

PD-AR-569-A1

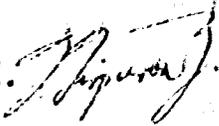
COMPLETION REPORT

AID Loan No. 522-L-013

Title: Farm to Market Access Road Program

Date Signed: November 25, 1965

A. Identification

1. AID staff conducting inspection: General Engineer: F. Figueroa Z. 
2. Date of Report: September 13, 1974.

- B. 1. Background: As originally contemplated in the Loan Agreement this loan was made to assist Borrower in financing the engineering and construction of 600 Kms. of all-weather farm-to-market roads.
2. According to the Second Amendment to the Loan Agreement made on July 28, 1971, the scope of the Loan was revised to cover:

- a) Construction of four access roads totalling 113.8 Kms.; and
- b) Preparation by the A/E firm of final engineering plans for nine sub-projects totalling 286 Kms. This revision of the scope of the Loan was made in order to reflect construction costs and additional work within sub-projects since the original Loan authorization.

- C. Project Execution: Four sub-projects were built under this Program and completed as follows:

Sub-Project No. 11, El Paraiso-Alanca

17.4 Kms.

BEST AVAILABLE COPY

Sub-Project No. 12, Maraita-Yauyupe	22.6 Kms.
Sub-Project No. 8, San Juan de Flores-Villa de San Francisco	16.3 Kms.
Sub-Project No. 2, Corocito-Tocoa-Sabá (Sections I and II)	57.5 Kms.
	<hr/>
	113.8 Kms.

D. Effectiveness of the Program: After completion of the sub-projects above mentioned, several field trip inspections have been made in order to determine the effectiveness of the access roads built under the Program. An engineering inspection was made in August 1974, to evaluate in the field the present situation of the roads from the maintenance point of view as well as from the usage and economic standpoint. A brief summary of the sub-projects follows:

Sub-Project No. 12 (Maraita-Yauyupe: 22.6 Kms.)

This access road is linked to the CA-6 highway by means of a trail, 27 Kms. long, which doesn't meet the minimum Honduran Highway Department standards for penetration roads.

It takes approximately 1 hour of hard driving from Zamorano (CA-6 highway) to Maraita. This poor linkage to the CA-6 highway, considerably reduces the potential use that the Maraita-Yauyupe road might have if it were properly linked to the main CA-6 highway. The Chief of the GOH Highway Construction Department has stated that improvement of this trail will be initiated by January 1975. This will allow ~~to make~~ better use of the Maraita-Yauyupe access road.

During our inspection the following conditions were observed:

- The selected material, sub-base course is washing out and ~~the~~ many ruts are forming as ^a result of lack of maintenance;
- Side ditches are blocked as a result of slides and erosion;
- A main bridge structure, 50 m. span, about 6 Kms. from Yauyupe has not ~~yet~~ yet been built. Due to the fact that the river crossing is in unfavorable conditions, traffic to Yauyupe is limited to four wheel drive vehicles. During our two hour inspection only two vehicles passed us;
- No agricultural development was observed in the project area, which consists mainly of rocky mountainous terrain and pine forest.

Sub-Project No. 11 (El Paraíso-Alauca: 17.4 Kms.)

This access road joins the CA-6 highway near the town of "El Paraíso". As in the Maraita-Yauyupe sub-project this access road is not being properly maintained by the Highway Department. Slides and eroded ditches were observed along the route. The road surface is in much better condition than in sub-project No. 12. During an hour inspection of the project eight passenger and cargo vehicles passed us.

BE T AVAILABLE COPY

Topography varies from rolling to mountainous terrain. The area of influence of this road has more agricultural potential than the Maraita-Yauyupe area. According to Highway Department officials, in a short time this road will be part of an alternate route that will link the Paraíso

region to the southern portion of the country.

Sub-Project No. 8 (San Juan de Flores-Villa San Francisco: 16.3 Kms.)

This access road is located in a small valley north of Tegucigalpa. It takes about 1-1/2 hours of hard driving to cover the 54 Kms. distance from Tegucigalpa to the project.

Some months ago damage was reported on a 1.5 x 2m box culvert approach at Sta. 3.7 due to erosion which almost stopped traffic. In our visit to the project we observed that maintenance crews from the Highway Department have already repaired the damage and traffic is in circulation. No maintenance has been given to the rest of the road. Side ditches need cleaning, and a course of selected material is required to keep the road surface in good condition. Much more agricultural activity was observed in this project area than in the other two project areas. More benefits and a faster capital recovery is anticipated from this project in comparison to sub-projects No. 11 and 12.

Following eastward from Villa de San Francisco the Highway Department has built, by force account, a fairly good 16 Kms. access to the CA-6 highway. Part of the construction is a 50 m. concrete bridge over ^{the} Yeguaré river, which was completed in December 1973. The Highway Construction Department has also completed, by force account, the section between San Juan de Flores and Talanga. This allows traffic to bypass Tegucigalpa,

linking CA-6 and the Tegucigalpa-Talanga highway through the San Juan de Flores-Villa de San Francisco road.

Sub-Project No. 2 (Corocito-Tocoa-Sabá: 57.5 Kms.)

Construction of this project was completed in October 1973. Approximately 130 Kms. of access to this road are being built under the first stage of the Lower Aguan Valley Agrarian Development Program, a multi-institutional program being carried out by the Government of Honduras. Because of its importance towards the future development of the region, the road is maintained in good condition.

A final engineering study is under way to link the Aguan region to La Ceiba, a Caribbean port located about 60 Kms. from Sabá. The construction of a bridge over the Aguan river near Sabá is contemplated as part of this project.

Engineering Plans Use

As indicated in B.2. above, the Second Amendment to the Loan Agreement contemplated preparation of engineering plans for nine sub-projects totalling 286 Kms. Names of those sub-projects and the use that the Highway Department is making of the engineering plans are summarized in the following table:

Sub-Project No.	Length (Kms.)	Name	Use that the Highway Department is making of the engineering studies
2	41.3	Sabá-Olanchito	This section of Sub-Project No. 2 will be used as part of the final engineering design Olanchito-Elixir-La Ceiba being executed under contract with Knoerle Bender Stone Assoc. Inc. in consortium with CONASH, a local consulting firm. The standards of Section III and IV of this sub-project No. 2 are to be upgraded with this purpose. Revision of the bridge design over the River is included in the contract with KBS. Funds for this study come from 291-SFH0, IDB Loan.
4	34.9	Yorito-Victoria-Sulaco	To comply with IDB requirements, feasibility study of this road is being made by Louis Berger and Gabinete Técnico, a local consulting firm. The engineering study was already made using AID 522-L-013 Loan funds. These engineering plans, once reviewed and upgraded, are to be used for construction of this section as part of the Central Highway.
5	41.1	San Ignacio-Orica-Guayape	Two sections of this project are being considered under the access road program to the Tegucigalpa-Juticalpa Highway. Feasibility study is being made by Brown & Root, S. A. Funding comes from IBRD Loan 896.
6	35.5	Salamá-Manto	Construction of this road was contemplated by the end of 1973 using the horizontal alignment. Construction was made using rented equipment.
9	15.7	Valle de Jamastrán-Villa Santa	This project is not contemplated for construction in a short term period.
13	49.9	Orocuina-Soledad-Platal- Texiguat with spur to Liure	Approximately 15 Kms. from Texiguat to Soledad has been built by the Highway Construction Department. Plans are to continue this project and link it to Choluteca and Tegucigalpa areas.

Use that the Highway Department is making of the engineering studies

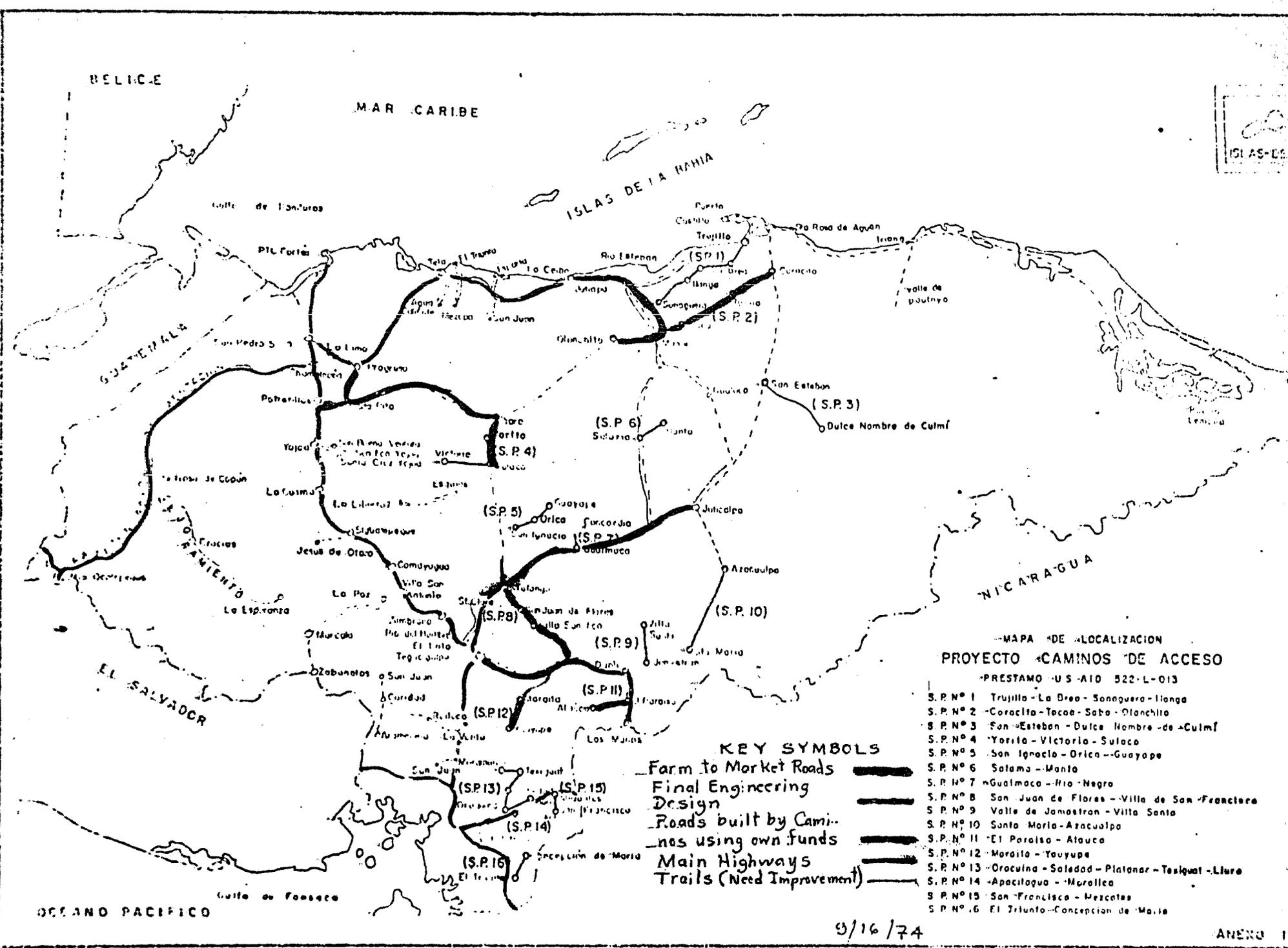
Sub-Project No.	Length (Kms.)	Name	
14	27.9	Apacilagua-Morolica	By the end of 1974 approximately 45% of this project will be completed by force account. The project is scheduled for completion next year.
15	19.1	San Francisco - Mezcales	Construction is not contemplated over the near term.
16	20.6	El Triunfo-Concepción de María	This project was contemplated by February 1974, by force account and rented equipment using local funds.

E. Summary and Conclusions

1. Construction of the four sub-projects above-mentioned^(Section C) was satisfactorily completed. Nevertheless, since construction was over the Highway Maintenance Department has not given proper maintenance to most of the roads. This is causing deterioration of road surfaces as^a result of erosion and slope slides. On the other hand, it is considered that the Government is making good use of the engineering designs prepared under this loan.
2. The GOH has built by force account and using local funds, two sections of road to both sides of Sub-Project No. 8 to link it to the CA-6 and Tegucigalpa-Talanga highways. These two sections have a total length of approximately 34 Kms. The investment was about 500,000 Lempiras (U.S. \$250,000).
3. Sub-Project No. 2, Corocito-Tocoa-Sabá, is being considered as the main highway of the Aguan Development Project. 130 Kms. of access to this project are contemplated under the first stage of the Aguan Program.
4. The Highway Construction Department contemplates improvement of the trail from Zamorano (CA-6 Highway) to Maraita next year. This will incorporate the Access Road No. 12 (Maraita-Yauyupe) into the central highway network.

5. Approximately 82 Kms. of access road had been built by the Highway Construction Department by force account and rented equipment. The estimated investment amounts to 1,200,000 Lempiras (U.S. \$600,000).
6. Approximately 120 Kms. are being considered for construction during the next five years. Of these 120 Kms., about 75 Kms. are being reviewed with an eye to upgrading to first class highways according to Honduran Highway Department Standards.
7. It is estimated that by the end of 1978 about 80% of the engineering studies prepared using Loan funds will have been used by the Highway Construction Department, and seven of the nine projects, with engineering plans, will be completed.
8. The Government of Honduras is undertaking complementary investment programs for highway construction and improvement in most of the areas of influence of the farm-to-market roads built under this AID Loan. It is expected that during the next five years the Farm-to-Market Access Road Program will start producing the benefits contemplated when this Loan was made.

Cleared: REDavis, CRE (in draft)



MAPA DE LOCALIZACION
 PROYECTO "CAMINOS DE ACCESO"

PRESTAMO US-AID 522-L-013

- S. P. N° 1 Trujillo - La Drea - Sonaguero - Ilang
- S. P. N° 2 Coracito - Tecoa - Saba - Olanchito
- S. P. N° 3 San Esteban - Dulce Nombre - de Culmí
- S. P. N° 4 Yocita - Victoria - Sulaco
- S. P. N° 5 San Ignacio - Orico - Guayape
- S. P. N° 6 Salama - Manta
- S. P. N° 7 Guaimaco - Rio Negro
- S. P. N° 8 San Juan de Flores - Villa de San Francisco
- S. P. N° 9 Valle de Jamastran - Villa Santa
- S. P. N° 10 Santa María - Azacualpa
- S. P. N° 11 El Paraíso - Atauca
- S. P. N° 12 Morala - Yuyupa
- S. P. N° 13 Orocuina - Soledad - Platón - Tequisat - Liura
- S. P. N° 14 Apacitagua - Morolica
- S. P. N° 15 San Francisco - Mezcales
- S. P. N° 16 El Triunfo - Concepción de María

- KEY SYMBOLS**
- Farm to Market Roads
 - Final Engineering Design
 - Roads built by Caminos using own funds
 - Main Highways
 - Trails (Need Improvement)

9/16/74