

PROJECT EVALUATION SUMMARY (PES) - PART I

1. PROJECT TITLE <b>ROADS GRAVELLING PROJECT</b>		2. PROJECT NUMBER <b>615-0170</b>	3. MISSION/AID/W OFFICE <b>USAID/KENYA</b>
		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) <b>615-82-02</b>	
		<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING		7. PERIOD COVERED BY EVALUATION	
A. First PRO-AG or Equivalent FY <u>77</u>	B. Final Obligation Expected FY <u>77</u>	C. Final Input Delivery FY <u>83</u>	A. Total	\$ <u>12,300,000</u>	From (month/yr.)	<u>July 1, 1980</u>
			B. U.S.	\$ <u>9,300,000</u>	To (month/yr.)	<u>Sept. 30, 1981</u>
					Date of Evaluation Review	<u>Dec. 1, 1981</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.)	9. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
<p>Two projects have been evaluated concurrently: Roads Graveling Project No. 615-0170 and Rural Roads Systems Project No. 615-0168. This summary sheet pertains to the Roads Graveling Project No. 615-0170 and to the GBC portion of Project No. 615-0168. A complementary summary sheet pertains to the Rural Access Roads portion of Project No. 615-0168. Items 13 thru 23 are presented jointly for both projects.</p>	J. Pastic	Sept. 30, 1982
<p>a) The rate of construction progress will depend on the relative proportions of road sections requiring complete reconstruction to sections needing spot improvements. Revise Implementation Plan.</p>	MOTC Project Manager	May 31, 1982
<p>b) Return deadline graders to service.</p>	MOTC Project Manager	May 31, 1982
<p>c) Implement Technical Assistance staffing pattern changes.</p>	MOTC	March 31, 1982
<p>d) Maintenance plan for improved roads</p>		

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT		
<input type="checkbox"/> Project Paper	<input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify)	A. <input checked="" type="checkbox"/> Continue Project Without Change		
<input 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 (Name and Titles)		12. Mission/AID/W Office Director Approval	
Drafted: PRJ: J. Pastic: 12-15-81		Signature <i>Allison B. Herrick</i>	
Clearances: PRJ: SPS Shah (Draft)		Typed Name	
PROG: W Lefes	<i>[Signature]</i>	Allison B. Herrick	
PROG: R Crist	<i>[Signature]</i>	Date	
CONT: G Robinson	<i>[Signature]</i>	1-7-82	
A/DIR: CECostello			

### 13. SUMMARY

This evaluation pertains to both the Roads Graveling Project (No. 615-0170) and the Rural Roads Systems Project (No. 615-0168). The format provides for reporting on two major components: Graveling, Bridging and Culverting (GBC); and Rural Access Roads (RAR). The former consists of the Roads Graveling Project (No. 615-0170) and the GBC portion of the Rural Roads Systems Project (No. 615-0168). The latter consists of the RAR portion of the Rural Roads Systems (No. 615-0168). The format has been followed because each component is managed and executed by separate MOTC branches.

The GBC component finance two construction units to bring 3,300 km. of secondary and minor roads in Western and Nyanza Provinces to an all-weather standard. The RAR component finances eight labor-intensive construction units in Western and Nyanza Provinces to construct 1050 km. of farm-to-market rural access roads.

#### A. GBC

The Graveling, Bridging and Culverting construction units began work in September 1979. Through October 30, 1981, the average construction rate has been 9.4 km. per unit-month. This is below the original target of 30-35 km. per unit-month. The original target has not been achieved because very little attention had been given to spot improvements; most roads have been upgraded to full MOTC standards. Other cause factors were low grader availability rates and a GOK-wide shut down of capital projects for a 1.5 month period at the end of the 1980-81 financial year. An engineering evaluation conducted in May-June 1981 by an independent engineering consultant has focussed attention on this issue and corrective actions have been identified, viz. more extensive use of spot improvements and changes in field staffing patterns.

#### B. RAR

Rural Access Roads units financed by USAID commenced construction activities in the first half of 1978. As of June 15, 1981 eight construction units are operating. They have completed 697 km. of earthwork, and have gravelled 279 kilometers. The project target of 1050 kilometers will be met.

Based on initial qualitative observations, the prospect of achieving the purpose and goal are very favorable. MOTC impact studies assisted by project funding have begun to quantify program achievements, with final reports to be ready by October 1982.

#### 14. EVALUATION METHODOLOGY

There are three elements of evaluation for the rural roads projects: (1) Annual RAR joint donors review; (2) socio-economic impact analysis; and (3) Mission quarterly evaluation.

The RAR program is reviewed annually at a joint donors' review. The donors' review consists of: (a) An initial formal presentation by the Ministry of Works; (b) field inspection of RAR camps and worksites; (c) donor discussions; (d) meeting with the MOW; and (e) composition of the draft donor report by donor representatives.

Donor representatives include Denmark, Switzerland, The Netherlands, Norway, United Kingdom, United States of America, and World Bank.

The second evaluation element is an analysis of the socio-economic impact of the roads on the target area and target population (including an environmental impact analysis) to determine: (1) If the forecast benefits are being achieved, and, if not, which socio-economic benefits and costs are occurring; (2) the distribution of these benefits among farmers, traders and consumers and whether the distribution could be improved; (3) the level of local participation in the projects; and (4) the degree of co-ordination of the AID projects with other Government of Kenya rural development programs. Devres, Inc. is on contract to assist in this study.

To enable the GOK to provide analytical support for the socio-economic impact study, project funds had been used to obtain the services of Mr. Harvey Herr (PSC). Mr. Herr arrived in Kenya in February 1979, and was assigned to the Central Bureau of Statistics. He supported the socio-economic impact study by developing, designing and implementing a statistical data processing system which is used by the Rural Roads Impact Study team. Mr. Herr's contract expired in February 1981.

The third evaluation element is the Mission Quarterly Evaluation, in which program progress is measured and issues are monitored.

Sources of information used for the Quarterly Review have been joint MOW/USAID staff discussions, field inspections by the USAID Project Manager, Quarterly Progress Reports for both the RAR and GBC program and, for the RAR programs, reports from a local consulting engineering firm.

This PES has been developed from internal review resources and has not been prepared by a contractor.

## 15. EXTERNAL FACTORS

The assumptions made in the development of the Roads Graveling and Rural Roads Systems Projects remain valid. During site visits and discussions with residents within the project areas, it is qualitatively clear that the rural access roads are making favorable changes in accessibility for social and economic activities.

The GOK, in its 1979-84 Development Plan, has re-emphasized its priority on the development of rural areas as a means of realizing more equitable income re-distribution and alleviating poverty. Both the RAR and GBC programs continue to appear to be necessary tools to achieve this development.

It is increasingly obvious, however, that other factors like marketing system also have major impact on increased productivity and improved welfare. Improved access roads facilitate the availability of these other factors, but do not necessarily guarantee them. The subject project papers were developed with the explicit understanding that roads by themselves would not guarantee the delivery of services. These areas selected for road construction/improvement are areas where major rural development programs are underway. The criteria for specific road selection includes consideration of development programs/projects active within the road's zone of influence.

## 16. INPUTS

### A. GBC

#### 1. T.A. Personnel

All AID-financed technicians are in place. However, a host-country amendment is under negotiation which puts forth personnel re-assignments and staff additions.

#### 2. Commodities

The 8 Fiat-Allis road graders availability rates are very low. Five graders are out of commission. Upon receipt of a large spares order, the firm has agreed to send a field representative to expedite repairs. To fill the shortage of graders, GOK graders have been loaned to the program.

16. B. RAR

1. Personnel

Donors have recommended a strengthening of the management of the RAR. The following additional staffing, to be funded by the GOK, is proposed:

- a) One Planning, Programming and Monitoring Engineer at the head office.
- b) One Regional Co-ordinator for East/Central region.
- c) One Transport/Mechanical Engineer at head office.
- d) Two (mobile) Superintending Mechanics for Nyanza/Western and East/Central respectively.
- e) Three field supervisors.

2. Maintenance and Supplies

- a) Donors recommend the staffing and provision of two more regional mobile workshops.
- b) Procurement of hand tools and spare parts, diesel, and cement has been slow and MOE has been requested to place emphasis on improvement during the next report period.

17. OUTPUTS

A. GBC

As of October 30, 1981, a total of 387 kilometers of minor roads have been completed. Since start of construction (September 1979), the average rate of construction has been 9.3 kilometers per unit-month, which rate is below that planned of 30-35 km. per unit-month. The primary reason for this lower rate is that very little priority has been given to the "spot improvement" technique. This discrepancy has been noted over the past 2 years, and the matter had repeatedly been reviewed with the Ministry of Transport and Communications (MOTC). The reasons given by MOTC to build to only full MOTC standards are:

1. Roads must first be brought to a maintainable condition. Most were only rough tracks.
2. Building to less-than-full widths would be perceived as MOTC not performing its task adequately.

3. Building roads to higher standards results in easier maintenance.
4. Most roads after upgrading quickly achieve an average daily traffic volume (ADT) of 70 vehicles or more, the break-even point for justifying full standard reconstruction.

Mission does not agree that all roads should automatically receive full upgrading, and this has been confirmed by an independent engineering evaluation conducted in May-June, 1971. MOTC has agreed to implement all of the recommendations of this evaluation, including a renewed emphasis on spot improvement. The effectiveness of the spot-improvement technique will be reviewed after 12 months. The average rate has risen to 16 km. per unit-month since July 1981.

B. RAR

<u>Unit</u>	<u>Achieved Thru June 15, 1981</u>	
	<u>Earthworks</u>	<u>Gravelled</u>
Bungoma I	90.89 km.	47.20 km.
Bungoma II	75.72	2.80
Busia	112.61	39.17
Kakamega I	75.52	16.76
Kakamega II	43.39	14.36
Kisumu	93.06	42.06
Siaya	96.22	38.97
Kisii	109.80	77.20
Total:	<u>697.21</u>	<u>278.52</u>

The rate of earthworks construction has been maintained at approximately 45 kilometers per unit-year, which is the program target. At this rate, 1050 kilometers should be completed through earthworks formation by the end of June 1982. The rate of gravelling has been lower than the planned target of 35 km. per unit-year. Donors have recommended actions to increase the present rate of 25 km. per unit-month, and this issue will be reviewed at the next donor review in March 1982. Nevertheless, all gravelling should be completed prior to the Project Assistance Completion Date (February 1984)..

C. Maintenance

1. GBC

Mission has continued to urge MOTC to increase the level of maintenance effort. The PRC Harris, Inc. Roads Maintenance Engineer will have completed his assignment in December 1981. His accomplishments in Western Province are noteworthy. All minor roads have been included in a maintenance

plan, and virtually all roads are being maintained. How this record is sustained in Western Province and replicated in Nyanza Province, are issues which Mission is pursuing with MOTC.

Although the establishment of a comprehensive maintenance plan for all secondary and minor roads will not be a probable early result of these discussions, Mission is encouraged that at least the maintenance of roads upgraded in the GBC program will be receiving management surveillance and the required maintenance. The technical assistance contractor will be required to report regularly on the maintenance of roads upgraded.

## 2. RAR

The RAR program includes a program for contractor maintenance. This pilot project shows promise, but has received considerable attention by the donors in the last review. Whereas two districts have implemented a management surveillance program donors have asked that this program be expanded to five districts by March 1982 and to all RAR districts by October 1982.

Recognizing the overall impact of growing maintenance requirements on the Government budget, donors have asked MOTC to present at the March 1982 donor review meeting an estimate of future resources needed for routine and periodic maintenance of RAR roads. Donors will use this information in deciding on further support for expanding the RAR network.

## 18. PURPOSE

The approved project purpose for Project No. 615-0170 is: "To improve smallholder access to agricultural institutions, services and infrastructure, including inputs, credit, knowledge/extension to apply inputs, markets and/or storage facilities, roads and water." For Project No. 615-0168, the approved purpose is: "To provide isolated rural areas with improved accessibility to public and private factors of production and social services."

The MOTC impact studies, supported in part by USAID, are studying these areas. Generally, indications are that roads are necessary but not sufficient. A synthesis of these impact studies has been requested by donors by September 1982.

## 19. GOAL/SUBGOAL

See Paragraph 18 above.

## 20. BENEFICIARIES

### A. GBC

Not pertinent at this time. Study data are still in the development stage.

B. RAR

Road user beneficiary data is becoming available from impact studies. The farmers constructing rural access roads during the normal nine-month construction period are hired from the immediate area of influence of the roads. These people realize direct non-farm income. For the duration of the project, un-employment and under-employment are reduced. Women are frequently seen on these projects.

21. UNPLANNED EFFECTS

A. GBC

Not pertinent at this time.

B. RAR

None noticeable so far.

22. LESSONS LEARNED

Not pertinent at this time.

23. ATTACHMENT

- A. Annual Donor Review of Rural Access Roads Program, 1981