

**AGENCY FOR
INTERNATIONAL
DEVELOPMENT**



**ANNUAL BUDGET SUBMISSION
FY 1980**

OFFICE OF FOREIGN DISASTER ASSISTANCE

BUREAU FOR PRIVATE AND DEVELOPMENT COOPERATION

**DEPARTMENT
OF
STATE**

MAY 1978



FY 1980
ANNUAL BUDGET SUBMISSION

OFFICE OF FOREIGN DISASTER ASSISTANCE

Bureau for Private and Development Cooperation

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Annual Budget Submission
FY 1980

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May 26, 1978

MEMORANDUM

TO: AA/PDC (Acting), Mr. Anthony M. Schwarzwald
AA/PPC, Mr. Alexander Shakow

FROM: PDC/OFDA, Anne C. Martindell

SUBJECT: Office of U. S. Foreign Disaster Assistance Annual Budget
Submission

We feel that it is very important that those reviewing the OFDA annual budget submission take into account the following considerations:

1. OFDA firmly believes that expenditures in foreign disaster assistance will be considerably more than the \$25 million requested in the FY 79 Congressional Presentation. Although we have adhered to the CP level for FY 79 in this presentation under 'Current' and 'Minimum' levels, we have revised the 'Expanded' and 'Proposed' levels which reflect additional funds that may be required. OFDA, therefore, expects that in FY 79 the Agency may need to seek either special appropriations or a transfer of funds from other Agency accounts in order to respond to disasters.

A.I.D.'s program budget instructions prevent OFDA from requesting additional funds at the 'Minimum' and 'Current' levels for FY 80 beyond the 'Current' level of the FY 79 Congressional Presentation (\$25 million). However, OFDA firmly believes that the \$25 million level is unrealistic with respect to meeting future disaster assistance needs. In order to be able to adequately respond to global disasters, meet preparedness and prevention needs, conduct post-disaster audits and provide long-term reconstruction assistance in FY 1980, OFDA will require funding at either the 'Expanded' or 'Proposed' levels.

2. OFDA believes that our expenditures will increase because:
 - OFDA is increasingly involved in such long-term disasters as drought.
 - Disaster assistance is being provided for activities which border upon reconstruction and which are extremely costly.
 - Disaster assistance funds are being used to care not only for displaced persons, but also those who border upon refugee status but are not in the strictest sense refugees.
 - OFDA is now trying to respond as early as possible to disaster situations to prevent serious situations from degenerating into all-out and almost unmanageable crises. For this reason, OFDA has, for example, provided such preventive inputs as transportation,

seeds, and insecticides, in order to help head off situations where food cannot be delivered or grown on a timely basis.

- OFDA believes, given the instability in Africa and the Middle East, that U. S. assistance funds will be used increasingly for war victims.
 - OFDA believes there is a correlation between increased population and increased vulnerability to disasters.
3. In order to effectively reduce the possibility of death and suffering prior to the occurrence of some disasters, OFDA believes that preparedness, prevention, and applied research activities should receive significantly increased program expenditures. This will necessitate a reduction of the 'Minimum' and 'Current' FY 19 FY levels of the amounts budgeted for relief and rehabilitation.

This reduction in relief and rehabilitation funds is artificial, however, since the Agency will certainly provide additional funds if disastrous events necessitate expenditures above budgeted levels.

4. The world has no effective early warning system for detecting disasters and monitoring the on-set of such creeping disasters as drought. We believe that our applied research and preparedness projects have the potential and objective of significantly strengthening the existing UN warning system. If we are capable of meeting this objective then we will have achieved a major accomplishment.

TABLE 1 - LONG RANGE PLAN

DECISION UNIT: PDC/OFDA

\$(THOUSANDS)

	FY 19PY ESTIMATE	FY 19CY REQUEST	FY 19BY		PROPOSED	PLANNING PERIOD						
			MINIMUM	CURRENT		EXPANSION	BY+1	BY+2	BY+3	BY+4		
INTERNATIONAL DISASTER ASSISTANCE	29,548	25,000*	21,000*	25,000*	37,500	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Foreign Disaster Relief and Rehabilitation	27,671	21,930	18,920	19,410	30,486	41,525	41,525	41,525	41,525	41,525	41,525	41,525
Disaster Related Applied Research	600	1,430	1,370	2,190	2,797	3,405	3,405	3,405	3,405	3,405	3,405	3,405
International Training Disaster Preparedness and Technical Assistance	350	950	420	2,710	3,545	4,380	4,380	4,380	4,380	4,380	4,380	4,380
Regional Disaster Supply Stockpiles	850	650	250	650	650	650	650	650	650	650	650	650
RSSA-OIH/HEW	77	40	40	40	40	40	40	40	40	40	40	40
PERSONNEL (in workyears) AID/W	24.40	27.20	30.20	35	35	35	35	35	35	35	35	35
CONTRACT, OTHER-	--	--	--	--	--	--	--	--	--	--	--	--
OPERATING EXPENSES	927	986	1,059	1,238	1,253	1,253	1,253	1,253	1,253	1,253	1,253	1,253

*See covering memorandum for discussion of additional funds that may be required beyond these levels.

TABLE III - SUMMARY OF RESOURCES - BY ACTIVITY
 (FUNDING IN \$ 000 AND OPERATING EXPENSES-FUNDED PERSONNEL IN WORKYEARS (XX, X))

ACTIVITY	PY: 1978		CY: 1979		MINIMUM		QUITTED		EXPANSION		PROPOSED	
	FUNDING	PERSONNEL	FUNDING	PERSONNEL	FUNDING	PERSONNEL	FUNDING	PERSONNEL	FUNDING	PERSONNEL	FUNDING	PERSONNEL
		US		FN		US		FN		US		FN
INTERNATIONAL DISASTER ASSISTANCE												
Foreign Disaster Relief and Rehabilitation	27,671	6.50	21,930	8.50	18,920	10.50	19,410	10.50	30,468	10.50	41,525	10.50
Disaster-Related Applied Research	600	3.00	1,430	3.00	1,370	3.00	2,190	4.00	2,797	4.00	3,405	4.00
International Training - Disaster Preparedness and Technical Assistance	350	3.80	950	3.80	420	3.80	2,710	5.80	3,545	5.80	4,380	5.80
Regional Disaster Supply Stockpiles	850	.50	650	.50	250	.50	650	.50	650	.50	650	.50
RSSA-OIH/HEW	77	--	40	--	40	--	40	--	40	--	40	--
TOTALS	29,548	13.80	25,000	15.80	21,000	17.80	25,000	17.80	37,500	17.80	50,000	17.80

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TABLE IV A - Activity Data Narrative

Relief and Rehabilitation

1. Purpose: To provide relief and rehabilitation to the victims of man-made and natural disasters.
2. Background: Disasters can seriously impede the overall development of a nation. Our relief and rehabilitation assistance enables a country to resume quickly its footing and continue with its development. More importantly, our disaster assistance is the most immediate and direct method the USG has to help save lives and reduce the suffering of those affected by such sudden and long-term endemic disasters as earthquakes, war, and drought, respectively.

Project Description

This is an on-going activity. However, a major problem has been the need to respond to disasters before they develop into full-blown crises and to link our relief efforts to long-term development needs. We believe that we have made considerable progress in these areas, particularly in responding to drought. A major issue is providing assistance to countries to which Congress has prohibited the provision of assistance. While disaster assistance funds are considered to be exempt from country specific restrictions in the FAA, we have yet to provide assistance to a country for which there is a specific aid prohibition.

Progress to Date

Our progress has been distinguished by early response to such difficult far reaching disasters as drought; we have also attempted to structure our assistance so that it has long-term impact which can help benefit the overall development of the disaster-struck country.

In the last year, we have obligated \$5.1 million for the Sahel; all of the assistance has been devoted to preventing rather than reacting to a disaster. We have committed an equal amount to provide shelter in India which has been more permanent and appropriate than tents; the provision of the shelter helped to restore quickly the disaster victims to normalcy so that they might continue with their development efforts.

3. Beneficiaries: The target group is disaster victims. This activity saves lives and reduces suffering.
4. Current Year Program

During the year, we expect:

- to aggressively respond to man-made and natural disasters to encourage the U.S. Government and affected nations to respond to disasters for which assistance is not being provided;

- to become more involved in such long-term disasters as drought and to adjust our assistance to have maximum impact on the development process;
- to react not only to disasters, but also to provide early inputs to help prevent serious situations from developing into all-out crises;
- to provide such costly forms of assistance as shelter and to respond to disaster which will require sustained OFDA input over a long period of time; and
- to seek either special appropriation or to have other agency funds transferred into the OFDA account to enable us to respond to disasters.

5. Budget Year Program

- At the minimum level, we would meet only such short-term activities as emergency medical, clothing, food, and some shelter needs. In addition, we would continue to provide early inputs and forms of assistance which have long-term impact.
- At the current level, we could expand our activities to include the rehabilitation of homes and such essential facilities as hospitals and water systems.
- At the expanded level, we could significantly increase our long-term relief efforts which would border on reconstruction assistance.
- At the proposed level, we would significantly expand our activities to include reconstruction. We do not believe it will be necessary to seek special appropriations or to transfer funds into the OFDA account in order to respond to disasters.

6. Major Outputs: The major output is to respond effectively to man-made and natural disasters.

ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
Foreign Disaster Relief and Rehabilitation		OFDA		Minimum		80	
PROJECT NUMBER		APPROPRIATION		INITIAL OBLIGATION		TOTAL COST	
72-1181035		72-1181035		1964		\$309,630*	
				DATE PP/REVISION		DATE NEXT PAR	
				--		--	

		ESTIMATED U. S. DOLLAR COST (\$ 000)											
		PY: 19 78			CY: 19 79			BY: 19 80					
		OBLI - GATION	EXPEN - DITURE	PIPE - LINE	FUNDING PERIOD (FR - TO)	OBLI - GATION	EXPEN - DITURE	PIPE - LINE	FUNDING PERIOD (FR - TO)	OBLI - GATION	EXPEN - DITURE	PIPE - LINE	
ACTIVITY INPUTS													
TOTAL -		27,671	27,671	--	10/01/78 - 09/30/79	19,255	19,255	--	10/01/79 - 09/30/80	18,920	18,920	--	
AID-FINANCED FOREIGN DISASTER RELIEF AND REHABILITATION													
TOTAL -													
HC AND OTHER DONOR													
TOTAL -													

		PERSONNEL WORKYEARS (XX, X)			PERSONNEL INTENSITY		PARTICIPANTS PROGRAMMED		FOOTNOTES	
		FISCAL YEAR			TYPE		TYPE			
		19 78	19 79	19 80	19 81	19 82	A	B		
FUNDING										
PROGRAM ACCOUNT TDY (NON -)										
OPERATING EXPENSES		6½	6½	10½	10½	10½				
AID 1330-8 (3-78)										

*Continuation of Program--estimation of cost.

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE	Foreign Disaster Relief & Rehabilitation	DECISION UNIT	OFDA	DECISION PACKAGE	Current	BUDGET YEAR	80
PROJECT NUMBER	72-1181035	INITIAL OBLIGATION	1964	FINAL OBLIGATION	1985	TOTAL COST	\$309,630*
APPROPRIATION	72-1181035	DATE PP/REVISION		DATE LAST PAR		DATE NEXT PAR	

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	PY: 1978			CY: 1979			BY: 1980			
	OBLIGATION	EXPENDITURE	PIPE-LINE	OBLIGATION	EXPENDITURE	PIPE-LINE	OBLIGATION	EXPENDITURE	PIPE-LINE	
AID-FINANCED FOREIGN DISASTER RELIEF AND REHABILITATION				10/01/78- 09/30/79	2,675	2,675	--	10/01/79- 09/30/80	490	490
TOTAL-										

HC AND OTHER DONOR	PERSONNEL WORKYEARS (XX.X)					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			LIFE OF PROJECT
	1978	1979	1980	1981	1982		TYPE A=NONCONTRACT B=CONTRACT	FISCAL YEAR	FOOTNOTES	
TOTAL-										

FUNDING	FISCAL YEAR					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES
	1978	1979	1980	1981	1982		TYPE A=NONCONTRACT B=CONTRACT	FISCAL YEAR	FOOTNOTES	
PROGRAM ACCOUNT (ADD OPERATING EXPENSES)										
TOTAL-										

TABLE IVB ACTIVITY BUDGET DATA		ACTIVITY TITLE		DECISION UNIT		DECISION FUNDING	
Foreign Disaster Relief and Rehabilitation		OFDA		Expansion		80	
PROJECT NUMBER		APPROPRIATION		INITIAL OBLIGATION		TOTAL COST	
72-1181035		72-1181035		1964		\$309,630*	
				DATE PP/REVISION		DATE LAST PAR	
				--		--	

ACTIVITY INPUTS	CY: 19 78				CY: 19 79				CY: 19 80			
	OBLI - GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)
TOTAL- AID-FINANCED FOREIGN DISASTER RELIEF AND REHABILITATION				10/1/78- 9/30/79	6,778		--	10/1/79- 9/30/80	11,058	11,058	--	
HC AND OTHER DONOR												
TOTAL-												

FUNDING	PERSONNEL WORKYEARS (XX, X)				PARTICIPANTS PROGRAMMED		FOOTNOTES
	1978	1979	1980	1981	1982	BEYOND	
PROGRAM ACCOUNT							
TDY (ADD -)							
OPERATING EXPENSES							

AID 1320-3 (3-73)
 *Continuing program--estimation of cost.

ACTIVITY TITLE

Foreign Disaster Relief and Rehabilitation

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE	OFDA		Proposed		TOTAL COST	
	INITIAL OBLIGATION	1964	FINAL OBLIGATION	1985		\$309,630*
PROJECT NUMBER	APPROPRIATION		DATE LAST PAR		DATE NEXT PAR	
--	72-1181035		--		--	
ESTIMATED U. S. DOLLAR COST (\$ 000)						
ACTIVITY INPUTS	FY 1978		CY: 1979		BY: 1980	
	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE
TOTAL- AID-FINANCED FOREIGN DISASTER RELIEF AND REHABILITATION	--	--	--	10/01/78- 09/30/79	6,777	6,777
				10/01/79- 09/30/80	11,057	11,057
HC AND OTHER DONOR						
TOTAL-						

FUNDING	PERSONNEL WORKYEARS (XX, X)				PARTICIPANTS PROGRAMMED		FOOTNOTES
	19 78	19 79	19 80	19 81	A=NONCONTRACT B=CONTRACT	FISCAL YEAR	
PROGRAM ACCOUNT TDY (ADD -)					LONG- TERM	19	
OPERATING EXPENSES		2			SHORT- TERM		
					LONG- TERM		
					SHORT- TERM		

AID 1330-8 (3-78) Continuing program--estimation of cost.

Table IV A - Activity Data

Stockpiles

1. Purpose

To maintain and provide stocks for four international disaster assistance stockpiles.

2. Background

The stockpiles support our overall relief and rehabilitation strategy by enabling the U.S. Government to respond quickly and economically to disasters. Because of the high cost of air transportation from the United States to the disaster site, prepositioning stocks, which have been sent by surface to stockpiles located in four strategic regions, reduces transportation costs during a disaster when commodities must be airlifted.

Project Description: This is an ongoing activity. Major problems have been the maintenance of the storage areas, commodities, and the stockpiling of medicines. We believe we have overcome these problems by making physical improvements to our stockpiles in Guam and Panama, developing a computerized inventory tracking system, and discontinuing stockpiling medicines.

Progress to Date: Because of our Italy and Singapore disaster relief stockpiles, we are able to provide significant quantities of relief supplies to the victims of the fighting in Lebanon this year. The stockpiles have played major roles in such disasters as the Italy, Guatemala, and Romania earthquakes.

3. Beneficiaries

Victims of man-made and natural disasters.

4. Current Year Programs

In the current year we expect that we will use supplies from our stockpiles to enable us to provide disaster relief on a speedy and economical basis. We expect, therefore, to continue mitigating the suffering of disaster victims through the release of our stocks.

5. Budget Year Program

The minimum level will permit us only to maintain our stockpiles, i.e., pay for the leases and for any maintenance of the storage facilities. At the proposed and current levels, we will be able to add such new supplies to the stockpile as cold weather tents, other forms of emergency shelter, and water purification units.

6. Major Outputs

The major output will be the provision of supplies on a fast and economical basis.

**TABLE IVB
Regional Disaster Supply
Stockpiles
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE	Regional Disaster Supply Stockpiles	DECISION UNIT	OFDA	DECISION PACKAGE	Minimum	BUDGET YEAR	80
PROJECT NUMBER	940-0001	INITIAL OBLIGATION	1968	FINAL OBLIGATION	1985	TOTAL COST	\$8,600*
APPROPRIATION	72-1181035	DATE PP/REVISION	1968	DATE LAST PAR	--	DATE NEXT PAR	--

ESTIMATED U. S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY 19 78		CY: 19 79		FY: 19 80		PIPE-LINE	EXPEN-DITURE	OBLI-GATION	FUNDING PERIOD (FR- TO)	EXPEN-DITURE	OBLI-GATION	PIPE-LINE	EXPEN-DITURE	OBLI-GATION	LIFE OF PROJECT
	OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE										
TOTAL-	850	850	250	250	250	250	--	250	250	10/1/78 - 9/30/79	250	250	--	250	250	--
Regional Disaster Supply Stockpiles																
HC AND OTHER DONOR																
TOTAL-																

PERSONNEL WORKYEARS (XX, X)	PERSONNEL INTENSITY				PARTICIPANTS PROGRAMMED	
	19 78	19 79	19 80	19 81	19 82	BEYOND
FUNDING						
PROGRAM ACCOUNT						
TODY (NON-)						
OPERATING EXPENSES	1/2	1/2	1/2	1/2	1/2	--

AID 1330-8 (3-78)
*Continuing project -- est. of cost.

TABLE IV A - Activity Data Narrative

Preparedness

1. Purpose: To strengthen the capabilities of disaster-prone countries to prepare for and respond to natural and man-made disasters.
2. Background: Many developing countries lack the administrative apparatus, technical skills, and equipment needed to prepare for and respond to disasters. Disasters can cripple the developmental progress of a nation. Disaster preparedness develops human and material resources which can minimize the impact disasters have on both individuals and the over-all development of a nation.

Project Description: Consultation, training, and technical assistance are provided to disaster-prone LDC's. Based on a country's or region's priority of need, OFDA prescribes a mix of seminars, consultations, workshops, and technical projects to meet the unique requirements of the target population. A wide range of U.S. administrative and scientific expertise, from both the public and private sectors, are brought to bear on specific social, economic, political, and technical problems which impede effective preparedness programs. Organization, legislation, funding, warning systems, and mitigation activities are addressed in the appropriate form. Activities to be continued or initiated in FY 1980 include:

- a. Regional Seminars. Focus is on administrative and technological systems as they relate to regional disaster threats (e.g., earthquakes, tropical storms). Seminars and workshops are projected to address needs of Southwest Pacific, Eastern Africa, and Western Caribbean countries, as well as to follow up on current initiatives in Eastern Caribbean, Sahel, and Indian sub-continent.
- b. Technical Assistance. Complementary to large-area seminars, OFDA will conduct more specialized activities to meet specific needs for management and technical development in disaster-prone countries such as Portugal, Peru, and Bangladesh.
- c. Seismic Networks. In conjunction with other U.S. government agencies and private institutions, OFDA will continue to help seismically vulnerable countries apply U.S. technology to measure earthquake risk and thus promote safer land-use and building practices. Central America, the Andean region, and the islands of the Caribbean will benefit in FY 1980.
- d. Disaster Manuals. Significant research efforts and disaster assistance programs over the past several years have yielded valuable information which can benefit all disaster managers. This activity aims at formalizing and classifying the bulk of lessons learned through past experience.
- e. Warning Systems. This activity is designed to develop management and communications links between the technologies of prediction (particularly for storm and flood hazards) and threatened populations.

f. Vulnerability Analysis. Much has been accomplished in recent years in estimating the risk of geographically represented populations from a variety of hazards. In some instances, this has been accomplished on a rough scale for very large areas (macrozonation); in others, it has focused on urban centers (microzonation). This effort represents the first comprehensive approach to defining the vulnerability of disaster-prone countries through successive enlargement of geographic scale on a risk priority basis.

g. Training/Work Study Grants. This activity is intended to complement our technical assistance efforts through grants to individuals and institutions to pursue solutions to specific problem areas such as identification of localized warning system requirements and analysis of disaster relief logistics bottlenecks. The activity will also serve specialized disaster assistance education requirements of LDC disaster managers.

h. Volag Conference. FY 1980 will include the eighth annual conference in which we meet with the major U.S. voluntary agencies to discuss mutual interests and problems confronting the disaster assistance community.

Progress to Date: Since 1969 OFDA has provided training for 132 senior foreign officials through the annual International Disaster Preparedness Seminars. Technical assistance missions have disseminated U.S. expertise in disaster planning to 43 countries. Indications of the efficacy of these training programs may be seen in the increased independence which several of the participating governments have shown from outside donors, notably the Philippines, Brazil, Venezuela, and Tunisia. Perhaps the most significant contribution of OFDA's preparedness activities to date has been the growing awareness on the part of donor and disaster-prone countries alike of the feasibility and benefits of preparedness programs. The annual conference with voluntary agencies similarly has provided understanding of motives, resources, and operating style between OFDA and the U.S. volags.

3. Beneficiaries: The most immediate beneficiaries of OFDA's preparedness activities are the foreign officials who benefit from training and their governments which benefit from increased management and technical capabilities. More important, however, are the ultimate beneficiaries--those who would die or suffer grievous loss were it not for their country's enhanced capacity to prepare for and cope with disasters.

4. Current Year Program

a. Regional Seminars. During FY 1979, we intend to make a significant departure from traditional training programs (that tradition being reflected in the FY 1979 Congressional Presentation). Rather than host a single, generalized seminar in Washington, we will be holding a number of regional seminars to attack the specific problems of the most disaster-prone areas of the world. Because of the lack of precedent for these intensified, localized efforts, considerable preparation time is necessary.

b. Technical assistance. This is an important adjunct to our seminar programs, allowing us to follow up on critical administrative and technical problem areas by detailing U.S. experts to work directly with host country officials on priority problems which impede effective preparedness. The \$45,000 allocated (Current level) for FY 1979 will allow us to field approximately ten technical missions.

c. Seismic Networks. Research and development work in this activity (Fiji, FY 1978) has indicated the applicability of such ground sensing networks to regional earthquake threat analysis. These funds will support development of projects currently planned by regional organizations such as OAS and CERISIS for the Andean and Central American regions and for feasibility studies for a network to cover the highly seismic Caribbean Islands.

d. Disaster Manuals. Classification of critical disaster preparedness problem areas will be accomplished, and monographs written, on priority information needs such as rehabilitation of human settlements; use of indigenous, hazard resistant shelter materials; logistics and delivery systems; resource inventory techniques; and voluntary agency coordination. Contracted technical writers will be employed to pull together information from PDC offices and outside organizations and materials.

e. Warning Systems. OFDA will fund the coordinated efforts of USGS, NOAA, NASA, and others to determine weaknesses in existing global warning systems and to provide fail-safe solutions. The emphasis of this program is on the linkages between proven technological forecasting systems and the victims.

f. Vulnerability Analysis. In FY 1979, initial research will accomplish three objectives to identify the existing worldwide data bases which define vulnerability of disaster-prone countries; to specify additional work to be done on a priority basis; and to describe the state-of-the-art in vulnerability analysis tools (e.g., microzonation, geophysical mapping). This effort will carry on recommendations made by the National Academy of Sciences Committee on International Disaster Assistance.

g. Training/Work Study Grants. Not detailed in the FY 1979 Congressional Presentation, these grants will complement both the Regional Seminar and Technical Assistance activities by allowing host country scientific personnel to upgrade their technical expertise in disaster related studies. It will also allow U.S. institutions to expand their knowledgeability of foreign disaster assistance programs.

h. Volag Conference. As in the past six years, a conference will be held to bring together OFDA and PDC staff with the leading voluntary agencies engaged in disaster assistance activities.

5. Budget Year Program (80) - MINIMUM

a. Regional Seminars. Only one regional seminar will be conducted under the Minimum level. The site would be Indonesia and the participants would be from the Western Pacific Islands. One hundred

thousand dollars (\$100,000) covers travel and per diem of participants and foreign experts, facilities and services at site, and educational materials.

b. Technical Assistance. Five field trips by U.S. Government employees (under PASA) will be allowed by the Minimum.

c. Seismic Networks. The Minimum level will provide low intensity continuation of initial development of the Central American, Andean, and Caribbean networks.

d. Disaster Manuals. Significant funding (\$50,000) will be necessary to develop this critical activity to the level where it can provide a timely, useful, and coordinated end-product.

e. Warning Systems. Fifty thousand dollars (\$50,000) will be the Minimum funding capable of translating Current (FY 1979) problem analysis into a life saving system. The Minimum will allow only the development of a single pilot activity (Bay of Bengal cyclonic/storm surge warning).

f. Vulnerability Analysis. This level of funding will provide only small scale analysis of macro regions and will not address risk patterns of specific populations.

g. Training/Work Study Grants. The Minimum level will allow continuance of the program at the initial pilot level developed in FY 1979.

h. Volag Conference. The Minimum level is adequate to conduct this annual meeting.

-- Budget Year Program (80) - CURRENT

a. Regional Seminars. Funding at the Current level will allow two additional seminars to be held in Eastern Africa and the Western Caribbean islands.

b. Technical Assistance. By reaching the Current level (\$60,000), a coherent program can be developed which will allow relevant USG agencies to provide long term expertise which otherwise would be limited under existing ceiling limitations for foreign assistance.

c. Seismic Networks. The Current level of funding will allow significant emplacement of network hardware in the Central American and Andean regions. A lesser increase (\$200,000) is sought for the Caribbean network since work will necessarily be exploratory in FY 1980.

d. Disaster Manuals. It is recognized there are a limited number of available persons who have background and training relevant to this activity and considerable OFDA guidance will be necessary. Therefore, only a modest increment is sought at the Current level.

e. Warning Systems. The increase of \$175,000 (to \$225,000) requested at the Current level will be necessary to develop the human and technological communications prototypes which are needed immediately to expand worldwide warning capabilities responsive to the variety of geophysical threats. Such prototype systems include hardware, administrative training, and public education in the South Pacific, and Central and South America.

f. Vulnerability Analysis. The Current level (\$100,000) is sought in order to carry the macro-analysis (allowed under the Minimum) to the scale whereby the risk of specific populations in pilot areas (South Asia and Caribbean) can be assessed.

g. Training/Work Study Grants. \$85,000 (total for Current) will allow the propagation of institutional capabilities both in the U.S. and abroad which are precisely responsive to the disaster preparedness training and research needs of donor country and LDC officials.

h. Volag Conference. No additional funds requested.

-- Budget Year Program (80) - EXPANSION

a. Regional Seminars. No additional seminars would be funded under the Expansion level.

b. Technical Assistance. No increase in funds requested.

c. Seismic Network. An additional \$250,000 U.S. input into the Central American and Andean regions would contribute significantly to the USG's proposed share in these projects in FY 1980. No such accelerated effort would be necessary in the Caribbean network.

d. Disaster Manuals. No increase requested.

e. Warning Systems. The large increase (\$225,000 Current to \$435,000) sought at the Expansion level is prompted by universal concern that thousands of lives are needlessly lost each year for lack of effective communications devices and systems. The additional 1/4 of a million dollars requested here will support the establishment of fail-safe systems in some of the most disaster-prone areas of the world. The cost includes deployment of satellite communications devices in remote regions of the Pacific and Caribbean, satellite transmission costs, and public awareness programs. These systems will respond to tropical cyclones, resulting storm surges, and seismic sea waves (tsunamis). At least one staff member could be devoted full-time to this activity.

f. Vulnerability Analysis. An additional \$25,000 is requested for this activity to normalize the USG risk mapping system for some off-shore regions. The cost includes a coordination and publication service at the Defense Mapping Agency and part-time PASA's with NOAA, USGS, and the Smithsonian Institution.

g. Training/Work Study Grants. No increase requested.

h. Volag Conference. No increase requested.

-- Budget Year Program (80) - PROPOSED

a. Regional Seminars. One additional seminar will be funded under the Proposed level. This seminar, which would require two additional staff positions, would deal primarily with earthquake risk in the Mediterranean/Near East seismic zone.

b. Technical Assistance. The \$20,000 increase (to \$80,000) reflects additional concentration on isolated "most at risk" areas such as Portugal and Mauritius.

c. Seismic Network. An additional \$400,000 U.S. input into the Central American and Andean regions would complete the USG's proposed shares in these projects in FY 1980. No such accelerated effort would be necessary in the incipient Caribbean network.

d. Disaster Manuals. No increase requested.

e. Warning Systems. The large increase (\$290,000 Expansion to \$725,000) sought at the Proposed level is prompted by universal concern that thousands of lives are needlessly lost each year for lack of effective communications devices and systems. The additional funding requested here will support the actualization of fail-safe systems in some of the most disaster-prone areas of the world. The cost includes deployment of satellite communications devices in remote regions of the Pacific and Caribbean, satellite transmission costs, and public awareness programs. These systems will respond to tropical cyclones, resulting storm surges, and seismic sea waves (tsunamis).

f. Vulnerability Analysis. An additional \$25,000 is requested for this activity to normalize the USG risk mapping system for off-shore regions. The cost includes a coordination and publication service at the Defense Mapping Agency and part-time PASA's with NOAA, USGS, and the Smithsonian Institution.

g. Training/Work Study Grants. No increase requested.

h. Volag Conference. No increase requested.

6. Major Outputs

a. Regional Seminars. Trained disaster assistance professionals in from 5 to 25 countries; development of disaster plans, disaster legislation, funding mechanisms, and resource inventories in an assumed 40% of those countries; and greatly enhanced donor nation knowledge-ability of contingency requirements, and host country capabilities and resources.

b. Technical Assistance. Improved host country capabilities in scientific and technological disaster prediction, forecasting, mitigation, warning, and response techniques.

- c. Seismic Networks. Earthquake risk data bases capable of generating life-saving standards for land-use planning and building construction.
- d. Disaster Manuals. The first comprehensive, universally applicable compendium of the world's knowledge of proven approaches to disaster preparedness and relief problems.
- e. Warning Systems. Physical and human systems capable of saving tens of thousands of human lives. Global early warning systems developed by OFDA will be incorporated to the maximum extent into the existing UN disaster warning system; we believe our work will dramatically improve the UN system. A major project in 1981 undoubtedly will be identifying how many components of our system can be managed and financed by the UN.
- f. Vulnerability Analysis. Hazard and risk maps of global and localized populations required for comprehensive targeting of disaster preparedness efforts.
- g. Training/Work Study Grants. Proliferation of existing worldwide disaster assistance expertise and concurrent rise in practical application of that expertise.
- h. Volag Conference. Communication of mutual concerns between PDC/OFDA and Volags.

TABLE IVB ACTIVITY BUDGET DATA		ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
International Training-Disaster Preparedness and Technical Assistance		OFDA		minimum		80		TOTAL COST	
PROJECT NUMBER 940-0002		APPROPRIATION 72-1181035		INITIAL OBLIGATION 1970		FINAL OBLIGATION 1985		5,850*	
				DATE PP/REVISION 1970		DATE LAST PAR --		DATE NEXT PAR --	

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY 19 78		CY: 19 79		BY: 19 80		PIPE-LINE	EXPEN-DITURE	PIPE-LINE
	OBLI-GATION	EXPEN-DITURE	FUNDING PERIOD (FR-TO)	PIPE-LINE	OBLI-GATION	FUNDING PERIOD (FR-TO)			
TOTAL	350	350	10/1/78 - 9/30/79	--	350	10/1/79 - 9/30/80	--	350	420
International Training-Disaster preparedness and Technical Assistance									
1. Regional Seminars	60	60		--	100		--	100	100
2. Technical Assistance	50	50		--	15		--	15	20
3. Seismic Network, Cent. Am.	--	--		--	25		--	25	30
4. Seismic Network, Andean	40	40		--	75		--	75	75
5. Seismic Network, Carib.	50	50		--	25		--	25	25
6. Disaster Manuals	50	50		--	30		--	30	30
7. Warning System Development	40	40		--	15		--	15	50
8. Global Vulnerability Analysis	35	35		--	25		--	25	50
9. Training/Work Study Grants	20	20		--	35		--	35	35
10. Volag Conference	5	5		--	5		--	5	5

HC AND OTHER DONOR									
TOTAL	--				--				LIFE OF PROJECT --

FUNDING	PERSONNEL WORKYEARS (XX, X)				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		FOOTNOTES
	19 78	19 79	19 80	19 81		TYPE A=NONCONTRACT B=CONTRACT	FISCAL YEAR	
PROGRAM ACCOUNT					<input checked="" type="checkbox"/> HIGH		19	
TDY (NON-)					<input type="checkbox"/> MEDIUM			
OPERATING EXPENSES	3.80	3.80	3.80	3.80	<input type="checkbox"/> LOW			
TOTAL	3.80	3.80	3.80	3.80				

AID 1330-8 (3-78)

*Continuing project - est. of cost.

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE
International Training-Disaster
Preparedness and Technical Assistance

DECISION UNIT
OFDA
INITIAL OBLIGATION
1970

DECISION PACKAGE
Current
FINAL OBLIGATION
1985

BUDGET YEAR
80
TOTAL COST
5,850*

PROJECT NUMBER
940-0002

APPROPRIATION
72-1181035

DATE PP/REVISION
1970

DATE LAST PAR
--

DATE NEXT PAR
--

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY: 19 78			CY: 19 79			BY: 19 80				
	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE
	TOTAL-										
International Training-Disaster Preparedness and Technical Assistance				10/1/78- 9/30/79	600	600	--	10/1/79- 9/30/80	2290	2290	--
1. Regional Seminars				+	200	200	--	+	200	200	--
2. Technical Assistance				+	30	30	--	+	40	40	--
3. Seismic Network, Cent. Am.				+	50	50	--	+	750	750	--
4. Seismic Network, Andean				+	100	100	--	+	750	750	--
5. Seismic Network, Carib.				+	50	50	--	+	200	200	--
6. Disaster Manuals				+	40	40	--	+	25	25	--
7. Warning System Development				+	50	50	--	+	175	175	--
8. Global Vulnerability Analysis				+	30	30	--	+	100	100	--
9. Training/Work Study Grants				+	50	50	--	+	50	50	--
10. Volag Conference					--	--	--		--	--	--
HC AND OTHER DONOR					--	--					
TOTAL-											

FUNDING	PERSONNEL WORKYEARS (XX, X)				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		FOOTNOTES
	FISCAL YEAR					TYPE		
	19 78	19 79	19 80	19 81		19 82	19 83	
PROGRAM ACCOUNT TDY (ADD OPERATING EXPENSES								
	--	--	2	--	--	--		

AID 1330-8 (3-78)

*Continuing Project - Est. of Cost.

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
International Training-Disaster Preparedness and Technical Assistance		OFDA		Expansion		80	
PROJECT NUMBER		INITIAL OBLIGATION		FINAL OBLIGATION		TOTAL COST	
940-0002		1970		1985		5,850*	
APPROPRIATION		DATE PP/REVISION		DATE LAST PAR		DATE NEXT PAR	
72-1181035		1970		--		--	

ESTIMATED U. S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY 19 78		CY: 19 79		FY: 19 80		PIPE-LINE	EXPEN-DITURE	OBLI-GATION	PIPE-LINE	EXPEN-DITURE	OBLI-GATION
	OBLI-GATION	EXPEN-DITURE	FUNDING PERIOD (FR- TO)	PIPE-LINE	FUNDING PERIOD (FR- TO)	PIPE-LINE						
TOTAL-			10/1/78-9/30/79		10/1/79-9/30/80			218	218		835	835
International Training-Disaster Preparedness and Technical												
1. Regional Seminars				+				50	50			
2. Technical Assistance				+				20	20			
3. Seismic Network, Cent. Am.											250	250
4. Seismic Network, Andean											350	350
5. Seismic Network, Carib.				+				100	100			
6. Disaster Manuals				+				20	20			
7. Warning System Development				+							210	210
8. Global Vulnerability Analysis				+				25	25		25	25
9. Training/Work Study Grants								3	3			
10. Volag Conference												

HC AND OTHER DONOR	TOTAL-		PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		FOOTNOTES
	OBLI-GATION	EXPEN-DITURE		A=NONCONTRACT	B=CONTRACT	

FUNDING	PERSONNEL WORKYEARS (XX, X)			PERSONNEL INTENSITY	TYPE	FISCAL YEAR	
	19 78	19 79	19 80			19 81	19 82
PROGRAM ACCOUNT							
TDY (NON-ADD)							
OPERATING EXPENSES							

AID 1330-8 (3-78)

*Continuing Project-Est. of cost.

Table IV A - Activity Data - Narrative

Applied Research

1. Purpose: To apply existing science and technology to the disaster preparedness, prevention, and relief needs of disaster-prone nations of the world.
2. Background and Project Description: It is known that a great deal of existing science and technology in many disciplines could be applied to the prevention of, or preparedness for, natural and man-made disasters. The following applied research activities are designed to stimulate a wide range of pre-disaster preparedness which will eliminate disasters in some instances and significantly reduce the impact of disasters on the people, infrastructure, and economy of a nation. Activities to be continued or initiated in FY 1980 include:
 - a. Climate Analysis: Sahel, Caribbean. These current FY 1978 activities conducted by the National Oceanic and Atmospheric Administration provide OFDA with weekly weather assessment reports for countries in the Caribbean Basin and the African tropics. These data are to be utilized in conjunction with historical crop yield data to forecast incipient drought conditions which may lead to severe food shortages.
 - b. Climate Analysis: India, Asia. These FY 1979 activities are to be conducted by the National Oceanic and Atmospheric Administration to provide OFDA with weekly weather assessments to be utilized in conjunction with historical precipitation and agricultural data bases to forecast drought conditions and monitor monsoon weather dynamics which may lead to food shortages in Indonesia and the Indian sub-continent.
 - c. Disaster Indicators. The exploration of precursors of impending disasters has been started, as a practical measure of present and future need in an effort to establish improved early warning from the ground through a simple, sensitive report delivery system from the field.
 - d. Disaster Shelter. Disaster victims whose homes have been rendered unusable by a disaster must be protected from the elements. OFDA has delivered its disaster tent to over 68,000 homeless families, sometimes within hours of a disaster. Cheaper, better, universal shelters will be developed under this activity. Also, it helps design shelters which will better withstand earthquakes in LDC's.
 - e. Portable Communications. The development of a portable communications terminal for obtaining early information, including video, in order to make an accurate, meaningful assessment of needs immediately after a major disaster is widening. The need for critical decision-making data was evident for several days following the earthquake in Guatemala.

f. Storm/Flood Forecasting, South Asia. These FY 1979 activities include the development of an automated system to provide tropical cyclone wind threat estimations for the Bay of Bengal and development of an hydrometeorological satellite flood forecasting, storm tracking system for South Asia.

g. Technical Support Contracts

1. Country Profiles. This has been an effort to develop "country profiles" of disaster-prone countries with particular focus on hazard and vulnerability analysis and host country resources.

2. Computer Assisted Data Storage Retrieval and Analysis (CADSRA). The objective has been the development and maintenance of a variety of management information, research and archival data bases.

3. National Academy of Sciences Study (NAS-NRC/CIDA), a study by the Committee on International Disaster Assistance. This is an effort, now in its second year, to provide assistance and guidance to OFDA, to review the U.S. role in international disaster assistance, to identify problems to which scientific and technical knowledge can be applied, to assess the state-of-the-art, and to identify areas of future R&D.

h. Seismic Building Codes, Fiji. This activity will provide scientific and engineering consultation and advice to seismically threatened Fiji regarding the need for, and design of, seismic instrumentation systems, and the applications of data obtained in the enhancement of seismic resistant structural criteria, building standards, and improved land-use. This entails support in the procurement of appropriate instrumentation.

Progress to Date

a. Climate Analysis: Sahel, Caribbean. Precipitation and agricultural historical data bases are being compiled and evaluated for inclusion in crop forecast modelling of Haiti and Senegal.

b. Climate Analysis: India, Asia. Project definition, feasibility, and scope of work are being discussed with NOAA.

c. Disaster Indicators. Some progress has been made identifying variables which, singly or combined, tend to foreshadow changes in, or deterioration of, nature and man--expressed as observable deviation from the norm.

d. Disaster Shelter. The recently established emergency shelter performance requirements have finally focused the world's attention on the immediate shelter needs of disaster victims. Field testing is underway. Engineering work has been completed on the solid fuel disaster stove which can be used in specially designed OFDA tents.

e. Portable Communications. The concept of slow-scan video applied to damage assessment was demonstrated in April 1978. NASA has

developed a program applying space technology to OFDA relief needs. Equipment systems are being designed for portability at reasonable costs.

f. Storm/Flood Forecasting, South Asia. Project definition, feasibility and scope of work are being prepared for evaluation and analysis by U.S. Army Corps of Engineers and Naval Environmental Research and Prediction Facility.

g. Technical Support Contracts

1. Country Profiles. Thirty-two of an arbitrary number of thirty-five country profiles have been completed; a number of these have been revised in 2nd editions.

2. CADSRA. Established files cover OFDA's Historical Analysis (emphasis 1965 to present); Universal Disaster File and Specific Disaster File; Commodity/Services (1965 to present); and Stockpile Inventory.

3. NAS-NRC/CIDA. Two reports have been published by the NAS-NRC/CIDA—The U.S. Government Foreign Disaster Assistance Program, and The Role of Technology in International Disaster Assistance.

h. Seismic Building Codes, Fiji. Cornell University has been given a grant to install earthquake monitoring equipment in the Fiji Islands. Data analyses will lead to strengthened building codes and improved land-use.

3. Beneficiaries

a. Climate Analysis: Sahel, Caribbean. Potential drought/famine disaster victims.

b. Climate Analysis: India, Asia. Potential drought/famine disaster victims.

c. Disaster Indicators. Disaster victims, disaster-stricken governments, and donors.

d. Disaster Shelter. The poorest victims of disasters in developing countries require emergency shelter when major disasters strike. They are least apt to be absorbed by unaffected relatives and have insufficient resources to fend for themselves.

e. Portable Communications. All victims of major foreign disasters will benefit from shortened relief response time. All relief donors will benefit from more accurate, more timely assessment.

f. Storm/Flood Forecasting, South Asia. Potential storm/flood/tidal surge disaster victims.

g. Technical Support Contracts

1. Country Profiles. OFDA operations and preparedness staff; desk officers; mission staff; other A.I.D. and State Department offices; voluntary agencies; and academic and other disaster-related communities.
2. CADSRA. OFDA accounting, research, and operations staff. Other users include World Bank; UNITAR; UNDRO; USGS and other agencies; and academic researchers.
3. NAS-NRC/CIDA. The ultimate beneficiary is the victim. The activity is of immediate benefit to OFDA and to the larger disaster assistance community, national and international.

h. Seismic Building Codes, Fiji. Inhabitants of countries subject to strong seismicity. In time, this form of activity will considerably reduce the catastrophic affects of such events. Data will also lead toward prediction.

4. Current Year Program (79)

- a. Climate Analysis: Sahel, Caribbean. The CY:1979 "current level" represents funding not requested in the 1979 CP. These newly funded PY:1978 activities are to be continued on an operational basis providing OFDA with weekly weather assessments and crop yield forecasts.
- b. Climate Analysis: India, Asia. The CY:1979 "current level" represents funding not requested in the 1979 CP. These new activities to be funded represent an expanded OFDA climate assessment and crop projection/famine early warning system to include the South Asia region.
- c. Disaster Indicators. This phase involves consultation with leading volags on feasibility for field trials; CDC advice; and publication of first attempt at field instrumentation and background material. This is an on-going in-house research effort preliminary to further refinement.
- d. Disaster Shelter. DoD testing laboratories will continue testing proposed new shelters for performance, as planned in CP. In addition, under contract, the Smithsonian Institution will begin evaluation for cultural acceptability of alternative shelter techniques. PS/ENG projects in seismic resistant low-cost shelter construction methods will receive some funding to relate them to reducing seismic risk in earthquake-prone IDC's.
- e. Portable Communications. Development of a lightweight terminal will be continued by NASA, as planned in CP. Demonstrations will be carried out using Communications Technology Satellite in western hemisphere only, in several foreign countries using OFDA Disaster Area Survey Teams. This activity seems to be getting ahead of schedule, will require increased funding.

f. Storm/Flood Forecasting, South Asia. The CY:1979 "current level" represents an increase of \$30,000 over the FY 1979 CP. This is due to an expansion in project definition and technical feasibility analyses of ground data collection, satellite tracking equipment, and image analysis instrumentation.

g. Technical Support Contracts

1. Country Profiles. Major focus is on updating and upgrading of existing studies, preparation of three new profiles and conversion of DM's computer tapes to be compatible with new word-processing equipment.

2. CASDRA. Current and continuing concerns are maintenance of on-going activities; updating, upgrading and fleshing out Historical Analysis 1900 - present time; and improvements in Stockpile Inventory.

In response to a long-felt need, OFDA is developing the data base for a Supplier File; also in the planning phase is a computer program design for a "lessons learned" system.

3. NAS-NRC/CIDA. The current phase reviews appropriate mixes of technologies for pre-disaster hazard monitoring and post-disaster damage assessment, and international coordination problems. Emphasis is on needs of less developed countries and on innovative approaches to extending technologies in light of social, political, and economic constraints.

h. Seismic Building Codes, Fiji. Fiji/Cornell University experts will install, integrate, and test seismic instrumentation in a network. Initial data will be received and be subjected to analysis.

5. Budget Year Program (80) - MINIMUM

a. Climate Analysis: Sahel, Caribbean. Continued operations program will provide weekly weather assessments and project crop yields based on experimental data analyses.

b. Climate Analysis: India, Asia. This would allow initiation of weather assessments and crop yield forecast model development on an experimental basis, and compilation of historical data bases.

c. Disaster Indicators. Focus will be on small-scale field testing of the applicability of indicator checklists.

d. Disaster Shelter. Various shelters will be evaluated (\$60,000) by testing laboratories for performance and by Smithsonian for cultural acceptability. We will coordinate closely with AID/ENG shelter projects.

e. Portable Communications. Configuration of portable terminal will be completed, and field testing on worldwide basis will begin. This

will involve considerable INTELSAT utilization (\$100,000), travel and transport, and design adjustments. This is limited to slow-scan.

f. Storm/Flood Forecasting, South Asia. A strike probability model for cyclonic storm wind threat will be developed in Bay of Bengal region, with additional feasibility analysis of hydrometeorological forecasting of flood/storm tracks in the region.

g. Technical Support Contracts

1. Country Profiles. To assure continuing usefulness of the profiles, attention will be devoted to completion of updating and new make-up (cover, illustrations).

2. CADSRA. Current disaster operations only will be the aim here, in an effort to maintain continuity and integrity of reporting.

3. NAS-NRC/CIDA. Proposed is an in-depth elaboration of one or two topics developed in the upcoming final report.

h. Seismic Building Codes, Fiji. Data collection and analyses will continue minimally.

-- Budget Year Program (80) - CURRENT

a. Climate Analysis: Sahel, Caribbean. Operational program will continue to provide weekly weather assessments and to project crop yields based on upgraded historical data bases, improved ground control, and additional modelling parameters.

b. Climate Analysis: India, Asia. Historical data base compilations, will increase and the project will be expanded to include most of South-east Asia.

c. Disaster Indicators. This includes 'minimum' plus building a network of informants in selected, high-priority areas; feedback to sharpen tool.

d. Disaster Shelter. Minimal participation will be funded in PS/ENG low-cost shelter projects to assure seismic resistant design.

e. Portable Communications: Several slow-scan terminals will be assembled for testing at various overseas sites and at key U.S. agencies (CDC, USGS, UNDPO). EASTs will be mobilized for worldwide testing. INTELSAT access time will be significant in cost (\$150,000).

f. Storm/Flood Forecasting, South Asia. Data Collection Platform testing will be incorporated to verify reliability and maintainability on-site.

g. Technical Support Contracts

1. Country Profiles. We propose to accomplish 'minimum' level described earlier plus further in-depth analysis, and to establish a distribution control system.

2. CADSRA. This includes 'minimum' level described earlier plus upgrading, researching, and fleshing out 1900-present History, plus other improvements in quality of files.

3. NAS-NRC/CIDA. This includes 'minimum' level described earlier plus cross-cultural study of disaster responses.

h. Seismic Building Codes, Fiji. Data will be collected and analyzed to evaluate structural standards.

--- Budget Year Program (80) - EXPANDED

a. Climate Analysis: Sahel, Caribbean. Expanded operational program incorporating the 'current' with expanded data bases and correlations of results with limited analyses of remote sensing imagery test sites.

b. Climate Analysis: India, Asia. Expanded model development and experimental testing to incorporate some remotely sensed data and correlation analyses.

c. Disaster Indicators. 'Current' level described earlier is expanded to include additional emphasis on "marketing" idea through audiences at OFDA's regional seminars and elsewhere.

d. Disaster Shelter. New shelters can be field tested. NBS will begin publishing emergency shelter standards. Some support will be given to disaster prevention elements of A.I.D. low-cost housing projects.

e. Portable Communications. At least one variable speed-scan terminal will be tested at a few foreign sites with a possible conference net (UNDRO, CDC, AmEmbassies, OFDA). Large INTELSAT utilization cost.

f. Storm/Flood Forecasting, South Asia. Implement a portion of flood forecasting program to include ground instrumentation, satellite storm tracking equipment, and telemetry, and continue improving the strike-probability model to include damage parameters.

g. Technical Support Contracts: to be continued at 'current' level. No additional funds requested.

1. Country Profiles. 'Current' level as indicated earlier will be maintained with added thrust of greater outreach with particular focus on fostering maximum feedback from mission and in return greater relevance.

2. CADSRA. Aims are to maintain 'current' level plus effecting computer storage for supplier file of critical commodities, and implementation of "lessons learned" system as feasible.

3. NAS-NRC/CIDA. This will be an exploration of the causes of failure of warnings and warning systems: negative influences in society, politics, etc.

h. Seismic Building Codes, Fiji. Additional training to be provided. Seismic engineering work study grants will be executed.

--- Budget Year Program (80) - PROPOSED

a. Climate Analysis: Sahel, Caribbean. Continued operational program incorporating the expansion with developed data bases and correlations of results with remote sensing imagery analyses.

b. Climate Analysis: India, Asia. Continued model development and experimental testing to incorporate additional remotely sensed data and correlation analyses.

c. Disaster Indicators. Expansion level described earlier is continued emphasis on "marketing" idea through audiences at OFDA's regional seminars and elsewhere. Also important will be promotion in the field and development of baseline data for each area.

d. Disaster Shelter. New shelters will continue to be field tested. NBS will publish emergency shelter standards. Support will be given to disaster prevention elements of A.I.D. low-cost housing projects.

e. Portable Communications. At least one variable speed-scan terminal will be tested at several foreign sites with conference net (UNDRO, CDC, AmEmbassies, OFDA). Large INTELSAT utilization cost anticipated.

f. Storm/Flood Forecasting, South Asia. Implement complete flood forecasting program to include ground instrumentation, satellite storm tracking equipment, and telemetry, and improve strike-probability model to include damage parameters.

g. Technical Support Contracts: to be continued at 'Current' level. No additional funds requested.

1. Country Profiles. 'Current' level as proposed earlier will be maintained with added thrust of serious development of greater outreach with particular focus on fostering maximum feedback from mission and in return greater relevance.

2. CADSRA. Aims are to maintain 'current' level plus effecting computer storage for supplier file of critical commodities, and implementation of "lessons learned" system.

3. NAS-NRC/CIDA. This will be an exploration of the causes of failure of warnings and warning systems: negative influences in society, politics, etc.

h. Seismic Building Codes, Fiji. Additional instrumentation and training to be provided. Seismic engineering work study grants will be executed.

6. Major Outputs

a. Climate Analysis: Sahel, Caribbean. Operational weather assessment and crop forecasting program. Improved operational crop forecasting program based on newly acquired data. Expanded operational programs correlated with remotely sensed and ground verified data.

b. Climate Analysis: India, Asia. Crop yield forecast model based on historical data bases and weekly weather assessments for Indian sub-continent. Increased geographical area to include most of Southeast Asia with improved ground control data. Expanded model ready to be applied operationally in Southeast Asia crop yield forecasting with ground data analysis.

c. Disaster Indicators. The end-product should be a reasonably reliable early warning instrument and delivery system based on simple ground observations to better assess potential needs.

d. Disaster Shelter. The availability and the cost of emergency shelter will be improved. Emergency delivery time will be shortened as new shelter techniques are designed using OFDA performance requirements. Demonstrations of adobe construction methods will reduce hazards of poor people living in seismically active areas in Peru.

e. Portable Communications. Visual, as well as audio, data-facsimile communication between DAST on-site and OFDA, CDC, NRS, UNDRO, USGS, DoD worldwide. Medical experts expect to complete assessment of medical needs in few hours after a disaster. Assessment of external relief needs can be accomplished within hours rather than days, and errors, duplications, and omissions will be reduced, lowering costs of international relief efforts and improving coordination.

f. Storm/Flood Forecasting, South Asia. Cyclonic storm strike probability and wind threat estimation forecast model for Bay of Bengal. Feasibility study of hydrometeorological forecasting of flood/storm tracks in Indian sub-continent. Evaluation of advanced DCP instrumentation on-site. Multilateral program for flood forecasting tidal surge, cyclonic storm tracking, strike probability threat analysis, imagery analysis, automatic data collection, and satellite tracking system.

g. Technical Support Contracts

1. Country Profiles. There will be a new look for the thirty-five Country Profiles. A series of distinct, well-laid-out OFDA publications, which will include maps and other illustrations.

2. CADSRA. OFDA will have the capability for quick response to specific management information queries. Some mathematical machine functions will also be possible. Computer printouts of listings or summary information are common end-products.

3. NAS-NRC/CIDA. Tangible output will be in the form of a final report, as previous monographs published by NAS-NRC.

h. Seismic Building Codes, Fiji. Seismic data; trained scientific, technical, and engineering personnel; building criteria and standards to withstand the normal and anomalous seismic activity of the area.

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
Disaster-Related Applied Research		OFDA		Current		80	
PROJECT NUMBER		APPROPRIATION		FINAL OBLIGATION		TOTAL COST	
940-0003		72-1181035		1976		\$8,150*	
		DATE PP/REVISION		DATE LAST PAR		DATE NEXT PAR	
		1976		---		---	

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY 1978		CY: 1979		BY: 1980		PIPE-LINE	EXPEN-DITURE	OBLI-GATION	FUNDING PERIOD (FR-TO)	OBLI-GATION	EXPEN-DITURE	PIPE-LINE
	OBLI-GATION	EXPEN-DITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLI-GATION	EXPEN-DITURE							
AID-FINANCED													
TOTAL-													
Disaster-Related Applied Research				10/01/78-09/30/79	325	325	--	325	820	10/01/79-09/30/80	820	820	--
1. Climate Analysis; Sahel, Caribbean				+	30	30	--	30	40	+	40	40	--
2. Climate Analysis; India, Asia				+	30	30	--	30	80	+	80	80	--
3. Disaster Indicators				+	25	25	--	25	20	+	20	20	--
4. Disaster Shelter				+	20	20	--	20	30	+	30	30	--
5. Portable Communications				+	100	100	--	100	250	+	250	250	--
6. Storm/Flood Forecasting, South Asia				+	20	20	--	20	350	+	350	350	--
7. Technical Support Contracts				+	50	50	--	50	--	+	--	--	--
8. Seismic Building Codes, Fiji				+	50	50	--	50	50	+	50	50	--
TOTAL-													

HC AND OTHER DONOR	TOTAL-	PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		LIFE OF PROJECT
			A=NONCONTRACT	B=CONTRACT	
			19	19	--

FUNDING	PERSONNEL WORKYEARS (XX.X)			PERSONNEL INTENSITY	TYPE		FISCAL YEAR		FOOTNOTES
	1978	1979	1980		A	B	19	19	
PROGRAM ACCOUNT TDY (NON-OPERATING EXPENSES)				HIGH	LONG-TERM	SHORT-TERM			
				MEDIUM	LONG-TERM	SHORT-TERM			
				LOW	LONG-TERM	SHORT-TERM			

*Continuing project--estimation of cost

**TABLE IVB
ACTIVITY BUDGET
DATA**

Disaster-Related Applied Research
PROJECT NUMBER 940-0003
APPROPRIATION 72-1181035

OFDA Expansion
INITIAL OBLIGATION 1976 \$8,150*
DATE PP/REVISION 1976
DATE LAST PAR 1976
DATE NEXT PAR --

ESTIMATED U. S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY: 1978		CY: 1979		BY: 1980		PIPE-LINE	EXPEN-DITURE	OBLI-GATION	FUNDING PERIOD (FR-TO)	OBLI-GATION	EXPEN-DITURE	PIPE-LINE	EXPEN-DITURE	OBLI-GATION	FUNDING PERIOD (FR-TO)	OBLI-GATION	EXPEN-DITURE	PIPE-LINE				
	OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE														OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE
	TOTAL		TOTAL		TOTAL															TOTAL		TOTAL	
Disaster-Related Applied Research										10/01/78-9/30/79	505	505	--		10/01/79-9/30/80	607	607	--					
1. Climate Analysis; Sahel, Caribbean										+	25	25	--		+	27	27	--					
2. Climate Analysis; India, Asia										+	25	25	--		+	35	35	--					
3. Disaster Indicators										+	30	30	--		+	5	5	--					
4. Disaster Shelter										+	35	35	--		+	30	30	--					
5. Portable Communications										+	35	35	--		+	150	150	--					
6. Storm/Flood Forecasting, South Asia										+	200	200	--		+	350	350	--					
7. Technical Support Contracts										+	140	140	--		+	--	--	--					
8. Seismic Building Codes, Fiji										+	15	15	--		+	10	10	--					
HC AND OTHER DONOR TOTAL																							

FUNDING	PERSONNEL WORKYEARS (XX, X)				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		FOOTNOTES
	FISCAL YEAR					TYPE A=NONCONTRACT B=CONTRACT	FISCAL YEAR	
	1978	1979	1980	1982				
PROGRAM ACCOUNT TOY (NON-)								
OPERATING EXPENSES								

*Continuing project--estimation of cost

AID 1330-8 (3-78)

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE Disaster-Related Applied Research		DECISION UNIT OFDA INITIAL OBLIGATION 1976		DECISION PACKAGE Proposed FINAL OBLIGATION 1985		BUDGET YEAR 80	
PROJECT NUMBER 940-0003		APPROPRIATION 72-1181035		DATE PP/REVISION 1976		TOTAL COST \$8,150*	
		ESTIMATED U. S. DOLLAR COST (\$ 000)		DATE LAST PAR --		DATE NEXT PAR --	

ACTIVITY INPUTS	TOTAL-	PY: 19 78			CY: 19 79			BY: 19 80				
		OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE
Disaster-Related Applied Research					10/01/78- 9/30/79	505	505	--	10/01/79- 9/30/80	608	608	--
1. Climate Analysis; Sahel, Caribbean					+	5	5	--	+	3	3	--
2. Climate Analysis: India, Asia					+	5	5	--	+	5	5	--
3. Disaster Indicators					+	20	20	--	+	15	15	--
4. Disaster Shelter					+	15	15	--	+	20	20	--
5. Portable Communications					+	65	65	--	+	150	150	--
6. Storm/Flood Forecasting, South Asia					+	300	300	--	+	400	400	--
7. Technical Support Contracts					+	60	60	--	+	--	--	--
8. Seismic Building Codes, Fiji					+	35	35	--	+	15	15	--
HC AND OTHER DONOR	TOTAL-											

FUNDING	PERSONNEL WORKYEARS (XX.X)					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES
	19 78	19 79	19 80	19 81	19 82		TYPE A=NONCONTRACT B=CONTRACT	FISCAL YEAR	FISCAL YEAR	
PROGRAM ACCOUNT TDY (NON- ADD)						<input checked="" type="checkbox"/> HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW				
OPERATING EXPENSES										

Table IV A - Activity Data - Narrative

RSSA - Health Advisor

1. Purpose

To provide the Office of U.S. Foreign Disaster Assistance (OFDA) with the capability to respond to the medical requirements of the U.S. international disaster assistance programs.

2. Background

Professional medical advice is needed in preparing for, assessing, and responding to disasters. Since 1970, the Office of U.S. Foreign Disaster Assistance has utilized the services of a medical officer on a full-time basis. This officer has been provided under a Resources Services Support Agreement (RSSA) with the Department of Health, Education, and Welfare (HEW).

Project Description: This is an ongoing activity.

3. Beneficiaries

The target group is disaster victims; they are benefitted by having their health concerns automatically factored into our overall relief effort.

Progress to Date

Activities accomplished under this agreement include:

- medical matters involved in all types of natural and man-made disasters needing assistance such as epidemiologists, burn specialists, and specialized hospitals;
- epidemiological surveillance and disease control;
- guidance on regional stockpiles of medical supplies; and
- liaison with the worldwide medical community.

4. Current Year

In the current year, we expect the medical officer to continue to help OFDA ensure that there is an appropriate health input into its preparedness and relief operations. We also expect the medical officer to develop a catalogue of the major lessons learned in the disaster/health field which can be applied to future relief operations.

5. Budget

The results at all three decision packages are the same, i.e., the provision of an adequate health input into our preparedness and relief operations.

6. Major Outputs: The major output will be to ensure that all significant health considerations are taken into account in the U.S. Government preparedness and relief efforts.

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE		RSSA - Health Advisor		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
PROJECT NUMBER		HEW/OIH 4-74		OFDA		Minimum		80	
APPROPRIATION		72-1181035		INITIAL OBLIGATION		1985		TOTAL COST	
DATE PP/REVISION		1974		DATE PP/REVISION		1985		\$477*	
DATE LAST PAR		1974		DATE LAST PAR		1985		DATE NEXT PAR	
DATE NEXT PAR		1974		DATE NEXT PAR		1985		DATE NEXT PAR	

ESTIMATED U. S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	PY: 19 78		CY: 19 79		BY: 19 80		PIPE-LINE	EXPEN-DITURE	OBLI-GATION	FUNDING PERIOD (FR- TO)	PIPE-LINE	EXPEN-DITURE	OBLI-GATION	FUNDING PERIOD (FR- TO)	PIPE-LINE	EXPEN-DITURE	OBLI-GATION
	OBLI - GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE											
AID-FINANCED	40	40	---	10/1/78 - 9/30/79	400	400	---	400	400	10/1/79 - 9/30/80	---	400	400	---	---	---	---
TOTAL-																	
RSSA - Health Advisor																	
HC AND OTHER DONOR																	
TOTAL-																	

PERSONNEL WORKYEARS (XX, X)	FISCAL YEAR				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		FOOTNOTES
	19 78	19 79	19 80	19 81		A=NONCONTRACT	B=CONTRACT	
FUNDING								
PROGRAM ACCOUNT TOY (ADD -)								
OPERATING EXPENSES								

AID 1330-8 (3-78)

*Continuing project - est. of cost.

DECISION UNIT OVERVIEW

A. Program Goals and Strategy for U.S. Assistance

Our overall goal is to save lives and reduce the suffering caused by man-made and natural disasters. In meeting this broad goal, our objectives are to provide relief and rehabilitation to peoples and to nations affected by man-made and natural disasters; to assist nations to prepare to respond to disasters; and to devise means to help prevent the occurrence of disasters.

Our strategy relies upon three basic elements: to monitor all potential and actual disasters to enable as early a response as possible before serious situations degenerate into almost unmanageable crises; to provide relief and rehabilitation through a mixture of bilateral, multilateral, and voluntary agency channels; and to assist nations to prepare for and to prevent disasters through a combination of practical regional preparedness workshops, technical assistance missions, and the application of such applied technology as seismic monitoring and crop yield forecasting to the needs of the disaster-prone country.

B. Alternative Objective

Alternative objectives would be a modification or expansion of the objectives discussed in the previous section:

- . to expand the scope of the disaster relief program from short-term to long-term assistance.
- . to change the policy definition of man-made disasters to include oil spills, plane crashes, nuclear accidents, etc.
- . to reduce our relief efforts significantly and to respond only to emergencies immediately following disasters.
- . to provide assistance on either a bilateral or multilateral basis.

C. Alternative Programs

In order to accomplish the above optional objectives, we could:

- . provide funds for administrative support and for relief efforts to the major international organizations (ICRC, UNHCR, UNDRO) and U.S. voluntary agencies (CRS, CWS, CARE, Lutheran World Relief, Seventh Day Adventists) involved in disaster assistance.
- . enlarge our preparedness and prevention programs by increasing the number of technical assistance missions; by developing new, pragmatic course material for regional workshops; and by increasing our efforts to apply technology and science to anticipate, to detect, and to monitor disasters. In this regard, OFDA could take the lead in developing an integrated, worldwide disaster warning system for the U.N.

D. Alternative Budget Levels

- . In the area of relief and rehabilitation, it is difficult to predict our annual expenditures. However, if the short-term nature of our assistance was altered to include reconstruction, annual expenditures would be significantly increased.
- . Expenditures could be increased if OFDA were to become involved in a variety of industrial/commercial-type disasters such as oil spills, toxic contaminations, etc.
- . If we limit our relief efforts to emergency responses the few days following a disaster, the amount we obligate could be substantially reduced.
- . Providing assistance only on a bilateral basis could prove to be very expensive. Multilateral channels somewhat reduce the need for U.S. staff and administrative support. And, if we operate only on a multilateral basis, we believe our relief expenditures would decline. Our reasons on this would be presented better orally.
- . If we concentrated only on preparedness to the exclusion of relief, expenditures could decline dramatically. Our preparedness and prevention efforts, however, could range between \$2 million and \$10 million.

E. Review of Past Performance

In the area of relief and rehabilitation, we believe we have been very effective. We are developing a capacity to anticipate serious problem areas and have been moving into the relatively new area of heading off serious problems before they become crises. This particularly applies to the area of emergency response. We have improved our response systems and have improved management controls for handling such breaking disasters as earthquakes. We also are placing emphasis on profiting from the lessons of past disasters. We are compiling our major "lessons learned" and will enter them into our computer system. Once we have done this, we feel it will considerably improve our relief effort capability.

In the last year, significant improvements have been made in the preparedness and prevention field in developing specific, pragmatic activities; we are at a turning point in our efforts. In the past, our programs have concentrated primarily on technical assistance missions and an annual six-week disaster preparedness seminar in Washington. Now we intend to hold workshops in the field which address the specific needs of a region. Additionally, we are undertaking a number of projects to apply science and technology to the needs of the disaster-prone nations.

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45

F. Impact of Adopting Alternative Strategy

We believe that our objectives and strategy are flexible and well suited to reduce the suffering of disaster victims. We do not anticipate taking only a bilateral or a multilateral approach; if we did provide assistance only through multilateral organizations, disaster victims in many cases would be deprived of the benefit of the U.S. Government's immediate response capability. We do not think the Congress would permit us to operate only multilaterally. On the other hand, if we decided only to provide assistance bilaterally, we would be deprived of the use of such organizations as the International Committee of the Red Cross, our prime channels of assistance to war victims. Finally, if we abandon our preparedness and prevention efforts, we lose the only way we have to help save lives and to reduce suffering before disasters strike.

OFDA Decision Package Overview

To facilitate review of the proposed levels for BY 80, the following overview is provided:

a. With increased population and more people living in less habitable locations, we believe that there will be an increased number of people vulnerable to natural disasters. We also feel that population pressures, coupled with unstable political conditions in Africa, the Middle East, and Asia, may very well continue into BY 80; such events will necessitate continued and increased assistance for war victims.

b. We are proposing that the overall disaster assistance program for FY 79 be increased to \$40 million or by \$15 million over the FY 79 CP level of \$25 million. At the proposed level for FY 80, we are seeking an overall program of \$50 million. We are proposing these increases, not only because of the assumptions expressed in the above section, but also because we believe that the overall disaster assistance program needs to take a broader and more comprehensive approach to disaster assistance than it has done. Therefore, in the area of relief and rehabilitation, we believe additional funds will be needed to not only react to disasters, but also provide assistance which will help head off serious situations in their initial stages, as well as provide assistance which meets such long-term needs as shelter.

c. We feel that our preparedness and prevention programs have not been sufficiently developed to respond to the very pressing global needs for assistance in this area. In essence, we feel that preparedness and prevention represent a significant opportunity for the U.S. Government to help prevent deaths and mitigate suffering before a disaster strikes. For this reason, of the \$15 million proposed level increase in FY 79, we are requesting that our preparedness and applied research activities be increased from approximately \$1 million to \$4 million. We have developed the programs which can only be implemented with these funds. For FY 80, we propose that our preparedness and applied research programs be increased at the proposed level by approximately an additional \$7 million. Considering the huge cost of disasters in both human and financial terms, we believe that this investment is appropriate and proportionate to our disaster assistance efforts. Moreover, our disaster relief and preparedness efforts should be considered as relating the disaster assistance program to the overall development effort of a disaster-struck or disaster-prone nation.

d. In FY 79, we are asking for an increase of four professionals, one part-time clerical and one full-time clerical in our operations branch. This staff is needed to perform field work, conduct post disaster audits and handle long-term assistance. In FY 80, we are asking for an additional three professionals, one full-time and one part-time secretary in the preparedness branch. These professionals are needed to conduct technical assistance missions and workshops and monitor our applied research activities.

Zero Based Budget

SUMMARY OF FUNDING

	<u>Congressional Presentation</u>	<u>Minimum</u>	<u>Current</u>	<u>Expansion</u>	<u>Proposed</u>
CURRENT YEAR 1979	25,000,000	21,000,000	25,000,000	32,500,000	40,000,000
Relief & Rehabilitation	23,360,000	19,255,000	21,930,000	28,708,000	35,485,000
Applied Research	600,000	1,105,000	1,430,000	1,935,000	2,440,000
Preparedness	350,000	350,000	950,000	1,168,000	1,385,000
Disaster Stockpiles	650,000	250,000	650,000	650,000	650,000
Medical RSSA	40,000	40,000	40,000	40,000	40,000
BUDGET YEAR 1980		21,000,000	25,000,000	37,500,000	50,000,000
Relief & Rehabilitation		18,920,000	19,410,000	30,468,000	41,525,000
Applied Research		1,370,000	2,190,000	2,797,000	3,405,000
Preparedness		420,000	2,710,000	3,545,000	4,380,000
Disaster Stockpiles		250,000	650,000	650,000	650,000
Medical RSSA		40,000	40,000	40,000	40,000

DECISION UNIT PDC/OFDA

FY 198Y ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION PACKAGE Minimum

ACTIVITY DESCRIPTION

International Disaster Assistance Program -- to provide assistance for the relief and rehabilitation of people and countries affected by man-made and natural disasters, including assistance related to disaster preparedness, and to the prediction of and contingency planning for, natural disasters abroad.

	19PY	19CY	198Y	
			<u>THIS PACKAGE</u>	<u>CUMULATIVE TOTAL</u>
Foreign Disaster Relief and Rehabilitation	27,671	19,255	18,920	20,290
Disaster Related Applied Research	600	1,105	1,370	20,290
International Training - Disaster Preparedness and Technical Assistance	350	350	420	20,710
Regional Disaster Supply Stockpiles	850	250	250	20,960
RSSA-OIH/HEW	77	40	40	21,000
Total Program	29,548	21,000		
<u>Employment - Full-time Permanent:</u>				
U.S. Direct Hire	22	22	27	27
Foreign Nationals	--	--	--	--
TDY	--	--	--	--
TOTAL	<u>22</u>	<u>22</u>	<u>27</u>	<u>27</u>

FIVE YEAR PROJECTIONS

Program Personnel (in workyears)	BY	BY+1	BY+2	BY+3	BY+4
	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000
AID/w	30.20	30.20	30.20	30.20	30.20

FY 1980 Annual Budget Submission

Decision Unit: OFDA

Decision Package: Minimum

Short-term Objectives: At the Minimum level, the short-term objectives include the following:

- . Provide emergency relief to disaster victims and provide forms of assistance which can head off serious situations before they degenerate into crises; the assistance will also be able to have in some cases long-term developmental impact.
- . Provide limited rehabilitation in the form of indigenous emergency shelter only.
- . Maintain leased space only in stockpile warehouses.
- . Retain staff (RASA) medical complement.
- . Continue weather/crop forecasts in Africa and Caribbean.
- . Initiate weather assessments and crop forecasts in most vulnerable regions of Southeast Asia.
- . Conduct limited field tests to validate disaster indicators.
- . Configure NASA portable disaster communications terminal and begin limited field tests.
- . Develop an initial strike probability model for cyclonic storm wind threat and initiate flood/storm forecast feasibility study.
- . Continue technical support contracts with National Academy of Sciences and contractor providing computer support.
- . Continue limited seismic data analysis in Fiji.
- . Provide training for a limited number of disaster managers by conducting one regional seminar.
- . Develop disaster plans for several countries.
- . Provide limited technical assistance.
- . Continue systems design work for developing seismic networks.
- . Compile and publish several elementary disaster manuals.
- . Implement and test a prototype warning system in India sub-continent.

- . Conduct limited analysis of large area vulnerability mapping.
- . Provide limited academic training for several disaster managers.
- . Conduct small conference with appropriate voluntary agencies.

Impact on Major Objectives: At the Minimum level, we can meet the major objective set forth in the Decision Unit Overview only if there are relatively few disasters in 1980. While we would have preferred seeking more funds for relief and rehabilitation at the Minimum level, we are constrained by the PPC requirement to keep the Minimum at or below the FY 1979 CP level. Frankly, we feel that at the Minimum level we will have to seek special appropriations during the year to respond to disasters. In the areas of preparedness and applied research, we will only be able to initiate or continue activities which allow us to meet certain primary objectives. Thus, we will not be able to consummate the proposed applied research and preparedness activities to the benefit of millions in need.

Other Information: Funding at the Minimum level will not allow complete development of crop yield projection techniques and data base compilations. Thus, whether or not the forecasts remain valid in the future in terms of accuracy and consistency will remain unanswered. To delay the proof of this potentially important component of a global food shortage early warning system is, in our view, a serious mistake. Similarly, the development of the techniques to be devised for forecasting storm strike probabilities and floods will remain in an experimental mode meaning further delays in proliferating this life-saving methodology beyond the initial experimentation.

FY 198Y ANNUAL BUDGET SUBMISSION

DECISION UNIT PDC/OFDA

DECISION PACKAGE Current

ACTIVITY DESCRIPTION

International Disaster Assistance Program -- to provide assistance for the relief and rehabilitation of people and countries affected by man-made and natural disasters, including assistance related to disaster preparedness, and to the prediction of and contingency planning for, natural disasters abroad.

	198Y	198Y	198Y	198Y
			<u>THIS PACKAGE</u>	<u>CUMULATIVE TOTAL</u>
Foreign Disaster Relief and Rehabilitation	27,671	21,930	490	21,490
Disaster Related Applied Research	600	1,430	820	22,310
International Training - Disaster Preparedness and Technical Assistance	350	950	2,290	24,600
Regional Disaster Supply Stockpiles	850	650	400	25,000
RSSA-OIH/HEW	77	40	-	25,000
Total Program	29,548	25,000		
Employment - Full-time Permanent:				
U.S. Direct Hire	22	24	4	31
Foreign Nationals	--	--	--	--
TDY	--	--	--	--
TOTAL	22	24	4	31

FIVE YEAR PROJECTIONS

	BY	BY+1	BY+2	BY+3	BY+
Program Personnel (in workyears)	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
AID/W	35	35	35	35	35

FY 1980 Annual Budget Submission

Decision Unit: OFDA

Decision Package: Current

Short-term Objectives: At the Current level, the short-term objectives include the following:

- . Provide required emergency relief to disaster victims to meet basic human needs.
- . Provide extended rehabilitation assistance in the form of improved low-cost shelter, seismic emergency housing, and essential infrastructure.
- . Maintain leased space in stockpile warehouses with possible expansion option.
- . Retain staff (RASA) medical complement.
- . Continue operational weather/crop yield forecasts in Africa and the Caribbean and upgrade data bases to include ground correlation analyses.
- . Continue weather assessments and crop forecast and compile expanded historical data bases for most of Southeast Asia.
- . Develop an informant network to begin feedback analysis of disaster precursor data.
- . Continue overseas testing of several slow-scan communications terminals using INTELSAT access time.
- . Develop an initial strike probability model for cyclonic storm wind threat and initiate flood/storm forecast feasibility study to include on-site Data Collection Platform reliability testing.
- . Continue expanded technical support contracts with National Academy of Sciences and company providing computer support to provide in-depth country profile analysis and to establish a distribution control system.
- . Continue seismic data collection and analysis leading to development of building codes and structural criteria in Fiji.
- . Provide training for up to 130 disaster managers in three (3) preparedness seminars, technical assistance missions and educational grant activities.
- . Develop disaster plans and expand number of countries participating in training activities.
- . Provide expanded technical assistance as required.

- . Engineer and install basic seismic network hardware in Andean and Central American regions.
- . Publish expanded disaster manuals.
- . Implement and test warning systems in Bay of Bengal, Southern Pacific and Latin America.
- . Conduct large area vulnerability mapping and regional micro-zonation.
- . Provide academic training for disaster managers and initiate institutional research studies.
- . Conduct conference with voluntary agencies.

Impact on Major Objectives

At this level, we still foresee the need to request special appropriations or transferring funds from other agency accounts in order to respond fully to disasters. Efficiency of operation would be somewhat enhanced, at this level due to increased and diversified stock-pile inventories. Implications for preparedness and applied research programs are significant, since the bulk of activities will be carried to completion or to the threshold at which expanded programs can be initiated.

Other Information

The Current level will support long-term activity bordering on reconstruction. Although considerable progress will be made in developing effective warning systems, the implementation will be limited geographically, exposing large, disaster-threatened populations to needless death and suffering. Most of the applied research activities, while being escalated, will not achieve their full potential based on state-of-the-art science and technology.

ACTIVITY DESCRIPTION

International Disaster Assistance Program -- to provide assistance for the relief and rehabilitation of people and countries affected by man-made and natural disasters, including assistance related to disaster preparedness, and to the prediction of and contingency planning for, natural disasters abroad.

	19BY				CUMULATIVE TOTAL
	19PY	19CY	THIS PACKAGE	THIS PACKAGE	
Foreign Disaster Relief and Rehabilitation	27,671	27,708	11,058	36,058	
Disaster Related Applied Research	600	1,935	607	36,655	
International Training - Disaster Preparedness and Technical Assistance	350	1,168	835	37,500	
Regional Disaster Supply Stockpiles	850	650	-	37,500	
RSSA - OIH/HEW	77	40	-	37,500	
Total Program	29,548	32,500			
Employment - Full-time Permanent:					
U.S. Direct Hire	22	27	-	31	
Foreign Nationals	--	--	--	--	
TDY	--	--	--	--	
TOTAL	22	27		31	

FIVE YEAR PROJECTIONS

	BY	BY+1	BY+2	BY+3	BY+4
Program Personnel (in workyears)	\$37,500	\$37,500	\$37,500	\$37,500	\$37,500
AID/W	35	35	35	35	35

FY 1980 Annual Budget Submission

Decision Unit: OFDA

Decision Package: Expansion

Short-term Objectives: At the Expansion level, the short-term objectives include the following:

- . Provide expanded emergency relief to disaster victims through advanced remote communications, assessments, improved shelter and medical options, and coordination/distribution systems.
- . Provide for extended rehabilitation with phased reconstruction options to include infrastructure development and low-cost housing implementation based on new shelter field testing.
- . Increase leased space in stockpile warehouses to include additional stocks and new technology options such as water purification equipment.
- . Retain staff (RASA) medical complement.
- . Expand operational Caribbean and African weather/crop yield forecast program incorporating expanded data bases and correlations with remote sensing imagery analyses.
- . Expand weather/crop forecast programs in S.F. Asia to include ground correlations, expanded data bases, and remote sensing imagery analysis.
- . Conduct field testing and validation of disaster indicator instrument with emphasis on concept promulgation and adaptation to regional requirements.
- . Conduct foreign on-site testing of variable speed-scan terminal in conference network incurring large INTELSAT costs.
- . Implement a portion of Indian sub-continent flood forecasting program to include ground instrumentation, satellite storm tracking equipment, and telemetry, and improve cyclone strike-probability model to include damage parameters.
- . Continue expanded technical support contracts (no additional funds necessary at this level) with National Academy of Sciences and company providing computer support to provide in-depth country profiles analysis, distribution control system, and lessons learned computer file.
- . Continue seismic data collection and analysis leading to development of building codes and structural criteria to include in land-use and disaster preparedness planning in Fiji.
- . Train up to 160 foreign disaster managers in seminars, technical assistance missions, and work study activities.

- . Develop disaster plans for the 30 countries participating in training activities.
- . Provide technical assistance as requested.
- . Continue developing Central American and Andean seismic networks and complete plans for Caribbean networks.
- . Complete and disseminate comprehensive disaster manuals.
- . Establish and maintain multi-regional, satellite communications oriented disaster warning system.
- . Prepare large-scale risk maps of select off-shore hazard-prone regions, in addition to large-area vulnerability mapping and regional microzonation.
- . Maintain academic training through work study grants.
- . Conduct voluntary agency conference.

Impact on Major Objectives

At the Expansion level, most major objectives described in the Decision Unit Overview are attainable. In the areas of relief and rehabilitation, we will be providing longer-term assistance, bordering on reconstruction. We definitely will be able to support select reconstruction-type activities, perform several post-disaster audits and increase the number of disaster assistance missions. At the Expansion level, technical assistance, in general, becomes a more dynamic goal in which in-country preparedness is promoted, new training approaches for national disaster managers are utilized, seismic network activities are further developed, and global warning systems are established where feasible. In Applied Research, there is equal acceleration of activities: (1) to correlate precipitation data with crop yields to develop forecast models; (2) to improve emergency shelter options; (3) to accelerate work on a Bay of Bengal Cyclone Strike Probability Model; and (4) to expand the NASA communications network to certain disaster-prone areas of the world.

Other Information

At the Expansion level, world disaster assistance activity significantly increases. This is consistent with expanding international interest in disaster assistance and technology and clearly emphasizes the importance that should be placed on these humanitarian programs by the U.S. Government. It may be anticipated that other donor nations and organizations will attempt to emulate our increased pace to the greater benefit of the millions of disaster victims created each year.

FY 198Y ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT PDC/OFDA

DECISION PACKAGE Proposed

ACTIVITY DESCRIPTION

International Disaster Assistance Program -- to provide assistance for the relief and rehabilitation of people and countries affected by man-made and natural disasters, including assistance related to disaster preparedness, and to the prediction of and contingency planning for, natural disasters abroad.

	198Y				198Y		CUMULATIVE TOTAL
	19PY	19CY	THIS PACKAGE	19CY	THIS PACKAGE		
Foreign Disaster Relief and Rehabilitation	27,671	35,485	11,057	35,485	11,057	48,557	
Disaster Related Applied Research	600	2,440	608	2,440	608	49,165	
International Training - Disaster Preparedness and Technical Assistance	350	1,385	835	1,385	835	50,000	
Regional Disaster Supply Stockpiles	850	650	-	650	-	50,000	
RSSA - OIH/HEW	77	40	-	40	-	50,000	
Total Program	29,548	40,000	-	40,000	-	50,000	
<u>Employment - Full-time Permanent:</u>							
U.S. Direct Hire	22	27	-	27	-	31	
Foreign Nationals	--	--	--	--	--	--	
TDY	--	--	--	--	--	--	
TOTAL	22	27	-	27	-	31	
<u>FIVE YEAR PROJECTIONS</u>							
Program Personnel (in workyears)	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
AID/W	35	35	35	35	35	35	

FY 1980 Annual Budget Submission

Decision Unit: OFDA

Decision Package: Proposed

Short-term Objectives: At the Proposed level, the short-term objectives include the following:

- . Provide expanded emergency relief to disaster victims through advanced remote communications, assessments, improved shelter and medical options, and coordination/distribution systems.
- . Provide for extended rehabilitation with phased reconstruction options to include infrastructure development and low-cost housing implementation based on new shelter field testing.
- . Increase leased space in stockpile warehouses to include additional stocks and new technology options such as water purification equipment.
- . Retain staff (RASA) medical complement.
- . Expand operational Caribbean and African weather/crop yield forecast program incorporating expanded data bases and correlations with remote sensing imagery analyses.
- . Expand weather/crop forecast programs in Southeast Asia to include ground correlations, expanded data bases, and remote sensing imagery analysis.
- . Conduct extensive field testing and validation of disaster indicator instrument with emphasis on concept promulgation and adaptation to regional requirements.
- . Conduct extensive foreign on-site testing of variable speed-scan terminal in conference network incurring large INTELSAT costs.
- . Implement major portion of Indian sub-continent flood forecasting program to include ground instrumentation, satellite storm tracking equipment, and telemetry, and improve cyclone strike-probability model to include damage parameters.
- . Continue expanded technical support contracts with National Academy of Sciences and company providing computer support to provide in-depth country profiles analysis, distribution control system, and lessons learned computer file.
- . Continue seismic data collection and analysis leading to development of building codes and structural criteria to include in land use and disaster preparedness planning in Fiji.

- . Train up to 200 foreign disaster managers in seminars, technical assistance missions and work study activities.
- . Develop disaster plans for the 45 countries participating in training activities.
- . Provide technical assistance as requested.
- . Complete Central American and Andean seismic networks and complete plans for Caribbean networks.
- . Complete and disseminate comprehensive disaster manuals.
- . Establish and maintain multi-regional, satellite communications oriented disaster warning system.
- . Prepare large-scale risk maps of off-shore hazard-prone regions, in addition to large-area vulnerability mapping and regional microzonation.
- . Maintain academic training through work study grants.
- . Conduct voluntary agency conference.

Impact on Major Objectives

At the Proposed level, all major objectives described in the Decision Unit Overview are attainable. In the areas of relief and rehabilitation, we will be providing longer-term assistance, including reconstruction. We definitely will be able to support reconstruction activities, perform post-disaster audits and increase the number of disaster assistance missions. We do not believe we will have to seek a special appropriation or drawdown on other A.I.D. accounts in order to respond to disasters. At the Proposed Level, technical assistance, in general, becomes a dynamic goal in which in-country preparedness is strongly promoted, new training approaches for national disaster managers are utilized, all seismic network activities are fully developed, and global warning systems are implemented. In Applied Research, there is equal acceleration of activities: (1) to correlate precipitation data with crop yields to develop forecast models; (2) to improve emergency shelter options; (3) to accelerate work on a Bay of Bengal Cyclone Strike Probability Model; and (4) to expand the NASA communications network to disaster-prone areas of the world.

Other Information

At the Proposed level, world disaster assistance activity increases measurably. This is consistent with expanding international interest in disaster assistance and technology and clearly emphasizes the great importance that should be placed on these humanitarian programs by the U.S. Government. It may be anticipated that other donor nations and organizations will attempt to emulate our increased pace to the greater benefit of the millions of disaster victims created each year.

TABLE V - PROPOSED PROGRAM RANKING

DECISION UNIT
PDC/OFDA

NAME OF DECISION PACKAGE SET
International Disaster Assistance

RANK	DECISION PACKAGES / PROGRAM ACTIVITY / SUPPORT ITEM	APPROPRIATE ACCT	PERSONNEL INTENSITY	MISSION	OPERATING EXPENSES	WORKYEARS FUNDED FROM	RESOURCE REQUIREMENTS		PROGRAM FUNDING	INCREMENT CUMULATIVE
							TDY	ACCOUNT		
<u>DECISION PACKAGE - MINIMUM</u>										
1.	- Foreign Disaster Relief and Rehabilitation (GO)	DR	H	10.50	-	-	-	18,920	-	-
2.	940-0001 - Regional Disaster Supply Stockpiles (GO)	"	M	.50	-	-	-	250	19,170	-
3.	940-0002 - International Training - Disaster Preparedness and Technical Assistance (GO)	"	H	3.80	-	-	-	420	19,590	-
4.	940-0003 - Disaster-Related Applied Research (GO)	"	H	3.00	-	-	-	1,370	20,960	-
5.	HEW/OIH 4-74 - RSSA (GO)	"	M	-	-	-	-	40	21,000	-
	Summary by Personnel Intensity: Medium (2 Projects) High (3 Projects)			(.50) (17.30)	-	-	-	(290) (39,710)	-	-
	TOTAL			(17.80)	-	-	-	(21,000)	-	-
<u>DECISION PACKAGE - CURRENT</u>										
1.	Foreign Disaster Relief and Rehabilitation (GO)	DR	H	-	-	-	-	490	21,490	-
2.	940-0001 - Regional Disaster Supply Stockpiles (GO)	"	M	-	-	-	-	400	21,890	-
3.	940-0002 - International Training - Disaster Preparedness and Technical Assistance (GO)	"	H	2.00	-	-	-	2,290	24,180	-
4.	940-0003 - Disaster-Related Applied Research (GO)	"	M	1.00	-	-	-	820	25,000	-
5.	HEW/OIH 4-74 - RSSA (GO)	"	M	-	-	-	-	-	-	-
	Summary by Personnel Intensity: Medium (2 Projects) High (3 Projects)			(-) (3.00)	-	-	-	(400) (3,600)	-	-
	TOTAL			(20.80)	-	-	-	(25,000)	-	-

TABLE V - PROPOSED PROGRAM RANKING

RANK	DECISION UNIT PDC/OFDA	NAME OF DECISION PACKAGE SET International Disaster Assistance	DECISION PACKAGES/PROGRAM ACTIVITY/SUPPORT ITEM				RESOURCE REQUIREMENTS			
			DESCRIPTION	APPROPRIATE ACCT	PERSONNEL INTENSIVITY	OPERATING EXPENSES	WORKYEARS FUNDED FROM	PROGRAM ACCOUNT	INCREMENT	CUMULATIVE
DECISION PACKAGE - EXPANSION										
1.			- Foreign Disaster Relief and Rehabilitation (GO)	DR	H	-	-	-	11,058	36,058
2.			- Regional Disaster Supply Stockpiles (GO)	"	M	-	-	-	-	-
3.			- International Training - Disaster Preparedness and Technical Assistance (GO)	"	H	-	-	-	835	36,893
4.			- Disaster-Related Applied Research (GO)	"	H	-	-	-	607	37,500
5.			- HEW/OIH 4-74 - RSSA (GO)	"	M	-	-	-	-	-
			Summary by Personnel Intensity: Medium (2 Projects) High (3 Projects)						(-) (12,500)	-
			TOTAL						(37,500)	-
DECISION PACKAGE - PROPOSED										
1.			- Foreign Disaster Relief and Rehabilitation (GO)	DR	H	-	-	-	11,057	48,557
2.			- Regional Disaster Supply Stockpiles (GO)	"	M	-	-	-	-	-
3.			- International Training - Disaster Preparedness and Technical Assistance (GO)	"	H	-	-	-	835	49,392
4.			- Disaster-Related Applied Research (GO)	"	H	-	-	-	608	50,000
5.			- HEW/OIH 4-74 - RSSA (GO)	"	M	-	-	-	-	-
			Summary by Personnel Intensity: Medium (2 Projects) High (3 Projects)						(-) (12,500)	-
			TOTAL						(50,000)	-

DECISION UNIT DESCRIPTION

BUREAU/OFFICE PDC

Decision Unit Name Office of U.S. Foreign Disaster Assistance

A. Major Goal/Responsibilities of this Organization:

Direct and coordinate the U.S. Government's foreign disaster assistance program. This program includes emergency relief and rehabilitation of people and countries stricken by natural and man-made disasters; help in disaster preparedness and prevention; and in the prediction of, and contingency planning for, disasters abroad. The Director of this program serves as the President's Deputy Special Coordinator for International Disaster Assistance.

B. Organizational Outputs:

Description	Best Measure	Expected Level		Beneficiary/Receiver of Output
		FY 78	FY 79	
1. Direct and manage foreign disaster relief programs	No. of disasters responses	Varies between 25-50		Victims of natural and man-made disasters
2. Direct and manage disaster projects a. Stockpiles b. Disaster Research c. Technical Asst./Preparedness d. RSSA - Health Advisor	See footnote			Disaster-prone countries and victims of natural and man-made disasters
3. Admin./Operations Support of five major projects and related personnel	Financial/admin. reports Program support documentation	200 1500	200 1500	Congress, Agency officials, program implementation
4. Secretarial/Clerical Support of five major projects and related personnel	See footnote			Program implementation

Footnote: Specific staff and mechanism have to be in place in order to be able to carry out this program.

DECISION UNIT DESCRIPTION

Bureau/Office PDC

Decision Unit Name OFDA

C. Current Deficiencies:

Description	Best Measure	Current Level	Who/What is affected and how
<p>Unable to:</p> <ul style="list-style-type: none"> . conduct long-term assistance (reconstruction). . conduct pre-disaster monitoring . conduct post-disaster audits . maintain working relationship with MDROs . provide disaster technical assistance for additional countries . produce disaster case reports on timely basis . expand weather/crop yield forecast activities globally . develop seismic networks beyond systems configuration . field test disaster indicators . improve cyclonic storm strike probability model for damage assessment . develop global vulnerability analysis . develop training/work study program . implement ground warning system for Indian sub-continent 	<p>Not applicable</p>	<p>Not applicable</p>	<p>These items delay life-saving and disaster preventing and mitigating benefits which could be delivered to the potential victims of future disasters. Suffering and death will continue unabated if we and others in the world fail to take action.</p>

Bureau/Office PDC

FY 79-80 BUDGET NARRATIVE

Decision Unit Name OFDA

(Workforce & Operating Expense)

Detail Summary (Check one)

Implications of Minimum Level:

At the minimum level, we can attempt to meet the major objectives set forth in the Decision Unit Overview. With the proviso that the number and impact of disasters during FY 80 do not exceed minimum expectations, we should be able to meet the primary objectives of emergency relief and rehabilitation activities. In the areas of preparedness and applied research, we will only be able to initiate or continue activities which allow us to meet certain primary objectives. Thus, we will not be able to consummate the proposed applied research and preparedness activities to the benefit of millions in need.

Funding at the minimum level will not allow complete development of crop yield projection techniques and data base compilations. Thus, whether or not the forecasts remain valid in the future in terms of accuracy and consistency will remain unanswered. To delay the proof of this potentially important component of a global food shortage early warning system is, in our view, a serious mistake. Similarly, the development of the techniques to be devised for forecasting storm strike probabilities and floods will remain in an experimental mode meaning further delays in proliferating this life-saving methodology beyond the initial experimentation.

In terms of staff, at the minimum level for FY 79, we need four more professionals, and one part-time and one full-time secretary in our Operations Division to provide field support, perform post-disaster assessment of the effectiveness of U.S. assistance, and provide the long-term support needed in our activities which border upon reconstruction assistance.

Bureau/Office PDC

FY 79-80 BUDGET NARRATIVE

Decision Unit Name OFDA

(Workforce & Operating Expense)

Detail Summary (Check one)

Implications of Current Level:

The current level will allow adequate response to projected relief and rehabilitation requirements. Efficiency of operation would be greatly enhanced, particularly due to increased and diversified stockpile inventories. Implications for preparedness and applied research programs are significant, since the bulk of activities will be carried to completion or to the threshold at which expanded programs can be initiated.

The current level will support long-term activities bordering on reconstruction. Although considerable progress will be made in developing effective warning systems, the implementation will be limited geographically, exposing large, disaster-threatened populations to needless death and suffering. Most of the applied research activities, while being escalated, will not achieve their full potential based on state-of-the-art science and technology.

At the current level in FY 80, we will need an additional three professionals, and one part-time and one full-time secretary in the Preparedness and Planning Division to provide regional seminars, technical assistance, and develop and monitor our applied research projects.

Decision Unit Name OFDA

(Workforce & Operating Expense)

Detail Summary (check one)

Implications of ExpansionLevel:

At the expansion level, most major objectives described in the Decision Unit Overview are attainable. In the areas of relief and rehabilitation, we will be providing longer-term assistance, bordering on reconstruction. We definitely will be able to support select reconstruction-type activities, perform post-disaster audits and increase the number of disaster assistance missions. At the expansion level, technical assistance, in general, becomes a more dynamic goal in which in-country preparedness is promoted, new training approaches for national disaster managers are utilized, seismic network activities are further developed, and global warning systems are established where feasible. In Applied Research, there is equal acceleration of activities:

- (1) to correlate precipitation data with crop yields to develop forecast models;
- (2) to improve emergency shelter options;
- (3) to accelerate work on a Bay of Bengal Cyclone Strike Probability Model; and
- (4) to expand the NASA communications network to certain disaster-prone areas of the world.

At the expansion level, world disaster assistance activity increases significantly. This is consistent with expanding international interest in disaster assistance and technology and clearly emphasizes the importance that should be placed on these humanitarian programs by the United States Government. It may be anticipated that other donor nations and organizations will attempt to emulate our increased pace to the greater benefit of the millions of disaster victims created each year.

At the expansion level, our applied research and preparedness activities will require no additional staff; if we are not funded at the proposed level, we will not be able to complete the activities described under the preparedness and applied research headings.

Bureau/Office PDC

FY 79-80 BUDGET NARRATIVE

Decision Unit Name OFDA

(Workforce & Operating Expense)

Detail Summary (check one)

Implications of Proposed Level:

At the proposed level, all major objectives described in the Decision Unit Overview are attainable. In the areas of relief and rehabilitation, we will be providing longer-term assistance, including reconstruction. We definitely will be able to support reconstruction activities, perform post-disaster audits and increase the number of disaster assistance missions. At the proposed level, technical assistance, in general, becomes a dynamic goal in which in-country preparedness is strongly promoted, new training approaches for national disaster managers are utilized, all seismic network activities are fully developed, and global warning systems are implemented. In Applied Research, there is equal acceleration of activities:

- (1) to correlate precipitation data with crop yields to develop forecast models;
- (2) to improve emergency shelter options;
- (3) to accelerate work on a Bay of Bengal Cyclone Strike Probability Model; and
- (4) to expand the NASA communications network to disaster-prone areas of the world.

At the proposed level, world disaster assistance activity increases measurably. This is consistent with expanding international interest in disaster assistance and technology and clearly emphasizes the great importance that should be placed on these humanitarian programs by the United States Government. It may be anticipated that other donor nations and organizations will attempt to emulate our increased pace to the greater benefit of the millions of disaster victims created each year.

At the proposed level, our applied research and preparedness activities will require no additional staff; if we are not funded at the proposed level, we will not be able to complete the activities described under the preparedness and applied research headings.

AID/W BUDGET REQUEST

BUREAU/OFFICE	PDC	Approval
Decision Unit	OFDA	Approval
Detail <input type="checkbox"/>	Summary <input checked="" type="checkbox"/>	(check one)

**II. EXPENSES
(Thousands of Dollars)**

FY 78 Estimated Actual	FY 1979		FY 1980		FY 1981	
	Minimum	Proposed	Minimum	Proposed	Minimum	Proposed
Salaries	656	712	786	886	886	886
Benefits	62	67	74	83	83	83
Overtime	6	6	6	7	7	7
Entertainment	3	3	3	3	3	3
Travel	61	68	82	70	85	85
Telephone	29	31	33	36	36	36
Other Personnel Costs	110	119	131	148	148	148
Contract Serv.	---	---	---	---	---	---
TOTAL.....	927	986	1,115	1,233	1,248	1,248

Portion of Total
pertaining to
Consultants

**I. PERSONNEL
(Workyears of Effort)**

A. Type of Employment	FY 78 Estimated Actual	FY 1979		FY 1980	
		Minimum	Proposed	Minimum	Proposed
Full-time	22.00	24.00	27.00	31.00	31.00
Part-time	2.40	3.20	3.20	4.00	4.00
Overtime	.25	.25	.25	.30	.30
Consultants	---	---	---	---	---
TOTAL.....	24.65	27.45	30.45	35.30	35.30

Portion of Total
Directly Managing
Program Activities

B. Type of Position	FY 1979		FY 1980	
	Minimum	Proposed	Minimum	Proposed
Admin/Supv.	2.00	2.00	2.00	2.00
Professional	14.80	16.80	18.80	21.80
Secretarial	7.60	8.40	9.40	11.20
TOTAL.....	24.40	27.20	30.20	35.00

C. Employees on Board End of Year

Full-time	22.00	24.00	27.00	31.00	31.00
Part-time	2.40	3.20	3.20	4.00	4.00

Bureau/Office PDC
 Decision Unit Name OFDA
 Detail Summary (Check one)

SCHEDULE A
 TRAVEL BUDGET FOR FY 1979 AND 1980
 (Dollars in Thousands)

TYPE OF TRAVEL	FY 78 Estimated Actual	FY 1979					
		Minimum		Current		Proposed	
		No. of Trips	\$	No. of Trips	\$	No. of Trips	\$
<u>Domestic</u>							
Training/Education	--	--	--	--	--	--	--
Conferences/Seminars	.4	.5	3	1.5	3	1.5	1.5
Other	4.0	3.0	20	6.0	20	6.0	6.0
Sub-Total	4.4	3.5	23	7.5	23	7.5	7.5
<u>International</u>							
Training/Education	--	--	--	--	--	--	--
Conferences/Seminars **	30.0	10.0	9	30.0	12	39.0	39.0
Mission Requested	17.0	6.0	5	15.0	5	15.0	15.0
Assistance (TDY)							
Review of AID Overseas							
Operations (AID/W	5.0	--	1	5.0	1	5.0	5.0
initiated)	5.0	5.0	5	10.0	7	15.0	15.0
Other							
Sub-Total	57.0	21.0	20	60.0	25	74	74
TOTAL TRAVEL EXPENSES FY 79*	61.4	24.5	43	67.5	48	81.5	81.5

\$25

\$68

\$82

TOTAL TRAVEL EXPENSES FY 1980

*Does not include travel of direct-hire staff to disaster sites which is charged to IDA account.
 **In most cases initiated by OFDA.

SCHEDULE C - WORKFORCE REQUIREMENTS FOR FY 1979 AND 1980

New positions thru FY 79/80 (001)

Direct-Hire only

DECISION UNIT: PDC/OFDA

L I N E N O (003)	Position Title	PP AL	G TA	C A	Est. Date to be ment to AID/u	Date Employee required on duty	Required AOSC's for new position		New ceiling required		Mode clearance required		Will IDI graduate be assigned to position		Remarks
							Primary 012	Secondary 013	Factory 014	Yes 016	No 017	Yes 019	No 020	Yes 022	
	ICS	GS	12		7/78	10/78		0136		X					79 Current
	ICS	GS	12		7/78	10/78		0136		X					79 Proposed
	ICS	GS	13		7/78	10/78		0136		X					79 Current
	ICS	GS	13		7/78	10/78		0136		X					79 Proposed
	Prog Analyst	GS	12		7/79	10/79		0345		X					80 Current
	Prog Analyst	GS	11		7/79	10/79		0345		X					80 Current
	Mgmt Analyst	GS	11		7/79	10/79		0343		X					80 Current
	Adm. Ops. Asst. (PT)	GS	07		7/79	10/79		0301		X					80 Current
	Sec.-Steno	GS	05		7/79	10/79		0318		X					80 Current
	Sec.-Steno	GS	05		7/78	10/78		0318		X					79 Proposed
	Clerk- Typist(PT)	GS	05		7/78	10/78		0322		X					79 Current

RESPONSE TO COLUMN 6 OF EVALUATION PLAN

OFDA conducts five disaster-related projects which are not evaluated by standard agency procedures. However, OFDA consistently analyzes the effectiveness of projects and activities. Additionally, we plan to adopt more stringent and systematic procedures in our approach to the evaluation process. The following comments review on-going procedures for project evaluation.

1. Applied Research

Activities within this project are closely monitored by OFDA scientists and program analysts. Participating agency service agreements (PASA) ensure submission of regular progress and quarterly reports. OFDA-sponsored applied research is evaluated as to its effectiveness in relief, rehabilitation, and disaster preparedness efforts by the National Academy of Sciences, Committee on International Disaster Assistance. Also, OFDA Operations Officers field test research results and report lessons learned. Applied research is subject to stringent evaluation and review procedures through PASA contracts and grants with NOAA, USGS, NASA, NBS, and technical assistance provided by U.S. Army, U.S. Navy, Smithsonian Institution, and other technical consultants and institutions. OFDA applied research results are closely reviewed, analyzed, and utilized by international agencies and organizations in accordance with their needs.

2. Regional Disaster Supply Stockpiles

An OFDA professional, Auditor General staff, and Contract Office staff have all been involved in reviewing and inventorying the contents of our stockpiles. A major element of this evaluation is to determine inventory requirement and viability. A case in point, we recently discontinued stocking medical supplies.

3. Resources Support Service Agreement

We review the performance of the medical officer and report to his/her superior at HEW.

4. Foreign Disaster Relief and Rehabilitation

OFDA's major post-disaster evaluation tool is the institutionalization of the "lessons learned" concept. Due to OFDA's small staff and presently limited funds, we have not always been able to return to the disaster site for post-disaster assistance evaluations. We believe that detailed cataloging of our "lessons learned" and conducting in-country reviews are essential to the provision of future effective disaster relief and rehabilitation.

5. Disaster Preparedness and Technical Assistance

We have discontinued our six-week seminar on the subject of disaster preparedness held annually in Washington, DC. We are currently in the process of developing new evaluation criteria for OFDA's regional preparedness workshops to commence in the winter of 1978.

DECISION UNIT: OFDA

PERIOD COVERED: FY 80

DATE:

Mission Evaluation Schedule for Operational Year and Budget Year ^{1/}

(1) Project Title and Number/Subject	(2) Number and Date of last PAR/PES Submitted	(3) Proposed date of next PES	(4) Period to be Covered	(5) Identification Special Evaluations and Purpose for them	(6) Remarks ^{2/}
Sahel climate mon- itoring and crop projection system	Project began April 78	Sept 78 to review Senegal crop model	April-August 1978		See attached
Caribbean climate monitoring and crop projection system	Project began Nov 77--monthly and quarterly reports submitted	Sept 78 to review models	November-Sept 1978		22
Seismic warning network	Project to begin June 78				
Flood prediction	Project yet to begin				
Portable disaster communications package	Project to begin August 78	Sept 78			

APPENDIX 3G

Exhibit 3-8

^{1/} Supplementary information may be provided either as footnotes or in accompanying narrative.

^{2/} Include indication of help needed from AID/W - for information and planning only; action requests to be submitted in accordance with normal procedures.

60

73

DECISION UNIT: OFDA

PERIOD COVERED: FY 80

DATE:

Mission Evaluation Schedule for Operational Year and Budget Year 1/

(1) Project Title and Number/Subject	(2) Number and Date of last PAR/PES Submitted	(3) Proposed date of next PES	(4) Period to be Covered	(5) Identification Special Evaluations and Purpose for them	(6) Remarks <u>2/</u>
Application of computer to disaster assistance	No PAR/PES Monthly progress report submitted and reviewed		May 1977-1978		
National Academy of Sciences review of disaster assistance	No PAR/PES Quarterly progress reports submitted and reviewed		1st year July 1976-Dec 1976 2nd year Oct 1977-Oct 1978		
Stockpiles		Regional field trip Jan 1979 to audit stockpile	In-house review Jan 1979		
RSSA with HEW	Not appropriate				
Relief and Rehabilitation	No PAR/PES submitted	Lessons learned review to occur after each relief effort			

1/ Supplementary information may be provided either as footnotes or in accompanying narrative.
2/ Include indication of help needed from AID/W - for information and planning only; action requests to be submitted in accordance with normal procedures.

DECISION UNIT: OFDA

PERIOD COVERED: FY 80

DATE:

Mission Evaluation Schedule for Operational Year and Budget Year^{1/}

(1) Project Title and Number/Subject	(2) Number and Date of last PAR/PES Submitted	(3) Proposed date of next PES	(4) Period to be Covered	(5) Identification Special Evaluations and Purpose for them	(6) ^{2/} Remarks
Disaster prepared- ness workshops	No PAR/PES sub- mitted	Yet to be determined			72

APPENDIX 3C

Exhibit 3-8

^{1/} Supplementary information may be provided either as footnotes or in accompanying narrative.

^{2/} Include indication of help needed from AID/W - for information and planning only; action requests to be submitted in accordance with normal procedures.

TABLE VI - FUNDING FOR SPECIAL CONCERNS

DECISION UNIT
OFDA

PROJECT NUMBER AND TITLE	APPROP CODE	SPECIAL CONCERN CODE	OBLIGATIONS (\$ 000)					
			PY: 78		CY: 79		BY: 80	
			PROJECT TOTAL	SPECIAL CONCERN	PROJECT TOTAL	SPECIAL CONCERN	PROJECT TOTAL	SPECIAL CONCERN
Disaster-Related Applied Research (G)	DR	RESA	600	--	2440	130	3405	150
Climate Assessments/Crop Forecasts: Africa, Carib	"	RESA		--		230		320
Climate Assessments/Crop Forecasts: India, SE Asia	"	RESA		100		150		160
Emergency Shelter	"	RESA		--		400		800
Portable Disaster Communications Terminal	"	RESA		25		680		1265
Cyclone Tracking/Flood Forecasting: South Asia	"	RESA		105		105		115
Computer Applications to Disaster Assistance	"	RESA		103		200		225
Seismic Network: Fiji	"	RESA		175		200		205
National Academy of Sciences Technical Review	"	RESD						
International Training - Disaster Preparedness and Technical Assistance (G)	DR	RESA	350	--	1385	175	4380	1280
Seismic Network: Central America	"	RESA		40		275		1325
Seismic Network: Andean Mts.	"	RESA		50		175		225
Seismic Network: Caribbean	"	RESA		40		65		725
Early Warning System Development	"	RESA		35		85		200
Global Vulnerability Analysis	"	RESA						