

PROJECT APPRAISAL REPORT (PAR)

4970241(2)

PAGE 1

1. PROJECT NO. <b>AID Loan 497-T-036</b>	2. PAR FOR PERIOD <b>May 1975 TO March 1977</b>	3. COUNTRY <b>Indonesia</b>	4. PAR SERIAL NO. <b>77-16</b>
---	--	--------------------------------	-----------------------------------

5. PROJECT TITLE  
**Aceh Road Betterment** PD-AAD-847-B1  
8p.

6. PROJECT DURATION: Began FY <b>73</b> Ends FY <b>81</b>	7. DATE LATEST PROP <b>N.A.</b>	8. DATE LATEST PIP <b>N.A.</b>	9. DATE PRIOR PAR <b>None</b>
10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: \$ <b>10,300,000</b>	b. Current FY Estimated Budget: \$	c. Estimated Budget to completion After Current FY: \$

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

a. NAME	b. CONTRACT, PASA OR VOL. AG. NO.
<b>Louis Berger Int. Inc. &amp; P.T. Asa Consulting Engineers</b>	<b>Contract No.56/CTR/LN/BM/75</b>
<b>P.T. Marjaya (Indonesian Contractor)</b>	<b>Contract No.13/CTR/LN/BM/76</b>
<b>P.T. Nindya Karya &amp; P.T. Hutama Karya (Indonesian)</b>	<b>Contracts signed Mar. 9,1977</b>

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		
		(1)	GOI requests USAID approval of signed construction contracts for the Sidikalang-Kruengluas Segment (Section 2) and the Kutacane-Blangkejeren Segment (Section 3) of the Aceh Road Betterment Project.	May 30, 1977
		(2)	USAID approves these construction contracts.	May 30, 1977

BEST AVAILABLE DOCUMENT

D. REPLANNING REQUIRES

REVISED OR NEW:  NA  PROP  PIP  PRO AG  PIO/T  PIO/C  PIO/P

E. DATE OF MISSION REVIEW

PROJECT MANAGER: TYPED NAME, SIGNED INITIALS AND DATE <b>Leslie C. Koski</b> <i>L.C.K.</i> <b>5/1/77</b>	MISSION DIRECTOR: TYPED NAME, SIGNED INITIALS AND DATE <b>Thomas C. Niblock</b> <i>T.C.N.</i>
Evaluation Officer: <b>Robert F. Zimmerman</b> <i>R.F.Z.</i>	<b>Sarah Jane Littlefield</b> <i>S.J.L.</i> <b>6/3/77</b>

**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. <b>Louis Berger, Int. &amp; PT Asa, Consultants</b>				<b>X</b>								<b>X</b>
2. <b>P.T. Marjaya</b>				<b>X</b>								<b>X</b>
3. <b>P.T. Nindya Karya</b>				<b>X</b>								<b>X</b>

Comment on key factors determining rating

4. **P.T. Hutama Karya** X X

#1 - Louis Berger contract for project supervision was signed on Oct. 31, 1975. The Consultant began mobilizing in Jan. 1976. Implementation has been slow mainly due the negotiations required to get acceptable unit prices on the contracts for Road Section 2 and Road Section 3. The consultant is redesigning the bridges in reinforced concrete because of the high cost of pressure treating timber. This also has contributed to some delays in the project. The consultant expatriate staff is mobilized and on site. (Continued)

<del>XXXXXXXXXX</del> 4. PARTICIPANT TRAINING	1	2	3	<b>X</b>	5	6	7	1	2	<b>X</b>	4	5
--	---	---	---	----------	---	---	---	---	---	----------	---	---

Comment on key factors determining rating

See page 6, item 6.

5. COMMODITIES	1	2	3	<b>X</b>	5	6	7	1	2	3	4	<b>X</b>
----------------	---	---	---	----------	---	---	---	---	---	---	---	----------

Comment on key factors determining rating

About 90% of the construction equipment has been procured and is on the job site. A contract for the reinforcing steel was signed Oct. 18, 1976 and letter of commitment to the bank was issued Mar. 1, 1977. Delivery of steel should be completed by May 30, 1977.

6. COOPERATING COUNTRY	a. PERSONNEL <b>Bina Marga</b>	1	2	3	4	5	<b>X</b>	7	1	2	3	<b>X</b>	5
	b. OTHER												

Comment on key factors determining rating

The Bina Marga Project Manager has been the driving force in keeping the project moving. He has provided excellent support for the consultants in housing technical support and vehicles. He has spent many long hours with consultant negotiating the contracts for Road Section 2 and Road Section 3. He was instrumental in finally getting contracts for these Sections signed. He has provided good support for USAID personnel on site inspection trips.

7. OTHER DONORS	1	2	3	4	5	6	7	1	2	3	4	5
-----------------	---	---	---	---	---	---	---	---	---	---	---	---

(See Next Page for Comments on Other Donors)

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

The West German AID Mission has expressed interest in financing the road betterment from Tapaktuan to Meulaboh. The Japanese AID Mission has expressed interest in financing the road betterment from Meulaboh to Banda Aceh. This additional road betterment will tie in with USAID Aceh road betterment project and will open up an additional area in Aceh for development and commerce.

III. KEY OUTPUT INDICATORS AND TARGETS

A. QUANTITATIVE INDICATORS FOR MAJOR OUTPUTS	CUMULATIVE PRIOR FY	TARGETS (Percentage Rate Amount)					END OF PROJECT
		CURRENT FY		FY <u>78</u>	FY <u>79</u>		
		TO DATE	TO END				
Road Section 1 completed.	PLANNED	-	12%	30%	70%	90%	100%
	ACTUAL PERFORMANCE	-	10%				
Road Section 2 completed.	REPLANNED						
	PLANNED *						
Road Section 3 completed.	ACTUAL PERFORMANCE						
	REPLANNED						
Durability of road.	PLANNED						
	ACTUAL PERFORMANCE						
	REPLANNED						
Utility of road by producers to transport goods to market.	COMMENT:	<b>To be measured several years after the road has been completed.</b>					
	COMMENT:	<b>Periodic traffic counts will have to be taken after the road is completed.</b>					
3.	COMMENT:						

\*The construction contractors have not submitted a progress schedule.

**IV. PROJECT PURPOSE**

A. 1. Statement of purpose as currently envisaged. 2. Same as in PROP?  YES  NO

**The purpose of the project is the opening of potentially productive areas to consumer markets, permitting easier entry of better service facilities and communications and to provide support for other Rural Development Projects in the northern Sumatra region.**

<p>B. 1. Conditions which will exist when above purpose is achieved.</p> <p><b>When the Aceh Road Betterment is completed it will be possible to drive directly from Sidikalang to the areas around Kruengluas, Tapaktuan and Meulaboh. At the present time there are no motorable roads out of the Kruengluas area. It takes 5 days to drive from Tapaktuan to Medan and 4 days to drive from Meulaboh to Medan. When the project is completed it will be possible to drive from Kruengluas to Medan in 6 hours, from Tapaktuan to Medan in 6 hours and Meulaboh to Medan in 16 hours. Completion of Road Section 3 will enable one to drive from Kutacane to Blangkejeren in 4 hours from Blangkejeren to Medan in 12 hours. At the present time it takes 12 hours to drive the (Continued)</b></p>	<p>2. Evidence to date of progress toward these conditions.</p> <p><b>Construction has begun on all three sections of road.</b></p>
---	---

**V. PROGRAMMING GOAL**

A. Statement of Programming Goal

**The regional goal is opening up the productive remote areas of Aceh Province to consumer markets in northern Sumatra primarily in the Medan area.**

---

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.

**Yes. Travel time between productive areas and consumer markets will be reduced (from 4 to 6 days to 6 to 16 hours), thereby making it easier to transport goods to market and provide services to people in these rural areas.**

<b>Page 5 PAR</b>	<b>Project #</b> 497-T-036	<b>PAR for period</b> May 75 to March 77	<b>Country</b> Indonesia	<b>PAR #</b> 77-16
-------------------	-------------------------------	---	-----------------------------	-----------------------

**Continued Relevance of Current Project Purpose**

1. Are there alternative approaches to achieving this Project's Purpose or the Sector Goal? Would any other approach be more effective or appropriate for USAID?

There are no alternative approaches to building roads if one wants to open isolated rural areas and ultimately increase agricultural production therein.

2. What is current priority of Project with the GOI? Evidence for or against?

The project has been given a high priority by the GOI and Bina Marga. Bina Marga has budgeted 2.135 billion rupiahs for FY 78. They have provided a good support staff and back up in the way of vehicles and equipment. Housing was redone to meet the needs of the expatriates. Bina Marga, at their expense, has built an extensive water supply system at Sidikalang to supply the needs of Base Camp of the consultant, contractor and Bina Marga.

3. How does GOI view USAID role? Do USAID and GOI share common perception of Project Purpose?

The GOI and Bina Marga appreciate the support USAID has given on the Aceh Road Betterment Project. USAID and the GOI share a common perception of the project which is to open up productive areas in Aceh to consumer markets permitting easier entrance of service facilities and communications.

4. Are there Adverse Side Effects to this Project?

- a. Economic? None are apparent at the present time.
- b. Ecological? None are apparent at the present time.
- c. Social/Political? None are apparent at the present time.
- d. Health? None are apparent at the present time.

<b>Page 6 PAR</b>	<b>Project #</b> 497-T-036	<b>PAR for period</b> May 75 to March 77	<b>Country</b> Indonesia	<b>PAR #</b> 77-16
-------------------	-------------------------------	---	-----------------------------	-----------------------

**5. Do the Benefits justify the costs?**

Yes. The GOI (Bina Marga) with the assistance of a UNDP planning team has done a study of the technical and economic aspects of the Aceh road system and the economy's needs.

On the cost side four initial types road improvements were evaluated. Two types of benefits were analyzed by the UNDP. (1) Estimates of development benefits based on national, provincial and district level estimates on production potential and on estimates of the production response to the introduction of more reliable, lower cost transportation, and access to markets for obtaining production inputs and selling output commodities. (2) Benefits in the user costs, i.e. the reduction in vehicle operating costs and user's time savings arising from higher average speeds.

In the case of the USAID Aceh Road project only development benefits were included in the analysis. The UNDP team determined that the majority of development benefits will come from increased production of the principal commodities of rice, rubber, palm oil and palm kernels, pine resin and turpentine, coconut, coffee, patchouli oil, cloves and nutmeg. These increases are due principally to the expected introduction of presently unutilized cultivable land, in consequence of increased market access and reduced transportation costs resulting from the road betterment.

USAID economic advisers reviewed with Bina Marga and UNDP the data on Aceh and the project area and checked the assumptions made in the analysis. Based on their review, the USAID Advisors projected an Internal Rate of Economic return for the total (USAID Project) Aceh Road Betterment Project of 43%.

**6. Are there any benefits unrelated to the project purpose as originally planned?**

(a). **Employment and Training:** The project will provide employment for many people in the area. Also, people will be trained in various skills required in construction of the road thereby creating a skilled labor base for future such projects.

(b). **Institution Building:** Bina Marga (Indonesian Highway Department) developed a point system for qualifying and selecting the supervising engineering consultant for the project. They also implemented a procedure for tendering bids for the construction of the project using local contractors. In the past Bina Marga has done road construction by force account.

(c). **Training of GOI Design Staff:** This is the first major road project which the design staff of the Directorate of Planning, Bina Marga, has handled the survey and design of the entire project. They also prepared the specifications and contract documents. (Continued)

Page / PAR	Project #	PAR for period	Country	PAR #
	497-T-036	May 75 to March 77	Indonesia	77-16

7. Does this project have any impact on the five development criteria outlined in Section 102(d) of the FAA (i.e.: a. increasing agricultural productivity through small farm labor intensive agriculture; b. reduce infant mortality; c. control population growth d. promote greater equality in income distribution; and e. reduce rates of unemployment and underemployment). Explain.

The road betterment will make the area more easily accessible, encouraging greater agricultural production. It will help make government services more readily available for reduction of infant mortality and family planning for population control.

8. Who are the direct and indirect beneficiaries of this project? (Identify, describe nature of benefits and number of those benefiting).

About 270,000 rural farmers and families will benefit from the Aceh Road Betterment in their areas. Transportation costs will be reduced substantially, providing ready markets for agricultural surplus produce and it will encourage additional agricultural production providing more employment in the areas.

9. Overall assessment of project performance.

Unsatisfactory		Satisfactory			Outstanding	
1	2	3	4	5	6	7
			X			

Narrative statement explaining ranking:

The project was slow in getting started. However, now that all of the contracts have been signed, mobilization and construction are moving ahead at an accelerated pace.

MICROFILMED FROM BEST  
AVAILABLE COPY

<u>Page &amp; PAR</u>	<u>Project #</u>	<u>PAR for period</u>	<u>Country</u>	<u>PAR #</u>
	497-T-036	May 75 to March 77	Indonesia	77-16

Continuation

Page 2 - Item 2.

#2 - PT. Marjaya contract for construction of Road Section 1 was signed on September 1, 1976. The contractor has completed mobilization and has cleared and grubbed 21 Km of road. The contractor is making good progress.

#3 - PT. Nindya Karya contract for construction of Road Section 2 was signed on March 9, 1977. The contractor has completed 40% of his mobilization. Progress should improve now that the contract has been signed.

#4 - PT. Hutama Karya contract for construction of Road Section 3 was signed on March 9, 1977. The contractor has completed 60% of his mobilization and cleared and grubbed 30 Km of road. The contractor is making good progress.

Page 4 - B.1

105 Kms from Kutacane to Blangkejeren by 4 wheel drive vehicle provided weather conditions permit.

Page 6 - Item 5.

(d) Development of Local Contract Capabilities: All three Sections of road are being constructed by local contractors. Each of the contractors has engaged an American expert in organizing and managing the actual construction. Previously work was done by force account or with foreign contractors.

(e) Development of Local Engineering Supervisory Consultants: The American consultant, Louis Berger Int., Ltd., has associated with local consulting firm, P.T. Asa. The American consultant will train the local personnel in supervision, surveying, inspection and various tests done in conjunction with road construction. Upon completion of this project, the local consulting firm will be able to supervise future road construction projects.

MICROFILMED FROM BEST  
AVAILABLE COPY