	20,000	-	-	

CONTINUING ACTIVITY

Continuation Sheet

TITLE	NUMBER
Lebanon Relief and Rehabilitation	

1976 when improved security permitted the UN to reissue its earlier appeal. The U.S. contribution of \$1 million was the first received by the UN for the Lebanon program.

FY 1978 Program: At the time of this writing, a cease-fire and formation of a new government in Lebanon has only recently taken place. The new government is actively planning for the short-term relief and rehabilitation requirements and the longer term reconstruction of the country. The \$20 million requested in FY 1978 will be used to support these efforts. Due to the fighting in Lebanon, comprehensive assessment of damages experienced during the war has not yet been possible. Now that the November 1976 cease-fire is holding, the United Nations is conducting an in-depth assessment of Lebanon's relief and rehabilitation needs, and the World Bank plans to undertake a survey of longer term reconstruction needs early in 1977. When the results of these and other studies are available they will be used to refine our estimates on the utilization of the requested \$20 million, and the appropriateness of this level of funding.

PRIVATE AND VOLUNTARY ORGANIZATIONS

The FY 1978 level of \$36.3 million will be distributed among the various elements of the program as follows:

-- Development Program Grants	\$4.0 million
-- Support to PVOs in Development	5.6 million
-- Cooperatives	2.4 million
-- Agency Assistance Grants	12.3 million
-- Ocean Freight	12.0 million
	<u>\$36.3 million</u>

Cooperation between A.I.D. and private and voluntary organizations (PVOs), including cooperatives, has had many mutual benefits. PVOs have helped A.I.D. conceive and test new strategies for involving the rural and urban poor in their own development while A.I.D. has provided financial, program and managerial resources to strengthen the role of PVOs in providing technical assistance.

- As PVOs become more proficient administrators of their own development programs, they are increasingly able to adapt their improved knowledge and capability to the particular concerns of the local groups with whom they are working overseas.
- While for the most part their function is a catalytic one, the techniques and strategies that they impart help to make their assistance self-sustaining and eventually replicable.
- PVOs registered with the Advisory Committee on Voluntary Foreign Aid reported income of almost \$600 million from private contributions during calendar year 1975.

Steps toward a more equal A.I.D./PVO partnership are gaining momentum. Recent efforts to simplify project

approval and grant administration procedures recognize the validity of the PVOs' own systems and their ability to operate planning and programming systems independent of A.I.D.

The two grant instruments created in 1974--Development Program and Operational Program Grants--have fostered this more collaborative relationship between the PVO community and A.I.D. PVOs have improved their capacity to implement development programs. A.I.D. is learning how to work with PVOs while respecting their unique qualities and style.

- Development Program Grants (DPGs) for a three year period enable PVOs to plan, design, manage, and evaluate their development programs more effectively.

** \$11.5 million was obligated between April 1974 and September 30, 1976, for 31 DPGs.

** Approximately \$1.5 million will be obligated in FY 1977 for about nine DPGs--the last year for new starts under this program.

** To continue funding the second and third years of ongoing DPGs, \$4.0 million will be obligated in FY 1978.

- Operational Program Grants (OPGs), reflected in regional program presentation volumes, assist PVOs to undertake specific new projects in developing countries such as:

** vocational training in Tanzania primary schools;

** improved grain storage in Chad and Rwanda;

** training Thai villagers to make better use of local foods;

- ** distributing rabbit and swine stock to relocated squatters in the Philippines to provide protein in their diets and a source of family income;
- ** generating methane gas from cow dung for heating and cooking in Indonesia;
- ** teaching Bangladeshi women marketable skills, while at the same time providing family planning and nutrition education;
- ** incorporating nutrition education in school feeding programs in various Asian countries;
- ** training health paramedics in Honduras;
- ** mobile health clinics in Bolivia;
- ** community gardens in Uruguay;
- ** a rotating loan fund for poor farmers in Peru.
- ** \$16.1 million was obligated between the inception of this program in FY 1975 and September 30, 1976, for 94 OPGs.

As a result of the impact of the DPG program, a number of PVOs are now expanding their own commitment to a development role abroad with resources in addition to A.I.D.'s inputs.

- They are further involving their constituencies in the support of development concepts and activities.
- They are contributing more of their own funds to overseas development programs.
- They have become more adept at attracting funds from other donors because of their improved capa-

bilities.

In FY 1978, new projects will respond to the critical needs of PVOs while reinforcing their independent character. A.I.D. will finance the sharing of expertise and resources within the PVO community in order to extend benefits to a broader constituency of PVOs, particularly:

- those smaller agencies which did not have the personnel or resources to participate in the DPG program;
- host country ("indigenous") PVOs which have not already been reached by the present DPG/OPG system.

Support to PVOs in Development

Many voluntary organizations have extensive experience working with other U.S. voluntary agencies and local groups overseas, either through their own membership or by the nature of their interests and activities. A.I.D.

funds will help enhance the role of service-oriented PVOs and consortia in providing administrative and financial management skills, establishing effective working relationships with host country organizations, and encouraging more collaborative attitudes and approaches to planning, information exchange, and program implementation in the developing world. The following activities will be carried out by PVOs with minimal A.I.D. oversight.

- The Management and Development Services project will enable the PVO community to assess program needs, obtain management consultant services, extend short-term technical assistance, and seek assistance in staff recruitment and training. The New Transcentury Foundation received the first grant under this project in the transition quarter to:

- ** strengthen the institutional structure of PVOs in the areas of evaluation, recruitment, and general management;
 - ** establish a Secretariat for Women in Development to help PVOs evaluate the impact of their overseas projects on women and identify opportunities for innovative programming.
- A.I.D. will also support the creation of Functional and Regional Consortia. Through such consortia voluntary agencies can combine individual agency resources and information in addressing specific development problems. Recent experiences with two such organizations, Private Agencies Collaborating Together (PACT) and Coordination in Development (CODEL), have demonstrated the effectiveness of this mechanism.
- One of the more creative approaches taken by some of the internationally based PVOs includes the planning for the establishment of multilateral Development Funds to finance feasibility studies and small grants and loans for experimental projects.
- ** A.I.D. intends to participate, along with other bilateral and international donors, in this initiative starting with the YMCA in FY 1978.
 - ** Several other PVOs have indicated their interest in similar plans for succeeding years.
 - ** In FY 1978, \$5.6 million will be provided for these new program activities.

Cooperatives are striving to sharpen the impact of their international programs on small farmers in developing nations.

- Cooperatives have received DPGs which reinforce their own efforts to design more innovative approaches and improved planning and evaluation systems.
- Cooperatives are working to increase their funding base by expanding other donor support and employing more funds received from their own constituencies.
- The Agricultural Development Council is conducting a study of the contribution of the American cooperative movement to alleviating rural poverty in developing countries.

U.S. cooperatives have established effective international operations to supply technical expertise to A.I.D. field missions and host country institutions in the planning and implementing of local programs.

- A.I.D. will continue to strengthen the administrative machinery required for these programs through agency assistance grants, totaling \$2.4 million in FY 1978.
- Two U.S. cooperatives, The Credit Union National Association and The Foundation for Cooperative Housing, are also being assisted in their planning and evaluation functions with DPG funds.

Agency Assistance Grants

A.I.D. has provided funds to PVOs in the form of Agency Assistance Grants to help meet their international operational costs. Institutions receiving such support include:

- The International Executive Services Corps (IESC) which makes available short-term services of volunteers with business and managerial skills to enterprises upon request;

- Opportunities Industrialization Centers International (OICI) which establishes industrial and commercial training classes for the unskilled urban poor in countries designated as the least economically prosperous of the LDCs;
- The Asia Foundation (TAF) which makes small grants to individuals and institutions concerned with the cultural, social, economic, and political aspects of development in Asian countries.

A total of nine organizations with special programs and skills will receive \$12.3 million in such grants in FY 1978.

Ocean Freight

Agencies registered with the Advisory Committee on Voluntary Foreign Aid have requested increasing amounts for reimbursement of costs of shipping their privately donated or purchased supplies.

- The American public, through PVOs, has doubled its contribution of food, medicines, and other goods to meet foreign crises.
- PVOs are responding to longer-term reconstruction and rehabilitation needs as well as to emergency situations.
- The cost of transport of food, medicines, and other goods has risen steadily.

The PVO community has taken the following steps to assist A.I.D. in making its ocean freight allocation decisions.

- They are providing more accurate projections of their freight requirements on a timely basis.
- In establishing a cost-sharing formula, they estimate that some \$5 million is contributed annually by PVOs for warehousing, packaging, and processing

of supplies for shipment overseas.

- They will provide country program descriptions to illustrate their program priorities and criteria, and explain how the freight subsidy is used in support of specific program objectives.
- A.I.D. will provide \$12.0 million for this program in FY 1978.

SAHEL DEVELOPMENT PROGRAM

I. Special Presentation

A cooperative multi-donor, multi-recipient program, the Club des Amis du Sahel, constitutes an important innovation in development planning in the Sahel. The program incorporates:

- A goal leading to food self-sufficiency and sustained economic and social development;
- Integrated planning and programming by donors and Sahelians;
- A planning horizon of 20 years for the economic and ecological reformation of an entire region.

The U.S. participation in this multi-donor/multi-recipient program for the Sahel, the special Sahel Development Program (SDP), should be considered as a separate initiative and, therefore, requires flexibility.

The U.S. concern for assisting the rural poor of the least developed countries is the primary objective of the SDP.

- This program can serve as a model for future development efforts aimed at meeting the needs of the rural poor.
- The U.S. has pioneered in the design and development of this multi-donor, multi-recipient program for the Sahel. The Program is in an advanced state of readiness, actively involving eight African states, (Chad, Mali, The Gambia, Cape Verde, Senegal, Niger, Upper Volta, and Mauritania), and at least 12 donors.
- Active participation in the program will permit the U.S. to demonstrate substantial humanitarian support for the Sahelian and other Relatively Less Developed Countries.

II. Program Overview

The SDP is designed to provide sectoral inputs which complement those of other donors to achieve food self-sufficiency and improved living standards for the Sahelians.

- The U.S. program focuses on achieving Sahelian food self-sufficiency and alleviating rural poverty and is built on the strengths of the existing agricultural and livestock production systems.
- The U.S. sectoral programs are being designed in concert with other donor programs through the mechanisms of the Club des Amis du Sahel.
- The international working groups, established by the Club, are developing a long-term strategy supported by extensive analyses of the requirements to achieve food self-sufficiency and socio-economic growth in the Sahel.

III. Background and SDP Planning

The Sahel countries are among the world's least developed, poorest and least industrialized.

- In the 1960s and 1970s, GNP in the Sahel grew at about 2.5% per annum (half as fast as the rest of the developing world) and per capita GDP stagnated or fell. Marketed agricultural production and real income returns to cash crop growers declined drastically. Real wages of workers also declined steadily during this period.

SAHEL DEVELOPMENT PROGRAM

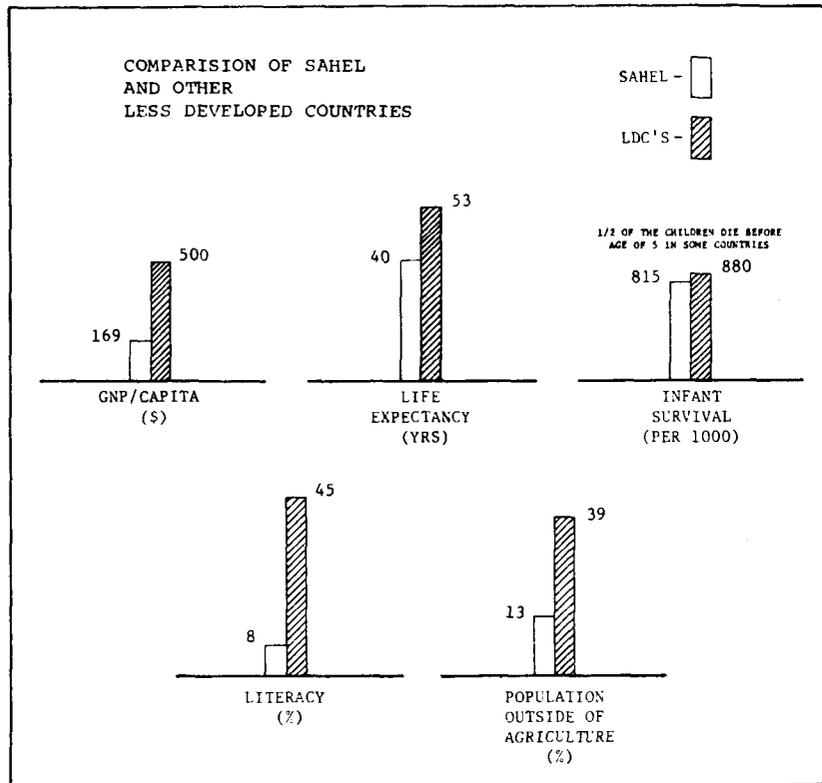


CHART 1

-- The Sahelian states have:

- ** Poor utilization of resource endowments, particularly of agricultural land and water supplies.
- ** Extremely limited numbers of trained people.
- ** Isolated centers of production and consumption which are commonly 700 to 1700 miles from sea-ports compounded by the problem of a poorly maintained road system.

** High birth rates combined with high incidence of disease and mortality.

-- The ecological balance of the region is precarious. Subsistence farming and nomadic livestock herding, which occupy over 80% of the population, are vulnerable to drought. The growing population and increasing number of livestock before the drought have steadily eroded the limited resource base of the region:

** Large herds of goats have eaten plant roots and leaves from bushes.

** Herders have chopped branches and trees for firewood.

** Cattle have been concentrated around wells and at the edges of major rivers, leaving denuded areas which are highly susceptible to further degradation.

The drought of 1968 through 1974 was a disaster for the countries of the Sahel.

-- Crops were destroyed and herds deprived of grazing. Pastures withered and perennial grasses could not reseed naturally. In 1972, the shrunken Niger and Senegal rivers failed to flood, virtually eliminating flood recession crops. Lakes, rivers and wells dried up; pastures and food reserves became exhausted. The nomads drove their herds further south, often into tsetse fly areas where their cattle succumbed to trypanosomiasis (sleeping sickness).

-- Wells ran dry for months because of inadequate ground water renewal. Occasionally enough water remained in streams, rivers, dams and ponds but many people had to abandon their villages to seek food and water. The relief operations undertaken by the national governments could deal with only a small number of the interrelated problems.

SAHEL DEVELOPMENT PROGRAM

In the fall of 1972, the dimensions of the famine were finally recognized and the world responded with a multi-donor emergency aid effort.

- The United States responded with its first allocation of emergency food in November 1972. In September 1973, the Sahelian states formally established the Permanent Interstate Committee for Drought Control in the Sahel, or CILSS, to serve as a coordinating agent and focal point for donor relief during the drought and also as a forum to articulate longer-term development needs.
- In May 1973, the United Nations charged the FAO with coordinating relief to the Sahel. FAO established the Office of Sahelian Relief Operation (OSRO) and a special Sahelian Trust Fund to channel aid. The first concern was delivery of food to avoid mass starvation. At least 100,000 tons of cereals had to be delivered monthly to prevent a total breakdown in food distribution before the October 1973 harvest.
- An important element of the operation was cooperation among all the African nations. Sudan permitted large scale export of seeds to Chad and Senegal when its own seed position was marginal, while Nigeria, suffering from a serious drought in its northern region, permitted seed to be flown out of the country.
- The United States provided more than \$230 million in emergency drought relief and rehabilitation and food assistance.
- The disastrous drought was broken by the rains in 1974. The July rainfall exceeded the average for the first time since 1969, and August rainfall was widespread and above average.

The effects of the drought were severe:

- The immediate and highly visible effect was human

suffering; it is estimated that as many as 100,000 people died from starvation and drought-related causes. Eight to nine million people were affected by the drought, and 2 to 3 million were made destitute. Seven million cattle are believed to have perished and \$300 million of crops were lost.

- The drought also produced economic consequences which directly affect the people of the Sahel:
 - ** Crop production fell by 25%.
 - ** The ability to buy basic necessities from abroad was severely impaired.
 - ** Food grain production deficits had to be made up by imports at a time when export earnings were falling and world-wide commodity prices were rising.
 - ** Sahelian governments sought to cope with social and economic problems created by drought and worldwide commodity price inflation. They were threatened with unmanageable budget deficits caused by the severely reduced capacity of their people to pay taxes.
 - ** Increased population pressures burdened the already overcrowded arable land and urban centers. Social services were inadequate.

It was the response of the international community to the economic problems of the Sahel which prevented total economic and political collapse.

The experience of the drought, the mobilization of emergency international relief resources and the lack of long-term development programs crystallized African and donor awareness of the compelling necessity to solve the fundamental problems of the Sahel.

- Focusing Sahelian activity toward regional long-term development became the primary role of the

SAHEL DEVELOPMENT PROGRAM

CILSS. The CILSS was evolving from an initial role of donor resource solicitation for drought relief toward leadership in regionwide integrated planning. The French, the U.S. and other principal donors began to work with the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD) to develop a forum for international consideration of long-range development objectives. An intensive dialogue with the African states was held in the fall of 1975, and through these discussions the Club des Amis du Sahel was formed.

-- The first formal presentation of the Club to the CILSS Council of Ministers was by the DAC Chairman at Niamey in March 1975, who stated:

"It is necessary to concentrate on basic long-term development. There is a need for new conceptual planning, mobilization of resources over an extended period and carefully coordinated implementation. These are the considerations which led the governments of France and the United States to propose a Club des Amis du Sahel for cooperation on long-term development assistance."

At the next meeting in December 1975 at Nouakchott the CILSS ministers wholeheartedly endorsed the formation of the Club.

-- The first Club meeting took place in March 1976 in Dakar. The Club:

** Brought together the donor and recipient communities to plan an approach for the long-term development of the Sahel.

** Concluded that it should not become another international development organization, but rather should serve as the forum to coordinate and design an international development program for the Sahel.

** Recognized that a "critical mass" investment and program approach has crucial advantages over an incremental approach. The Club recognized that more substantial international investment, leading to food self-sufficiency in the region, could be truly cost-effective.

** Agreed that integrated regional planning is required to: identify and design high return programs, define the necessary temporal and functional relationships among projects, coordinate bilateral and host-funded projects with major regional programs, and provide in-process evaluation. Programs must address problems endemic to the whole region, such as waterborne diseases.

** Acknowledged that the program must be placed under the complete management control of the recipient nations as soon as possible.

** Recognized that the Sahelian states will insist on determining their own needs and priorities. At the same time, the aid community will require an accountability of the public funds which they are providing. Both Sahelian and donor states will require continuing evaluation of progress toward quantified goals.

-- An international working group was established and the CILSS Minister-Coordinator provided leadership for its inaugural meeting on June 28 through 30, 1976, in Ouagadougou.

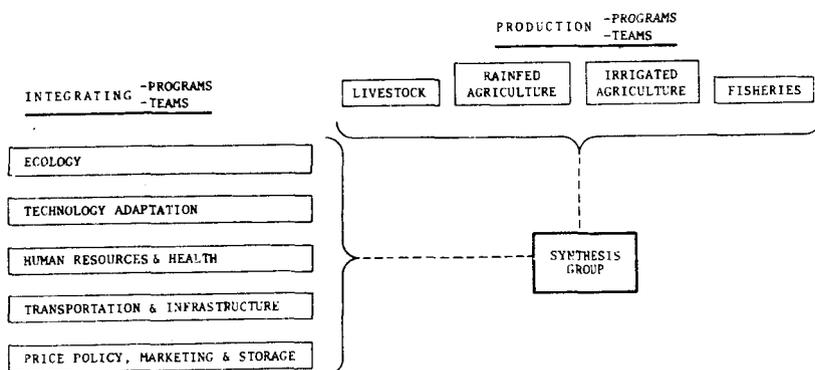
-- In adopting the resolution to form the working group, food self-sufficiency was set as the primary objective. This objective implies the development of self-sustaining agricultural production systems which will be less vulnerable to the impact of future droughts. They entail major improvements in distribution, marketing and grain storage systems as well as sufficient diversification to permit active participation in intraregional

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and international trade and to raise the living standards.

- The Club has adopted a matrix management structure with specialized teams and a synthesis group to carry out the planning and programming effort as shown in Chart 2.

ORGANIZATION OF THE PRODUCTION AND INTEGRATING TEAMS OF THE CLUB DES AMIS DU SAHEL



SAHEL DEVELOPMENT PROGRAM ORGANIZATION

CHART 2

- ** Four production teams are charged with developing the sectors basic to food self-sufficiency and five horizontal teams are responsible for addressing the key structural, human and technological considerations. The tenth, a synthesis group, is responsible for maintaining substantive integration among the other teams and team schedules. The latter group also has the authority to make basic program decisions on behalf of the Club.

- ** For planning its Sahel program, the U.S. has adopted a matrix management structure similar to that of the Club's. The only exception is the inclusion in the U.S. structure of a separate team for health, nutrition and population and the exclusion, at present, of a team for fisheries.

- ** This approach differs fundamentally from the traditional sector-by-sector, donor-by-donor approach for development planning. This structure facilitates the much needed systematic integration of projects on both a national and regional basis.

Specific features of the Club and the SDP are noteworthy:

- Present donor resource commitments are substantial: Canada has pledged \$250 million over 5 years to the program. The IBRD has directed \$120 million per year to the Sahel. France and other donors have indicated that they are prepared to redirect substantial portions of their aid to Club-related projects. West Germany is considering a substantial increase in assistance to the Sahel as is The Netherlands. Both have indicated informally that they are prepared to double their budgets to the region as multi-donor programs are planned. The Kuwait and Abu Dhabi Development Funds and the Arab Bank for African Development have asked to see the program papers as activities are ready for financing.
- Full African participation is essential to the Program. The CILSS, representing the eight Sahelian countries, currently provides overall leadership to the Club and the working group. Through the mechanism of the CILSS, the Sahelians will assume increasing management and technical responsibility for the Program.
- The program will not produce another development bureaucracy. Existing management capabilities,

SAHEL DEVELOPMENT PROGRAM

such as bilateral programs, international agencies and special purpose organizations, will implement projects under the Club's direction.

- The U.S. program must operate in concert with the international effort. The implementing authorities require flexibility to mesh with the Club planning processes. Project approval and programming procedures must take into account the need for joint development of complementary programs by the U.S. and other donors.

IV. Integration and Timing

To achieve food self-sufficiency and sustained economic growth, the SDP must be implemented and coordinated in the general time sequence of near-, medium- and long-term.

- Near-term (1978 through 1982) activities will be designed to use existing resources and technology for crop production, protection and storage. Integrated rural development schemes and broad approaches to rainfed farming, range management and livestock production programs, feeder roads and specific health care programs will be undertaken. Activities will:

- ** Increase the availability of skilled manpower through investments in human resources development. Particular emphasis will be placed on all levels of agricultural training, non-formal education and institution-building projects.
- ** Investigate, through studies and pilot schemes, methods to bring into play the entire potential of the area. This will include studies to develop new technologies for dry land farming and to plan the development of the river basins and other water resources of the area.
- ** Encourage the Club to place a high priority

on health and population in overall planning and project development.

- Medium-term (1982 through 1990) programs will:

- ** Continue and expand the education, training and health programs initiated in the near term.
- ** Promote family planning.
- ** Extend the productive capacity of rainfed farming throughout the region and provide the Sahelians with a more adequate and equitable distribution of services.
- ** Develop extensive storage facilities, crop protection services and information and marketing systems.
- ** Promote programs to improve the commercial sales of livestock and management of range resources.

- Over the long-term, the major resources of the region, particularly the river basins, will be tapped. Phased basin development will begin, backed by the studies, pilot projects, training programs, and institution-building activities undertaken in the two earlier periods. The Sahel Development Program will contribute to sustained economic growth and a permanent improvement in the quality of life for the Sahelians.

V. Legislation and Budgets

The Congress has been an active and strong supporter of assistance to the Sahel for emergency relief and reconstruction and a long-term comprehensive development program.

- The Congress first authorized \$25 million for emergency and recovery needs in December 1973.

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- In an amendment to the Foreign Assistance Act, approved on December 17, 1973, another significant provision was included:

"Sec. 639B. African Sahel Development Program. The Congress supports the initiative of the United States Government in undertaking consultations and planning with the countries concerned, with other nations providing assistance, with the United Nations, and with other concerned international and regional organizations, toward the development and support of a comprehensive long-term African Sahel development program."

- Seven months later on July 8, 1974, even as rains began throughout most of the region, the Congress authorized an additional \$85 million for emergency and recovery needs in the Sahel and other drought-stricken nations of Africa.
- Expanding the former Section 639B (now Section 494B of the Foreign Assistance Act in 1975) the Congress specified that in developing the Sahel program the President shall:
 - ** Consider international coordination for the planning and implementation of such a program.
 - ** Seek greater participation and support by African countries and organizations in determining development priorities.
 - ** Begin such planning immediately.

The new section contains a \$5 million authorization for carrying out the purposes of the section.

The proposed FY 1978 program builds upon the previous and existing legislation for the development of a long-term comprehensive Sahel Development Program by authorizing the President, under the proposed section 694(A),

"to furnish assistance, on such terms and conditions as he may determine, for the long-term development of the Sahel region. Assistance furnished under the Section shall be in accordance with the long-term, multi-donor development plan which calls for an equitable burden-sharing with other donors. Such assistance to be furnished whenever appropriate in cooperation with an international coordinating mechanism."

To date, U.S. financial support for a long-term, multi-donor, multi-recipient program for the Sahel, has been limited to studies and start-up activities.

- In FY 1976, \$5 million, and in FY 1977, \$7.5 million, were provided for long-term studies, project design, Club working group support, assistance to CILSS and the Club Secretariat.
- In FY 1978, a \$50 million program is proposed as initial financing for the Sahel Development Program. These funds will be used for:
 - ** Projects to support the Club objectives.
 - ** Studies and research.
 - ** Support to the Club working groups.
 - ** Assistance to CILSS and the Club secretariat.
- While the sectoral strategies establish a significant magnitude of assistance needs, certain first-generation SDP projects proposed in this submission are of urgent priority. The planning process of the Club working group will identify additional first-generation projects by mid-1977.

The \$50 million program is described in detail in the following sections. These discussions follow the sectoral matrix structure of the Club except that they include a separate section on health, nutrition and population and exclude a section of fisheries. The proposed projects are

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consistent reflections of the concerns of the international program for long-term transformation in the Sahel.

For FY 1979 authorization of \$100 million is proposed. These funds will be used to support the significant long-term programs and projects which are currently being developed by the multilateral working teams of the Club du Sahel. Continued U.S. participation in these programs will be important, visibly demonstrating our support for the comprehensive long-term programs currently being designed. U.S. participation will continue to focus heavily on agriculture and supporting elements needed for success in achieving food self-sufficiency and economic viability for the entire region. While the U.S. will continue to play an important role in the mobilization of this international effort, U.S. financial participation will in no instance exceed 20% of the total provided for the program by the international consortium.

Country: UPPER VOLTA

CONTINUING ACTIVITY

Table IV

TITLE Integrated Rural Development, Eastern O.R.D.	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	700	
NUMBER 686-0201	PRIOR REFERENCE Advice of Program Change to be transmitted	INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1978	ESTIMATED COMPLETION DATE OF PROJECT FY 1980
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Purpose: To carry out effective extension and rural adult education programs in all areas of the Eastern Rural Development Organization (ORD). The ORD will be assisted in its efforts to increase agricultural and livestock production and to deliver services to small farmers and herders.

<u>Major Outputs:</u>	9/30/76	FY 77	FY 78
	(Cumulative as of end of FY)		
Demonstration zones selected and established	2	4	4
ORD credit system expanded (no. of loans made)	268	668	1,408
Marketing system effectively established	x	x	x
ORD administrative offices constructed	-	x	x
In-country training of extension workers	25	50	50

Host Country and Other Donors:

Government of Upper Volta	Personnel and facilities
FAO	Technicians (\$200,000)
ILO	Technical Assistance (\$367,000)
Swiss Tech. Cooperation	Technical Assistance

Progress to Date: Construction is underway by local contractors and all contracts have now been let with an estimated completion date of March 1977. Contract negotiation

for technical assistance services including applied research is in the final stage. The ORD directorship changed in mid-October 1976, disrupting an already weak management unit but an able and experienced new director has been chosen.

FY 1978 Program: \$700,000 is requested for FY 1978 for continuation of technical assistance and other costs (credit, local training costs and certain operating costs) as described in the fiscal data below.

<u>A.I.D. - financed Inputs</u>		
(\$ Thousands)		<u>FY 78</u>
Personnel:		
Six long-term U.S. technicians (60 pm)		475
Training:		
Twenty short-term participants for training in the U.S. (100 pm)		85
Commodities:		
Vehicles and office equipment		50
Other Direct Costs:		
Funds for Credit Program, Operating and maintenance expenses		<u>90</u>
Total		700

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	a/	-	-	To be selected
Estimated Fiscal Year 1977	b/	-	-	
Estimated through September 30, 1977	-	-	-	
		Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1978	700	-	700	

a/ Prior funding provided under the Foreign Disaster Assistance Act of 1974.

b/ Funding under Regular Development Program in FY 1977.

NEW ACTIVITY

Table V

Country: NIGER

TITLE INRAN/Applied Agricultural- Research (Niger)	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	1,000	
NUMBER 683-0213		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1982	ESTIMATED COMPLETION DATE OF PROJECT FY 1982
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Goal: To assist the Government of Niger to develop its capacity to conduct policy-relevant research, primarily in the areas of agricultural and livestock production and marketing - and increase its capacity to collect statistical data required for such specialized research.

Purpose: To develop the applied research and operational capabilities of the Rural Economy Department of Niger's Institute for Agriculture Research (INRAN) to analyze and evaluate the economic feasibility of alternative rural development strategies and rural economic policies.

Background: Throughout the Sahelian countries one of the major obstacles to rational planning and policy making is the lack of reliable data, analysis and research upon which to formulate sound and relevant decisions appropriate to development requirements. At the request of the Government of Niger this project will establish an institutional relationship between INRAN and a U.S. University to supply technical assistance in the field of rural economics. It will also provide academic training for the indigenous staff of INRAN and help to establish the capability of the department to conduct computer analysis. The results of the research and analytical studies which this project will produce will be of immense value both to the Government of Niger and to the donor community (including A.I.D.) in planning and evaluating their program activities. Cost benefits will accrue over the long run to the entire development process in Niger.

<u>Major Outputs:</u>	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 81</u>	<u>FY 82</u>
	(Cumulative as of end of FY)				
Participants trained to the MS level	-	-	7	7	7
Studies and analyses related to Niger development activities	-	-	X	X	X

Interchange and information flows between INRAN and the Government of Niger on issues affecting policies and strategies

Institutional relationship between INRAN and U.S. universities

-	-	X	X	X
-	-	X	X	X

Host Country and Other Donors:

Government of Niger Will provide an estimated \$450,000 in both budget and in-kind contributions. This will include salary support of local staff, vehicle maintenance and operation and office space. At the end of the project Niger will assume all recurring costs.

FY 1978 Program:

	<u>A.I.D. - financed Inputs</u> (\$ Thousands)	
	<u>FY 78</u>	<u>All Years</u>
Technical Assistance (7 persons - 120 pm)	800	1,800
Participants (7 persons - 42 pm)	49	200
Commodities	100	1,500
Other Costs	51	550
Total	1,000	4,050

An institutional contract for the funding of Technical Assistance includes 4 senior researchers in Marketing, Production, Planning/Evaluation and Statistics and 3 junior researchers for field work. Participants include 7 university graduates entering graduate training at a U.S. University for Masters Degrees. Commodities include vehicles, office equipment and supplies, computer hardware and library materials. Other costs include data processing, reproduction and publications.

Country: THE GAMBIA

NEW ACTIVITY

Table V

TITLE Soil and Water Resource Management	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
NUMBER 635-0202		FY 78 700		
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1980	ESTIMATED COMPLETION DATE OF PROJECT FY 1982

Goal: To halt and reverse ecological and environmental deterioration and increase production in concert with policies and practices best calculated to protect the environment and promote its long-term improvement.

Purpose: To establish a basic soil and water resource management planning and implementation capability within the Ministry of Agriculture and Natural Resources, including the training of extension workers in principles and techniques of correct soil and water resource management relevant to the requirements of The Gambia.

Background: Agriculture is the backbone of The Gambian economy and the main source of individual and national income. 35% of the population earns its livelihood from farming and about two-thirds of the country's Gross Domestic Product is derived from agriculture (primarily peanuts). Although diversification of agriculture has been a nominal policy for several years, the policy has been given new emphasis in the 1975-80 plan. In The Gambia, increases in agricultural production will require a substantial expansion and upgrading of the existing extension program, including land use management and soil/water conservation in its broadest resource management context. The Gambian Government recognizes, with regard to the long-term interests of the country's development, that it is charged with the responsibility for stimulating not only the rational exploitation and utilization, but also the development and protection of natural resources.

Major Outputs:

	FY 78	FY 79	FY 80
	(Cumulative as of end of FY)		
Establish soil/water management unit	-	-	x
Complete conservation manual	-	1	1
Established data collection Units	5	10	15
Trained Staff	-	40	60

Host Country and Other Donors:

Various Donors	Variety of agricultural activities
United Kingdom	Forestry, Extension Education and Livestock activities
The Gambia	Personnel, housing, support costs international travel for participants

FY 1978 Program: U.S. specialists will begin the work of establishing the Soil and Water Management Unit (SWMU), determining the resource and other technical information needed to improve soil and water conservation management under Gambian conditions, developing a soil and water conservation reference manual for The Gambia, and training a team of sub-professional conservation technicians.

	A.I.D. - financed Inputs	
	(\$ Thousands)	
	FY 78	All Years
Personnel:		
3 Long-term advisors (54 pm)	315	549
Short-term consultants (24 pm)	154	154
Training:		
2 Short-term U.S. (12 pm)	16	50
20 Short-term Africa (40 pm)	20	106
Commodities:		
Cartographic material, field equipment, office supplies, vehicles	195	200
Total	700	1059

Country: SAHEL REGIONAL ACTIVITIES

CONTINUING ACTIVITY

Table IV

TITLE Sahel Water Data Network and Management	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	1,000	
NUMBER 625-0917	PRIOR REFERENCE	INITIAL OBLIGATION	ESTIMATED FINAL OBLIGATION	ESTIMATED COMPLETION DATE
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>	FY 1977 Africa Programs, p. 168	FY 1978	FY 1982	OF PROJECT FY 1983

Purpose: To help the drought stricken states of the Sahel to develop an operational meteorological and hydrological capability as the next step in planning and establishing a water resources data collection and processing network.

Major Outputs:

	9/30/76	FY 77	FY 78
	(Cumulative as of end of FY)		
Provide a capacity to develop, process and interpret weather-water data in Sahelian countries.	-	X	X
Develop longer range forecasting methods and early warning systems	-	X	X
Construction Regional Center	-	-	X
Equip 7 national programs	-	7	7
Dissemination of data	X	X	X

Host Country and Other Donors:

African Governments Participating	-Will assist in the costs for local personnel and services.
United Nations Development Fund	-Collaboration and participation in the project implementation
Permanent Interstate Committee Against the Drought in the Sahel	
Netherlands	
Belgium	
France	
Switzerland	

Progress to Date: The U.S. officially joined and provided financing for this World Meteorological Organization (WMO) program in May 1976. France and Switzerland subsequently became donors. These actions followed an A.I.D. funded study by the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce. Meteorological and hydrological data gathering equipment has been procured to restore and expand the National Water data networks in seven Sahel countries. Experts have also been retained to provide advisory services. The Regional Center in Niamey began operations and training in October 1976, and the Center itself is under construction.

FY 1978 Program: The proposed funding will provide for the completion of the installation of the telecommunications and data processing facilities (national and regional), the data dissemination activities, and technical assistance.

A.I.D. - financed Inputs
(\$ Thousands)

	<u>FY 78</u>
Personnel:	
Six technicians (66 pm)	410
Other Costs:	
Construction	350
Equipment installations	190
Publication costs	50
Total	1,000

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	a/	-	-	World Meteorological Organization National Oceanic and Atmospheric Administration
Estimated Fiscal Year 1977	a/	-	-	
Estimated through September 30, 1977	-	-	-	
		Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1978	1,000	970	1,970	

a/ Prior funding provided under the Regular Development Program.

Country: SAHEL REGIONAL ACTIVITIES

CONTINUING ACTIVITY

Table IV

TITLE Sahel Food Crop Protection	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78 1,600		
NUMBER 625-0916	PRIOR REFERENCE	INITIAL OBLIGATION	ESTIMATED FINAL OBLIGATION	ESTIMATED COMPLETION DATE
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>	FY 1977 Africa Programs, p. 169	FY 1978	FY 1978	FY 1980

Purpose: To establish in each participating Sahel country a viable plant protection organization to give the farmer the capability to efficiently control pests in order to increase food crop yields and farmer income.

consultation scheduled by FAO in Rome to review all pest control and grain storage activities in the Sahel with 17 countries participating. Coordinating committees will be established to maximize use of resources. An evaluation of the project will be made during the first quarter of FY 78.

Major Outputs:

	<u>FY 77</u>	<u>FY 78</u>
	(Cumulative as of end of FY)	

Training Centers Constructed	1	2
Demonstration Centers Constructed	-	2
Number of participants trained in U.S.	-	8
Number of participants (short-term)	-	20
Number of participants (in-country)	20	80

FY 1978 Program:

A.I.D. - financed Inputs
(\$ Thousands)

	<u>FY 78</u>
Personnel:	
4 Long-term specialists (48 pm)	200
Training:	
8 Long-term U.S. (96 pm)	80
20 Short-term U.S./third country (120 pm)	120
60 Short-term In-Country (360 pm)	180
Commodities:	
Office, training and demonstration equipment; insecticide for demonstration; vehicles	360
Other Costs:	
Construction of centers, operating costs, support costs	660
Total	1,600

Host Countries and Other Donors:

Senegal, Cameroon, The Gambia, Cape Verde, Chad \$1.3 million annually for personnel and other costs

FAO, OECD, France, and the Sahel States Similar projects underway, be coordinated

Progress to Date: In the presently participating countries, i.e., Cape Verde, the Gambia, Senegal, Cameroon and Chad, National Plant Protection Units have been recently established and Plant Protection Chiefs appointed. Assistance has been provided through FAO for insecticides and spray equipment to reduce crop losses due to heavy infestations of pests in food crops. Many other donors and the research Centers are devoting special attention to pest management problems in the Sahel. A series of multilateral donor and host government consultations have been held with a major

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	a/	-	-	United States Department of Agriculture
Estimated Fiscal Year 1977	a/	-	-	
Estimated through September 30, 1977	-	-	-	
		Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1978	1,600	1,300	2,900	

a/ Prior funding provided under the Foreign Disaster Assistance Act of 1974 and from the Regular Development Program.

TITLE Integrated Pest Management	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	3,400	
NUMBER 625-0928		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1982	ESTIMATED COMPLETION DATE OF PROJECT FY 1983
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Goal: To increase food crop production in the Sahel.

Purpose: To establish and strengthen capacity of plant protection and research organizations in the Sahelian countries to effectively reduce pest losses to sorghum and millet and benefit the small farmer.

Background: In the countries of the Sahelian zone, pest damage to food crops has dramatically emphasized production drops caused by the recent drought. A FAO study on the prospects for agricultural development in the Sahelian zone (1975-1990) stated that according to studies to date, cereals furnish 60%-70% of energy supply, are the primary source of proteins, and will be the principal food crops of most of these countries in 1990 and beyond. It is therefore considered to be fully justified to concentrate efforts on these crops since they will constitute cultivation of 8,600,000 hectares by 1990. Experience in integrated pest management is essential and will greatly benefit other crops. The knowledge gained will be linked to the FAO/UNDP Global Program and will be transferred to the benefit of the global program. All of the Sahelian countries strongly endorse the need for increased food crop production particularly in sorghum and millet. In December 1976, FAO co-sponsored a major international conference on pest control for the Sahel. The result of that conference was agreement by the host governments and the principal participants to jointly formulate and implement a long-term pest control program for all the Sahel. This project is in direct support of that program. It is anticipated that it will be fully integrated into the multidonor activity for FY 79.

Major Outputs:

	FY 78	FY 79	FY 80
	(Cumulative as of end of FY)		
Number of Research Units established	3	5	5
Number of professional Researchers trained	-	20	20

Major Outputs: (Con't)

	FY 78	FY 79	FY 80
Number of field technicians trained	-	50	100
Established centralized documentation center	-	X	X
Benefits derived by entire farming population of Sahel and entire urban population by increased food production and reduced prices	-	X	X

Host Country and Other Donors:

Donors including FAO, Canada, Great Britain, Germany, France, The Netherlands, and the European Economic Community. Personnel Financing

Participating host countries and African organizations Personnel Financing

FY 1978 Program:

	A.I.D.-financed Inputs (\$ Thousands)	
	FY 78	All Years
Personnel:		
Long-term (204 pm)	1,000	13,500
Training:		
20 Long-term (240 pm) and 50 short-term (150 pm)	400	2,600
Commodities:		
Laboratory and office equipment, vehicles, field and farm equipment, and training aids	500	3,100
Other Costs:		
Support costs to research and documentation centers, demonstrations	400	2,300
Construction of laboratories and demonstration centers	1,100	3,500
Total	3,400	25,000

NEW ACTIVITY

Table V

Country: MALI		PROPOSED OBLIGATION (In thousands of dollars)		
TITLE Operation Haute Vallee	FUNDS Sahel Development Program	FY 78 2,000		
NUMBER 688-0210		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1981	ESTIMATED COMPLETION DATE OF PROJECT FY 1982
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Goal: To improve the quality of rural life in the Second Region of Mali through an integrated rural development project.

Purpose: To enable the Operation Haute Vallee to plan and manage an integrated rural development program incorporating social and economic components.

Background: The Haute Vallee zone with its proximity to Bamako has traditionally been a supplier of food products for urban consumption. This fact, along with its great potential for irrigated agriculture, enhances the suitability of the zone for intensive agricultural production. Haute Vallee is also the area in which the Selingue Dam will be built. The Dam, which began in late 1976, will vastly enlarge the irrigable area and will have an enormous long-term agricultural impact. As the dam's impact will not be felt for the next five to seven years, the more immediate objective is to begin to develop the necessary agricultural infrastructure to enable the area to prepare for this longer term development

Major Outputs:

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>
	(Cumulative as of end of FY)		
Trained staff and Extension agents working in program	10	20	35
Adult literacy program	X	X	X
Disease vector surveillance and control	-	X	X
Roads constructed within project area (kilometers)	-	100	300

Host Country and Other Donors:

Government of Mali Staff, operating costs and road maintenance.

International Bank for Reconstruction and Development (IBRD) Construction of Class B (All weather) roads (165 km) in project area.

FY 1978 Program:

	<u>A.I.D. - financed Inputs</u> (\$ Thousands)	
	<u>FY 78</u>	<u>All Years</u>
Personnel:		
3 Long-term (54 pm) and		
5 Short-term (10 pm)	400	2,000
Training:		
4 Long-term (48 pm) and		
10 Short-term (40 pm) in the U.S. and Africa	70	394
Commodities:		
Vehicles, construction and agricultural equipment, and educational materials	1,110	3,142
Other Costs:		
Construction, support costs, and studies	420	5,880
Total	2,000	11,416

Country: SAHEL REGIONAL ACTIVITIES

CONTINUING ACTIVITY

Table IV

TITLE	Planning, Management and Research	FUNDS	Sahel Development Program			PROPOSED OBLIGATION (In thousands of dollars)
					FY 78	10,600
NUMBER	625-0929	PRIOR REFERENCE	FY 1977 Africa Program, p. 206			INITIAL OBLIGATION
GRANT <input checked="" type="checkbox"/>	LOAN <input type="checkbox"/>				FY 1978	ESTIMATED FINAL OBLIGATION
						FY Continuing
						ESTIMATED COMPLETION DATE OF PROJECT
						FY Continuing

Goal: To establish an analytic data base for identification of investment opportunities leading to long-term, comprehensive development of the Sahel.

Purpose: To ensure continuity in the planning, management and research activities supporting the Working Groups of the Club des Amis du Sahel and the design of U.S. programs and projects related to the international effort.

Background: To facilitate coordinated planning by and among donor organizations with Sahelian states, the Club des Amis du Sahel was established. At the Club's first meeting in March 1976, nine international Working Groups were created. Each group developed terms of reference and identified research gaps and priorities. A.I.D. embarked upon a series of basic studies in resource development, crop and livestock production, food-related infrastructure development and health in the TQ and 1977 as forerunners to the more comprehensive studies now being identified by the Working Groups. These initial U.S. efforts provide the preliminary analyses requisite to comprehensive planning and sound program design. The United States concern with health, nutrition and population continues to be reflected in this project, which will provide data to highlight these dimensions for Club consideration as an additional Working Group. Particular emphasis is given by the United States to the provision of financial resources to African institutions to facilitate their increased participation in the planning and research activities.

Major Outputs:

	FY 77	FY 78	FY 79	FY 80
	(Cumulative as of end of FY)			
-Short-term investigations and studies completed	x	x	x	x
-Project development/designs	x	x	x	x
-Long-term studies initiated	x	x	x	x

Host Country and Other Donors:

Sahelian States (8)

Local support costs and services
Technical assistance, sector specialists for planning and research activities in support of Working Groups.

Other donors: i.e., aid agencies of France, Canada, U.K. and U.N. agencies.

FY 1978 Program Working Groups:	A.I.D.-financed Inputs (\$ Thousands)	FY 78
Irrigated Agriculture		2,500
Livestock		2,000
Rainfed Agriculture		2,000
Human Resources		1,300
Pricing, Marketing and Storage		600
Adaptation of Technology		600
Ecology		600
Transportation and Infrastructure		1,000
TOTAL		10,600

a/ Prior funding provided from the African Development Program (Section 494B of the FAA) and the regular development program.

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	a/	-	-	To be selected
Estimated Fiscal Year 1977	a/	-	-	
Estimated through September 30, 1977	-	-	-	
		Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1978	10,600	-	-	

Country: SAHEL REGIONAL ACTIVITIES

CONTINUING ACTIVITY

Table IV

TITLE Sahel Regional Aid Coordination and Planning	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78 1,000		
NUMBER 625-0911	PRIOR REFERENCE FY 1977 Africa Programs, p. 206	INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY continuing	ESTIMATED COMPLETION DATE OF PROJECT FY continuing
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Goal: To assure coordinated participation of donor organizations with Sahelian governments in order to facilitate food self-sufficiency and improved living conditions for the people of the Sahel.

Purpose: To provide assistance to key organizations engaged in and responsible for coordination of the management and research activities vital to the long-term development program for the Sahel.

Background: Through A.I.D. support in FY 1974 to the Secretariat of the United Nations Sahelian Office (UNSO), and financial assistance in FY 1976 to the Secretariats of the Permanent Interstate Committee (of Sahelian states) for Drought Control in the Sahel (CILSS) and the Club des Amis du Sahel, the United States has facilitated coordination and planning essential to recovery and growth in the Sahel. In FY 1976, provision was also made by the U.S. for two senior development officers to serve in the UNSO and Club Secretariats respectively, as well as for the first increment of U.S. technical assistance to the CILSS Secretariat. The UNSO chiefly coordinates the medium-term Sahelian programs of U.N. agencies; coordinating efforts within the Sahel rest mainly with CILSS, and the Club Secretariat provides support services essential to the Working Groups. The mobilization of the specialized talents required to achieve development in the Sahel necessitates the combined action of these three key organizations, as well as participation of other African institutions such as the proposed Sahel Institute for which financial assistance will also be required.

Major Outputs:

	FY 77	FY 78	FY 79	FY 80
	(Cumulative as of end of FY)			
Technical specialists upgraded	X	X	X	X
Participant training/upgrading achieved	X	X	X	X
Working group support system established	X	X	X	X
Communications network operating	X	X	X	X
Seminars, forums, conferences held	X	X	X	X

Host Country and Other Donors:

Sahelian states (8)	Administrative and technical personnel.
Other donors: i.e., aid agencies of Canada, France, Netherlands, U.K., Germany plus U.N. and IBRD.	Technical assistance for administrative management and for all sectors of the Working Groups; operational costs.

FY 1978 Program:

	A.I.D. - financed Inputs (\$ Thousands)	FY 78
Personnel: (150 pm)		550
Training:		100
Commodities: Office and data, collection and analyses equipment		100
Other Costs: Operating costs		250
Total		1,000

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	a/	-	-	
Estimated Fiscal Year 1977	a/	-	-	
Estimated through September 30, 1977	-	-	-	
Proposed Fiscal Year 1978	1,000	-	-	
		Future Year Obligations	Estimated Total Cost	To be selected.

a/ Prior funding provided from the African Development Program (Section 494B of the FAA) and from the Regular Development Program.

NEW ACTIVITY

Table V

Country: CHAD		NEW ACTIVITY		
TITLE Crop Production Research and Seed Multiplication		FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)	
NUMBER 677-0014			FY 78 1,500	
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1982	ESTIMATED COMPLETION DATE OF PROJECT FY 1982

Goal: Achievement of self-sufficiency in food production and improvement in social and economic status of low income small farmers.

Purpose: 1) Develop Chad's capability to design efficient food crop and forage production techniques and packages, and provide outreach/demonstration services to extension agency, and 2) increase productivity by providing farmers with adequate quantities of improved seed at reasonable price.

Background: Increasing food crop production is a major Chadian objective in order to avert a recurrence of the tragic events of the drought years of 1968-74. At the same time Chad seeks to improve the social and economic standing of its small agricultural producers who make up the bulk of the population and account for total production of the country's staple crops (millet, sorghum, groundnuts). These twin objectives can be met by increasing the productivity of the small producer. The project will assist Chadian research agencies to improve production technology and develop, multiply and distribute improved seed varieties to small farmers.

Major Outputs:

	FY 78	FY 79	FY 80
	(Cumulative as of end of FY)		
<u>Research</u>			
Agronomic scientists trained	1	3	5
Begin screening of varieties	X	-	-
Adoption of technological package in target areas	-	-	X
<u>Seed Multiplication</u>			
All facilities at foundation seed center	1	2	2
Seed multiplication centers constructed	-	2	2
Technicians trained	-	-	2

Host Country and Other Donors:

UNDP/FAO: two agricultural technicians

FAO: two training instructors

European Development Fund: seed multiplication station and research activities

CHAD: budget support for local employees salaries, office and labor force.

FY 1978 Program:

	A.I.D.- financed Inputs	
	(\$ Thousands)	
	FY 78	All Years
Personnel:		
Long-term	(60 pm) 400	2,800
Short-term	(15 pm) 100	900
Training		900
Academic	(48 pm) 46	
Short-term	(6 pm) 5	
On-job	(154 pm) 31	
Commodities:	480	2,472
Vehicles and spare parts, laboratory and field equipment		
Other Costs:		2,700
Construction of centers and facilities	270	
Office equipment, supplies and support	168	
Total	1,500	9,772

Country: SAHEL REGIONAL ACTIVITIES

CONTINUING ACTIVITY

Table IV

TITLE OMVS Data and Institutional Development (Formerly OMVS Management and Staff Support)	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
NUMBER 625-0620	PRIOR REFERENCE	FY 78	4,300	
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>	FY 1977 Africa Programs, p. 161	INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1981	ESTIMATED COMPLETION DATE OF PROJECT FY 1983

Purpose: To assist the Senegal River Basin Development Authority (OMVS) with financial support, technical assistance, staff development and data collection in order that the organization can plan and manage the increasing number of development activities occurring in the Senegal River Basin.

Major Outputs:	FY 78	FY 79	FY 80	FY 81	FY 82
	(Cumulative as of end of FY)				
Trust fund established	X	X	X	X	X
Number of staff trained	15	37	53	55	56
Water data guages established	-	51	51	51	51
Hydrogeologic map prepared	-	-	-	X	X
Critical photomaps prepared (%)	-	-	-	50	100

Host Country and Other Donors.

UNDP	Technical assistance in administrative and financial management.
FAO	Technical assistance in management of agricultural activities.
France	Mapping of Diama Dam Site.
West Germany	Mapping of Manantali Dam Site.
OMVS Member States	Support costs, nationals for training, and land for data station sites.

Progress to Date: The re-organization plan of the OMVS High Commission has been approved by the OMVS Council of Ministers, and the Basin Development Plan has been reviewed and reconfirmed. Studies for some of the major infrastructure

projects are underway and have reached the final engineering stage, with resultant increases in the management requirements of the High Commission. The project will address this manpower constraint with a project component expected to begin approved late in FY 1977 with regular program funding. The aerial mapping component of this project is to begin in FY 1977 with \$1.2 million provided from the African Development Program, Section 494B of the Foreign Assistance Act, under which will be established a network of control points for the mapping.

FY 1978 Program:	A.I.D. - financed Inputs (\$ Thousands)	FY 78
Personnel:		
Experts in management, engineering, agriculture, mapping, and water data collection, (20 person/years long-term and 120 person/months short-term)		2,000
Training:		
5 person/years of long-term training and 120 person/months of short-term training for OMVS headquarters staff and water data collection personnel		200
Commodities:		
Office equipment, photographic and mapping materials, and water data collection equipment		800
Other Costs:		
OMVS budget support, aerial photography expenses, and local contracts for ground water exploration		1,300
Total		4,300

a/ Prior funding provided from both the regular development program and the African Development Program (Section 494B of the FAA).

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	a/	-	-	To be selected
Estimated Fiscal Year 1977	a/	-	-	
Estimated through September 30, 1977	-	-	-	
		Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1978	4,300	15,161	19,461	

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	ESTIMATED FINAL OBLIGATION FY 1979	ESTIMATED COMPLETION DATE OF PROJECT FY 1982
Niger River Development Planning	Sahel Development Program	1,000		
NUMBER 625-0915	PRIOR REFERENCE	INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1979	ESTIMATED COMPLETION DATE OF PROJECT FY 1982
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>	FY 1977 Africa Programs, p. 205			

Purpose: To place in operation through a multi-donor effort the process of planning for the integrated development of the Niger River Basin by (1) strengthening the institutional base of the River Niger Commission (RNC), (2) preparing a detailed diagnostic study of the Basin for the elaboration of a five-year action program, and (3) financing and implementing the first planning studies.

Major Outputs:

	FY 77	FY 78
(Cumulative as of end of FY)		

Completion of diagnostic study and indicative plan of actions	-	X
Participants trained	10	21
Documentalists trained	3	3
Study tours for member state technicians	1	2
RNC Secretariat building complex and staff housing completed	-	-
Planning studies initiated and completed on a continuing basis	-	-

Host Country and Other Donors:

Combined Member States	270
UNDP	2,000
Canada	6,750

FAC, The Netherlands and the IBRD have expressed interest and are expected to contribute. It is expected that contributions will also be made by the EEC, West Germany, and others.

Progress to Date: Prospective donors met with the RNC in Paris in September 1976 to develop a common approach and agree on a coordinated action plan based on previous studies by A.I.D., Canada, IBRD and UNDP. The meeting recommended a 5-year program costing \$27.3 million including a completed preparatory diagnostic study. Half of this budget has been tentatively pledged and the UNDP will perform a "catalyst" role in soliciting other funding sources. The results of the Paris meeting have been approved by the RNC's Council of Experts.

FY 1978 Programs:

	A.I.D. - financed Inputs (\$ Thousands)	FY 78
Participants:		
Long-term Academic		
For Executive Secretariat (12 persons-144 pm)		140
For Member States (11 persons-132 pm)		115
Short-term study tours (9 persons-54 pm)		55
Commodities:		
Documents, office equipment, vehicles		20
Other Costs		
Contribution of 25% of construction cost for Secretariat complex in Niamey		270
Planning studies and surveys		400
Total		1,000

U.S. GRANT FINANCING (In thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1976	a/	-	-	
Estimated Fiscal Year 1977	a/	-	-	
Estimated through September 30, 1977	-	-	-	
Proposed Fiscal Year 1978	1,000	1,925	2,925	

To be selected

a/ Prior funding provided under the Regular Development Program.

Country: UPPER VOLTA

NEW ACTIVITY

Table V

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	2,000	
Volta Valley Development	Sahel Development Program	INITIAL OBLIGATION	ESTIMATED FINAL OBLIGATION	ESTIMATED COMPLETION DATE
NUMBER 686-0222		FY 1978	FY 1981	OF PROJECT
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				FY 1981

Goal: Improve the social and economic well-being of people resettling in areas recently freed of Onchocerciasis.

Purpose: Strengthen Volta Valley Authority (AVV) capacity to plan, select and prepare lands for development and conduct successful resettlement operations and system of settler support.

Background: The Red, White and Black Volta River Valleys contain some of Upper Volta's most arable land. As this is cleared of the black fly which causes River Blindness (Onchocerciasis), the Government's AVV is developing a resettlement program designed to resettle these fertile, but now depopulated, valleys, to relieve population pressures on the overcrowded Mossi Plateau and ultimately to provide greater opportunity for the resettled population.

AVV is now planning to expand its pilot resettlement programs to include the Black Volta as well as fuller exploitation of the Red and White Volta valleys. To enable AVV to plan soundly for this expansion, the Government of Upper Volta has requested A.I.D. to finance certain data-gathering and feasibility studies of the areas and peoples to be resettled; a pilot subproject for resettlement of 400 families to be accompanied by sample surveys of economic progress and social change experienced; heavy equipment for road building and land preparation, and essential personnel training.

Major Outputs:	FY 78	FY 79	FY 80
	(Cumulative as of end of FY)		
Studies completed	4	9	10
Trial farm established	-	1	1
Families resettled	-	400	400
Personnel trained locally	25	75	100

Host Country and Other Donors:

Upper Volta	personnel salaries and general support costs	\$ 2,516,000
FAC		2,000,000
Dutch		1,600,000
IBRD	(proposed beginning CY 1977)	1,500,000
FED	over five years	13,000,000
African Development Bank	Agricultural Credit Funds	

FY 78 Program:

A.I.D.-financed Inputs
(\$ Thousands)

	FY 78	All Years
Personnel:		
Five technicians, long-term (39 pm)	250	1,000
Six technicians, short-term (24 pm)	93	400
Participant Training:		
Training personnel locally (100 pm)	25	300
Commodities:	1,295	5,000
Road building Equipment	600	
Agricultural Equipment	464	
Communications Equipment	50	
Geological Equipment	145	
Vehicles	36	
Other Costs:	337	1,300
Construction	165	
Aerial photography	110	
Agricultural credit	8	
AVV support	54	
TOTAL	2,000	8,000

TITLE LCBC Institutional Development	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	1,000	
NUMBER 677-0018		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1981	ESTIMATED COMPLETION DATE OF PROJECT FY 1982
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Goal: To increase the effectiveness of the Lake Chad Basin Commission (LCBC) as an institution responsible for overseeing the planned development of resources of the Lake Chad Conventional Basin.

Purpose: To create a Planning Unit and develop the human resources required to undertake strategic planning of water resource utilization, and to assist the LCBC to undertake projects, activities and studies to test the feasibility of alternative uses of the resources of the Lake.

Background: The Lake Chad Basin is an unusual hydrogeologic basin of 2,450,000 square kilometers covering parts of several Central African countries. The Basin and Lake Chad proper offer rich economic potential for the four countries bordering the Lake: Chad, Niger, Nigeria, and Cameroon. Development of the lake and surrounding basin resources must take into account the special climatic and hydrological situation and the fragile ecology of the basin. In collaboration with other donors, A.I.D. will assist the LCBC to develop a cadre of experts to staff the Commission, and will finance special studies and plans for the development of the Chad basin.

Major Outputs:

	FY 78	FY 79	FY 80	FY 81	FY 82
	(Cumulative as of end of FY)				

Planning Unit fully operational	-	-	-	X	X
Basic studies undertaken	-	1	2	3	3
Operational Water-use strategy accepted by member states	-	-	-	-	X

Host Country and Other Donors:

Lake Chad Basin Commission	Staff facilities and support costs - \$350,000.
UNDP/FAO and Other Donors	Undetermined amounts to be made available through the Club des Amis du Sahel.

FY 1978 Program:

	A.I.D. - financed Inputs (\$ Thousands)	
	FY 78	All Years
Personnel:		
Long-term (72 person months and Short-term (10 person months)	550	2,400
Training:		
9 Long-term academic (108 pm), observation (22 pm)	150	900
Commodities:		
Vehicles, office equipment, and scientific machinery	200	600
Other Costs:		
Specialized studies, operational and support costs	100	600
Total	1,000	4,500

Country: SENEGAL

NEW ACTIVITY

Table V

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1982	ESTIMATED COMPLETION DATE OF PROJECT FY 1984
Casamance Regional Development	Sahel Development Program	FY 78 3,600		
NUMBER 685-0205				
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Goal: To assist Senegal in its efforts to become self-sufficient in food crop production and to improve the quality of life of people living in the Casamance Region.

Purpose: Provide the capital and institutional infrastructure to increase food grain production in the Casamance River Basin, a region in the south of Senegal with a favorable climate, soils and rainfall. The Basin is expected to play a major agricultural role especially in the production of rice and maize.

Background: The potential for development of the Casamance has been impeded by several major constraints: salt-water intrusion into the low-lying lands; research on rice and corn varieties adaptable to soils and conditions peculiar to the Casamance has not been extensive; and rural travel throughout the region is severely hampered by the condition of the roads. Symptomatic of these constraints is the rural exodus of youth, generated by the lack of income-earning potential closer to home.

The Government of Senegal has requested A.I.D. assistance for the integrated development of the Casamance Region. The major elements to be addressed by the A.I.D. project are research and extension of irrigated and swamp rice and corn perimeters; intermediate farm technology; establishment of a seed production farm; feeder road improvement; institutional support to the regional development agency for the Casamance (SOMIVAC) and the project management unit (PRUSAIDBAC); small scale salt-water intrusion operations beginning with a survey of the water resources of the Casamance; and community development including health, village banks, small farmer credit and day care centers.

Major Outputs:

	FY 78	FY 79	FY 80
	(Cumulative as of end of FY)		
SOMIVAC and PRUSAIDBAC operational	X	X	X
Seed farm in operation	-	1	1
Rice and maize perimeters developed	-	4	6
Extension agents trained	3	5	7
Feeder roads improved (km)	100	225	551
Small farmer credit disbursed (\$000)	330	500	950
Personnel trained in U.S.	-	24	32

Host Country and Other Donors:

Senegal	Personnel, land, operating costs.
IBRD and FED	Have similar projects that will be coordinated with A.I.D.

FY 1978 Program:

	A.I.D. -financed Inputs	
	(\$ Thousands)	
	FY 78	All Years
<u>Personnel:</u>		
6 Long-term (108 pm)	630	4050
10 Short-term consultants (60 pm)	190	1140
Local Personnel Support	35	200
<u>Training:</u>		
10 U.S. Long-term Degree (120 pm)	100	3800
8 U.S. Long-term non-Degree (96 pm)	80	640
6 U.S. Short-term (36 pm)	30	380
40 Local training (40 pm)	40	340
<u>Commodities:</u>		
Vehicles, office equipment, farm equipment, fertilizer, seeds, pesticides	550	3950
<u>Other Costs:</u>		
Construction of offices, labs, storage, support costs, operational support, land clearing, credit fund	1945	11,500
Total	3,600	26,000

Country: UPPER VOLTA

NEW ACTIVITY

Table v

TITLE Agriculture and Human Resources Development	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78 2,000		
NUMBER 686-0221		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1982	ESTIMATED COMPLETION DATE OF PROJECT FY 1982
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Goal: To accelerate agricultural development through the improvement of agricultural training and research facilities.

Purpose: To provide the infrastructure needed to train professional staff needed for positions in agriculturally related enterprise.

Background: The National Development Five-Year Plan accords the highest priority to the agricultural sector. In support of this effort, the donor community, responding to the need to find long-term solutions to the Sahel's precarious food balance, is sponsoring an ever increasing number of agricultural development activities. A primary constraint, however, to Upper Volta's capacity to absorb this increasing level of activity is the quantitative and qualitative lack of trained agricultural personnel. In the past, all medium and upper level agricultural professionals received training outside Upper Volta, often far from the climatic, social and technological realities of home.

A.I.D. has received requests from the Government to develop a training and research infrastructure within Upper Volta. This project will help resolve these needs by providing the Ministry of Rural Development with two expanded agricultural training centers and the rural development engineering students of the University of Ouagadougou with an extension/research center and practical training field stations in different climatic regions.

Major Outputs:

	FY 78	FY 79	FY 80	FY 81	FY 82
	(Cumulative as of end of FY)				
Buildings constructed and equipment in place	-	5	6	6	6
Staff trained	-	6	12	18	24
Agricultural extension agents trained in new and existing training centers	-	106	218	334	500

Host Country and Other Donors:

Government of Upper Volta Land and maintenance of buildings and equipment, the salaries and fringe benefits of staff and operating costs (approximately \$3,000,000).

FY 1978 Program: In this project, A.I.D. will provide four person years of long-term advisory assistance to work in curriculum and education institution development as well as construction of necessary facilities.

A.I.D. - financed Inputs

	(\$ Thousands)	
	FY 78	All Years
Personnel:		
Long-term technical advisory assistance (60 pm)	400	2,500
Short-term technical advisory assistance (15 pm)	126	
Training:		
Four long-term participants for degree training in agricultural and human resource development (96 pm)	102	750
Commodities:		
Vehicles and educational equipment	80	2,500
Other Costs:		
Improvement of existing training center, Matourkou	300	
New training center at Bogande	782	
Central field station and 2 regional field stations (construction)	210	2,431
Total	2,000	8,181

Country: SENEGAL

NEW ACTIVITY

Table V

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1982	ESTIMATED COMPLETION DATE OF PROJECT FY 1982
Agronomic Institute	Sahel Development Program	FY 78 1,000		
NUMBER 685-0221				
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Goal: To increase agricultural production and improve land use.

Purpose: To assist the Senegalese Government to establish a university-level Agricultural Sciences degree program for training agricultural students in-country.

Background: Senegal does not have a university-level training program in agricultural sciences other than in veterinary medicine. Senegalese students desiring to study agricultural sciences have to go to other countries, mainly France. Senegal has recognized the increased need for agricultural training in such subjects as administration, agronomy, range management, and irrigation engineering to staff a network of offices throughout Senegal. In order not to rely wholly upon the present system, involving training abroad, which is expensive and provided on a space-available basis, Senegal has decided to initiate a university-level program leading to a degree in agronomy (Ingenieur Agronome). This institute will stress practical development-oriented courses in agricultural management, irrigation, conservation, production and marketing practices. In addition to A.I.D., indications of possible willingness to assist in this project have come from the European Development Fund (FED), the International Bank for Reconstruction and Development (IBRD) and the Governments of France and Brazil. A.I.D.'s contribution will be 30% of the total cost of the project while the other donors will provide 50% and the Government of Senegal the remaining 20%.

Major Outputs:

	FY 78	FY 79	FY 80
	(Cumulative as of end of FY)		
Construction of buildings completed	33%	66%	100%
Number of students trained	40	80	120
Future Staff trained	3	6	9

Host Country and Other Donors:

Senegal	Land, local staff and financial support.
FED, IBRD, France and Brazil	Fifty percent of buildings, support costs.

FY 1978 Program:

	A.I.D.-financed Inputs (\$ Thousands)	
	FY 78	All Years
<u>Personnel:</u>		
One professor (12 pm)	80	900
Short-term consultant (3 pm)	20	120
<u>Training:</u>		
2 long-term degree (24 pm)	16	84
Short-term (2 pm)		16
<u>Commodities:</u>		
Vehicles, laboratory and farm equipment	-	480
<u>Other Costs:</u>		
Operating costs	-	1,300
Construction of campus facilities	880	3,100
Total	1,000	6,000

Country: SENEGAL

NEW ACTIVITY

Table V

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78	FY 79	FY 80
SAED - Training	Sahel Development Program	1,000		
NUMBER 685-0218		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1982	ESTIMATED COMPLETION DATE OF PROJECT FY 1983
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Goal: To improve agricultural practices in the Senegal River Basin and increase production.

Purpose: To assist SAED (the agricultural extension agency operation in Senegal in the Senegal River Basin) to develop a training program for upgrading the skills of its personnel.

Background: In 1965, the Government of Senegal created the Societe d'Aménagement et d'Exploitation du Delta (SAED), a semi-autonomous government organization charged with developing the Senegal River Valley. The objectives are to develop the land along the Senegal River (diking of its banks to prevent annual flooding; installing irrigation and drainage networks, pumping stations, etc.; and finally clearing and making the land ready for cultivation) and to organize and train farmers living in the valley to carry out irrigated agricultural production to produce mostly cereals (rice) and other crops. The ultimate objective is to train and upgrade local farmers to permit their taking control over the production and marketing aspects of SAED in the shortest period of time. It is hoped that production of food crops in the valley will reduce Senegal's dependence on food imports and will arrest the rising trend of migration from the valley to the cities where unemployment is already substantial. Senegal plans to add 5,555 hectares of irrigated land each year in the Senegal River Basin with assistance from several donors.

<u>Major Outputs:</u>	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>
	(Cumulative as of end of FY)		
Number of SAED Extension workers trained	60	120	180
Number of SAED personnel (top Managers and other level trained)	125	250	375
Number of long-term participants	1	2	3

<u>Major Outputs (continued):</u>	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>
Number of short-term participants trained	-	5	10
Number of villagers trained by chiefs	-	5,000	15,000
Number of village chiefs trained	-	160	320
Number of persons receiving literacy training	-	4,000	10,000
Savoigne center built and equipped	-	1	1
Number of perimeter centers built	-	2	4
Ross Bethio and Niango Centers built	-	2	2

Host Country and Other Donors:

Senegal	Personnel and other costs estimate \$140,000 per year.
France	Agreed to support project for 5 years with \$800,000 for first two years.
IBRD	Provided two experts for project design
SATEC (Senegalese Organization)	Preliminary study.

FY 1978 Program:

	<u>A.I.D. -financed Inputs</u> (\$ Thousands)	<u>FY 78</u>	<u>All Years</u>
<u>Personnel:</u>			
2 Long-term advisors (36 pm) and 3 short-term consultants (9 pm)		255	1210
<u>Training:</u>			
1 Long-term (12 pm)		10	30
5 Short-term (5 pm)		5	116
<u>Commodities:</u>			
Vehicles, tractors, equipment		130	390
<u>Other Costs:</u>			
Construction of new centers		470	1450
Refurbish existing center		120	400
Functional literacy program		10	50
Evaluation		-	60
Total		1,000	3,706

Country: SAHEL REGIONAL ACTIVITIES

NEW ACTIVITY

Table V

TITLE OMVS Health Research Program	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
		FY 78 1,600		
NUMBER 628-0505		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1980	ESTIMATED COMPLETION DATE OF PROJECT FY 1982
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>				

Goal: To establish preventive and curative measures against endemic water borne diseases in the Senegal River Basin.

Purpose: To develop the data necessary for designing preventive and curative health projects in the Senegal River Basin as a basis for improved health planning for the rural poor as well as to consider how to prevent the deterioration of health conditions which might be adversely effected by river basin development.

Background: A team of health professionals, including experts in parasitology, virology, medical entomology and immunology, have chosen a 100 square mile pilot area in Mauritania and Senegal centering around Rosso, Mauritania in which to conduct a six-month pilot study on transmissible disease problems. This study was requested by officials of the Ministries of Health of Senegal and Mauritania to develop programs of preventive and curative measures against water borne diseases in the river basin. Recognizing the need for intensive data-gathering in certain key population areas of this pilot area, the team will begin medical studies in the area in early 1977. The final report of this health survey team will form the basis for this project.

Major Outputs:	<u>FY 78</u>	<u>79</u>	<u>80</u>	<u>81</u>	<u>82</u>
	(Cumulative as of end of FY)				
Field Laboratory	-	1	1	1	1
Laboratory Technicians	-	2	5	8	12
Data for Health Projects	-	X	X	X	X
Monitoring of specific health conditions	-	X	X	X	X

Host Country and Other Donors:

World Bank	Public health studies at major irrigation perimeters.
Governments of Senegal and Mauritania	Personnel for training, and support costs and in-kind services.

FY 1978 Program:

	A.I.D. -financed Inputs (\$ Thousands)		All Years
	FY 78		
Personnel:			
Services of a specialist in tropical medicine (team leader) and eight researchers (24 pm each), short-term consultants (12 pm total)	1,150		2,000
Training:			
4 Long-term (48 pm)	50		130
Commodities:			
Research equipment, 5 vehicles and a mobile laboratory	250		270
Other Costs:			
Construction of the laboratory and related facilities, and operating costs	150		200
Total	<u>1,600</u>		<u>2,600</u>

Country: SAHEL REGIONAL ACTIVITIES

NEW ACTIVITY

Table V

TITLE Demographic Data Collection and Analysis	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
NUMBER 625-0927		FY 78	1,000	
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1980	ESTIMATED COMPLETION DATE OF PROJECT FY 1982

Goal: To cooperate with the Club des Amis du Sahel in the compilation and interpretation of demographic data which will provide information for development planning and evaluation, and to assist member countries in formulating appropriate programs of population and family planning.

Purpose: To develop a comprehensive population program for the Sahel in order to build an indigenous capability in demographic planning research and analysis and family planning.

Background: A demographic component will be introduced to complement multi-sector integrated development projects with a view toward planning and evaluating project inputs and results in the context of expected population characteristics and their changes. This will include a profile of the project population by its age, sex, location and project-specific skills and traits, and projections designed to anticipate demographic changes during project implementation. Ultimately, all Sahel planning should have such a component, but initially the technique will be developed in conjunction with two or three projects. During this phase, data research and some data collection will be undertaken to complement data compilation, presentation and analysis. Local institutions will be supported to develop an indigenous competence to carry on the demographic program.

Information will be gathered and provided on the relationships between population/family planning issues and development as well as the effects of unregulated fertility on maternal and child health. Conferences will also be held to explore these issues with Sahelian decision makers and personnel. Actual family planning service programs will be designed to complement health and rural development projects.

Major Outputs:

	FY 78	FY 79	FY 80
	(Cumulative as of end of FY)		
Demographic study and analysis	X	X	X
Family planning study and analysis	X	X	X
Dissemination of information	X	X	X
Regional institutional capacity for demographic program	-	X	X

Host Country and Other Donors:

Sahelian States (8)	Local support and in-kind services.
Other donors, i.e. agencies of France, Canada, IBRD, and U.N. agencies.	Technical sector specialists and research and project activities in support of the Club's Work- ing Groups.

FY 1978 Program:

	A.I.D. - financed Inputs (\$ Thousands)	
	FY 78	All Years
Personnel:		
54 pm of demographic planning, data collection and analysis consultants	325	900
48 pm of local personnel	50	300
24 pm of family planning/health consultants	200	600
Training: 80 pm	100	500
Commodities: Audio-visual supplies and research equipment	125	400
Other Costs: Computer resources, data collection and analysis, costs transport, publications	200	800
Total	1,000	3,500

Country: MAURITANIA

NEW ACTIVITY

Table V

TITLE Renewable Resource Management and Conservation	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
NUMBER 682-0205		FY 78 1,000		
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1980	ESTIMATED COMPLETION DATE OF PROJECT FY 1982

Goal: To promote self-sustained development in the rural sector through comprehensive programs to build a human and physical resource base needed to withstand future droughts without undue disruption to continued development.

Purpose: To develop an integrated program for renewable resource management which will result in more stable energy, livestock and agricultural production systems.

Background: This project is an effort to assist the Government of Mauritania develop an integrated approach to management and conservation of the arable land in the country. It will consist of developing a plan for national resource development; pilot projects in dune fixation, rangeland conservation and management, and reforestation; and, training of government cadres. These programs are considered essential for two reasons. First, any serious attempt to promote the long-range development of the country must address itself to the problem of efficient management and utilization of its natural resources. This is a particularly critical factor in Mauritania because the soils and forests (among the most important resources) have been seriously compromised by the recent droughts. Second, the needs for wood and by-products are increasing as the population expands and the economy modernizes. This project will be the first attempt by the Government to develop a comprehensive land management system and therefore offers A.I.D. a unique opportunity to help set constructive precedents whose effects will be felt for a long time.

Major Outputs:	FY 78	FY 79	FY 80	FY 81	FY 82
	(Cumulative as of end of FY)				
Natural Resource Survey	-	1	1	1	1
National Plan for Resource Development	-	1	1	1	1
People Trained:					
In-Country	-	-	10	20	30
U.S. short-term	5	10	15	15	15
U.S. long-term	-	-	-	2	4
Wood Production Site (hectares)	50	150	425	700	980
Dune Stabilization Plots (hectares)	-	55	55	55	55
Vegetation Rehabilitation site (hectares)	-	-	-	-	1265

Host Country and Other Donors:

Government of Mauritania \$125,000 for personnel and facilities.

FY 1978 Program:

	A.I.D.-financed Inputs (\$ Thousands)	
	FY 78	All Years
Personnel:		
Two long-term advisors (36 pm)	210	210
Training:		
Five U.S. short-term (30 pm)	25	125
Commodities:		
Vehicles, bulldozers, barbed wire, fertilizer, pesticides, and tools	439	1,820
Other Costs:		
Operating expenses, support costs, and local labor for land clearing and construction of base camps	326	1,845
TOTAL	1,000	4,000

Country: SENEGAL

NEW ACTIVITY

Table V

TITLE Land Conservation and Revegetation	FUNDS Sahel Development Program	PROPOSED OBLIGATION (In thousands of dollars)		
NUMBER 685-0219		FY 78 1,000		
GRANT <input checked="" type="checkbox"/> LOAN <input type="checkbox"/>		INITIAL OBLIGATION FY 1978	ESTIMATED FINAL OBLIGATION FY 1982	ESTIMATED COMPLETION DATE OF PROJECT FY 1983

Goal: To provide a broad base of renewable resources which permit increased and stable agricultural, energy and live-stock production.

Purpose: This project has four primary purposes: 1) to decrease soil degradation at deep-bore water points in the sylvo-pastoral (rangeland) zones, 2) to preserve existing forests and wood resources against uncontrolled bush fires and woodcutting, 3) to prevent further deterioration of soil and reduction of crop yields in Senegal's peanut and millet producing regions, and 4) to conserve and improve the existing forest resources in the Cap-Vert (Thies-Dakar) region.

Background: The degradation of Senegal's land and soil resources due to uncontrolled grazing, wind erosion and excessive use of forest resources is profound. The damage to forests, crops and livestock due to lack of fire control is enormous. Losses of livestock following the drought are placed at 15% of the pre-drought cattle population; productivity in crop production in non-pastoral zones due to uncontrolled burning and soil degradation is evident and will worsen as additional stress is placed upon the environment unless land and soil stabilization is achieved. In 1975-76, two to three million hectares of land were subjected to indiscriminate burning.

A comprehensive integrated program for the stabilization, protection and conservation of renewable land and soil resources is a sine qua non to increased agricultural, live-stock and forestry productivity in Senegal.

<u>Major Outputs:</u>	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>
	(Cumulative as of end of FY)		
Number of supervisors trained	-	7	14
Number of technical personnel trained	-	120	240

<u>Major Outputs (Continued)</u>	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>
Number of farmers contacted by mobile units	-	1,200	2,400
Kilometer of firebreaks constructed	-	540	1,080
Number of tree seedlings produced	-	2 mil.	4 mil.
Number of hectares planted with improved species	-	10,600	22,000
Number of hectares planted with gum arabic	-	400	800
Kilometers of water distribution system constructed	-	40	80
Fire fighting brigades organized	-	20	40

Host Country and Other Donors:

Senegal Salaries of technicians, full and part-time labor costs, buildings, operating costs, land, per diem and travel costs estimated at 400,000 dollars annually.

Peace Corps Four to six volunteers

FY 1978 Program:

	<u>A.I.D. -financed Inputs</u>		
	(\$ Thousands)		
	<u>FY 78</u>	<u>All Years</u>	
<u>Personnel:</u>			
3 Long-term advisors (54 pm)	315	1525	
<u>Training:</u>			
2 Long-term (24 pm)	20	410	
2 Short-term (12 pm)	15	370	
40 In-country (80 pm)	30	981	
<u>Commodities:</u>			
Heavy equipment, trucks, pipes, pumps, storage and water tanks, radios, fencing, fuel, fertilizer, seeds	620	7,800	
Total	1,000	11,086	