

LAC/DP 3913

CLASSIFICATION

PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

PD-AAM-219

1. PROJECT TITLE

Rural Access Roads I

C/27-82

2. PROJECT NUMBER

511-T-056

3. MISSION/AID/W OFFICE

USAID/Bolivia

4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) Final Evaluation 12-2

REGULAR EVALUATION SPECIAL EVALUATION

5. KEY PROJECT IMPLEMENTATION DATES

A. First PRO-AG or Equivalent FY <u>75</u>	B. Final Obligation Expected FY <u>75</u>	C. Final Input Delivery FY <u>81</u>
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6. ESTIMATED PROJECT FUNDING

A. Total	\$ <u>10,370,000</u>
B. U.S.	\$ <u>6,400,000</u>

7. PERIOD COVERED BY EVALUATION

From (month/yr.)	<u>9/76</u>
To (month/yr.)	<u>10/80</u>
Date of Evaluation Review	<u>2/81</u>

B. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)

B. NAME OF OFFICER RESPONSIBLE FOR ACTION

C. DATE ACTION TO BE COMPLETED

USAID/Bolivia should take into account the recommendations of Audit Report No. 1-511-80-12 when a decision is made to consider the reactivation of the Category III "suspended" Rural Access Roads II Project (511-T-061).

Isaac Torrico*

December 1981

*As defined in USAID/Bolivia discussion in November-December, 1981.

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

- | | | |
|--|--|--|
| <input type="checkbox"/> Project Paper | <input type="checkbox"/> Implementation Plan e.g., CPI Network | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Financial Plan | <input type="checkbox"/> PIO/T | _____ |
| <input type="checkbox"/> Logical Framework | <input type="checkbox"/> PIO/C | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Project Agreement | <input type="checkbox"/> PIO/P | _____ |

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

- A. Continue Project Without Change
- B. Change Project Design and/or Change Implementation Plan
- C. Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

Isaac Torrico, RD (in draft) Marcelo Miranda, DP *MM*

Mario Benavides, ADM *MB* Roberto León de Vivero, DP

Gover Carranza, EE *GC* Howard Handler, DP (draft)

Lawrence Odle, EE *LO*

12. Mission/AID/W Office Director Approval

Signature *[Signature]*

Typed Name Henry H. Bassford

Date Acting Director: December 23, 1981

13. SUMMARY:

The Rural Access Roads I Project (511-T-056) was initiated on September 20, 1976. Its purpose was to increase agricultural production and off farm sales of agriculture/livestock production through the provision of all-weather access roads in target areas. Specifically, the project called for the construction and/or upgrading of 1,200 kilometers of rural access roads to all weather standards, and to establish within the National Road Service (SNC) the capability to develop an effective access roads program.

As a result of the failure of the Government of Bolivia (GOB) "to carry out the project with due efficiency" in compliance with Section 8.02 (b) of the loan agreement, on August 28, 1980 USAID/Bolivia sent a letter to the GOB advising that the project was suspended for a period of 60 days, and indicating that if the causes for the suspension were not corrected within such period, AID reserved the right to cancel the loan pursuant to section 8.04 of the loan agreement.^{1/}

^{1/} The agreement required that the GOB "promptly provide all funds needed in addition to the loan, as well as all resources required for the punctual and effective carrying out and maintenance of the project". According to the letter of suspension, those requirements were not carried out with regard to the following aspects:

- 1) Financial Support: During the period from 1977 to 1979 the contribution of the GOB was only 53% of that required to implement the project on a timely basis, a situation that continued without correction during 1980.
- 2) Institutional Support: Two entities of the GOB (SNDC and MACA) failed to give the required support to the project. As a result, the implementation of the project was delayed for lack of volunteer labor to construct the roads, as well as for the lack of the information necessary to prepare feasibility studies and to select the road segments to be constructed.
- 3) Community Participation: The lack of collaboration of some of the rural communities to provide unskilled labor caused project delays.
- 4) Equipment Maintenance: The project was delayed due to poor maintenance practices which caused many of the pieces of heavy road equipment to be inoperable for extended periods of time.
- 5) Administration and Management: SNC failed to maintain adequate books and records for project activities as required under Section 4.9 of the Agreement.
- 6) Construction Schedule: Serious delays in road construction made it impossible to adhere to the Project Implementation Plan.
- 7) Construction Supervision: Lack of adequate supervision caused delays in the implementation of road construction.

The project was formally terminated on November 21, 1980. At that time, of the 1200 kilometers to be constructed/upgraded, only four roads totaling 63 kilometers had been completed, and 410 kilometers were under construction with an average completion rate of 2.7%. This represented ~~2.7~~ seventeen month delay in the project's implementation schedule.

The major problems encountered during the implementation of the project include: 1) significant delays due to the cumbersome process followed in issuing IFBs, selecting qualified bidders, and clearing commodities through GOB customs; 2) delays in the selection of appropriate construction equipment; 3) a shortage of labor due to the overestimation of community participation in the project design; and 4) the inadequacy of the GOB counterpart contribution.

14. EVALUATION METHODOLOGY:

This is the second and final evaluation of the project. It covers the period from its inception in September 1976 through November 1980, when the project was officially terminated.

The evaluation process included a review of the most important project documentation (e. g. project paper, reports, and documents); a survey of project sites conducted during November 1980, allowing for the discussion with agricultural extension agents, farmers, and road construction personnel; and the review of the findings and the preparation of the PES.

The evaluation team consisted of the following USAID members: Isaac Torrico, an agricultural economist of the Rural Development Division; Mario Benavides, a contracting officer of the Administrative Office; Gover Carranza, an engineer of the Engineering and Energy Division; and Marcelo Miranda, an engineer/economist of the Development, Planning and Evaluation Office.

15. EXTERNAL FACTORS:

1) Economic situation/GOB financial burden: The project design's output assumption that "GOB resources would be provided as planned" did not occur. The economic difficulties confronting Bolivia since 1976 created national budgetary limitations directly affecting the GOB financial contribution to the project. The GOB financial commitments in the implementation plan approved in the Implementation Letter No. 5 were not fulfilled, and as of the date of termination the GOB had provided less than 54% of the amount agreed upon. However, the impact on project progress of the GOB contribution shortfall cannot be determined because other problems as well greatly hampered the timely and successful implementation of the project (e. g. lack of support and cooperation from the National Community Development Service (NCDS) and the Ministry of Agriculture and Rural Affairs (MACA)^{2/}; inability of SNC itself and other GOB entities to overcome procurement and general implementation problems).

2/ SNDC was responsible to provide support in the following areas: 1) sub-project site identification and selection; 2) organization of the community project committees, which were to be the formal bodies representing the communities during sub-project construction; 3) provision of required voluntary labor force during the construction phase; and 4) collaboration with the community project committees, to assure the mobilization of work groups needed to undertake minor road maintenance. MACA's primary responsibility to the project was to provide the necessary agronomic data to help select and rank-order the sub-projects.

2) **Community Voluntary Labor:** The project design's input assumption that "NCDS would be able to recruit sufficient community labor" was incorrect. Despite the NCDS/SNC agreement signed on February 10, 1977, NCDS did not carry out promotional efforts among the participating communities to ensure that the required voluntary labor was provided during the construction phase of the project. This lack of community commitment is expected to result in less than adequate maintenance of the completed roads which was to be carried out by community committees.

3) **GOB's Support to the Project:** The project design's goal/purpose assumption that "the GOB would continue to provide essential public services for agricultural development" did not occur. This lack of agricultural public services in the target areas where the year-round access roads were completed (63 kms) and/or upgraded (410 kms) is expected to diminish the project's purpose to assist the small farmers to increase agricultural production and off farm sales.

16. INPUTS:

The initial implementation plan presented to the Mission by SNC on February 17, 1977, modified the original schedule of the project paper. According to the revised plan, the publication of the Invitation for Bids for heavy equipment was postponed from September 1976 to January 1977; and the start of NCDS's promotional activities delayed from November 1977 to April 1978. The construction of the first 450 kilometers, however, was rescheduled from July-August 1979 to December 1978, well ahead of the PP schedule.

16.1 Technical Assistance Budgeted: \$200,000; Disbursed: \$ 82,000.

Long Term Assistance

The project called for 72 person months of technical assistance to assist (SNC) in project implementation -- 36 person-months for an administrative

advisor experienced in the design, construction and maintenance of low volume roads to assist the SNC Director of the Rural Roads Department in the implementation/monitoring of the "experimental construction of roads" sub-project; and 36 person months for a technical advisor experienced in heavy equipment maintenance/spare parts control to instruct operators/mechanics in maintenance procedures in the location where the equipment was to be used.

The initial two year contract for the administrative advisor was terminated after one year of services, as SNC considered his professional performance to be unsatisfactory. Despite the extensive responsibilities of this advisory position (e. g. assisting in the planning/implementing of project activities; carrying-out the evaluation of the experimental program; identifying implementation bottlenecks), SNC did not approve the further use of loan funds to refill this position based on the negative experience with the first advisor.

The arrival of the heavy equipment advisor in December 1978 came after a 13 months delay. This delay had only a limited adverse effect on the project because the arrival of the heavy equipment in September-October 1978 was 10 months behind schedule. Despite this delay, the advisor was able to carry out his assignment and by March 1979 reports indicated that SNC's heavy/light equipment maintenance capability had improved significantly. During the 22 months of this contract, the advisor continued to upgrade SNC personnel standards through the participation in seminars/training sessions for SNC engineers and heavy equipment operators.

Short-Term Assistance

In addition to the long term advisors, five person months of short term technical assistance were contracted to upgrade the SNC's capability

in training work crews and managing field equipment.

16.2 Commodities Budgeted: \$5,800,000; Disbursed: \$5,602,000

In general, heavy equipment, hand tools, and spare parts purchased under the loan arrived with substantial delays causing implementation to fall 10 months behind schedule. The commodity procurement process was the main bottleneck throughout the life of the project evidenced by 1) delays in the preparation of the bidding documents and 2) a delay of 3 months for the GOB to issue the Supreme Decree approving the purchase of the heavy equipment.

Heavy Equipment and Spare Parts

According to the project paper, the Invitation for Bids for heavy equipment was supposed to be published by August 1976, so that the equipment would arrive by November 1977. In practice, the cumbersome GOB process caused the Invitation for Bids not to be published until March 1977; the letter of credit to be issued in December 1977; and the equipment to arrive on site between September-October 1978. It should also be noted that it took seven months to clear the spare parts from customs and four months for the heavy equipment. The issue of the lack of proper logistic support raised in the initial evaluation dated April 4, 1978 included these same problems, as well as the necessity to issue a decree authorizing the duty free importation of equipment and materials purchased with project funds. Since that time the GOB continued to demonstrate a lack of concern to improve the deficient commodity selection/delivery process.

16.3 Hand Tools Budgeted: \$150,000; Disbursed: \$127,000.

Most of the tools were delivered as scheduled, although it was found after their arrival that they were in excess of actual needs. An audit

report dated April 1980 indicates that by January 1980, of 15,000 units (shovels, picks, wheelbarrows) received by SNC, only 25% had been delivered to the regional offices due to a combination of a lack of demand for the equipment and problems with the distribution system.

16.4 Local Materials Budgeted: \$1,850,000; Disbursed: \$352,000

Cement

During the implementation period, shortage of cement in the local market delayed the construction of drainage facilities and other small structures. This delay adversely affected the completion of most roads (some of which were damaged during the rainy season due to lack of the required drainage structures), and affected the timely implementation of the project.

Concrete Pipes

SNC opted to produce the concrete pipes necessary for the project in their own installations in lieu of purchasing them, a procedure agreed to by USAID/Bolivia. To this effect, the manufacturing equipment had to be imported from Brazil and its tardy arrival significantly delayed the manufacturing of the pipes. It was not until the end of the project that SNC was able to achieve acceptable levels of production.

Explosives

One problem faced with the explosives purchased under the loan was that the ammonium nitrate initially performed unsatisfactorily as an explosive. Subsequent tests determined that the unsatisfactory performance of the explosives was the result of excessive agglutination of the ammonium nitrate due to a high moisture content resulting from improper packaging.

16.5 Small Structures Budgeted: \$290,000; Disbursed: \$ -0-

According to the project paper, \$290,000 had been allotted to finance contracts to build small structures and culverts. However, SNC decided that

to save money they would prefer to use their own personnel and voluntary community labor to manufacture them. SNC was not able to carry out this task as planned due to a lack of trained voluntary labor force. In this regard, although the project paper estimated that each of the 15,000 small farm beneficiary families would provide an average of 2.5 man-months of labor, it did not take into account that the labor^{would}/be provided by different family members — a virtually impossible situation for providing necessary training and in obtaining a continuous flow of adequate labor.

16.6 Training: Budgeted: \$10,000; Disbursed: \$ 6,000

According to the project paper, these funds were to be used to pay per diem costs of training equipment operators, mechanics and truck drivers. The personnel were to be trained at SNC's facilities, and SNC was to absorb all other costs.

Of the amount spent under this line item \$4,000 was used to finance the participation of four SNC professionals at a two week Rural Roads Conference at Oaxaca, Mexico; and \$2,000 was used in on-site training activities for operation personnel.

16.7 GOB Contribution: Budgeted: \$3,970,000; Disbursed: \$1,982,000

According to the project agreement, SNC was to assume all costs of engineering, surveying, economic analysis, equipment operation and maintenance, and part of the local materials. MACA and NCDS were: 1) to provide the necessary personnel to promote and mobilize the labor contribution to the project; and 2) to gather the agricultural/economic data necessary for sub-project evaluations to be carried out by the National Road Selection Committee.

GOB Institutional Contributions

<u>Institution</u>	<u>Component</u>	<u>Planned Contributions</u>
SNC	Construction personnel	\$ 2,230,000
	Professional and support personnel	\$ 670,000
SNC	Operating costs of equipment	\$ 660,000
	Training	\$ 30,000
	Materials	\$ 320,000
NCDS	Personnel (promotion)	\$ 40,000
MACA	Personnel (agricultural and economic data gathering)	\$ 20,000

As indicated in Section 13 - Summary, the GOB's financial contribution to the project was substantially less than agreed upon. Nevertheless, the most acute problem affecting project implementation was NCDS and MACA's lack of support to the project despite the fact that their financial contributions were small as indicated in the above table. As a result, the lack of basic data developed for feasibility studies and a shortage of trained analysts, prevented the Selection Committee which was composed of representatives of the NCDS, SNC and MACA to analyze and approve a sufficient number of sub-projects to maximize equipment use.

By the end of December 1970, 43% of the planned data-gathering process was carried out and only 27 of 55 planned cost-benefit analyses had been completed. By May 1980, the rates rose to 75% and 28 of 50 planned, respectively. According to the implementation plan, these activities should have been carried out well ahead of the field work to enable the timely approval and scheduling of the construction/improvement of geographically isolated sub-projects. This in turn would have resulted in a reduction of general operating costs and a more efficient scheduling of heavy equipment transportation needs.

At the same time, the lack of promotional efforts by NCDS to organize

road committees at the community level had serious damaging effects. Specifically, (1) NCDS's failure to assure that voluntary labor was provided for the construction and maintenance of the roads significantly delayed the implementation of the program, and in one instance caused the closing of a road half way into its construction; and (2) other roads showing substantial progress during the last year of project implementation were damaged due to rains and floods.

16.7 Local Contribution: Budgeted: \$3,100,000; Disbursed: Not available

The project called for a local contribution of unskilled labor and the surrender of right-of-ways for the roads. Although it was found that the villagers were at first willing to supply the required labor, the uncoordinated and inefficient working arrangements caused by insufficient and deficient NCDS promotional efforts resulted in a loss of interest in participating in the sub-projects.

An estimate of actual local contribution could not be determined by the evaluation team from existing records. However, there is reason to believe that it was not substantially over the proportional amount of roads actually completed (65 kms. out of 1,200 kms. or 5%).

17. OUTPUTS:

A. Rural Access Roads I

<u>Planned*</u>	<u>Actual</u>	<u>Comment</u>
1. 1,200 kms. of Roads constructed and/or improved	4 roads (63 kms.) are 100% completed 25 roads (410 kms.) were in construction as of 10/27 (average rate of completion: 72.7%).	Slow project implementation reduced the number of roads completed prior to project termination.

	<u>Planned*</u>	<u>Actual</u>	<u>Comment</u>
2. SNC Personnel Trained			
a. 11 Mechanics		4	Due to lack of counterpart funds, SNC decided that only 4 mechanics, one from each participating department, would be trained.
b. 120 Equipment Operators		43	Of a total of 66 SNC operators, only 43 had to be trained. A shortage of funds prevented the hiring of the additional operators.
3. 200 Road Maintenance Monitoring Committees Formed		0	The monitoring committees were not formed since the number of road segments completed was minimal.
4. Equipment in Place by December 1977		On site by October 1978	See Section 16.2 Commodities.
5. 4 Experimental Roads Constructed (See page 13)		1	Two other roads under construction. The information gathered by SNC on the three roads has not been analyzed.

* As per project paper.

18. PURPOSE:

As indicated in the Summary Section 13, the project was suspended eight months before the scheduled completion date. Progress towards the End of Project Status (EOPS) was limited and difficult to evaluate in terms of the Objectively Verifiable Indicators mentioned in the PP.

As of the date the project was terminated, less than 30% of the construction work had been completed, and delays in completion of the roads prevented project resources from being used as efficiently as planned resulting in the increase of per kilometer road construction cost (the Audit Report dated April 1980 estimates an increase of 43% above PP estimates).

Project Purpose:

"To increase agricultural production and off-farm sales of agricultural/livestock production in the Cochabamba Department and in selected areas of the Departments of Chuquisaca, La Paz and Santa Cruz through the provision of all-weather access roads."

There is insufficient information to determine whether or not there has been an actual increase in the area under cultivation or an improvement in the agricultural yields that could be tied directly to this project. Nevertheless, during the survey of the project area the evaluation team observed some changes in the production and marketing patterns that ultimately could lead to increased area under cultivation and higher agricultural yields. In the Yungas (La Paz) area, the traditional crop mix (coffee, bananas, citrus) seems to be expanding to include vegetables (a higher value commodity) and the role of the middleman seems to have diminished. Most farmers indicated that with the improvement of the roads they were now able to bring their produce directly to local town fairs, thus avoiding transportation payment to the middlemen and increasing their net gain.

In the Cochabamba area, the small farmer also seems to be expanding the traditional crop mix (corn, wheat, potato, barley, citrus, bananas) also to include vegetables and dairy products; as well as to have reduced the role of the middleman.

As was anticipated in the project design, the construction of the roads has increased the vehicular flow in the project area. The average frequency of 8 vehicles per week before the project increased to 17 per week. The estimated savings for the transportation of produce to market (based on ton per kilometer) derived from this change is on the order of 15%, while the passenger transportation costs remained essentially constant. The evaluation team notes

that the actual benefits are in fact substantially higher, as current instead of constant values were used in their analysis.

Project Sub-Purpose:

"The establishment of a capacity within the Bolivian Highway Service (SNC) to improve and maintain rural access roads in the project areas."

From the inception of the project, SNC management demonstrated institutional weakness which reflected in the poor implementation of the project. Decisions taken to achieve cost/benefit savings (i.e. the decisions a) to purchase culvert pipe manufacturing equipment, and b) to use their own personnel and insufficiently trained voluntary community labor to build small structures and culverts, instead of subcontracting for such work), resulted in bottlenecks that only during the last months of implementation were being resolved. Not only was the initial project implementation plan unrealistic, but also review and approval procedures established for the evaluation of subprojects were discarded. From October 1979 through mid-1980, there was no project economist to carry out the required feasibility studies, and the cooperation from NCDS and MACA was sporadic.

An experimental part of this project designed to test technologies and to determine a cost-effective mix between labor and capital intensive construction methods was the construction and/or improvement of four roads. According to the project paper the experimental program was divided into four areas of inquiry. The first would have applied labor to such functions as the stockpiling and screening of surfacing materials, road surface leveling and aggregate spreading, digging drainage ditches and other intermediate technologies such as those identified by the

by the International Labor Organization. The second would have developed cost data on work productivity for the aforementioned tasks, specifically for purposes of cost comparison. Productivity and cost data would have been collected on both capital and labor intensive technologies. The third area would have examined how farm machinery and equipment might be adapted to carry out some of the functions of conventional construction and maintenance equipment. The fourth area would have addressed the feasibility of installing a large-scale labor intensive road improvement and maintenance program based on findings from the first three steps.

Of the four roads that were to be constructed, only one was completed. The information gathered in the process was never analyzed and the reliability of the data not determined to date. The project paper mentioned that the information gathered in the process was to be used in the design of the Rural Access Roads II project, but such benefit never came about as SNC seemed to have considered the information as non-essential, in part because by that time the follow on Rural Access Roads II loan, had already been authorized by AID/W. Needless to say, such information and experience could have been put to productive use in the implementation of the Rural Access Roads I project.

In sum, while SNC's Rural Access Roads Division was not tested to its full capacity, the fact that this project was substantially behind schedule at the time of its termination indicates that it lacked the capability to improve the rate of implementation of rural access road projects. According to SNC reports covering the period from the project's

suspension in August 1980 to June 1981, only four new roads were started and no additional engineering design work was carried out.

19. GOAL:

The goal as stated in the logical framework of the Project Paper is: .

"To improve the relative welfare of the rural poor".

Although the project terminated long before its planned outputs were achieved, local inhabitants in the area of influence of the completed roads (60 kms.) stated that the roads have had a positive impact on their lives. Specific examples cited included: (1) the greater accessibility to market towns allowing for the sale of larger quantities and greater varieties of farm produce; and (2) the increased access to the purchase of manufactured goods/ farm inputs improving the efficiency of overall farming practices.

20. BENEFICIARIES:

According to the project paper, the primary beneficiaries of the project were estimated to be 15,000 small farmers and their families who were to gain access to all-weather roads during the four year life of the project; and 11,000 additional farm families before the equipment procured with loan funds was fully depreciated. Since the construction of rural roads under this project was just beginning to have an impact on Bolivia's rural poor when it was terminated, it is difficult to determine the long-term effect on the target areas. Based on the 410 kms. of roads constructed (see Section 13 - Summary) less than 3,000 families have benefitted through the end of the project. In the short-run, however, the completed roads and the roads under construction have resulted in an increased commercial activity in the project

areas. Furthermore, field studies have indicated that all the inhabitants within the areas of influence of these roads are receiving additional non-financial benefits. Although the survey was not able to quantify these non-financial benefits, the general opinion expressed by the beneficiaries was that with the new roads, their children and families now have better access to health and education services. This is in addition to the economic benefits derived from lower transportation costs and better access to the marketing centers.

21. UNPLANNED EFFECTS:

None.

22. LESSONS LEARNED:

1) The project paper mentioned the NCDS was to provide: a) the required voluntary labor during the construction phase, and b) maintain the community project committee so that it is capable of mobilizing the work groups needed to undertake minor road maintenance. This assumption was based on NCDS's eleven year experience promoting voluntary labor among rural communities, which was assumed to be proof of the communities willingness to support the subprojects. At the same time, the apparent unemployment/subemployment of labor in rural areas was mentioned as evidence of the existence of surplus labor among this group.

There is no reason to question the assumption that community participation in decisions and constructions affecting them, results in better utilized and maintained services. However, the demands on voluntary labor in road construction, are substantially more stringent. Not only the inaccessibility of the construction site implies a greater effort on the part of the farmer, but the implied savings derived from using voluntary labor is diminished due to the continuous rotation among the laborers. The project paper

indicated that based on an average contribution of 2.5 person-months by each of the 15,000 small farm families to benefit from the project, it was estimated that the voluntary labor available for both, the construction and subsequent maintenance of the roads, was 37,500 person months. In reality, the 2.5 person months per family mentioned above, when provided, often came as sporadic unskilled labor of 2-3 day periods, with little or no apparent cumulative skills improvement.

Furthermore, the project assumption that surplus labor would ensure the availability of required voluntary labor required further analysis. The design's definition that Bolivia was a labor abundant country misrepresented the situation. In reality, the apparent abundancy of labor in which the project was to depend is a "false" abundancy resulting from a lack of opportunities to utilize available non-labor resources. As mentioned in Section 18-Purpose, the data compiled during the experimental work was neither analyzed nor was additional information gathered to estimate the actual voluntary labor availability and skills required to implement the project. In addition, there was no indication that the "false" surplus of labor could usefully be employed without extensive and well-coordinated promotional efforts.

2) NCDS and MACA's lack of support for the project, an issue that was considered a bottleneck until project termination, was never resolved, and the recommendation to use loan funds to cover in part the operational costs directly related to the project, was not entirely consistent with the spirit of the project.

In addition, USAID/Bolivia records indicate that prior to the suspension, it was agreed (verbally) that the selection and promotion process would be changed to conform with the same process designed for the Rural Roads II

project, where MACA's and NCDS's support is substantially reduced and replaced by the Departmental Development Corporations. What should have been taken into account is that the project was designed to take advantage of the assumed cumulative institutional building process of MACA and NCDS, achieved under previous USAID/Bolivia sponsored projects. Experience indicates that it is still too soon in the development process to expect that institutions not receiving direct project financed assistance will provide logistical support despite the direct relationships of such support to the enhancement of their own activities.

The lesson learned is that multidisciplinary projects such as this one, require a greater degree of Mission participation and control in the implementation of the project, if success is to be achieved.

3) The fact that SNC was not able to implement the project in a timely and efficient manner, demonstrates the need for the services of an administrative advisor in these types of projects, as was included in the project paper. Unfortunately, USAID/Bolivia decided to accept SNC's position of not hiring a replacement for the administrative advisor utilizing loan funds, (see Section 16.1) even though it was implicitly conceded that such assistance was needed for the project. At that time, the Mission decided that the service provided by the administrative advisor was needed but could be postponed to a later date and eventually financed with grant funds when they again became available as part of the Rural Roads II project. However, this never occurred before this project was terminated.

The lesson learned is that the Mission must take a stronger position

during the implementation of the projects and the provision of critical inputs such as technical assistance, particularly when they are considered essential for the success of the project as defined in a project paper. Furthermore, in situations when the technical assistance is loan financed, the provision of the input under the conditions specified in the project paper, will encourage a greater sense of commitment to the project on the part of the GOB.

SPECIAL COMMENTS:

Despite the termination of the Rural Access Roads I project and the subsequent cancellation of the recommendations of the Audit Report No. 1-511-80-12, USAID/Bolivia should take into account said recommendations when a decision is made to consider the reactivation of the "suspended" Category III Rural Access Roads II project, since the implementation of the latter will be the responsibility of essentially the same institutions that carried out the Rural Access Roads I project. If necessary, alternative means should be sought to assure the success of Phase II such as the utilization/participation of other Bolivian entities (non-governmental) that have achieved certain successes in this field of endeavor (e. g. OSCAR - "Obras Sociales de Caminos de Acceso Rural). Working agreements could be entered into between SNC and such organizations so as to broaden the participatory nature of the Rural Roads II project, accelerate project implementation, and further assure the achievement of project objectives.