

PROJECT EVALUATION SUMMARY (PES) - PART I

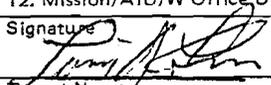
1. PROJECT TITLE Transport Sector I (Road Maintenance)	2. PROJECT NUMBER 633-0073	3. MISSION/AID/W OFFICE USAID/Botswana
	4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <u>5 FY 81</u> <input type="checkbox"/> REGULAR EVALUATION <input checked="" type="checkbox"/> SPECIAL EVALUATION	

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING (\$000)		7. PERIOD COVERED BY EVALUATION	
A. First PRO-AG or Equivalent FY <u>79</u>	B. Final Obligation Expected FY <u>79</u>	C. Final Input Delivery FY <u>83</u>	A. Total \$ <u>12,458</u>	B. U.S. \$ <u>6,000</u>	From (month/yr.) <u>7/79</u>	To (month/yr.) <u>9/81</u>
						Date of Evaluation Review

8. 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
1. Responsibilities of CTO seconded mechanics and two mechanic trainers should be formalized.	CTO	1/82
2. Plan for localizing the Cost Accounting system in RDMB should be prepared.	RDMB	1/82
3. USAID, MFD, RDMB and CTO must agree on utilization of excess project funds.	USAID, CTO, MFD, RDMB	12/81
4. Plan formalizing the responsibilities of mechanics seconded to RDMB and describing the system for the procurement and distribution of spare parts should be prepared.	CTO, RDMB	12/81
5. All USAID funded project technicians should provide quarterly reports.	USAID	Continuing
6. All 2nd tranche equipment should be financed using AID Direct Letters of Commitment	USAID, CTO	1/82
7. 2nd tranche equipment should be of the same manufacturer as that provided under the 1st tranche, if deemed economical	CTO	1/82
8. CTO should determine if any penalties should be assessed on 1st tranche procurement	CTO	1/82
9. Regular meetings should be held re: project implementation between RDMB, CTO and USAID	USAID	Continuing

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT		
<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify)	A. <input checked="" type="checkbox"/> Continue Project Without Change		
<input checked="" type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	_____	B. <input type="checkbox"/> Change Project Design and/or		
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify)	<input type="checkbox"/> Change Implementation Plan		
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	_____	C. <input type="checkbox"/> Discontinue Project		

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)		12. Mission/AID/W Office Director Approval	
John Pielemeier, USAID/Botswana Assistant Director John Lewis, REDSO/EA Procurement Officer Stafford Baker, USAID/Botswana General Engineering Officer Niels Schultz, MWC RD Chief Maintenance Engineer		Signature  Typed Name <u>Louis A. Cohen, Director</u> Date _____	

13. Summary

Many AID and GOB inputs to the project have been delayed from the Implementation Schedule in the PP, some by over a year. However, all project Technical Assistance is now in place (three of four for over a year now), all training planned in the PP has been initiated and two-thirds of the 1st tranche road maintenance equipment (in terms of cost) has been in use since January 1981. Roads Department Maintenance Branch (RDMB) staff and the project TA have worked to accomplish a major reorganization of RDMB personnel and equipment, have developed maintenance plans for all the gazetted roads in the country, and have established a cost accounting system to monitor maintenance performance. The prospects of achieving planned project Outputs and Purpose are encouraging.

Avoidable delays with 1st tranche procurement have been caused by Ministry of Finance and Development Planning (MFDP) problems with Letters of Credit for most of the many smaller suppliers of equipment and with Central Transport Organization (CTO) lack of attention to spare parts procurement. The 2nd tranche of procurement began in September 1981 with plans to purchase items from only four suppliers and to use Direct Letters of Commitment for all transactions. It is believed that the streamlined procedures and experience gained in the 1st tranche should eliminate most problems in the 2nd tranche.

Now that the project is well into actual road maintenance operations, there is increasing concern over the arrangements being made to utilize personnel and commodities for maintaining the road equipment. The utilization of mechanics, mechanic trainers and spare parts has been discussed with RDMB and CTO officials, suggestions have been made, and written policy decisions have been requested.

14. Evaluation Methodology

A PES scheduled for September 1980 was delayed due to the unavailability of the REDSO/EA Procurement Officer. In early 1981 USAID/Botswana decided to combine the PES with the special Mid-Project Evaluation, scheduled for June/July 1981. This PES Mid-Project Evaluation is intended to (1) measure progress towards providing project inputs, (2) provide preliminary indications of the likelihood of achieving the desired outputs and purpose, and (3) reassess the procedures and proposed list of equipment planned for the 2nd tranche of procurement. An evaluation team composed of John Pielemeier (USAID/Botswana Assistant Director and the former Project Manager), John Lewis (REDSO/EA Procurement Officer), and Stafford Baker (USAID/Botswana General Engineering Officer and the current Project Manager) inspected project equipment and RDMB and CTO facilities, and discussed the project with RDMB and CTO officials in Ghanzi, Maun, Francistown and Gaborone. Individuals

providing major contributions to the evaluation were:

RDMB

Niels Schultz - Principal Roads Engineer (Maintenance)
Peter Argo - Senior Roads Engineer - Maun (Project TA)
Friederich Sander - Senior Roads Engineer - Francistown
Frank German - Senior Technical Officer - Francistown
Helge Simenstad - Senior Roads Engineer - Gaborone
Warren Niles - Cost Accounting Specialist (Project TA)

CTO

Leonard Mukokomani - General Manager
Dave Beattie - Chief Mechanical Engineer
Doug Hardy - Fleet Manager
Gobul Nair - Procurement Officer
Valentine Phumaphi - Mechanical Engineer
A. H. Rossenkhan - Workshop Manager - Maun
Collin Hawes - Chief Technical Officer (Training)
Bob Rokos - Mechanic Trainer (Project TA)
Ron Cox - Mechanic Trainer (Project TA)

15. External Factors

The recent independence of Zimbabwe and formation of the Southern African Development Co-ordination Conference (SADCC) have resulted in significant dialogue among southern African countries concerning transportation linkages and economic cooperation. Increased economic independence from South Africa has been a major theme of these discussions. Improvements to railroad networks, ports and regional road links have been emphasized with little said about maintenance of internal country road systems. This emphasis has had no immediate effects on GOB priorities, but independence to Namibia may change transportation budget priorities to a rail link with that country.

16. Inputs

Delays have been encountered in provision of almost all AID and GOB inputs to the project. Coincidentally, however, inputs have been delayed by approximately the same time, resulting in no significant inconveniences to the project. For example, completion of spare parts storage and maintenance/repair facilities for RDMB depots throughout the country has been delayed by a year, but at the same time, procurement of equipment and spare parts and CTO recruitment of expatriate mechanics for secondment to the depots have also been delayed. The facilities should be complete by the time equipment is in need of repair, mechanics are all available, and spare parts arrive. Specific evaluation findings, grouped by type of inputs, are:

a. Technical Assistance. The RDMB and CTO are very

pleased with the quality of TA they are receiving, but the assistance to RDMB seems to be a much more integral part of the project than the TA to CTO. CTO sees the two mechanic trainers as filling staff vacancies connected with a broad range of their training programs, not just the heavy equipment mechanic training important to the project. The appropriate use of the two mechanic trainers has been the subject of considerable discussion and correspondence between USAID and CTO, but the issue remains unresolved at this time. Delays in recruiting the two mechanic trainers has been one factor in delays in programming mechanic training in the U.S. and in procurement of training material.

RDMB believes that a one-year extension to the Cost Accounting TA contract will be necessary to completely localize the position, and has informally requested consideration of project funding for the extension.

CTO has recruited and hired four Mauritian mechanics for secondment to RDMB. Two others are to be hired soon. The six, together with three mechanics previously employed by CTO, will provide an expatriate mechanic for each of the nine RDMB depots throughout the country. The responsibilities of these seconded mechanics is the subject of ongoing discussions between CTO and RDMB.

b. Training. The USAID and GOB project managers have made a conscious decision to increase the duration of training courses where they and the project TA have felt it to be appropriate, and have tentatively agreed to use a portion of the costs savings identified in the budget review to fund training of additional participants.

RDMB and AID agreed that formal training for the Motswana Cost Accounting System counterpart would be more appropriate after on-the-job training with the Cost Accounting Specialist. The counterpart departed for training in the U.S. in August 1981, about a year and a half later than had been planned in the PP.

c. Commodities. Procurement of road maintenance equipment and spare parts has been delayed by unresponsive bids to the original tender package, delays in AID/W approval of a subsequently required waiver, MFDP confusion with language and amounts of Letters of Credit and insufficient CTO action and follow-up with suppliers. Financing for mower attachments and mechanical brooms was shifted from AID to the GOB when no interest was expressed by U.S. suppliers.

All 1st tranche equipment and spares were to be in Botswana by October 1980, but many items arrived in late 1980 and throughout the first half of 1981. AID financed Bitumen Sprayers and GOB financed caravans have not arrived, and GOB financed mower attachments, mechanical brooms and 10,000 liter water bowsers have not been ordered as of September 1981. The last spare parts

orders for AID financed equipment were placed in August 1981.

At the time of this evaluation, the Caterpillar heavy equipment, the International Harvester trucks, and the Ford and Same tractors had been available and in use by RDMB for a significant period of time. CTO and RDMB staff have been extremely pleased with the performance of the Caterpillar and Ford equipment, generally satisfied with the I.H. trucks (some were delivered with electrical and steering problems that are gradually being corrected), and disappointed with the Same tractors--(they are perhaps too sophisticated for the operators and have had continual mechanical and electrical problems). Mechanics in Ghanzi (Western Botswana) are concerned about the difficulty in providing good quality operator/mechanic service, and petrol, oil and lubricants for the Caterpillar equipment. One of the eighteen Ford tractors has had gearbox problems and dealer support has been unsatisfactory.

While the Ford LDV's have not been in the country long, RDMB and CTO believe the air clearer assemblies are not appropriate to conditions in Botswana and have recommended refitting with a South African designed assembly.

d. Construction. The GOB and IBRD funded RD 12 project has constructed nine RDMB depots consisting of workshops and stores at Gaborone, Kanye, Kang, Francistown, Palapye, Mahalapye, Nata, Maun and Ghanzi. The facilities are all complete except for minor finishing work such as painting and installation of gutters at a few sites. The workshops will provide facilities for seconded mechanics to carry out maintenance and minor repairs on road equipment and the stores will hold fast-moving spare parts.

INPUTS BUDGET

A budget review of the cost of project inputs projected through the end of the project indicates approximate savings of \$28,000 in TA, \$39,000 in training, \$8,000 in non-equipment commodities, and \$115,000 in other costs¹, for a total of \$298,000.

Cost overruns in the 1st tranche of equipment totalled approximately \$160,000. The GOB has agreed to purchase 5 LDV's scheduled for AID financing (at \$53,000) in the 2nd tranche of procurement, reducing the total shortfall in the 2nd tranche equipment budget to \$107,000.

Non-Equipment Budget Savings	\$298,000
Equipment Budget Shortfall	107,000
	<hr/>
Available for Reprogramming	\$191,000

It has been tentatively agreed by USAID and the GOB to apply the cost savings as follows:

One year extension Cost Accounting TA	\$ 50,000
Computer Training	15,000
Refitting of 4x4 LDV's	16,000
Additional Short Term Training (5 at \$22,000)	110,000
	<hr/>
Total	\$191,000

1. "Other costs" savings are in local support budget for TA that became unnecessary when TA was changed from Direct Contract to OPEX arrangement.

17. Outputs

Although many delays have occurred in provision of project TA, training and equipment, progress has already been made towards achievement of some planned outputs and all outputs seem likely to be achieved. The status of planned outputs are:

a. Equipment. The project planned to reduce fleet obsolescence from 75% to 0, reduce fleet size from 249 to 247, standardize on no more than 2-3 makes of each type in the fleet and improve equipment availability. Using the strict obsolescence guidelines AID engineers suggested in the PP, fleet obsolescence stands at 48% as of August 1981. The planned output of 0% obsolescence by the end of the project will not be achieved if the strict PP guidelines are followed, because CTO has recently adopted a different estimate of vehicle lifetime (based on actual annual use in Botswana) for scheduling vehicle replacement. AID engineers used 4 years (2,000 hours per year) for heavy equipment and 3 years for trucks; CTO uses 8 years (1,000 hours per year) for heavy equipment, 5 years for heavy trucks and 3 years for light duty vehicles. Using CTO guidelines and taking into account the major overhaul of towed dumping trailers, fleet obsolescence stands at 33% as of August 1981. The replacement of sixteen caravans (new caravans have been ordered and shipped by the supplier) in the near future will reduce obsolescence to 27%.

As of August 1981, fleet size stands at 271 vehicles.. Some items still on the register are actually scrapped and being used for spare parts. Other items are still serviceable and slow to be turned in by the field depots.

CTO has no written standardization plans but, nevertheless, has encouraged standardization and now has no more than three makes of any type of equipment. With project procurement and planned boarding of older equipment, the number of types of front-end loaders, rollers and LDV's in the fleet will be reduced even further.

Equipment availability has improved because many of the items are new. Significant improvements can only be evident after maintenance and repair by CTO becomes necessary. Initial impressions are that the seconded mechanics are very capable and CTO/RDMB cooperation in the field is excellent.

b. Administration/Management. Planned project outputs were an operational cost accounting system by June 1981, annual maintenance programs based on the improved accounting system, improved road maintenance productivity and localization of the accounting system. The cost accounting system computer was programmed in early 1981 and was fully operational on schedule by May 1981. The first annual maintenance plans have been prepared for each of the districts with planned productivity based on anticipated work of new equipment. These plans project improvements over previous years of maintenance. The programs can be expected to show some adjustment in the short-term as

the actual productivity of equipment and operators is revealed. Actual improvements are expected over the long-term as the fleet becomes increasingly modernized and operators become more familiar with the new equipment. The cost accounting system is set up to measure and compare productivity over time for different road control sections and road maintenance units. Cost information from the system and the budgeting system now being programmed will allow RDMB to accurately predict and justify future budget requests.

U.S. training for the Botswana Cost Accounting System counterpart is just getting started and RDMB has recommended a 2nd candidate for similar training. The project TA Cost Accounting System Specialist and RDMB believe that an extra year of TA will be required before the two Botswana can take over management and operation of the system.

c. RDMB and CTO personnel. The project has, as a planned output, the promotion of trained MB and CTO personnel to more responsible positions. Training is behind schedule but GOB interest in longer courses and training for more personnel indicates that an impact is likely to be made, though possibly later on or even after the project is over.

18. Purpose

"To improve the capacity of the Ministry of Works to adequately maintain its large and expanding road network built to achieve the three objectives (sector goals) described above."

End-of-Project Status (EOPS) conditions and their status are:

a. Modernized and appropriate road maintenance fleet. Arrival and use of 1st tranche equipment has already made considerable progress towards achievement of this condition. Availability rates are up and preliminary indications are that the new equipment is appropriate to Botswana conditions. Complete achievement can be expected within a year as 2nd tranche equipment arrives, old equipment is sold or scrapped and equipment maintenance facilities, personnel and procedures are in place and functioning.

b. RDMB efficiently carries out maintenance program. RDMB has organized its personnel and equipment into functional units. Routine maintenance is performed by the Grading, Miscellaneous (repair of potholes and depressions in gravel roads, culvert cleaning), Repair/Culvert (new culverts or major repairs), Bushdrag (smooth corrugations in gravel roads--to be renamed Towed Grader Unit), Sand Spur (establishes pre-made tracks in sand roads), Bitumen Repair, Grass Cutting and Fencing Units. Periodic maintenance is performed by the Regravelling-shoulders, Regravelling and Bush-Clearing Units. Annual maintenance targets are based only on estimates of equipment and staff productivity. Actual productivity will be measured over the next year as remaining equipment arrives and is used. The maintenance programs will then be revised to reflect actual productivity and the system should begin an annual cycle of

monitoring to measure improvements in productivity (caused by improved operator or equipment maintenance efficiency, for example) with subsequent adjustments to the annual plans. Achievement of this EOPS condition can be expected by early 1983 when the third annual maintenance plans are being prepared.

c. Increased numbers of trained local personnel in key MB and CTO positions. The cost accounting specialist is the only position likely to be localized (as a result of project training) by the end of the project. Five or six RDMB staff will have returned from training by the end of the project (two have already returned) and will be promoted to Chief Technical Officer and Senior Technical Officer positions. The training program for the first group of four CTO mechanics has been extended an extra year over the training period outlined in the PP, and they will not return until the end of the project. They will be in a position to replace some of the expatriate mechanics seconded to RDMB depots. Two or three MB staff will complete Engineering Degree training after the end of the project (with funding transferred to the Southern Africa Manpower Development Project) and may replace expatriate engineers in MWC at that time.

19. Sector Goal

"To upgrade the transport sector in Botswana to:

- a. Promote development and the provision of basic social and economic services in rural areas;
- b. Encourage exploitation of the development potential of isolated regions of Botswana; and
- c. Decrease Botswana's dependency on existing transport network through South Africa."

The project has not been underway long enough to make any contribution towards achievement of this sector goal. The recently prepared first maintenance programs for Botswana include extensive regravelling and periodic maintenance of some of the worst roads linking the developing eastern portion of the country to the undeveloped central interior and western regions. Any constraints to development of these areas caused by the poor roads should be reduced as these roads are improved.

With the recent independence of Zimbabwe, it has become increasingly apparent that reducing Botswana's dependency on South Africa transport links is dependent as much on what Botswana's neighbors in Southern Africa do to improve their transport routes as on what Botswana does to its internal system.

20. Beneficiaries

Roads Department Maintenance Branch operations maintain

or improve the quality of all gazetted roads throughout Botswana and therefore, benefit all the country's population except those isolated from the gazetted road network.

Principal benefits are lower vehicle operating costs or lower transport costs for people who use the road system or consume and use goods and services transported over the road net. Most of the maintenance operations are on the worse roads in the country. This tends to bias benefits towards people in the poorer northern and western areas of Botswana. It is too early in the project to quantify actual benefits to these people.

21. Unplanned effects

Not pertinent at this time.

22. Lessons Learned

To date, project administrators have been primarily concerned with providing the project inputs. This evaluation has focused on provision of inputs and the evaluation recommendations are concerned with improving that process in order to better achieve the project objectives. Recommendations cover two major areas: (1) the informal administration of many of the project components, and (2) actual procurement procedures.

An impressive number of CTO and MB personnel can quickly pull out of their files a green covered, often referenced copy of the Project Paper, used to guide their activities related to the project. The guidance is very general, however, and many decisions on project related activities, such as scheduling of procurement, delegation of authority to seconded mechanics, assignments and responsibilities of mechanic trainers and inservice training plans for mechanics, are made on an informal basis. Often other interested parties are not consulted or informed. The result has been delays, confusion and less than optimal use of project inputs.

Similar results have characterized 1st tranche procurement. AID/W delayed approval of a waiver to purchase trucks from IH/RSA. MFDP continues to have problems with shipping instructions, amounts and expiration dates of Letters of Credit. When suppliers are slow to respond, CTO fails to utilize all the resources available to them to expedite procurement. For example, CTO attempted for months with no success to obtain updated costs for Caterpillar spares from the Caterpillar office in Geneva, Switzerland. When AID learned of this, a call by the project manager to a Caterpillar representative in South Africa produced the costs in a week. With a 2nd tranche of procurement coming up, the evaluation believes some modification to procurement procedures is advisable.

The evaluation recommends that:

1. CTO and RDMB should agree upon a plan formalizing the responsibilities of the mechanics seconded to RDMB, and describing the system for the procurement and the distribution of spare parts to be used by these mechanics. In order to obtain maximum efficiency in the utilization of all RDMB equipment, it is recommended that the seconded mechanics be permitted to carry out primary and secondary maintenance of all RDMB equipment (including vehicles).
2. RDMB provide USAID with an updated plan for localization of the Cost Accounting activities in Ministry HQ.
3. CTO provide USAID ~~provide USAID~~ with a plan for utilizing the two USAID-funded mechanic trainers for the duration of their two-year tours. Following the objectives of the project, we believe these two technicians should work primarily, if not solely, on the training of plant mechanics rather than automotive mechanics. We suggest that this plan take into consideration the plant mechanic teaching needs of the Automotive Trades Training Center and the in-service training requirements for plant mechanics (including assistants for plant mechanics seconded to RDMB).
4. All USAID-funded project technicians should provide USAID with brief quarterly reports outlining work accomplished over the past quarter and describing work planned for the subsequent quarter.
5. All 2nd tranche procurement should be financed using USAID Direct Letters of Commitment.
6. In order to promote the standardization objectives described in the Project Paper and the Grant Agreement, USAID strongly recommends that equipment financed under the 2nd tranche be from the same manufacturers that produced the 1st tranche equipment, if reasonable prices can be obtained from suppliers. (A proprietary procurement waiver for Caterpillar and Hyster equipment was approved on July 10, 1981). 2nd tranche purchase orders should require deliveries on an FOB CTO Workshop basis.
7. CTO should review all Purchase Orders for equipment financed under the 1st tranche to determine if suppliers have met the established delivery schedules and if any penalties should be assessed in those cases where schedules were not met.
8. CTO should consider providing follow-up training for vehicle drivers in order to ensure full utilization of the capacity of the new equipment and to ensure the availability of back-up drivers.
9. RDMB, CTO and USAID should hold regular meetings to discuss the status of project implementation.
10. The Budget Review in Section 16 indicated cost savings

from the non-equipment elements of the project and cost overruns for 1st tranche equipment procurement. At a meeting with Ministry officials held June 3 it was the general consensus that the excess funds should be applied as follows:

2nd tranche overruns	\$107,000
Technical Asst. (Cost Acct.)	50,000
Training (Cost Accounting)	15,000
Short-term training (CTO and Roads Dept.)	110,000
5 at \$22,000	
Misc. Refitting for 4x4 vehicles, Cont.	16,000
	<hr/>
	\$298,000

The MWC through the MFDP should provide USAID with a letter confirming this proposed use of excess funds or providing an alternative recommendation.

11. Project evaluators should adopt the CTO replacement schedule for measuring fleet obsolescence.

23. Special Comments or Remarks

Attachments

1. Detailed Status Report on Project Inputs
2. Letter to Schultz dated April 30, 1981
3. Letter to CTO General Manager dated April 28, 1981
4. Schultz letter to USAID Director dated June 2, 1981
5. Project Implementation Letter No. 19 dated July 30, 1981
6. CTO comments on draft evaluation dated September 29, 1981

STATUS OF PROJECT INPUTS

A. AID Financed

		<u>PP ETA</u>	<u>ACTUAL START</u>				
1. <u>Technical Assistance</u>							
a.	Roads Engineer	6/80	5/80				
b.	Cost Accounting Specialist	6/80	7/80				
c.	Mechanic Trainer	11/79	9/80				
d.	Mechanic Trainer	6/80	12/80				
2. <u>Training</u>							
		<u>No. 's</u>	<u>PP START</u>	<u>DURATION</u>	<u>No. 's</u>	<u>ACTUAL START</u>	<u>DURATION</u>
a.	CTO Mechanics	2	2/80	9 months	4	9/81	2 yrs.
		2	9/80	"			
		1	9/81	"			
		1	9/82	"			
b.	MWC RDMB	2	2/80	"	5	8/80	1 yr.
		2	9/81	"			
c.	Cost Accounting	1	2/80	6 months	1	8/81	6 months
d.	Engineering Degree	1	9/80	4 yrs.	1	9/81	3 yrs.
		1	9/81	"	2	9/81	1 yr.
3. <u>Commodities</u>							
		<u>QTY.</u>	<u>PP ETA</u>	<u>ACTUAL ARRIVAL</u>			
a.	CAT 120G Graders	5	9/80	1/81			
	CAT 140G Graders	8	9/80	12/80, 1/81			
	Spares		9/80	(ordered 8/81)			
b.	CAT D6 Dozers	3	9/80	11/80, 12/80, 1/81			
	Spares		9/80	(ordered 8/81)			
c.	CAT 920 Front-end Loader	1	9/80	12/80			
	Spares		9/80	(ordered 8/81)			
d.	Hyster Grid Roller	1	9/80	6/81			
	Spares		9/80	(ordered 8/81)			

e.	Hyster Vibratory Rollers	3	9/80	6/81
	Spares		9/80	(ordered 8/81)
f.	Hyster Self-Propelled Rollers	1	9/80	1/81 (not operational until 7/81)
	Spares		9/80	(ordered 8/81)
g.	Dynapac Self-Propelled Rollers	2	9/80	1/81
	Spares		9/80	(ordered 6/81)
h.	Ford 4x2 LDV's	18	9/80	6/81
	Ford 4x4 LDV's	20	9/80	6/81
	Spares		9/80	(ordered 7/81)
i.	IH Dump Trucks	11	9/80	1/81
	IH Water Tankers	8	9/80	1/81
	Spares		9/80	7/81
j.	Marconi Radios	42	9/80	6/81
k.	Rassow Lube Trailers	9	9/80	7/81
	Spares			(ordered 6/81)
l.	Snap-on-Tool Sets	9	9/80	12/80
m.	Sander Bitumen Sprayers	3	9/80	(ordered 2/80)
n.	Training Materials		6/80	(ordered 7-8/81)
o.	Cost Accounting Computer System		6/80	3/80
4.	<u>Technician House</u>		<u>PP Completion</u> 5/80	<u>Actual Completion</u> 7/80

B. GOB FUNDED

		<u>PP</u>	<u>ACTUAL</u>
	<u>QTY.</u>	<u>ETA</u>	<u>ARRIVAL</u>
1.	<u>Commodities</u>		
a.	Bedford Flat-Bed Trucks	12	9/80
			2/80 (2)
			3/81 (6)
			4/81 (2)
			5/81 (1)
			6/81 (1)
b.	Ford 6600 Tractor	18	9/80
			3/80

c. Massey Ferguson MF50 w/backhoe	3	9/80	1/81
d. SAME Tractors	9	9/80	2/80
e. Trailer/Dumpers	9	9/80	(overhauled in 1979)
f. 5000 1 Towed Water Bowsers	10	9/80	1/81
g. Caravans	16	9/80	(ordered 3/81)
h. 10,000 1 Towed Water Bowsers	3	9/80	(not ordered)
i. Mower Attachments	4	9/80	(not ordered)
j. Towed Mechanical Brooms	4	9/80	(not ordered)

2. Technical Assistance

Although they are not an Input attributed in the PP to the GOB, nine expatriate mechanics were to be provided by CTO for secondment to RDMB depots. Three mechanics were already employed by CTO and four new Mauritian mechanics have been hired, leaving two vacancies yet to be filled.

3. Construction

	QTY.	PP COMPLETION	ACTUAL COMPLETION
RD 12 Workshops and Stores	9	8/80	8-9/81

April 30, 1981

Mr. Nels Schultz
Ministry of Works and Communications
Private Bag 007
Gaborone

Dear Nels,

To facilitate the upcoming evaluation of the Transport Sector I Project, USAID would like the Roads Department to assemble some information on certain aspects of the project for use by the evaluators who will begin their assessment May 11, 1981. Needed are:

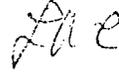
1. A schedule for completion of the Depots currently under construction;
2. The Roads Department plan for distribution, storage and control of the spare parts to be ordered for the project;
3. The location of project road maintenance equipment in-country, and proposed allocations of equipment that have not yet arrived;
4. A status report on the establishment of the computerized cost accounting system;
5. Evidence of improved road maintenance productivity resulting from use of the new equipment and an explanation of the method the Roads Department uses to document the changes in productivity.

Finally, please refer to my letter to the General Manager of CTO dated April 23, 1981 and copied to you, wherein USAID requested that

in-service training of CTO mechanics be added to the official responsibilities of the two expatriate trainers. We would appreciate the transmittal of your views on in-service training requirements to the CTO General Manager.

Thank you and we look forward to working with you on the evaluation.

Sincerely yours,



Louis A. Cohen
Director

SBaker: 

Clearance:JPielemeier (Draft)

cc: Permanent Sec., MWC
Duncan, MFDP
General Manager, CTO

April 22, 1981

General Manager
Central Transport Organization
P.O. Box 10013
Gaborone

Dear Sir:

USAID is planning to conduct an evaluation of the Transport Sector I project May 11 to 22. Among other elements of the project, the evaluators will be interested in reviewing CTO performance on procurement of the road equipment and spare parts, provision of mechanics to Roads Department Depots, training of plant mechanics in Gaborone and procurement of training materials. USAID is aware of many apparent problems with CTO performance on all of these tasks. These include:

Spare Parts Procurement - Recommended spare parts lists for some of the project equipment have been available to CTO for over a year, yet to our knowledge, only parts for Rasso supplied lube trailers have been ordered to date, and they were ordered without prior USAID review and approval. Much of the project equipment is already in-country, in use and in need of spare parts.

Mechanics for Roads Department Depots - Six additional mechanics and project procured tool sets are to be made available to Roads Department Depots for maintenance and repair of project equipment. A few of the mechanics (Mauritians) have reportedly arrived at their posts without the local CTO Workshop Manager being officially informed of their duties and assignments which has led to confusion and possible misuse of project tools.

Plant Mechanic Training - Two project-supplied expatriate trainers are to provide basic plant training to CTO mechanics. The trainers believe that the plant training would most appropriately be given

at the Sebele CTO workshop. However, their requests to combine the training there have been either ignored or resisted by the CTO Training Branch.

The two trainers are in a position to provide in-service training to CTO mechanics as well as the basic training they are now responsible for. USAID requests that in-service training be officially made one of their responsibilities.

Procurement of Training Materials - Project funds are available for procurement of training materials, but basic classroom training as part of the project is almost over, only a small portion of the training materials have been ordered and none have arrived in Botswana.

USAID would not like to have these problems interfere with the project's second tranche of equipment procurement, scheduled for mid-1991. In order to facilitate the evaluation, we would appreciate receiving from you by no later than May 11, the following:

1. Your schedule for ordering the remaining spare parts and training materials.
2. Copies of your instructions to CTO Workshop Managers as to the disposition of the Mauritian mechanics and their tool sets.
3. Your comments and response to the request to combine plant mechanic training operations at Sebele.
4. Your comments and response to our request to officially include in-service training of CTO mechanics as part of the two expatriate trainers responsibilities.

In addition, we would expect to receive future spare parts and training material order lists for prior review and approval. Thank you.

Sincerely yours,


Louis A. Cohen
Director

SB: 

Clearance: J. Pielemeier 

cc: Duncan, MFDP
N. Shultz, MWC
Perm. Sec., MWC - N.T.K. Mmono

REFERENCE:

RB/4/14 I(87)

PRIVATE BAG 002

GABORONE


 REPUBLIC OF BOTSWANA

2nd June, 1981

6/2/81

The Director,
Agency for International Development
Embassy of the United States of America
P. O. Box 90
G A B O R O N E

Dear Sir,

With reference to your letter of 30th April, 1981 herewith please find the following information:-

1. The enclosed schedule gives completion dates for each individual depot. As you will notice, all except the Gaborone one should be complete by end of July, 1981. Electricity and water is taken care of by Buildings Department.
2. All spare parts ordered over the project will be entered on the computer and a checking list will be printed. On receipt of the goods unpacking will take place in the central store being built here in the Gaborone depot. Each item will be checked against the printout, and a deficiency/surplus list presented to CTO for onward transmission to the suppliers. At the time of unpacking all items will be entered on ledger cards (Cardex system) and placed on shelves accordingly. Minimum and maximum stock levels will be established. As indicated above, the central store here in Gaborone will be controlled in accordance with Stores Regulations. On top of that we will have monthly printouts from the computer showing all transactions for the month. One copy will be sent to CTO for them to procure the parts required. Lists will be made up by the seconded mechanics for fast moving spare parts they want to hold in stock in their respective depots. Also here minimum and maximum stock levels will be established. The spare parts will be signed out to the depots in accordance with standard government procedures (Form Gen. 12). The same will take place out in the depots where the seconded mechanic will request and sign for each part received and he will indicate on the requisition form, the BX number for which the part is required.

Daily requests will be handled by a Chief Technical Officer, who will assist the Storekeeper. He will have his office in the central store building and will be in constant contract with the mechanics via the radio system.

Three 5-ton flat bed trucks with cranes are available - one in each division - to move the spare around the country.

3. Enclosed please, find the latest Master Equipment File and Master Check print-outs. The equipment file shows all active equipment by BX numbers, while the Master Check shows the active equipment by units.

at least by end of project

BEST AVAILABLE COPY

Furthermore please, find photostat copies of Road Maintenance Equipment Requirements 1981/82 (Appendix 14 - 26). From those you will be able to see the proposed distribution of equipment which has not yet arrived. For your information I also enclose Road Maintenance Staff Requirements 1981/82 (Appendix 1 - 13). The above forms part of our yearly estimates (Budget) submission. They have been approved in full.

4. Your staff, Mr. Pielemeier and Mr. Baker were presented with a status report by Mr. Niles during their meeting on 19th May, 1981. ✓
5. The Divisional Engineers prepare annual maintenance programmes which they update on a monthly basis. They record actual progress against the projected one. Through this process they get a good knowledge of what a unit can and should do and are thus able to evaluate the efficiency of the units. It would be wrong of me at this time to say that we have conclusive evidence of improved productivity. Given more time I am confident we will not only be able to prove it, but we should also be able to see the effects in the field.)

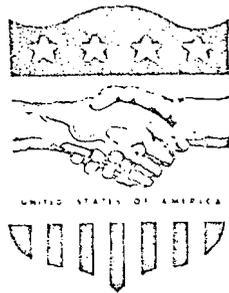
However, at this stage we can say that the new machines are working well, and that we have virtually all our units established. The workload has been identified and split up on various units. The supervisors have been briefed accordingly and a cost accounting system established. The data we are collecting will tell us how we perform. I would expect within the next half year to have overcome most of the teething problems and we should have factual data in about one year's time.

Roads Department would be very keen to see CTO organising in-service training for plant mechanics. I am not here thinking so much of the seconded mechanics, but more on their supporting staff which we provide. As you will notice from the Staff Requirement forms (Appendix 1-13) we have nine posts for Mechanics (Diesel), group 1.23. They would certainly benefit from any in-service training which could be provided. The seconded mechanics would no doubt also benefit from instruction courses given by the manufacturers. I am sure they would only be too pleased to assist with such courses, which could be organised by the CTO training instructors. In our next meeting with CTO, I will discuss our views with them.

Sincerely yours,


N.C. Schultz
for/CHIEF ROADS ENGINEER

cc: Permanent Secretary,
Works and Communications.



Agency for
International
Development

Embassy of the United States of America
Post Office Box 90
Gaborone, Botswana
Tel. 53382/314

July 30, 1981

Mr. Baledzi Gaolathe
Permanent Secretary
Ministry of Finance and
Development Planning
Private Bag 008
Gaborone, Botswana

Dear Mr. Gaolathe:

Project Implementation Letter No. 19
Transport Sector I (633-0073)

The purpose of this letter is to summarize the status of road maintenance equipment and spare parts procurement under this project. There are a number of outstanding issues related to the remaining spare parts procurement under the 1st tranche and plans being made for 2nd tranche equipment resulting from the recent evaluation of the project.

USAID has previously approved CTO purchase orders for spare parts from Rassow International, Dynapac and International Harvester. We have now reviewed and approve a recommended spare parts purchase order for Ford LDV's supplied by Intraco Marketing Corporation in the amount of \$37,899.27. CTO can proceed with procurement of these spare parts immediately.

CTO has informed USAID by a letter from V.E.B. Phumaphi dated July 22, 1981, that the cost of Dynapac spare parts has increased. CTO has requested USAID authorization to purchase a modified list of spares. USAID approves the modified list in the amount of \$3631.20.

We have noted that the existing Letter of Credit to Dynapac is not sufficient to cover this new amount and that the existing Letter of Credit to Intraco (Ford LDV's) is in excess of the amount necessary to cover the Intraco spares. We therefore request your Ministry to instruct the Chase Manhattan Bank to make amendments decreasing the Intraco L/Credit by \$500.00 and increasing the Dynapac L/Credit by \$500.00

Our office in Washington D.C. has informed us that Dynapac was confused about the reimbursement procedures for the spare parts order. Dynapac has been notified that reimbursement is to be made against the Letter of Credit with Chase Manhattan Bank. We note that the Intraco spare parts order instructs charges to be made to CTO Gaborone. CTO should change this and the outstanding Hyster and Intraco (Bitumen sprayer) spare parts orders to instruct charges to be made against the Letter of Credit. The outstanding Caterpillar spare parts order should be charged to the Direct Letter of Commitment (633-0072-02).

It is our understanding that the expiration dates on the Letter of Credit have been extended to December 31, 1981 and that the amounts have been amended as follows:

Snap on Tools	19,000
Intraco (Bitumen Sprayers)	28,000
Dynapac	44,000 (to be increased to 44,500)
Marconi	145,000
Intraco (Ford LDV's)	560,000 (to be reduced to 559,500)
Rassow	145,000
Hyster	<u>173,000</u>
	TOTAL <u>1,114,000</u>

To avoid further delays in spare parts procurement, we request that your Ministry confirm these amounts and the extended expiration date.

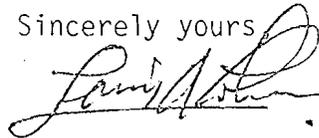
As a result of the recent evaluation of the project, USAID intended to withhold approval of any contracts for 2nd tranche procurement until spare parts for the 1st tranche of equipment were ordered, unless USAID otherwise agreed in writing. CTO now has supplier recommended spare parts lists for the Hyster and Caterpillar equipment. We understand that delivery of the other outstanding equipment (the Intraco supplied Bitumen Sprayers) has been delayed by manufacturer's difficulties. USAID will therefore approve 2nd tranche procurement once spare parts for Hyster rollers and Caterpillar equipment have been ordered.

Items in the 2nd tranche of procurement are six motor graders, four front-end loaders, one bulldozer, one grid roller, eight dump trucks, five self-propelled vibrating rollers and five LDV's. The Roads Department Maintenance Branch and CTO have agreed to purchase the five LDV's with GOB funds. The remaining items are to be USAID project financed.

On July 10, 1981, USAID approved a proprietary procurement waiver in the amount of \$1,097,306 for six Caterpillar 1206 Motor Graders, four Caterpillar 920 Front End Loaders, one Caterpillar D6D Crawler, one Hyster Grid Roller and associated spare parts. A previously approved waiver authorizes procurement of eight International Harvester dump body trucks directly from IH/RSA. The proprietary procurement waiver allows CTO to approach 3-4 suppliers of Caterpillar and Hyster equipment for quotations for supply of this 2nd tranche equipment. Normal CTO competitive tendering procedures will be required for procurement of the five self-propelled vibrating rollers.

The contracting and disbursement procedures for the 1st tranche procurement, discussed in PIL No. 4 (dated January 11, 1980), will also apply to the 2nd tranche procurement except as otherwise stated in this letter. At your Ministry's request, USAID will issue Direct Letters of Commitment to Caterpillar and International Harvester. Given our recurring problems with 1st tranche Letters of Credit, we strongly recommend the use of Direct Letters of Commitment to Hyster and the suppliers of the self-propelled vibrating rollers.

Sincerely yours



Louis A. Cohen
Director

cc: N. Schultz, MWC
M. Kenlan, MFDP
L. Mukukomani, CTO
V. Phumaphi, CTO
J. Mpetsane, CTO
D. Hardy, CTO

M I N U T E

TO: General Manager,
C.T.O.

REF: CTO/547

29th September, 1981.

Reference is made to the evaluation report on USAID.

Procurement should be dealt with in two parts, spare parts and equipment.

(a) Spare Parts: The failure to procure spare parts in a timely manner can be attributed solely to Mr. J. Siew, the CIDA employee who functioned as the supply manager. He attended all the procurement meetings and was well aware of his responsibilities. As CIDA was obliged to pay him three months salary if they terminated his contract and he was in his last three months of service he simply did nothing. A great deal of noise has been made about the failure to provide spare parts thus hindering Roads Operation. CTO is obliged to support equipment be it purchased by USAID or GOB. The local International dealer had the parts stocked when the vehicles arrived. Caterpillar has been used by CTO for years. The BEICO parts catalogue has the same part number for the USAID supplied equipment hence these parts were available through the R.S.A. The Roads repair depots have not been completed hence the spare parts could not have been distributed. In summary, CTO did not purchase the spare parts within the required time frame however this did not in any way hold up the maintenance of the equipment.

(b) Equipment: Equipment procurement will be discussed in two categories, USAID funded and GOB funded.

(i) USAID FUNDED:

CTO placed orders as soon as the tenders were awarded. The delays were not in the procurement but in the time from the equipment was received until it was serviced and turned over to CTO. Caterpillar equipment was received in September, 1980 but the bulk of it was not accepted by CTO January, 1981. A Hyster roller sat in the BEICO Yard for approximately two months waiting for a steering wheel and a seat. It was decided to install Donaldson air cleaners on the Ford Trucks and this again delayed the delivery of the Ford trucks to Roads. In summary delays in the procurement and delivery of USAID funded equipment cannot be attributed to CTO.

2. GOB FUNDED:

The delay in the GOB equipment was caused by the time required to get development funds after it was decided to switch the brooms and mowers to GOB. The caravans have started to arrive. CTO

- 2 -

CTO has found a supplier for the brooms and mowers and we have asked for quotes. We still need further information from the suppliers to award the tender for the 10,000 litre tankers. The main problem is that these three items (brooms, mowers and 10,000 litre tanker) are not normal supply items. The suppliers are few and difficult to find. The fact that they could not be purchased in the USA is a good indication of how few suppliers there are.

In summary, prompt procurement action was taken on all USAID equipment. There were delays in the servicing or modification of equipment before it could be accepted by CTO. There were difficulties finding suppliers for some equipment funded by the GCB. CTO now has found suppliers and has asked for quotes for the mowers and brooms. Tenders have been received for the water trailers (10,000 litres) and will be awarded as soon as some additional information has been provided.