

5240104(4)
 PD-ADF 45441

PROJECT APPRAISAL REPORT (PAR)

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1. PROJECT NO. 504-11-755-104	2. PAR FOR PERIOD: 1/1/75 TO 3/31/75	3. COUNTRY NICARAGUA	4. PAR SERIAL NO. 76-3
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5. PROJECT TITLE
 Center for Earthquake Hazard Reduction (CEHR)

5240104(4) 1002

4p

6. PROJECT DURATION: Began FY 74 Ends FY 77	7. DATE LATEST PROP 11/74	8. DATE LATEST PIP	9. DATE PRIOR PAR 12/74
10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: \$ 201,000	b. Current FY Estimated Budget: \$ 30,000	c. Estimated Budget to completion After Current FY: \$ 26,000

11. KEY ACTION AGENTS (Contractor, Participating Agency or Voluntary Agency)

a. NAME	b. CONTRACT, PASA OR VOL. AG. NO.
United States Geological Survey (USGS)	PASA No. LA(IC) NIC-104-10-74

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X)			B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
USAID	AID/W	HOST		
X			Prepare letter of support for CEHR request to Minister of Public Works for budget allocations for publications and overtime	May 15, 1975

D. REPLANNING REQUIRES	E. DATE OF MISSION REVIEW
REVISED OR NEW: <input type="checkbox"/> PROP <input type="checkbox"/> PIP <input type="checkbox"/> PRO AG <input type="checkbox"/> PIO/T <input type="checkbox"/> PIO/C <input type="checkbox"/> PIO/P	April 9, 1976

PROJECT MANAGER: TYPED NAME, SIGNED INITIALS AND DATE
 MISSION DIRECTOR: TYPED NAME, SIGNED INITIALS AND DATE
 Emerson J. Melaven, Acting Director

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II. PERFORMANCE OF KEY INPUTS AND ACTION AGENTS

A. INPUT OR ACTION AGENT CONTRACTOR, PARTICIPATING AGENCY OR VOLUNTARY AGENCY	B. PERFORMANCE AGAINST PLAN							C. IMPORTANCE FOR ACHIEVING PROJECT PURPOSE (X)				
	UNSATISFACTORY		SATISFACTORY			OUTSTANDING		LOW		MEDIUM		HIGH
	1	2	3	4	5	6	7	1	2	3	4	5
1. USGS							X					X
2.												
3.												

Comment on key factors determining rating

USGS technicians were highly qualified and dedicated and contributed to the initiation of the fully functioning seismic network. Without their personal concern and assistance, it is unlikely that the system would have gotten underway as it did, nor that the first publication would have been as successful.

4. PARTICIPANT TRAINING					X								X
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Comment on key factors determining rating

One additional CEHR technician was trained at Menlo Park, completing the original training plan.

5. COMMODITIES						X							X
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Comment on key factors determining rating

The USGS has continued to mail seismic supplies as needed on a timely basis, in response to CEHR requests.

6. COOPERATING COUNTRY	a. PERSONNEL						X						X
	b. OTHER financial contribution				X								X

Comment on key factors determining rating

CEHR technicians and staff have continued to be hard working and dedicated, as well as capable. One original technician was transferred during the period to the Urban Development Vice-Ministry, but was replaced by new qualified person. The GON Budget has not included funds for publishing findings, a crucial aspect of project, nor for vacations during which CEHR staff had to work to maintain vigilance over equipment. USAID plans to request such action.

7. OTHER DONORS				X								X		
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(See Next Page for Comments on Other Donors)

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II. 7. Continued: Comment on key factors determining rating of Other Donors

III. KEY OUTPUT INDICATORS AND TARGETS

A. QUANTITATIVE INDICATORS FOR MAJOR OUTPUTS		TARGETS (Percentage/Rate/Amount)					END OF PROJECT
		CUMU- LATIVE PRIOR FY	CURRENT FY		FY ____	FY ____	
			TO DATE	TO END			
No. of technicians trained by USGS	PLANNED	4	4	4			4
	ACTUAL PERFORM- ANCE	4	4				
	REPLANNED						
No. of seismograph sites in full operation	PLANNED	15 incl. Hqtrs.	15	15			15
	ACTUAL PERFORM- ANCE	15	15				
	REPLANNED						
No. of strong motion accelero- graphs/seismoscopes installed and operating	PLANNED	2 3/0	3 2/0	26/18			26/18
	ACTUAL PERFORM- ANCE	9	26/18				
	REPLANNED			26/18			
	PLANNED						
	ACTUAL PERFORM- ANCE						
	REPLANNED						
B. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS	COMMENT: Center began functioning in March 1975 and in three months had registered more events than registered in past 70 years. First bulletin published; and next two prepared.						
1. Compilation of new data gathered by network; correlation with existing.							
2. Establish continuous monitoring of volcanic activity.	COMMENT: Semi-monthly visits made to Cerro Negro and San Cristobal; eruption of San Cristobal in March diverted attention to that site.						
3. Installation of strong motion equipment for building response measurements.	COMMENT: 26 accelerographs installed in all major Pacific zone cities; strong motion now required for activation.						

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IV. PROJECT PURPOSE

1. Statement of purpose as currently envisaged.

2. Same as in PROP? YES NO

To create, equip, staff and train an organization including a modern seismograph network for applied seismic and related research in Nicaragua with capability of determining potential frequency, location, and destructiveness of seismic and volcanic events.

a. 1. Conditions which will exist when above purpose is achieved.	2. Evidence to date of progress toward these conditions.
<p>1. Earthquake Center, including network of seismographs, strong motion accelerographs, and seismoscopes will be functioning with adequate local funding.</p> <p>2. Preliminary maps of seismicity and seismic risk will be prepared and distributed to appropriate entities of public and private sector.</p> <p>3. Information on strong motion being gathered for use in zoning and building design.</p>	<p>1. CEHR is a reality - with seismic equipment in place and operating, staff on board and funded by GON, and building and vehicles provided for. Additional funds needed for publication of findings, and additional TA and equipment (already programmed by USAID) needed for enhanced analytical capability.</p> <p>2. Maps prepared and distributed to public sector with first bulletin. Private sector distribution must still be done.</p> <p>3. Strong motion must occur first.</p>

V. PROGRAMMING GOAL

A. Statement of Programming Goal

To minimize death, damage, and public services disruption caused by seismic events by incorporating best possible seismic information in locational and design decisions.

B. Will the achievement of the project purpose make a significant contribution to the programming goal, given the magnitude of the national problem? Cite evidence.

Achievement of project purpose is necessary, though not sufficient element towards achievement of project goal. Essential data gathered by CEHR must be used by zoners and designers.