

INTERIM REVIEW
HURRICANE RECONSTRUCTION PROGRAM
DOMINICAN REPUBLIC
DECEMBER, 1980

I INTRODUCTION

This Interim Review of the Hurricane Reconstruction Program is part of a continuing evaluation process instituted by the Mission. The evaluation schedule developed during the early phases of the program has proven to be most opportune because: (1) a major segment (San Cristóbal/Valdesia/Baní Transmission Line) of the program has now been completed; (2) 16 months have passed since the disaster, and (3) new developmental activities related to disaster assistance are under consideration.

The Evaluation will include the immediate post disaster period, during which the primary emphasis was upon relieving human suffering, the planning and reprogramming period, and the implementation and evaluation phase. This paper provides an overview of the Disaster Program. Individual projects have been evaluated and PES forms have been completed on each with the exception of the Small Farmer Agricultural Rehabilitation Project. This evaluation is in process and will be completed this month.

II MAJOR EVENTS

A. Emergency Phase

On August 31, 1979, the Dominican Republic was struck by Hurricane David, one of the most powerful and destructive hurricanes of this century, with sustained winds of over 150 MPH. The Hurricane entered the southern coast of the island land mass 25 miles southwest of the capital at the city of San Cristóbal and proceeded northwest across the island. 2,000 lives were lost, 4,000 people were injured and more than 200,000 people were left homeless in the wake of the hurricane. The country was struck by another crippling blow on September 5/6 when Hurricane Frederick, following almost the identical path of the previous hurricane, dumped 10 to 30 inches of water in a 48-hour period on an already devastated country causing untold additional damage and human suffering. The resulting floods displaced an additional 200,000 persons who sought refuge in schools, churches and other public buildings.

As a result of these two catastrophes, much of the country's electric power generating and distribution capacity was destroyed or damaged, radio and telephone communication was seriously impaired and the destruction of roads and bridges isolated hundreds of communities and thousands of people. The emergency needs of the people were, obviously, beyond the capacity of the Government to respond and an appeal was made for outside assistance. The U.S. Government's response was immediate. Ambassador Yost met with President Guzmán the evening of August 31 in an emergency session. As an initial gesture of good faith, the Ambassador exercised his disaster assistance authority to make \$25,000 available for emergency purchases of foodstuffs and other relief supplies. With the concurrence of the GODR, a request for a DAST was also initiated (see Santo Domingo 5145, which was sent at 9:50 local time on August 31 - 010150Z September 1979).

September 1 was spent in discussions with counterpart officials, damage assessments as roads permitted, and in starting emergency distribution of PL-480 supplies.

To coordinate U.S. Government assistance, the Ambassador established and chaired a country team liaison and disaster relief committee. The committee met at 11:00 AM September 2, to share information and receive assignments, and again at 3:30 PM for a joint briefing with the DAST which had just arrived. At the Ambassador's direction, a command/control center was established in the MILGP offices as the focal point for information and decision. A watch officer roster was developed to insure that the center was always staffed and that working records were maintained. The GODR assigned a liaison officer to work full time at the center. In turn, a full time liaison officer from the Mission staff worked in the office of the Secretary of State for Civil Defense. The principal U.S. PVO's were represented in Civil Defense by a senior local employee who provided liaison for CARE, CRES, and CWS.

On September 3, 1979, the first of a series of continuing meetings was held with high level GODR officials, and representatives from various public institutions. The ranking members of the liaison and disaster relief committee and the DAST attended this and all subsequent meetings.

The priority relief area identified by the GODR extended from San Cristóbal/Baní/Azua/San José de Ocoa north through the central highlands to Quayubín and Montecristi on the northwest coast. USG relief response was concentrated in this area because it was most seriously affected, and because of the U.S. Government's capability for action in difficult terrain. This capability was evident in relief operation during the emergency period. The USG continued to focus its efforts in this area during the reconstruction phase as the needs were greatest there.

Immediately following the disaster, the GODR requested from the USG emergency rations (C-Rations) for 100,000 people, water purification tablets, air boats, helicopters, medical supplies, etc., as well as aerial reconnaissance and disaster survey.

By September 2, 1979, the first U.S. military personnel, equipment and relief supplies arrived in country. Ultimately, there were upwards of 500 U.S. Government personnel (475 military, 25 civilian) involved in the distribution of relief supplies and disaster survey. However, there were seldom more than 200 TDY military in-country at any time. A total of 27 helicopters made 790 sorties and moved one million lbs. of relief supplies to the areas most affected by the hurricanes. U.S. Government relief activities continued through September and most of October and were conducted by personnel from military units, Peace Corps, State Department and AID.

The emergency phase of the Disaster Relief Program terminated with the withdrawal of the last military units and disbandment of the Disaster Relief Control Center on October 25, 1979.

While there were some minor difficulties involved in the management of these activities, a dedicated, effective and efficient relief effort was mounted during a very difficult time. Everyone involved can be justly proud and pleased with the results.

B. Planning and Reprogramming Phase

Almost immediately following the Hurricanes and concurrent with immediate relief efforts, the Mission began planning and considering long range reconstruction requirements. The DAST survey provided good preliminary information on the extent of damage. Elements of the Mission began a series of meetings with GODR officials from the Office of the President, the Technical Secretariat, and its Office of Planning and the various Secretariats to identify GODR priorities. Efforts were coordinated with various donor organizations.

Immediate consideration was given to reprogramming existing projects. Discussions were held with each of the four Secretariats with active AID projects. The Mission's early thinking on reprogramming was submitted to Washington on September 17 (Santo Domingo 5647). Major reprogramming proved to be desirable in one area, Rural Roads, and approximately \$1.6 million from this Loan was reprogrammed for Disaster Reconstruction purposes. The proposed overall disaster reconstruction program considering GODR priorities, other donor inputs, the limit on resources available from the U.S. Government, was submitted to Washington the later part of October and was approved in early November.

Essentially U.S. Government disaster relief activities were concentrated in four general areas of highest priority to the GODR: (1) restoration and repair of electrical service; (2) restoration and repair of crucial rural roads and bridges; (3) restoration and repair of shelters, and (4) restoration of agricultural productivity.

C. Implementation Phase

Relief activities and planning and reprogramming efforts were carried out successfully during the difficult period following the Hurricanes. The extent of this effort can best be appreciated when the conditions which existed are considered. There was no power in the capital nor in a large part of the country. This situation extended for several months and it was almost a year before full power was restored. Most telephones were out of order. There was little gasoline or diesel fuel available for 6 to 8 weeks after the hurricane. Food was in very short supply. Transport was very difficult because of the scarcity of fuel and the poor condition of the roads.

Towards the end of November 1979, attention was directed to the implementation of the reconstruction program. Essentially this program was funded as follows:

<u>Electrical Restoration</u>	<u>\$ 7.1 million</u>
(a) Transmission line Baní/Valdesia/San Cristóbal \$3.1 million	
(b) Distribution system Baní/San Cristóbal \$.4 million	
(c) Transmission line Baní/Azua \$3.6 million	
<u>Rural Roads</u>	<u>\$ 6.6 million</u>
<u>Shelters</u>	<u>\$ 2.2 million</u>
<u>Agriculture</u>	<u>\$12.2 million</u>

In November 1979, the Mission received authority from Washington to enter into a project agreement with CDE for reconstruction of the 69 KV high tension transmission line from San Cristóbal/Valdesia/Baní. Part of the funds were allocated by AID/W at that time; the balance was allocated in January 1980. The funds for the procurement of electrical materials to be used in the restoration of the electrical distribution systems in the towns of San Cristóbal and Baní were also received in November 1979.

The final funding for the restoration of the transmission line between Baní and Azua was received nearly one year later, in September 1980. Actual construction of this line should begin in February 1981 and is scheduled for completion in June 1981.

Reprogramming of funds in an existing road loan provided \$1.6 million for hurricane reconstruction purposes. The funds were made available in October 1979 and the majority of these funds have now been expended. The reprogrammed funds were used to rehabilitate 150 kms. of roads in sections of 19 rural roads. Implementation of the reprogrammed rural roads project was by "force account" because of the early availability of funds and the emergency situation which existed immediately following the hurricanes.

The \$5 million Rural Roads Grant funds were not received until June 1980. Contracting is following standard procedures and it is expected that the reconstruction of 250 kms. of rural roads and 16 bridges will be completed in December 1981.

In the immediate post hurricane period, shelter rehabilitation and reconstruction was handled primarily by the Private Voluntary Organizations. The purpose of this was twofold. One, the outreach of the program was considerably expanded because of the number of PVOs who were active in the country and who had mobilized their own resources; and two, this supplemented efforts by the Instituto Nacional de la Vivienda (INVI), whose main purpose at this time was to provide shelter for the tens of thousands of refugees housed temporarily in public and private institutions. Most of the 538,000 thus far allocated for this project has been expended. All the rehabilitation sub-projects (1879) units implemented by the several PVOs were completed as of September 1980. The one remaining sub-project (84 units) for construction of new homes is scheduled for completion in December 1980.

An additional 1,746,500 was made available in September 1980 for additional rehabilitation and the construction of new homes for hurricane victims who were still living in substandard housing. This program includes:

<u>Rehabilitation Phase</u>	<u>873 houses</u>		
20,000 sheets of zinc roofing		Value	70,000
59,000 lbs. of nails		Value	36,500
			<u>220,000</u>
	Sub-total		326,500
<u>New Construction Phase</u>	<u>930 houses</u>		1,420,000
	Grant Total		1,746,500
	1,366 houses rehabilitated		
	<u>930 houses newly built</u>		
Total	<u>2,266</u>		

These funds are being channeled through INVI; however, the PVOs will continue to participate in the program through an Inter Agency Committee sponsored by INVI. All of the anticipated 2,266 units planned for rehabilitation and construction are scheduled to be completed by September 1981.

Title II food supplies and emergency rations assisted in alleviating the immediate food crisis. However, the unavailability of disaster assistance funds in the early stages of the reconstruction program prevented the initiation of any agricultural projects which could impact significantly on the immediate food problem. Several small animal husbandry projects were instituted in collaboration with the P.C. Most of these funds have now been expanded and the several subprojects are now producing small animals for consumption. Other small scale agricultural projects designed to provide a source of food and income for the poor rural dwellers most affected by the disaster were not initiated because funds were not available when needed.

A \$12,000,000 loan program was authorized in December 1980 for small farmer agricultural rehabilitation. The loan provides \$8,000,000 for salvage of severely damaged small coffee fincas and \$4,000,000 for credit for small farmer food crops.

III SUMMARY

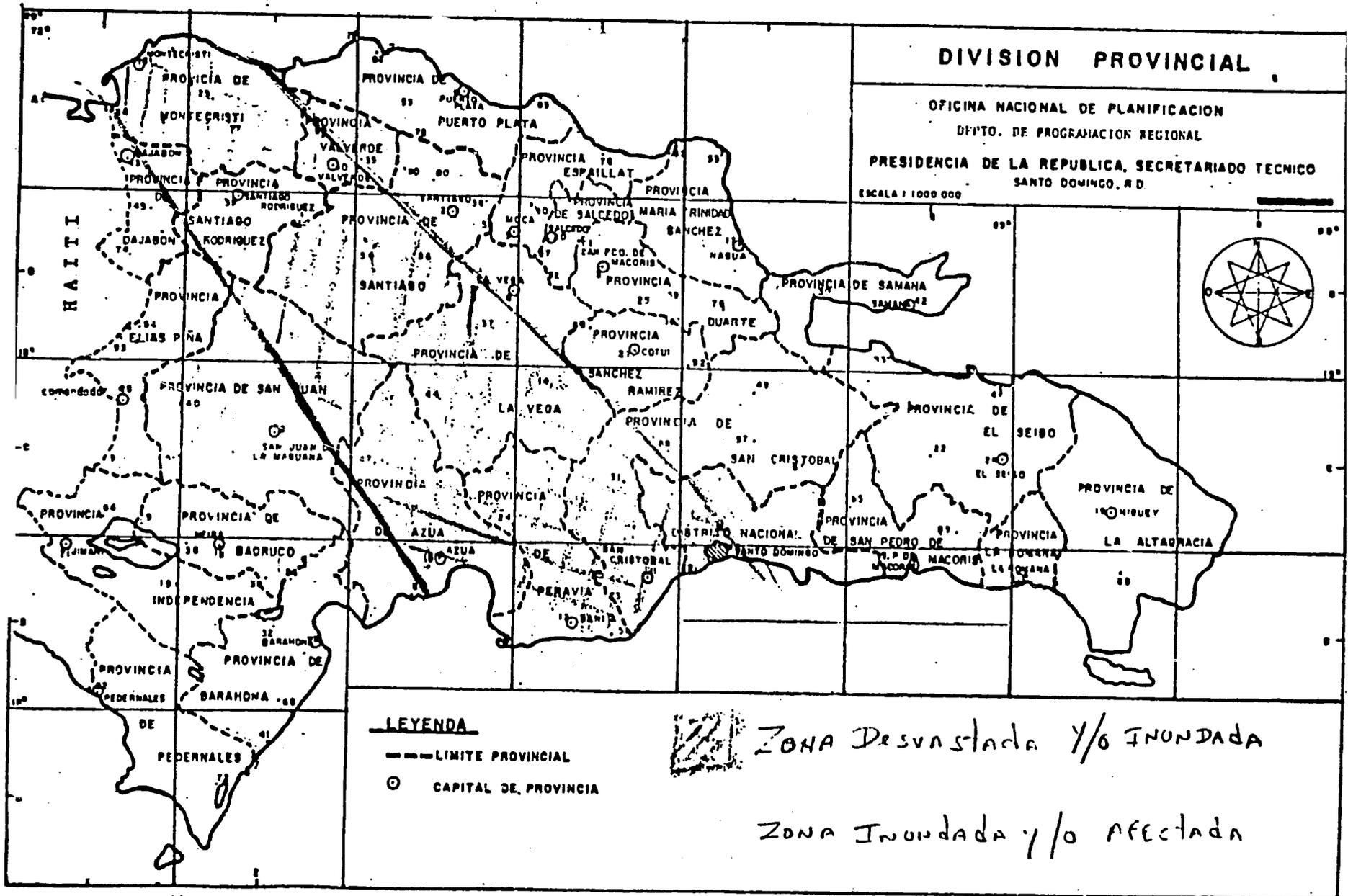
Mission efforts in the first 30 to 60 days immediately following the hurricanes were devoted primarily to urgent relief activities. However, considerable attention was also given at this time to the identification of longer term reconstruction needs and to the development of a disaster reconstruction program in concert with the GODR to meet those needs. These objectives have been met extremely well. However, our response capability could have been improved. What became apparent as the process unfolded was that AID has a wide variety of tools which can be directed towards disaster relief and recovery. Our final "package" of assistance included regular disaster funds, supplemental funds, food, grant and loan funds and specialized TA.

Most Mission employees had had no experience in managing a disaster reconstruction program and consequently, were not knowledgeable about nor familiar with the primary U.S. Government disaster response mechanism, the Office of Foreign Disaster Assistance. As a result, some time was lost during the learning process. Our experience with OFDA in the David/Frederick disasters, although extremely helpful in most respects, could have been easier for us to relate to had we felt that OFDA's responses to our needs were concentrated in one or only a few officers. We recall hearing from numerous officers from OFDA during the first several weeks, sometimes resulting in time-consuming periods of uncertainty as to who was speaking with what authority from OFDA. Later on that situation was relieved as we found one or at most two officers to be retaining the focus of OFDA's interest as far as our emergency was concerned.

Also, the ability to carry out the disaster program was seriously and adversely affected because of the situation surrounding disaster assistance funds. Funds for the later stages of the program were received over a period of one year and originated from a number of different sources. All of us connected with the program understand why this occurred and why it was beyond the control of A.I.D. Nevertheless the program suffered as a result. Our relationship with the GODR at times required explaining why the USG was unable to respond more quickly to those commitments made by A.I.D. and the Congress to disaster relief and recovery.

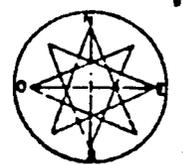
Attachments:-Controller's financial summary

-Map



DIVISION PROVINCIAL

OFICINA NACIONAL DE PLANIFICACION
 DPTO. DE PROGRAMACION REGIONAL
 PRESIDENCIA DE LA REPUBLICA, SECRETARIADO TECNICO
 SANTO DOMINGO, R.D.
 ESCALA 1:1000 000



LEYENDA
 --- LIMITE PROVINCIAL
 ○ CAPITAL DE PROVINCIA

ZONA Desvastada y/o INUNDADA

ZONA Inundada y/o afectada

ZONA DEVASTADA Y/O INUNDADA

<u>Provincias y Municipios</u>	<u>Población Estimada al 1ro. de julio '79</u>
DISTRITO NACIONAL*	1,379,198
Santo Domingo (Urbano)	1,170,463
SAN CRISTOBAL (PROVINCIA)*	408,228
Bajos de Haina	43,705
Sabana Grande de Palenque	5,117
Yaguatae	24,327
Villa Altagracia	46,164
Yamasá	73,813
PERAVIA (PROVINCIA)	152,341
Bani	85,030
Nizao	12,563
San José de Ocoa	54,748
AZUA (PROVINCIA)	99,698
Azua	67,500
Padre Las Casas	32,198
SAN JUAN DE LA MAGUANA (PROVINCIA)*	235,424
San Juan	143,205
LA VEGA (PROVINCIA)	362,425
Bonao	93,696
Constanza	33,699
Jarabacoa	44,201
SANTIAGO (PROVINCIA)*	505,083
Jánico	26,103
San José de las Matas	54,241
VALVERDE (PROVINCIA)	92,533
Mao	57,560
Esperanza*	24,371
Laguna Salada*	10,602
SANTIAGO RODRIGUEZ (PROVINCIA)	54,446
Santiago Rodríguez (Sabaneta)	48,961
Monción	5,485
DAJABON (PROVINCIA)	65,194
Dajabón	27,707
Loma de Cabrera*	24,003

<u>Provincias y</u> <u>Municipios</u>	<u>Población Estimada</u> <u>al 1.º de julio '79</u>
MONTECRISTI	
Montecristi	79,355
Guayubín	17,217
Pepillo Salcedo	32,890
Villa Vásquez	6,033
Castañuelas	13,442
	<u>9,773</u>
TOTAL	<u>2,288,817</u>

Summary of Disaster Assistance

Dominican Republic

As of October 31, 1980
(In US\$)

<u>Category</u>	<u>Obligation/ Value</u>
I Disaster Assistance Funds	
A. FY 79 - AID/W thru OFDA	\$ 3,431,631
B. FY 80 - AID/W thru OFDA	3,070,121
C. FY 80 - Mission Allotted	<u>6,444,190</u>
Total Disaster Assistance Funds	<u>\$12,945,942</u>
II Disaster Related Programs Funded from Other Funding Sources	
A. FY 79 - Mission Allotted	\$ 14,053
B. FY 80 - Mission Allotted	<u>18,739,072</u>
Total Disaster Related Programs Funded from Other Sources	<u>\$18,753,125</u>
III In-Kind Contribution	<u>\$ 106,500</u>
TOTAL	<u>\$31,805,567</u>

RECAPITULATION OF DISASTER ASSISTANCE PROGRAM - DOMINICAN REPUBLIC
USAID/DOMINICAN REPUBLIC
AS OF OCTOBER 31, 1980
(IN US\$)

<u>PROJECT NO.</u>	<u>PROJECT TITLE AND DESCRIPTION</u>	<u>DATE OF AGREEMENT</u>	<u>AMOUNT OBLIGATED</u>	<u>EXPENDITURES (1)</u>	<u>UNLIQUIDATED BALANCE</u>
<u>DISASTER ASSISTANCE FUNDS</u>					
<u>FY 1979</u>					
1. AID/W ALLOTTED FUNDS PROVIDED BY OFDA (2)					
N/N	Ambassador's Fund - Cash Donation	9/79	\$ 25,000 ✓	\$ 25,000	-0-
N/N	Local Administrative Costs	9/79	5,000 ✗	5,000	-0-
N/N	Direct Procurement - OFDA - Medical Supplies; Transportation Tents, FEMA Support Costs; TDY	9/79	408,678 0.	408,678	-0-
N/N	Army Corps of Engineers - DOD	9/79	2,992,953 (3)	2,992,953	-0-
SUB-TOTAL FY 79 FUNDS PROVIDED BY OFDA			<u>\$3,431,631</u>	<u>\$3,431,631</u>	<u>-0-</u>
<u>FY 1980</u>					
2. AID/W ALLOTTED FUNDS PROVIDED BY OFDA (2)					
N/N	Direct Procurement -OFDA - Technical services; transportation costs	Various	\$ 20,444	\$ 20,444	-0-
517-0145.07	Electric Power Transmission PREPA Contract	11/79	3,049,677	3,049,677	-0-
SUB-TOTAL FY 80 FUNDS PROVIDED BY OFDA			<u>\$3,070,121</u>	<u>\$3,070,121</u>	<u>-0-</u>
3. MISSION ALLOTTED FUNDS					
<u>PRODUCTION AND TRAINING</u>					
517-0145.01	Small Farm Agriculture and Livestock Peace Corps/Instituto Agrario Dominicano (IAD)	11/79	\$ 110,000	\$ 85,014	\$ 24,986

(2)

<u>PROJECT NO.</u>	<u>PROJECT TITLE AND DESCRIPTION</u>	<u>DATE OF AGREEMENT</u>	<u>AMOUNT OBLIGATED</u>	<u>EXPENDITURES (1)</u>	<u>UNLIQUIDATED BALANCE</u>
		<u>FY 80 CONT.</u>			
3.	MISSION ALLOTTED FUNDS - CONT.				
	<u>EMERGENCY HOUSING</u>				
517-0145.03	Emergency Home Repair Program - CARE	11/79	\$ 130,000	\$ 130,000	-0-
517-0145.04	Emergency Home Repair Program - Servicio Social de Iglesias Dominicanas, Inc. (SSID)	11/79	129,000	129,000	-0-
517-0145.05	Emergency Home Repair Program - Southern Baptist Mission of the Dominican Republic	11/79	3,000	3,000	-0-
517-0145.10	Emergency Home Repair Program - American Institute for Free Labor Development (AIFLD)	12/79	50,000	50,000	-0-
517-0145.11	Emergency Home Repair Program - Dominican Development Foundation (DDF)	12/79	150,000	135,000	\$ 15,000
517-0145.13	Emergency Home Repair Program - Catholic Relief Services (CRS)	3/80	76,000	50,000	26,000
517-0145.14	Emergency Plan for Repair and Reconstruction of Houses	7/80	220,000	38,390	181,610
517-0145.21	Emergency Plan for Repair & Reconstruction of Houses - Instituto Nacional de la Vivienda (INVI)	9/80	<u>1,420,000</u>	<u>-0-</u>	<u>1,420,000</u>
	SUB-TOTAL, Emergency Housing		\$ 2,178,000	\$ 535,390	\$ 1,642,610

<u>PROJECT NO.</u>	<u>PROJECT TITLE AND DESCRIPTION</u>	<u>DATE OF AGREEMENT</u>	<u>AMOUNT OBLIGATED</u>	<u>EXPENDITURES (1)</u>	<u>(3) UNLIQUIDATED BALANCE</u>
<u>3. MISSION ALLOTTED FUNDS - CONT.</u>					
<u>ELECTRIC POWER</u>					
517-0145.06	Electric Power Distribution Corporación Dominicana de Electricidad (CDE)	11/79	\$ 400,000	\$275,818	\$ 124,182
517-0145.19	Azua-Banf 138 KV Transmission Line Corporación Dominicana de Electricidad (CDE)	9/80	<u>3,622,863</u>	<u>-0-</u>	<u>3,622,863</u>
	SUB-TOTAL - Electric Power		<u>\$4,022,863</u>	<u>\$275,818</u>	<u>\$3,747,045</u>
<u>FOOD FOR WORK</u>					
517-0145.08	Emergency Agriculture Program Catholic Relief Services	12/79	\$ 50,000	\$ 50,000	-0-
517-0145.09	Emergency Agriculture Program	12/79	<u>16,727</u>	<u>16,727</u>	<u>-0-</u>
	SUB-TOTAL - Food for Work		<u>\$ 66,727</u>	<u>\$ 66,727</u>	<u>-0-</u>
<u>TECHNICAL SERVICES</u>					
517-0145.02	Coffee Rehabilitation Program Servicios Técnicos del Daribe	11/79	\$ 2,600	\$ 2,451	\$ 149
517-0145.12	Technical Services Artbur E. Valdez - PSC	3/80	<u>64,000</u>	<u>34,422</u>	<u>29,578</u>
	SUB-TOTAL - Technical Services		<u>\$ 66,600</u>	<u>\$ 36,873</u>	<u>\$ 29,727</u>
	SUB TOTAL - FY 80 MISSION ALLOTTED DISASTER FUNDS		<u>\$6,444,190</u>	<u>\$999,822</u>	<u>\$5,444,368</u>
	SUB-TOTAL MISSION/OFDA DISASTER ASSISTANCE FUNDS FY 80		<u>\$ 9,514,311</u>	<u>\$4,069,943</u>	<u>\$5,444,368</u>
	TOTAL MISSION/OFDA DISASTER ASSISTANCE FUNDS-FY 79 & 80		<u>\$12,945,942</u>	<u>\$7,501,574</u>	<u>\$5,444,368</u>

<u>PROJECT NO.</u>	<u>PROJECT TITLE AND DESCRIPTION</u>	<u>DATE OF AGREEMENT</u>	<u>AMOUNT OBLIGATED</u>	<u>EXPENDITURES (1)</u>	<u>UNLIQUIDATED BALANCE</u>
<u>DISASTER RELATED PROGRAMS FUNDED FROM OTHER FUNDING SOURCES</u>					
<u>MISSION ALLOTTED FUNDS</u>		<u>FY 79</u>			
517-0000	Food and Nutrition PD & S - Materials and services necessary for bread production	9/79	\$ 14,053	\$ 14,053	-0-
		<u>FY 80</u>			
517-0000	Selected Development PD & S Charles T. Main	1/80	\$ 94,072	\$ 94,072	-0-
517-0130	Rural Roads Grant	6/80	5,000,000	-0-	\$5,000,000
Loan 517-T-033	Rural Roads Maintenance - Reprogrammed for Emergency Road Rehabilitation (a component of \$10,000,000 loan)	10/79	1,645,000	1,083,336	561,664
Loan 517-T-034	Small Farmer Agricultural Rehabilitation	1/80	12,000,000	9,622,125	2,377,875
SUB-TOTAL FY 80			\$18,739,072	\$10,799,533	\$7,939,539
TOTAL DISASTER RELATED PROGRAMS FUNDED FROM OTHER FUNDING SOURCES - FY79 AND 80			\$18,753,125	\$10,813,586	\$7,939,539

<u>PROJECT NO.</u>	<u>PROJECT TITLE AND DESCRIPTION</u>	<u>IN KIND CONTRIBUTION - FY 80</u>	<u>ESTIMATED VALUE</u>
517-0145.14	Emergency Plan for the Repair and Reconstruction of Houses. INVI 20,000 sheets of roofing		\$ 70,000
517-0145.20	Emergency Housing - INVI nails		36,500
TOTAL IN-KIND CONTRIBUTION			\$106,500

- FOOTNOTES:
- (1) Includes estimated accruals, when applicable.
 - (2) Accounting station for OFDA funds is AID/W. Details of obligations and expenditures not available at USAID/DR.
 - (3) Per OFDA, the total cost of assistance provided to Dominica and Dominican Republic was \$5,985,906. Although DOD is unable to provide a break out as to costs applicable to each country, they informed OFDA that approximately 50% pertained to the Dominican Republic.