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PHILIPPINES

PROJECT PAPER
DISASTER REHABILITATION (DIDANG)

USAID - PHILIPPINES
Capital Development Division
September 1976

PHILIPPINES
PROJECT PAPER
DISASTER REHABILITATION (DIDANG)

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Part I

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

1. TRANSACTION CODE: [ ] A = ADD, C = CHANGE, D = DELETE

PP

2. DOCUMENT CODE: 3

3. COUNTRY/ENTITY: Philippines

4. DOCUMENT REVISION NUMBER: [ ]

5. PROJECT NUMBER (7 digits): 492-0316

6. BUREAU/OFFICE: A. SYMBOL: Asia; B. CODE: 04

7. PROJECT TITLE (Maximum 40 characters): Disaster Rehabilitation (Didang)

8. ESTIMATED FY OF PROJECT COMPLETION: FY 77

9. ESTIMATED DATE OF OBLIGATION: A. INITIAL FY 76; B. QUARTER 5 (Enter 1, 2, 3, or 4); C. FINAL FY 76

10. ESTIMATED COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY B. F.X.	FIRST FY C. L/C	FIRST FY D. TOTAL	LIFE OF PROJECT E. F.X.	LIFE OF PROJECT F. L/C	LIFE OF PROJECT G. TOTAL
AID APPROPRIATED TOTAL	5,000		5,000	5,000		5,000
(GRANT)	(5,000)	( )	(5,000)	(5,000)	( )	(5,000)
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER U.S. 1.						
OTHER U.S. 2.						
HOST COUNTRY		2,000	2,000		2,000	2,000
OTHER DONOR(S)						
TOTALS	5,000	2,000	7,000	5,000	2,000	7,000

11. PROPOSED BUDGET APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. 1ST FY 76 F. GRANT	E. 1ST FY 76 G. LOAN	H. 2ND FY — I. GRANT	H. 2ND FY — J. LOAN	K. 3RD FY — L. GRANT	K. 3RD FY — M. LOAN
(1) DR	B-930	940		5,000					
(2)									
(3)									
(4)									
TOTALS				5,000					

A. APPROPRIATION	N. 4TH FY — O. GRANT	N. 4TH FY — P. LOAN	Q. 5TH FY — R. GRANT	Q. 5TH FY — S. LOAN	LIFE OF PROJECT T. GRANT	LIFE OF PROJECT U. LOAN
(1) DR					5,000	
(2)						
(3)						
(4)						
TOTALS					5,000	

12. IN DEPTH EVALUATION SCHEDULED: MM 09 DD 77

13. DATA CHANGE INDICATOR: WERE CHANGES MADE IN THE PID FACESHEET DATA, BLOCKS 12, 13, 14, OR 15 OR IN PRP FACESHEET DATA, BLOCK 12? IF YES, ATTACH CHANGED PID FACESHEET.

[ ] 1. NO 2. YES

14. ORIGINATING OFFICE CLEARANCE

SIGNATURE: Richard M. Dangler

TITLE: Asst. Director for Capital Development

DATE SIGNED: MM 09 DD 07 YY 76

15. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

AID 1330-4 (3-76)

Philippines

Project Paper
Disaster Rehabilitation (Didang)

Part I. Summary and Recommendations

A. Project Paper Facesheet

B. Recommendation

Grant (Disaster Rehabilitation) $5,000,000

C. Description of the Project

This project consists of: (1) repair and rehabilitation of 30 infrastructure projects (flood control and irrigation) damaged during the typhoon and flooding of May 1976 (Didang) and; (2) technical assistance (hydrologic study) to insure proper future development of the flood control scheme. Annex D lists these individual subprojects and provides an estimated cost breakdown. The designs and cost estimates for these 30 subprojects will be subject to AID review and approval (See Part IV B for details). It is recognized that some changes and/or modifications of the list may be required prior to or during project implementation.

The accomplishment of the repair work will be carried out by agencies of the Government of the Philippines: the Bureau of Public Works for flood control projects; and the National Irrigation Administration for irrigation projects. The actual work will be accomplished either by contract or by administrative force account of these agencies. Restoration of these projects will help to reduce future flooding of vast areas of agricultural land and population centers as well as insure a more adequate supply of water for numerous irrigation systems in the dry season. In effect this project is a follow-on of the $50 million Disaster Recovery Program undertaken by AID and the GOP as a result of the 1972 typhoons and floods, and AID will be coordinating with the same agencies as in the prior program.

D. Summary Findings

As detailed in Part III of this Project Paper, it is concluded that the project is sound from an engineering standpoint, necessary socially and justified economically. Further, there are no reasonably foreseeable detrimental effects on the human environment that will result from the rehabilitation work (See Part III-E). The project meets all applicable statutory criteria and the implementing agencies of the GOP have the capability to effectively maintain and utilize the project. USAID can implement, monitor and evaluate the project with its present staff, augmented by local hire engineers or local consultants as necessary.

E. Project Issues

There are no major issues that have been identified in connection with implementation of this project.

Part II. Project Background and Detailed Description

A. Background

1. Flood Control, Central Luzon

The Central Luzon Basin is composed of essentially two major drainage systems, the Agno-Tarlac river system which has a drainage area of 746,000 hectares and flows southwesterly from the northern Luzon mountains then northwesterly to Lingayen Gulf, and the Pampanga River system which has a drainage area of 1,054,000 hectares and flows south to the head of Manila Bay. The flooding of Central Luzon during late May 1976 was the result of rains of unprecedent intensity over the above drainage areas brought on by typhoon "Didang" and consequent inducement of the southwest monsoon. The Agno and Pampanga Rivers rose to record heights, exceeding stages which occurred during the disastrous 1972 floods. This flood caused severe damage to infrastructure projects, particularly flood control, irrigation, and transportation facilities. The total damage including damage to agriculture, was estimated by USAID and the GOP to be about $85 million, with damage to infrastructure making up about 40 percent of that amount. Many of the facilities damaged were previously rehabilitated or upgraded under the $50 million Disaster Recovery Program for Central Luzon following the 1972 floods.

The flood control system for Central Luzon consists of several hundred kilometers of levees (dikes) and revetments along both banks of the Pampanga, Agno, Tarlac and Angat Rivers. The basic system was laid out and implementation started under the guidance of the U.S. Army Corps of Engineers in the 1930's and subsequently improved starting in the 1950's. However the system was incomplete at the time of the 1972 floods and is still under development. In view of the limited hydrologic data available and the unprecedented flood levels reached in the May storm, a definite need exists for expert reevaluation of the entire system, hydrologically as well as structurally, for both existing conditions and the projected future concept.

2. Irrigation, Luzon Provinces

The National Irrigation Administration's projects are separated into three categories: national, communal and special. The national systems are medium sized systems constructed and maintained by the NIA and charge user fees to the farmers in the service areas. The communal systems are small local projects, mostly serviced by small pumps and receiving only periodic technical assistance from NIA. The special projects are larger projects and systems which have recently been constructed through international lending agencies and are administered by a separate sub-element within NIA.

Following the typhoons and floods of 1972, 34 of the national systems were rehabilitated under AID's $50 million grant Disaster Recovery Program. Due to the high level of flooding and extreme velocity of flow attained, several of these systems were again damaged in the recent May 1976 flood as well as many additional national systems not affected by the 1972 floods. Total damage to all irrigation facilities during this flood was estimated at $5.5 million and is included in the previously mentioned total.

B. Detailed Description

This project will entail the repair and rehabilitation of some 30 of the most severely damaged flood control projects and national irrigation systems. In addition the project will finance a hydrologic study which will serve to update the overall flood control plans for Central Luzon, and the services for 12 months of one American Flood Control Advisor (extension of an existing PASA with U.S. Army Corps of Engineers) from October 1, 1976 to September 30, 1977.

The flood control rehabilitation portion of the project will consist of levee repair and raising, construction of spur dikes to protect areas subject to serious erosion, boulder rip-rap at critical sections and construction of revetment extensions.

The restudy of the flood control plan for Central Luzon will involve a comprehensive review of hydrologic data and design flood computations and routing studies through math modeling of the basin for existing conditions of development to determine if modifications in the overall plan are warranted. Particular attention will be focused on design flood elevations relative to design heights of existing levees.

AID's role in the project will consist of review and approval of plans, specifications, and cost estimates for each sub-element, monitoring the construction to assure quality workmanship and adherence to plans and specifications, assist the agencies of the GOP in contract matters, and upon satisfactory completion of the sub-elements or discrete operational portions thereof, reimburse the GOP for the direct costs in accordance with the Fixed Amount Reimbursement Method (FAR).

As of June 30, 1976, disbursements under the $50 million Disaster Recovery Program associated with the 1972 typhoons and flooding, currently being undertaken by AID exceeded $47 million. The policies and procedures utilized in that program will be contained in this new project essentially as a follow-on effort, in coordination with the same agencies of the GOP as participated in the prior program. The current AID staff has the experience, expertise and working knowledge of the area and of the key GOP personnel to administer this project in an efficient manner.

Part III. Project Analyses

A. Technical Analysis

Since the project entails primarily the rehabilitation of existing structures it is particularly appropriate that the work be accomplished as soon as possible. The project will be accomplished utilizing modern technological methods and equipment to insure timely completion in accordance with high quality construction methods. The implementing agencies have or will have access to the equipment and technical ability to assure a high level of operation and maintenance of the restored projects.

The preliminary cost estimates submitted by the agencies for the rehabilitation work appear to be reasonable in view of USAID's recent experience on the $50 million Disaster Recovery Program in which cost estimates were carefully reviewed by USAID. During the implementation phase of this project submittal of detail cost estimates by the GOP agencies will be required; the same level of review of these estimates will be accomplished by AID as was accomplished during the $50 million program. The repair work will conform to approved designs and construction procedures that have been established for the $50 million grant, insuring a high quality finished product and guaranteeing the technical soundness of the project. It is estimated that most of the rehabilitation work in this project will be completed in one construction season, that is, by July 1977, with attendant reimbursement being completed the following month. This schedule is based upon favorable weather conditions and expeditious development of plans and cost estimates. In the event of adverse weather conditions during the normally typhoon-free construction season or design delays, the completion date would be adjusted accordingly.

The hydrologic study would be completed by the end of August 1977 with the end-of-project report and final evaluation report being accomplished by to September 30, 1977.

B. Financial Analysis and Plan

Item:	(1) U.S. Cost (Grant)	(2) GOP Cost (dollar equiv)	(3) Total Cost
(a) PASA	$ 50,000	$ 8,000	$ 58,000
(b) Hydrologic studies and other technical assistance	150,000	12,000	162,000
(c) Repair of F.C. projects	3,500,000	1,500,000	5,000,000
(d) Repair of irrigation projects	1,100,000	480,000	1,580,000
(e) Commodities (Excess Property)	200,000	-	200,000
	$5,000,000	$2,000,000	$7,000,000

The total cost estimates for individual projects in (c) and (d) above were prepared by the GOP and are based on current construction costs. Their reasonableness has been substantiated in USAID by comparison of similar projects recently completed under the Disaster Recovery Program. The GOP agencies involved have prepared these preliminary estimates using liberal estimating procedures, however, no specific line item for contingencies is in their total estimate. The amount to be reimbursed (U.S. cost) is USAID's estimate calculated as 70 percent of the total cost estimate. However, this U.S. cost figure will be determined more accurately on a project by project basis upon submittal, review, and approval of the detailed cost estimates. Since the construction of the project will be completed within seven to eight months, no allowance for inflation is necessary.

On the basis of the foregoing, and pending detailed review of subsequent submittals of refined and updated cost estimates, it is concluded that the financial plan is sound and reasonable.

Further, in order to insure full utilization of the grant funds and to facilitate good management of the project, during the implementation stage, items (a) through (e) above should be flexible and open to internal adjustment as future conditions may dictate (i.e., adjustments in project priorities between flood control and irrigation, more detailed cost estimates, etc.); but in no case will AID's total contribution exceed $5.0 million.

C. Social Analysis

The paramount social goal of the project is the restoration of a sense of security in the local inhabitants. This will be done by reducing the probability of flooding of agricultural lands, residences, small businesses and transportation facilities, as well as protection of local drinking water supplies against increased contamination. The restoration and repair of the flood control projects will accomplish this goal, and repair of the damaged irrigation systems will provide peace of mind to the farmers who are dependent upon these systems for their livelihood. In addition, family and community relations may continue uninterrupted, providing a better quality of life in the rural areas.

D. Economic Analysis

It is difficult to quantify the substantial economic benefits of this project since it consists of rehabilitation of a number of existing projects, and in some cases improvement of critical areas where failure might occur in the event of future serious flooding. The major economic benefits would consist of protection of the capital investment already made in the original projects as well as the prevention of future damages to agriculture, personal property and infrastructure which would occur during subsequent storms if the repairs were not undertaken. A secondary economic benefit will accrue to the workers who carry out the manual labor portion of this project. In many cases these workers will be unemployed or underemployed farmers and local residents. Recognizing the enormous capital investment that exists as a sunk cost in the damaged facilities there is little question that the economic benefits

resulting from this incremental investment will conform to AID's guidelines for economic rate of return as stated in AID Handbook 3, Chapter 6C. A detailed economic analysis of this activity is not deemed essential.

E. Environmental Declaration

The proposed grant funds will be used for reconstruction of irrigation and flood protection works damaged in May 1976 during Typhoon Didang.

It is recommended that a Negative Declaration be made by the Assistant Administrator of the Asia Bureau stating that the Agency will not develop an Environmental Impact Statement or an Environmental Assessment based upon:

(a) the need to proceed immediately with disaster relief rehabilitation infrastructure repairs, and

(b) the program is similar to, but much smaller, than the disaster rehabilitation activities implemented following the major 1972 typhoon flood. No significant effects were identified during the previous disaster relief work which adversely impacted upon organisms in the biosphere, including human life.

Part IV. Implementation Arrangements

A. Analysis of the Recipient's and AID's Administrative Arrangements

1. Recipient

The recipient agencies for the Government of the Philippines will be the Bureau of Public Works and the National Irrigation Administration for flood control and irrigation projects, respectively. These agencies have the prime responsibility for these functions on a National level and both are sub-elements of the Department of Public Works, Transportation and Communication, and the inter-relationship of their respective roles is coordinated at that level. Both agencies are staffed with adequate design elements capable of preparing plans and specifications for all sub-elements of the project in a timely and efficient manner. Both agencies have shown an excellent capability in dealing with construction contractors and consulting engineers and they utilize contractor selection procedures similar to those used successfully in the United States and other developed countries. And both agencies have field offices competently staffed to administer the sub-elements of the project and at the same time be responsive to the needs and desires of the local population. In view of the foregoing administrative analysis, no problems are foreseen in the implementation of the project. It should also be recognized that these are the two GOP agencies that had the primary responsibility for implementation of AID's $50 million grant (Disaster Recovery Program) following the 1972 floods. Their organizations and staffs are personally known to USAID officials.

2. A.I.D.

In view of the success of the $50 million Disaster Recovery Program just now reaching its conclusion, this project presents no complex or unusual administrative features. Plans, specifications and cost estimates submitted by the two GOP implementing agencies involved will be reviewed by USAID's engineering staff for adequacy and completeness and

the actual construction will be monitored by AID. USAID currently has on its staff one Flood Control Advisor (PASA U.S. Army Corps of Engineers), one General Engineering Officer, one Civil Engineer and three local hire engineers. In view of his experience in similar functions over the past three years, USAID has initiated a request (Manila 12905 dated August 25, 1976) for the extension of the Flood Control Engineer PASA through September 30, 1977, to administer this project and to advise the GOP agencies involved. Approval and execution of this PASA extension request will provide adequate staffing within USAID for this project and can easily be coordinated with requirements of other on-going projects. Disbursements will be in accordance with the Fixed Amount Reimbursement Method (FAR).

B. Implementation Plan

1. General

Immediately upon approval of this paper and notification to the GOP, the agencies involved will submit designs and cost estimates for the rehabilitation projects to USAID. These designs and cost estimates will be reviewed by USAID's engineering staff, and agreements will be entered into for reimbursement of agreed upon direct costs in accordance with the Fixed Amount Reimbursement Method. Construction will start immediately thereafter, for those projects to be accomplished by force account and negotiations for contracts on the remaining projects will be started with local contractors. Most of the projects will be accomplished by force account. The construction will be monitored closely by USAID's engineering staff to insure that the construction is done according to the plans and previously approved specifications. This procedure will provide for continuous evaluation of the quality of work and of the GOP agencies' ability to perform the work as required. The resources of these agencies may be supplemented by the provision of additional construction equipment from U.S. government excess property sources.

It is planned that the implementation of the hydrologic review portion be accomplished by PIO/T to the

Asian Institute of Technology or like institution. It is foreseen that the review study would be similar to that undertaken for the Bicol River Basin by AIT including math modeling. It is anticipated that this study could be initiated immediately upon approval of the project and would require about nine months for accomplishment.

2. Project Schedule

The overall project schedule is shown on the Project Performance Network (PPT), Annex B. Key items in initiating this project will be approval of extension of PASA for the Flood Control Advisor by October 1976 and negotiation of a contract for the hydrologic basin study by November 1976. The construction phase of the project should present no problems once construction begins in January 1977.

C. Evaluation Arrangements for the Project

In agreement with the Government of the Philippines, the projects will be monitored and continuously evaluated by USAID's engineering staff. Reimbursement under the FAR method will not be made unless the project has been constructed according to previously agreed upon plans and specifications. This arrangement has been very successful in accomplishing the previous Disaster Recovery Program. The implementing agencies will also provide full-time project inspectors on those projects undertaken by contract and these inspectors will provide progress reports and an evaluation of that phase of the work in cooperation with the AID Monitoring staff.

D. Conditions, Covenants and Negotiating Status

1. Conditions

There are no unusual conditions precedent (CP) required of the Government of the Philippines regarding this grant.

2. Covenants

The principal covenant recommended for inclusion in the Project Agreement is that the Government of the Philippines will finance the reconstruction of the damaged projects and will be reimbursed by AID for the direct cost thereof in accordance with the Fixed Amount Reimbursement Method (FAR) only upon certification by the AID monitoring that the project or discrete portion thereof has been satisfactorily completed according to previously approved plans and specifications.

Further that construction should not begin until adequate plans and specifications have been prepared and approved by AID, except in emergency cases where it was necessary to accomplish repairs at an earlier date. These exceptions for reimbursement for work already completed will be at the discretion of AID.

3. Negotiating Status

Discussions between officials of AID and the National Economic and Development Authority (NEDA), the GOP Coordinating authority for development projects, have already taken place and the above items discussed. These conditions are the same as the previous Disaster Recovery Program and apparently present no problems for the GOP.

REPUBLIC OF THE PHILIPPINES
NATIONAL ECONOMIC AND DEVELOPMENT AUTHORITY
P. O. Box 1110, Manila

ANNEX A

Tel. 50 30 71
Cable Address: NEDAPHIL

July 20, 1976

Mr. Garnett A. Zimmerly
Director, USAID Mission
M a n i l a

Dear Mr. Zimmerly,

You will recall that when Typhoon "Didang" struck the Philippines in May, 1976, inducing unprecedented floods and causing extensive loss of lives and damage to property, my Government issued a general appeal for assistance. This appeal was repeated in my general statement before the Consultative Group Meeting in Paris on June 15 to 16, 1976.

My Government wishes to acknowledge with deep gratitude the emergency assistance provided by the United States in May which was most helpful in meeting the immediate relief requirements of the people. The Philippines is now faced with the herculean task to repair and rehabilitate the facilities damaged by Typhoon "Didang". Enclosed concise table shows that Typhoon "Didang" caused estimated total damage of ₱397.007 M, of which ₱240.887 M represents damage to infrastructures and ₱156.120 M represents damage to agriculture and industry. This is exclusive of the damage to private property.

We would, therefore, deeply appreciate additional assistance you could provide to assist the Government and the people of the Philippines in the rehabilitation of infrastructures and agriculture as a follow up to your earlier emergency assistance. To reactivate at the earliest possible time the productive capacity of the economy, it would be highly desirable if your assistance could be directed to the repair and rehabilitation especially of the arteries of communication, irrigation systems, flood control structures and to regenerate the agricultural productive capacity of the country.

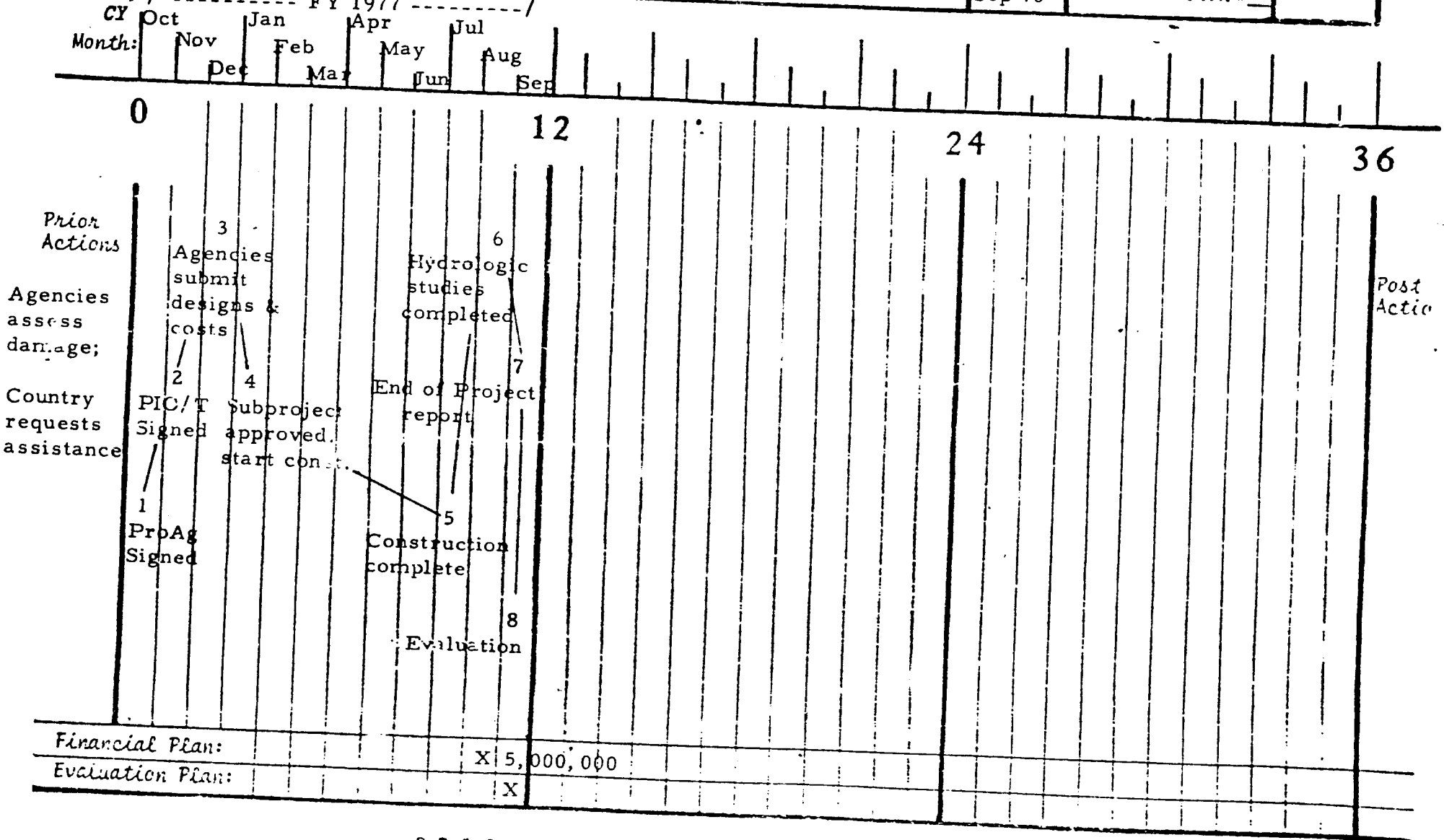
Trusting that this appeal will meet prompt and generous response from your Government, I have instructed appropriate officials of my Government to prepare the projects that would require immediate attention for which your assistance would be a very valuable element.

Sincerely yours,

GERARDO P. SICAT
Secretary of Economic Planning
(Director-General)

ANNEX B

Country:	Project No:	Project Title:	Date:	/ X / Original	PPT appr
Philippines		Disaster Rehabilitation (Didang)	Sep 76	/ / Revision #	



PROJECT PERFORMANCE NETWORK

PPT FORM

Country:	Project No:	Project Title:	Date:	/X/ Original	Apprvd:
Philippines		Disaster Rehabilitation (Didang)	Sep 76	/ / Revision #	

CPI DESCRIPTION

1. 10/31/76 ProAg Signed
2. 11/30/76 PIO/T Signed with AIT
3. 12/15/76 Agencies submit designs & costs
4. 12/31/76 Subprojects approved, start construction
5. 7/15/77 Construction completed
6. 8/31/77 Hydrologic studies completed
7. 9/15/77 End of project report
8. 9/30/77 Evaluation completed

ANNEX B

AID 1020-25 (1-73)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Disaster Rehabilitation (Didang)

(INSTRUCTION: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN AID TO ORGANIZING DATA FOR THE PAR REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Life of Project: From FY 76 to FY 77
Total U.S. Funding $5,000,000
Date Prepared 9/76

PAGE 1

NARRATIVE SUMMARY Program or Sector Goal: The broader objective to which this project contributes: (A-1)	OBJECTIVELY VERIFIABLE INDICATORS Measures of Goal Achievement: (A-2)	MEANS OF VERIFICATION (A-3)	IMPORTANT ASSUMPTIONS Assumptions for achieving goal targets: (A-4)
Increase the well-being and sense of security of rural people living in Central Luzon.	1. Weather-related crop losses reduced from 1976 levels to those of more normal years, e.g. 1975 in Central Luzon. 2. Residences, business and transportation facilities in Central Luzon withstand annual flooding with levels of damage significantly below those arising from Typhoon Didang in 1976.	National Food and Agriculture Council Records and Statistics Provincial and National Government Reports	1. Non-typhoon-related agricultural production conditions do not offset lack of typhoon damage, e.g. drought, insect/rodent infestation, fertilizer availability. 2. National and international economic conditions remain stable, e.g. balance of payment, pricing policy. 3. Other standards of well-being, e.g. health, education - do not decline.

AID 1020-28 (11-73)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number:

Life of Project:
From FY _____ to FY _____
Total U.S. Funding _____
Date Prepared: _____

PAGE 2

NARRATIVE SUMMARY Project Purpose: (B-1)	OBJECTIVELY VERIFIABLE INDICATORS Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)	MEANS OF VERIFICATION (B-3)	IMPORTANT ASSUMPTIONS Assumptions for achieving purpose: (B-4)
1. Reestablish flood protection of agricultural land and population centers in the Central Luzon flood basins. 2. Reestablish adequate supply of water for irrigation systems in the dry season in the Central Luzon flood basins. 3. Generate contingency plans for handling future floods and future flood control construction.	1. Restored flood control projects and national irrigation system-components in Central Luzon withstand flood waters in 1977 and proceeding years. 2. Dry season irrigation sufficient to permit agricultural production to reach and/or exceed pre-typhoon Didang levels in flood basin of Central Luzon. 3. Flood control plans based on precise mathematical expectations.	Bureau of Public Works reports National Irrigation Administration Reports Inspection/Observation of new plans of BPW	1. Local people aware of and assist in requirements of canal and dike maintenance. 2. Sufficient monitors and inspectors can be obtained to enforce strict adherence to engineering specifications. 3. Sufficient water available at diversion dam in dry season.

AID 1020-28 (11-73)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: _____

Life of Project:
From FY _____ to FY _____
Total U.S. Funding _____
Date Prepared _____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1)	Magnitude of Outputs: (C-2)	(C-3)	Assumptions for achieving outputs: (C-4)
1. Repair of damage caused by typhoon Didang - May 1976 in Central Luzon: a) Flood Control Projects b) Components of the National Irrigation System 2. A study of Flood Control plan for Central Luzon.	1. 30 of most severely damaged flood control projects and components of the National Irrigation System (Listed on Annex D of PP). 2. Computer simulation model of varying posited storm conditions.	Inspection assisted by BPW Engineer offices. Copy of Report.	Implementing agencies have sufficient manpower and equipment to carry out project. BPW Engineers assist simulation study with accurate and complete information.

AID 1020-25 (1-73)
SUPPLEMENT 1 -

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number:

Life of Project:
From FY _____ to FY _____
Total U.S. Funding _____
Date Prepared: _____

NARRATIVE SUMMARY Project Inputs: (D-1)	OBJECTIVELY VERIFIABLE INDICATORS Implementation Target (Type and Quantity) (D-2)				MEANS OF VERIFICATION (D-3)	IMPORTANT ASSUMPTIONS Assumptions for providing inputs: (D-4)
	Item	US Cost Grant	GOP Cost $ Equiv	Total Cost		
U. S. Grant Funds - $5 Million Monitors/Advisors Commodities GOP Budget Funds Personnel	a) PASA	50,000	8,000	58,000	AID Budget Authorizations and obligations. USAID Budget and planning documents. GOP Budget.	AID and GOP funding provided on timely basis.
	b) Hydrologic studies & other tech. assistance	150,000	12,000	162,000		
	c) Repair of flood control projects	3,500,000	1,500,000	5,000,000		
	d) Repair of irrigation projects.	1,100,000	480,000	1,580,000		
	e) Commodities (Excess property)	200,000	-	200,000		
		5,000,000	2,000,000	7,000,000		

Philippines - Disaster Rehabilitation (Didang)

Annex D - List of Sub-projects

A. Flood Control	Est. Reimb. Cost ($000)
1. Balo-coc Revetment	750.0
2. Cayanga Revetment	300.0
3. Viray Depalo Spur Dikes, Riprap and Levee Repair	150.0
4. Rosales-Santa Maria Tayug Spur Dikes and Levee Repair	50.0
5. Bayambang Revetment Repair	300.0
6. Santo Tomas Revetment Repair and Extension	300.0
7. Poponto Floodway Levee Repair and Spur Dikes	100.0
8. Bued Revetment Repair and Extension	150.0
9. Abeloleng-Angalacan Revetment	100.0
10. Jaen Revetment Repair	200.0
11. Arayat-Apalit Levee Repair and Raising	200.0
12. Arayat-Cabiao Ring Levee Repair and Spur Dikes	200.0
13. Pasig-Portrero-Caulaman Levee Repairs and Revetment	200.0
14. Apalit Revetment Extension	500.0
Sub-Total - Flood Control - - -	$3,500.0

B. Irrigation	
1. Ambayoan-Depalo	150.0
2. Agno RIS	180.0
3. San Fabian RIS	15.0
4. Abulog RIS	30.0
5. Laoag Vintar RIS	30.0
6. Santa Maria-Burgos RIS	15.0
7. Caulaman RIS	15.0

Irrigation (Cont'd)

8.	Amburayan RIS	15.0
9.	Masalip RIS	15.0
10.	Porac-Gumain RIS	15.0
11.	Nayom RIS	15.0
12.	Sto. Tomas RIS	15.0
13.	Cavite Friar Lands	15.0
14.	Lower Agno RIS	200.0
15.	Kay Akla RIS	75.0
16.	Pangasinan Communals	300.0
	Sub-Total - Irrigation - - -	$1,100.0
	Grand Total - Rehabilitation Work - -	$4,600.0

Note: List of sub-rpojects shown here differs from original GOP request as result of direct negotiations with agencies concerned and adjustment of priorities, Total cost reflect $4,600,000 in part c and d of Financial Analysis, page 8 of Project Paper.

ANNEX E

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
Manila, Philippines

Ramon Magsaysay Center
1680 Roxas Boulevard

Telephone: 59-80-11

CERTIFICATION PURSUANT TO SECTION 611 (e)
OF THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED

I, GARNETT A. ZIMMERLY, the principal officer of the Agency for International Development in the Philippines, having taken into account, among other things, the maintenance and utilization of projects in the Philippines previously financed or assisted by the United States, do hereby certify that, in my judgment, the Philippines has both the financial capability and the human resources capability to effectively maintain and utilize the proposed Disaster Rehabilitation (Didang) grant.

This judgment is based upon the project analysis as detailed in Philippines Disaster Rehabilitation (Didang) Project Paper and is subject to the conditions imposed therein.

Garnett A. Zimmerly

Garnett A. Zimmerly, Director
USAID/Philippines

9-7-76

Date