

Subject: A.I.D. Project No. 615-0168
Kenya-Rural Roads System Project
Project Assistance Completion Report

000106

A. Project Description:

The project purpose is to develop a network of secondary, minor and farm access roads to provide isolated rural areas accessibility to public and private factors of production and social services.

The Kenya Rural Roads Project loan funded capital equipment and construction materials to equip and operate one self-contained construction unit to improve and upgrade to all weather standards 2,000 kms of secondary and minor roads in Western province. The loan also funded eight labor-intensive units to construct from existing tracks and right-of-ways approximately 1294 kms of all weather access roads in remote semi-isolated areas in six districts of Nyanza and Western Provinces. Grant funds provided technical assistance services to the Ministry of Transport and Communications at headquarters and in the field. The implementation period spanned seven years (FY 77 to FY 83).

B. Project Status:

As of the project assistance completion date (PACD), August 31, 1984, the following had been achieved:

A total of 355 kms of secondary and minor roads had been gravelled and pipe culverts installed in Western Province.

Project equipment and vehicles consisting of 4 road graders, 3 dozers, 4 shovels, 30 tippers, transport vehicles and spare parts had been provided for the machine intensive gravelling unit.

A total of 35 bridges and box culverts were constructed.

A total of 1,532 kms of rural access roads had been constructed by labor-intensive methods and 1,209 kms of these roads had been gravelled.

All technical assistance staff positions had been filled with qualified Kenyan staff.

Summary of Contributions

1. AID Contribution

	Planned \$	Actual \$
Rural Access Roads, and Bridges	7,200,000	5,826,462
Equipment, Construction Materials Spare Parts and Operating Costs	5,800,000	5,449,224
Evaluations	410,723	344,197
Technical Assistance	1,337,277	1,304,350
Total	<u>14,748,000</u> =====	<u>12,924,233</u> =====

2. GOK Contribution

	Planned \$	Actual \$
Rural Access Roads and Bridges	1,600,000	1,942,154*
Equipment Operation and Maintenance	4,900,000	4,250,000+
	<u>\$6,500,000</u> =====	<u>\$6,192,154</u> =====

The GOK contribution represents 35% of the total actual project cost of \$19,116,387.

D. Project Accomplishments:

The original target of the Rural Access Roads Project was to construct 934 kilometers of rural access roads from existing tracks and right-of-ways. This target was later revised to 1294 kms. At the PACD a total of 1,532 kms had been constructed by the labor-intensive construction units and 1,209 kms of these roads had been gravelled. An additional 323 kms remained to be gravelled by the GOK.

Under the roads gravelling program, the Project did not

* GOK contributed 25% of actual construction costs.

+ Figures obtained from M.O.T.C.

attain its target of upgrading 2000 kms. of secondary and minor roads using the equipment-intensive construction unit. The actual total length upgraded to all weather standard quality was 355 kms.

E. Problem Areas

The project paper estimated that a target of 30-35 kms per unit per month was an achievable output for the road upgrading (gravelling) unit. This target was never achieved. A revised practical and achievable output of 10-15 km per month was subsequently established. The target of upgrading and gravelling 2,000 kms by the PACD was not met due to the following reasons: (1) emphasis on upgrading entire road lengths instead of upgrading by spot improvement, and (2) work stoppages due to insufficient GOK operating funds. The GOK is presently continuing with the program.

F. Evaluation of Spot Improvement Method for Roads Gravelling Component

An in-house evaluation of the spot improvement method was conducted by MOTC. The evaluation concluded that spot improvements could not provide all weather quality throughout the length of a road and hence full length upgrading was necessary.

G. Impact Evaluation of Rural Access Roads

Studies to evaluate the impact of the rural access road system have been undertaken by GOK with technical assistance funded by USAID and other donors. These studies indicated a positive relationship between road improvement, generation of traffic and increased cash incomes. The studies did not evaluate increased access to social services.

H. Lessons Learned from Project

During the Project Implementation the following lessons were learned:

1. Labour intensive road construction methods can be successfully applied for improvement of low traffic rural roads. GOK now intends to use similar methods for improving about 4,500 km of minor roads throughout Kenya over a period of five years.
2. Careful scheduling of construction and gravelling activities is necessary to avoid large backlogs of ungravelled roads.

Initially there were delays in recruitment and procurement of maintenance staff and vehicles. As a result some roads did not receive adequate maintenance during the initial stages of the project. Maintenance should commence as soon as the roads are completed and maintenance staff, equipment, tools and vehicles should be procured in advance of road completion.

4. Spot improvement efforts for earth roads were not successful. Spot improvement does provide sufficient quality upgrading on earth tracks or roads not originally built to engineered standards.
5. During the project design the GOK resource and management capabilities for project implementation were overestimated. This initially caused chronic stoppages due to cash flow problems.

The capability of the Government implementing agency should be carefully evaluated during the project design stage to avoid serious implementation problems.

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Drafted: JThuo/VMacDonald:lh;02/03/86
Clearance: PRJ:RRifenburg
PRJ:GBertolin