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Report No. 19516

PERFORMANCE AUDIT REPORT

TANZANIA

SIXTH HIGHWAY REHABILITATION PROJECT (CREDIT 1688-TAN)

June 28, 1999

Sector and Thematic Evaluations Group
Operations Evaluation Department

Currency Equivalents (annual averages)

Currency Unit = Country Currency (Tanzania Shilling, USh)

Year	Exchange Rate
Appraisal Year Average (1986)	US$1 = T Sh 16.415
	US$1 = SDR 1.155840
1990 Average	US$1=T Sh 200
	US$1=SDR 0.78
Completion Year Average (1994)	US$1=SDR0.78
	US$1=SDR0.72

Abbreviations and Acronyms

AFdf	African Development Fund
AGC	Attorney General Chambers
CODAP	Coordination Office for Donor Assisted projects
CTB	Central Tender Board
DANIDA	Danish International Development Agency
ERR	Economic Rate of Return
GOT	Government of Tanzania
ICR	Implementation Completion Report
FY	Fiscal Year
ICB	International Competitive Bidding
IDA	International Development Association
IRP	Integrated Roads Project
IRP II	Second Integrated Roads project
MCTI	MCW's Morogoro Training Institute
MCW	Ministry of Communications and Works
MOE	Ministry of Education
MOW	Ministry of Works
MWCT	Ministry of Works Communications and Transport
NCC	National Construction Council
NORAD	Norwegian Agency for Development Corporation
NTC	National Transport Corporation
PEHCOL	Plant and Equipment Hire Company
SAR	Staff Appraisal Report
SOE	Statement of Expenditure
TANZAM	Tanzania Zambia Highway
TAZARA	Tanzania Zambia Railways Authority
THA	Tanzanian Harbour Authority
TRC	Tanzanian Railway Corporation
voc	vehicle operating costs
vpd	vehicles per day
CCM	Chama Cha Mapinduzi

Fiscal Year

Government: July 1 – June 30

Director-General, Operations Evaluation	:	Mr. Robert Picciotto
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Office of the Director-General
Operations Evaluation

June 28, 1999

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Performance Audit Report on Tanzania Sixth Highway Rehabilitation Project (C1688-TA)

Attached is the Performance Audit Report prepared by the Operations Evaluation Department on Tanzania–Sixth Highway Project (C1688-TA). The credit, for US$50 million closed in FY95, two years later than scheduled. The credit was fully disbursed. Co-financing for the project consisted of grants from the governments of Denmark (US$2 million) and Norway (US$17.1 million) and a loan from the African Development Fund (US$17.45). The total financing for the project, including the government of Tanzania's contribution (US$22 million), was US$117.15 million.

The principal objective of the project was to bring economically important roads into a maintainable condition, increase the institutional capacity of sector organizations, and improve the policy and planning framework. The project sought to achieve these objectives through seven components: (i) a road rehabilitation program, (ii) an equipment rehabilitation program, (iii) technical assistance to the Ministry of Communication and Works, (iv) training, (v) assistance to the contracting industry, (vi) assistance to the trucking industry, and (vii) studies.

In 1989, without changes in the objectives, the project was substantially restructured and scaled down. Government counterpart funding was reduced from 20 to 10 percent. The rehabilitation of the TANZAM highway was expanded from 295 to 370 kilometers, while the rehabilitation of the gravel roads component was reduced from 1,000 to 130 kilometers. In addition, the restructuring allowed the government to make direct contracting arrangement for equipment repair with local garages, and the borrower was granted greater flexibility in procurement.

The rehabilitation of 370 kilometers of the TANZAM highway, financed 75 percent by other donors, was completed as planned. The substantially reduced rehabilitation of the gravel road component was partially completed. The equipment rehabilitation program was not achieved even after restructuring. The economic rate of return (ERR) of the completed components was 37 to 41 percent versus 27 to 39 percent at appraisal.

On the institutional side, no material progress was achieved in strengthening sector institutions, although some studies and training were carried out. Technical assistance proved ineffectual in mitigating capacity deficiencies.

The project had serious implementation difficulties from the start. All the project components were delayed by anywhere from 5 to 24 months. Despite 20 years of Bank intervention in the sector, the borrower had not developed the capacity to implement Bank-supported projects. Implementation was plagued by constant delays in procuring consultants and contractors and was characterized by excessive reliance on expatriate technical staff to comply with Bank guidelines and implementation procedures. In addition, the poor incentive structure in the implementing agencies and the absence of implementation technique or process suited to the country's institutional endowment compounded the implementation difficulties.

In the ICR review, OED rates the outcome of the project as satisfactory, sustainability as uncertain, institutional development as modest, and Bank and borrower performance as satisfactory. The audit rates the outcome of the project as marginally satisfactory, sustainability as uncertain, institutional development as modest, and Bank and borrower performance as satisfactory.

The outcome of the project is downgraded to marginally satisfactory because some project objectives were not achieved. In particular, the objectives to improve maintenance operation and to support the agricultural sector by improving the gravel road network were not achieved. Excepting the TANZAM highway, the project failed to achieve its overarching objective of rehabilitating economically important roads and increasing the capacity of sector institutions. A large amount of the credit was reallocated after project restructuring to pay for the purchase of vehicles for the Ministry of Works and the increased costs of consultantcy, training, and technical assistance. The training component increased the skills of staff in implementing agencies.

The key lessons from this project are: (i) ownership and sustainability of reforms are at risk if the borrower does not appreciate the reasons for reform and does not have the appropriate incentive structure; (ii) scale-up effects of projects and programs are more likely to be achieved if projects permit "learning–by–doing"; and (iii) excessive use of technical assistance diminish the scale-up effects by limiting the learning aspects of projects.

The audit recommends that the Bank, in its work with GOT in the transport sector, improve the design of the project to reflect the institutional endowment of the country and minimize the use of technical assistance to remedy institutional deficiency.

Attachment

Contents

This report was prepared by Binyam Reja (Task Manager), and reviewed by Ridley Nelson. William B. Hurlbut edited the report. Romayne Pereira provided administrative support.

Principal Ratings

Sixth Highway Rehabilitation Project (Cr. 1688-TAN)

	ICR	OED/ICR	PAR
Outcome	Satisfactory	Satisfactory	Marginally Satisfactory
Sustainability	Likely	Uncertain	Uncertain
Institutional Development	Partial	Modest	Modest
Bank Performance	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Satisfactory

Key Staff Responsible

Sixth Highway Rehabilitation Project (Cr. 1688-TAN)

	Task Manager	Division Chief	Country Director
Appraisal	K.V.S. Nathan	Yoshiaki Abe	Jochen Kraske
Completion	Joel Maweni	Stephen Weissman	F. Colaco

Preface

This is a Performance Audit Report (PAR) for the Tanzania Highway Rehabilitation Project, for which Credit 1688-Tan, in the amount of US$50 million equivalent, was approved on June 25, 1986. The credit closed two years late, on June 30, 1994. It was fully disbursed, with the last disbursement taking place on October 31, 1994. Cofinancing for the project consisted of grants from the government of Denmark (US$2 million) and Norway (US$17.1 million) and a loan from the African Development Fund (US$17.45 million). The total financing of the project, including the government of Tanzania contribution (US$22 million), was US$117.15 million.

The PAR was prepared by the Operations Evaluation Department (OED) based on extensive review of the President's Reports, Staff Appraisal Reports (SARs), Project Completion Reports (PCRs), Implementation Completion Reports (ICRs), transcripts of Board proceedings, project correspondence files, Bank documents on other transport projects, and other Bank and non-Bank materials on transport. In June 1998, an OED mission visited Tanzania to discuss the project with representatives of the relevant ministries and private and civil entities.

The PAR has four objectives: (i) to examine project preparation, including borrower participation; (ii) to assess institutional development, managerial improvements, and government commitment to reform; (iii) to evaluate project outcomes; and (iv) to draw lessons for the future.

Following standard OED procedures, copies of the draft PAR were sent to the relevant government officials and agencies for their review and comments. No comments were received.

1. Introduction and Background

Political Economy

1.1 Tanzania, one of the poorest countries in the world, had an estimated per capita income of US$130 in 1995. The country covers an area of 945,000 square kilometers and has a population of about 30 million that is growing at about 3 percent a year. The economy is heavily dependent on agriculture (over 50 percent of GDP). The manufacturing sector is small and the mining sector has potential but is relatively undeveloped. Tourism, one of Tanzania's most dynamic sectors, has shown significant growth in recent years. The service sector and the informal sector are increasingly important sources of employment.

1.2 Following the Arusha Declaration in 1967, Tanzania launched a socialist development agenda with pervasive state controls. This resulted in a sharp economic decline, severe macroeconomic imbalances, widespread shortages, and deteriorating living conditions and services. In 1986, the government embarked on economic reform to dismantle the system of state controls and promote private sector expansion. This included removing restrictions on agricultural marketing and exports, liberalizing the trade and exchange system, eliminating price controls and most state monopolies, and opening the financial sector to private sector participation. Programs were launched to rehabilitate vital infrastructure, particularly roads, railways, and ports. The economy responded to these reforms, recovering at an annual growth rate of 4 percent over 1986–94. Recent surveys also show substantial household income growth and reduction in poverty during the reform period.

1.3 Tanzania's economic potential and its efforts to reduce poverty are hampered by extensive corruption. Several years ago, the President appointed a commission to investigate official corruption and in 1996 the commission produced a report highlighting the existence of systemic and pervasive corrupt practices within the civil service system and in parastatal organizations.[1] The government, to increase the development effectiveness of its investments and reforms, has now pledged to fight this problem.

1.4 After three decades of one-party rule, which gave the Chama Cha Mapinduzi (CCM) party a dominant role in Tanzanian politics and bureaucracy, multi-party elections were held at the local level in late 1994, and presidential and parliamentary elections followed in November 1995. The ruling CCM party won both the presidential and parliamentary elections. Although recent political reforms have decreased the influence of the CCM, it still pervades Tanzanian society and affects many aspects of the social, economic, and political life of ordinary citizens. CCM's pervasiveness also enables it to "capture" many government and parastatal organizations. Reforms and the privatization process are also vulnerable to capture by the CCM.

Sector Context

1.5 The transport system has five subsectors: (i) a road network of about 82,000 km; (ii) two railway systems totaling about 3,1610 km of track (2,640 km operated by the Tanzania Railway Corporation (TRC) and 970 km within Tanzania by the jointly owned Tanzania/Zambia Railway

1. *United Republic of Tanzania: Report on The Commission on Corruption, 1996.*

Authority (TAZARA); (iii) ocean ports managed and operated by the Tanzania Harbors Authority (THA); (iv) two international airports and more than 60 smaller airfields (mostly unpaved); and (v) a pipeline that conveys crude oil products from Dar-es-Salaam to the Zambian border.

1.6 The road network is by far the most dominant transport mode, accounting for more than 60 percent of total internal traffic flows. The network consists of about 3,800 km of paved trunk roads, 6,500 km of unpaved trunk roads, 17,730 km of regional roads, and an estimated 30,000 km of district and feeder roads. In addition, about 30,000 km of unclassified roads are managed by national parks and village councils. By the mid-1980s, the condition of the road network had deteriorated for lack of adequate maintenance over several years. It was estimated that only about 15 percent of the trunk roads and 10 percent of the regional roads were in good condition. By 1996, the situation had improved: 44 percent of trunk roads and 30 percent of regional roads are in good condition, as reported by the Ministry of Works. The improvement is a result of the substantial road investment undertaken with the multi-donor-supported Integrated Roads Program.

1.7 Administrative responsibility for the transport sector currently is shared by the Ministry of Works (MOW), Ministry of Communication and Transport (MOCT), and the Prime Minister's Office. The organization of the sector administration has been altered several times because of changes in Tanzania's political economy and the scale and scope of the road investment program. The changes began in 1984, when the Ministry of Works and Ministry of Transport were merged into the Ministry of Communication and Works (MOCW). In 1990, when the First Integrated Roads Project (IRP) was approved, the MOCW was split to form the MOW and MOCT. MOW was given responsibility for the trunk roads. MOCT was given responsibility for overall transport sector administration, including oversight of the transport parastatals. In 1993, during preparation of the Second IRP, MOW and MOCT were again merged to form the Ministry of Works, Communication, and Transport (MOWCT). The Department of Roads in the MOWCT was given responsibility for developing and maintaining trunk and regional roads. District and urban roads were the responsibilities of the local authorities, with ministerial oversight by the Prime Minster's Office. In 1996, MOWCT was again split into MOW and MOCT and MOW took over the responsibilities of the Department of Roads. Currently, government-donor discussions (including the Bank) are underway to establish an autonomous road agency.

1.8 The frequent changes in the organization of sector administration have resulted in substantial organizational slack and inefficiencies. The changes in organization seem to have been motivated by the notion that putting the right type of organizational arrangement in place will improve the performance of the sector. But the perennial problem in Tanzania's road sector—and in its economy—has been the absence of a institutional environment conducive to the evolution of an organizational arrangement that could respond to the needs of the sector and of the economy.

2. Project Objectives & Relevance

2.1 The World Bank's participation in Tanzania's road sector developed in two phases. In the late 1960s and early 1970s, the Bank primarily assisted road construction through three highway projects. By the mid-1970s the deteriorating state of the road network required the government to redirect its priority from construction to maintenance. It also required enhancement of the ministry's technical capacity to carry out road maintenance works. Accordingly, in 1974, the government formulated a national trunk road maintenance program, which was supported under two Bank-financed projects (Fourth Highway Project in 1974 and Fifth Highway Project in 1979). The two projects, however, fell short of achieving their objective to enhance the ministry's capacity to carry out a sustainable road maintenance program.[2]

Objectives and Components

2.2 The Sixth Highway Rehabilitation Project (the subject of this PAR) was a continuation of the efforts begun with the Fourth and Fifth Highway projects. That is, it sought to bring economically important roads into a maintainable condition, increase the institutional capacity of the ministry involved with the road sub-sector, and improve the policy and planning framework in the road sub-sector. The Sixth Highway Rehabilitation project had two primary objectives: (i) to support the borrower's efforts to improve the efficiency of its transport operations and maintenance and (ii) to expand the effective capacity in its territory in order to assist the borrower in its efforts to rehabilitate its economy, particularly the agricultural sector.

2.3 To achieve these objectives, the project had seven components: (i) a road rehabilitation program, (ii) an equipment rehabilitation program, (iii) technical assistance to the Ministry of Communications and Works, (iv) training, (v) assistance to the contracting industry, (vi) assistance to the trucking industry, and (vii) studies. The details of these components are shown in the box.

Project Relevance and Evolution

2.4 When the project was identified, Tanzania's investment in roads had been severely compromised by lack of maintenance. The government had invested substantially in expanding and constructing roads in the 1960s and 1970s, but by the late 1980s, the roads were on the verge of collapse. The project's goal of preserving Tanzania's road assets was therefore relevant and consistent with the needs of the country and the Bank's strategy at the time.

2.5 The project's approach sought to address the reasons for the poor maintenance: the lack of finance and shortage of staff adequately trained to plan and carry out a maintenance program. It set out to correct these deficiencies by providing external financing and extending technical assistance. During the course of the project, however, it became apparent that the problem was much deeper and stemmed from deficiencies in the institutional framework within which roads are financed and managed. In this sense, the project became a "learning project" that led to the development of the Integrated Roads Project (IRP). The IRP became the basis for addressing the

2. The outcome of the Fourth Highway Project was rated "unsatisfactory," that of the Fifth Highway Project was rated "satisfactory." The institutional development impact and sustainability of the projects were "not rated."

institutional waknesses in the road administration and coordinating donor assistance in the road sector. The First Integrated Roads Project was approved in FY90 and a follow-on project was approved in FY94.

Box. Components of the Sixth Highway Rehabilitation Project

Road rehabilitation	Rehabilitate six sections of the TANZAM highway (295 km). Rehabilitate 700–1,000 km of gravel roads. Provide technical assistance for the supervision of construction of the above works.
Equipment rehabilitation	Rehabilitate inoperative road maintenance equipment and vehicles. Provide technical assistance for the supervision of the above activities and reorganize, strengthening of six zonal workshops and the central workshop at Morogoro.
Technical assistance to MOCW	Strengthen capabilities of the ministry by providing technical assistance in project coordination, training, road maintenance, and equipment management and service.
Training	Provide fellowships for training abroad of engineers, planning officers, and other professionals of MOCW. Establish a three-year course for about 25 highway technicians at the Dar-es-Salaam Technical College. Train field supervisory personnel at the Morogoro Training School. Prepare and supervise an annual in-service training program for MOCW staff.
Assistance to contracting industry	Train local contractors in cost estimation, bid preparation, site management, and methods of executing roadwork and contractual obligations. Provide technical assistance to local contractors in carrying out periodic maintenance and rehabilitation works.
Assistance to trucking industry	Strengthen public regional trucking companies by providing technical assistance in management, accounts, and vehicle maintenance and repair. Provide spare parts, tires, and batteries for public and private truck operators.
Studies	Carry out feasibility studies and detailed engineering of sections of Chalinze-Segera-Mkumbara, Tanga-Segera, and Arusha-Moshi roads. Carry out an agricultural feeder roads study.

3. Project Implementation

3.1 The Department of Roads, under the MOWCT, was in charge of the project's implementation. The National Construction Council (NCC), under the direction of the MOWCT, implemented the assistance to the local contracting industry. Similarly, the National Transport Corporation (NTC), also under the direction of MOWCT, implemented the assistance to the trucking industry. The Ministry of Education implemented the training component. A project coordinator was set up in MOWCT and became responsible for overall coordination of the various project elements and disbursement of the credits funded by IDA and AfDF. IDA managed the NORAD funds through a trust fund agreement.

Project Management

3.2 The project had serious implementation difficulties from the start. All the project components were delayed by anywhere from 5 to 24 months. Procuring for contractors and consultants proved cumbersome and time consuming for the borrower. The sources of the difficulties in project implementation were three interrelated factors: (i) lack of preparedness of the borrower to implement Bank-supported projects, (ii) a poor incentive structure in the implementing agencies and non-transparent practices, and (iii) the absence of an implementation technique or process suited to the country's institutional endowment.

Borrower Preparedness

3.3 When the project was approved the borrower had not developed the capacity to implement Bank-supported projects—despite 20 years of Bank intervention in the sector. Implementation was plagued by constant delays in procuring for consultants and contractors and was characterized by a heavy reliance on expatriate technical assistance staff to comply with Bank guidelines and implementation procedures. The borrower failed to invest the requisite resources to increase its capacity to implement the project. As a result, technical assistance aimed at mitigating capacity deficiencies proved ineffectual.

Incentive Problems

3.4 Incentive problems are common in Tanzania's public sector and the implementing agencies for this project were no exception. Road administration has long been part of the civil service in Tanzania and under the direct control of the Ministry of Works (or its variations in the past). This has made it vulnerable to political influences and bureaucratic management. In Tanzania's poor civil service system, road sector jobs have low salaries, and are therefore unattractive to qualified people. Therefore, the staff in charge of project implementation were poorly motivated and failed to successfully implement the project.

Lack of Clear Implementation Technique

3.5 On the Bank side, there were delays in approving "no-objections" and variation orders. The delays were largely caused by the asymmetry of information that exists between the project site and the Ministry's headquarters. It was difficult to processes and organize the information in the Ministry's headquarters to improve the decision-making process at the Bank's headquarters.

The method used was to require more documentation from the borrower (through the implementation unit) and painstakingly analyzing the information. Supervision missions did not improve matters because they were short and irregular to permit a full appreciation of the events in the field. In addition, the task manager changed five times during project supervision, causing substantial loss in project memory. The result of these difficulties and changes was increased transaction costs to manage the project.

Project Restructuring

3.6 The combined difficulties in project implementation were manifested in the government's inability to complete the project as approved. This led to the substantial restructuring and scaling down of the project components in November 1989, without changes to the project objectives. The Bank and the government agreed to the following changes:

a) Revise the financial participation of IDA in rehabilitating road maintenance equipment and civil works, in order to reduce government participation in the project costs to about 10 percent (from 20 percent as appraised), and to bring the cost share in line with the subsequently appraised Integrated Roads Project (IRP).

b) Increase the scope of the works by widening of unpaved roads and asphalt chip sealing of paved road shoulders. At the same time, works on the number of gravel roads was reduced from the 700 km-1,000 km estimated at appraisal to 130 km. Those works not contracted were rolled over to the follow-on project, IRP.

c) Increase the total length of TANZAM Highway to be rehabilitated from 295 km to 370 km. This was to be done with additional financing provided by the government of Norway.

d) Increase from $500,000 to $1,000,000 the upper limit amount for contracts used for training of domestic contracts in road network.

e) Provide MOCWT with greater flexibility in the procurement procedures to carry out the equipment rehabilitation component.

f) Permit direct contracting of equipment repairs with local garages.

4. Results and Ratings

Road Rehabilitation

4.1 The project, as *restructured*, achieved the civil works component to rehabilitate the TANZAM highway. The rehabilitation of 370 km of the highway restored a portion of the principal artery of the country to a maintainable condition. The economic rate of return (ERR) at completion was 41 percent, compared to 39 percent at appraisal. The implementation of a much reduced rehabilitation of gravel roads was also achieved as restructured and had an ERR of 37 percent, compared to 27 percent at appraisal.

4.2 While the project improved upon its expected ERR, it had substantial cost and time overruns. The road works suffered from inadequate and poorly prepared engineering designs.

This resulted in significant changes in the field that contributed to higher costs than estimated at appraisal. Moreover, works originally designed as maintenance were changed to major rehabilitation in part due to delays in procuring contractors, which allowed the roads to deteriorate further. Road works also suffered from poor and uneven quality. Contractors were slow to mobilize, and when they did they failed to produce works of acceptable quality.

Equipment Rehabilitation

4.3 This component was considered critical to the road rehabilitation program. Tanzania suffers from a chronic shortage of working equipment to undertake road works. As in road maintenance, the problem was thought to be the shortage of foreign exchange to purchase spare parts and capacity to manage the equipment. Therefore, the project was designed to remedy these deficiencies by providing funding for spare parts and technical assistance.

4.4 The sub-component failed to improve the management and rehabilitation of inoperative maintenance equipment. This failure demonstrates that little can be gained by simply funding equipment and technical assistance when the government entity receiving the funding operates in a poor institutional environment. To correct the problem, toward the end of the project cycle, the government created an autonomous agency, PEHCOL (for Plant Equipment Hire Company), to manage the equipment pool on a commercial basis. But the agency has not satisfied its mandate. Its autonomy from the government remains superficial and it suffers from a poor working relationship with MOW and the Regional Engineering Offices (REOs). Subsequent attempts under IRP I and II to invigorate PEHCOL have also failed. PEHCOL is now slated for privatization.

Technical Assistance and Training

4.5 The project had a significant component (45 percent of the restructured credit commitment, Table 4.1) for technical assistance, consultantcy, training and vehicles. The training and fellowship component, which made up 7 percent of the project cost funded by IDA, was successfully carried out. A group of students were sent oversees to study road engineering at the B.S. and M.S. level. In addition, the training center at Morogoro was substantially strengthened.

4.6 The technical assistance and consultancy component (38 percent of the restructured credit), however, was a different story. Expatriate staff assigned to the MOW, NCC, and NTC were ineffectual and failed to develop a good working relationship with their counterparts. The implementing agencies did not benefit from this component and their capacity to plan and manage a road maintenance and development program on their own remains rudimentary.

4.3 Despite the failure of technical assistance programs in Tanzania's road sector, the use of expatriate staff in project implementation continues and even intensified under IRP. A better approach would be to decrease the scale of project operations to align with the institutional endowment of the country, so that the borrower staff could undertake the work themselves, or do so with minimal external support. While this may delay project implementation owing to the time lag for learning by the borrower, in the long run it will enhance the borrower's capacity to implement projects.

Assistance to the Contracting Industry

4.8 The training and technical assistance to the contracting industry was carried out, but its effect in increasing the capacity of the local industry was not significant. The local contractors remain unable to win contracts that are let under international competitive bidding. While domestic firms may have less experience and capital base to compete successfully with large international firms, they often have a comparative advantage on small-lot and labor-intensive works. But most of the contracts were on this project were on the TANZAM highway require large lots and sophisticated equipment. Because the gravel roads component were substantially scaled down, there were no small lot contracts let that would have been more suitable for domestic contractors.

4.9 The objective of increasing the capacity of the industry will therefore not be met through training and technical assistance alone. The main impetus that will increase the capacity of the domestic construction industry is if the contractors are successful in winning the contract and getting a long term business opportunity with stable flow funds. This would encourage them to deploy resources to increase their capacity and gain experience through learning by doing.

Table 4.1: Project Component Breakdown

	Appraisal		Completion	
	US$ M	% of Total	US$M	% of Total
Tanzam	9.8	20%	18.1	31%
Gravel Roads	9.9	20%	2.9	5%
Housing	0.3	1%	0.3	1%
Equipment Repair and Spare parts	3	6%	3.8	7%
Trucking Spare parts, Tires, Batteries	5.1	10%	4.7	8%
Training and Fellowship	3.6	7%	4.2	7%
TA and Consultancy	9.2	18%	22.1	38%
Vehicles	0	0%	2.5	4%
Unallocated	9.1	18%	0	0%
Total	50	100%	58.6	100%

Source: Implementation Completion Report: Tanzania Sixth Highway Project (C1688-TZ) (Report No. 14641).

Ratings

4.10 In the ICR review, OED rated the outcome of the project as satisfactory, sustainability as uncertain, and institutional development as modest. It also rated Bank and borrower performance as satisfactory. The PAR rates the outcome of the project as marginally satisfactory, sustainability as uncertain, and institutional development as modest. The PAR rates Bank and borrower performance as satisfactory.

4.11 The outcome of the project is downgraded to marginally satisfactory because some project objectives were not achieved. In particular, the objectives to improve maintenance operation and to support the agricultural sector by improving the gravel road network were not achieved. Excepting the TANZAM highway, many of the components were not implemented. The gravel roads component, which was considered to be important for agriculture, was not implemented as planned in the SAR. Even after restructuring, the component was under spent by $0.8 million. Substantial money was reallocated to pay for the purchase of MOW vehicles and the increased costs of consultantcy, training and technical assistance components[3], some of which

3. Implementation Completion Report: Sixth Highway Rehabilitation Project (Cr.1688-TA), Table 8A-1

improved the skills of staff in the implementing agencies. The rehabilitation of the TANZAM highway was only made possible by the substantial intervention of other donors, who financed 75 percent of the cost of rehabilitating the highway. In particular, NORAD provided an additional US$10 million toward the end of the project to ensure that the works were executed. The Bank's share of the project mainly financed technical assistance, training, consultantcy and new vehicles.

4.4 The equipment rehabilitation was a complete failure. The rehabilitation of inoperative road maintenance equipment did not take place as planned. Even after restructuring of the project, allowing the government to contract with private garages, appropriate actions were not taken to rehabilitate the equipment. To remedy the managerial problem within the ministry, an autonomous plant pool agency, PEHCOL, was created to manage the plant pool. But the result thus far has been inadequate.

Bank Performance

4.13 The Bank's performance was inadequate at the beginning, but substantially improved towards the end of the project, rendering the overall Bank performance as satisfactory. The project was inadequately prepared and poorly designed. The important gravel road component, for example, was not designed until after the credit became effective.

4.14 The project did enable the Bank to "learn" the shortcomings of "traditional" projects in Tanzania. It tried to tackle the institutional weaknesses through the IRP and the Road Maintenance Initiative (RMI) in Africa. Ironically, though, the borrower failed to heed the lessons learned from previous projects and did not embrace the new approaches. The new project forced its approaches upon the borrower through conditionalities. The borrower's lack of cooperation in the IRP conveys its disappreciation or lack of incentives for the reasons underlying the new approach[4]. Or, from a different perspective, the IRP approach is beyond the borrower's capacity to accept it because it is unable to get the consensus necessary to adopt the IRP's prescriptions.

Borrower Performance

4.15 Borrower performance is rated as satisfactory during preparation and covenant compliance, but deficient during project implementation. The borrower delayed the procurement of contractors and consultants. Its policy dialogue with the Bank and donors was ineffectual, and it failed to lead on donor coordination. Its performance on promoting policy reforms was poor, and it had to be pushed by the Bank to adopt reforms. In terms of administration, the government put an undue amount of political influence in the sector. The ministry is overly bureaucratic and political. The borrower also failed to appropriately manage contractors and consultants and left itself open to rent-seeking activities.[5]

4. The IRP I and II are listed as projects "at risk" by QAG.

5. *United Republic of Tanzania: Report on The Commission on Corruption, 1996.*

5. Current Agenda: Getting the Institutions Right

5.1 The ongoing effort to bring Tanzania's road network to a maintainable condition begun in the late 70's and intensified in the 1990s with the Integrated Roads Program. Despite nearly 20 years of effort and a substantial injection of capital, the road network in Tanzania remains in a dismal state and the institutions responsible to look after it also remain ineffectual.

5.2 Why Tanzania continues to have inadequately maintained roads and deficient institutions has been a subject of debate and several studies and proposals to remedy the problem. In the 1970s, the problem was diagnosed as the lack of technical capacity and inadequate finance. Thus, the remedy was to provide technical assistance, training, and finance from multilateral and bilateral agencies. The rationale for the audited project was consistent with this view. But the approach failed to solve the fundamental problem in Tanzania's road sector—lack of a sustainable road maintenance program and institutions capable of carrying out the program with minimal technical assistance.

5.3 In the context of the Road Maintenance Initiative in Africa, the problem in Tanzania (as elsewhere in Africa) was diagnosed as the lack of conducive institutional framework within which roads are managed and financed.[6] The deficiencies in technical capacity and finance were seen as symptoms of a larger institutional problem underpinning road management and financing. Roads have been managed through the public bureaucracy system and financed through the general budget. As a result, road management and financing developed poor incentive structures and became vulnerable to political prerogatives. For example, when funded from the general revenue, governments were more likely to prefer construction over maintenance as it provides them a higher political return. They also found it politically difficult to justify expenditure on road maintenance as long as many regions in the country did not have any type of road. Similarly, because road institutions have been part of the civil service, the incentive structures embedded in them are not capable of attracting and retaining qualified staff, especially when the road organization has to compete with the private sector to attract technical staff. In addition, recruitment and promotion in the road agency was overshadowed by political variables and was often not guided by technical merits.

5.4 Today's debate in Tanzania's road sector therefore centers on how to improve the institutional framework that underpins the management and financing of the road network. The government is now poised to create an autonomous road fund and an autonomous road agency. The reform being promoted by the Bank and donors has two elements: (i) establishing an autonomous road agency that will be capable of managing the road network on commercial principle and (ii) developing a sustainable road maintenance financing mechanism that will channel users' contribution to an autonomous ,"ring-fenced" road fund.

5.5 The PAR endorses the general thrust of the reform proposals. Experience in other countries has shown that autonomous road funds improve cost recovery in the sector and contribute to sustainability of road maintenance. Similarly, autonomous road agencies improve incentive structures in that the agencies are able to provide market-based compensation to their

6. Heggie, Ian (1995) Management and Finance of Roads. Technical Paper 275. Washington, D.C.: World Bank.

staff and management. This allows them to attract and retain qualified staff and thus improve their performance in carrying out road investment programs.

5.6 But the Audit has reservations about the approach to this reform process. Like the many previous reforms, the current reforms do not have government ownership. The Bank and other donors have had to push the government to accept them. This is because the borrower and the Bank do not see the issues in the same way. Furthermore, the Bank appears to be learning from experience—the borrower does not. We must understand why this is happening and correct it before the reforms take place. Otherwise, the current agenda will have the same fate as previous efforts.

6. Lessons Learned and Recommendations

6.1 The Sixth Highway Rehabilitation Project was a lesson learning project—but only the Bank learned the lessons. The borrower failed to learn from its mistakes, or if it did, it is not reflected in more recent project designs. The only lessons that were incorporated in those projects were what the Bank learned from the project and elsewhere in Africa: institutional arrangements are key in improving road sector management and financing. But the borrower seems not to appreciate this lesson, as it has not tried *on its own* to institute the reforms directed at improving the institutional arrangement.

6.2 The key lessons in this project are:

- "Ownership" and sustainability of reforms are at risk if the borrower does not appreciate the reasons for reform.

- Scale-up effects of projects and programs are more likely to be achieved if projects permit "learning-by-doing." The process with which works are procured needs to be flexible enough to encourage pilot schemes and small turnkey projects to allow the borrower to benefit from the scale-up effects of projects.

- Technical assistance programs diminish the scale-up effects of projects. When expatriate staff do most of the project preparation and implementation, there will be less chance for the borrower to learn during the project cycle and fully appreciate the institutional, managerial, technical and political dimensions and skills required in order to capitalize on the effects and side-effects of the project.

6.3 The recommendations from these lessons are:

- The project designs should reflect the development stage of the country. They should be consistent with the institutional endowment of the country.

- The use of technical assistance should be minimized. The project investments, their scope and the level of difficulty need to be driven by the clients readiness and ability to absorb technical assistance. The borrower should write the terms of reference for technical assistance, if needed. In plain language, this means that even if benefit-cost or other technical analyses show a need for a complex project, but the client does not have the requisite skills or can not acquire them in time, then the project complexity must be reduced until such time when the client is ready for it. This approach, in essence, reverses the current practice in which a project is designed irrespective of client skills and then a technical assistance and training component is added to provide the skills needed.

BASIC DATA SHEET

SIXTH HIGHWAY REHABILITATION PROJECT (CREDIT 1688-TA)

Key Project Data *(amounts in US$ million)*

	Actual or current estimate
Total project costs	117.15
Loan amount	58.60
Cofinancing	36.55
Cancellation	-
Date physical components completed	June 30, 1994
Economic rate of return	

Cumulative Estimated and Actual Disbursements

	FY87	*FY88*	*FY89*	*FY90*	*FY91*	*FY92*	*FY93*	*FY94*	*FY95*
Appraisal estimate (US$thousands)	6.5	19.1	31.7	41.7	48.3	50.0			
Actual (US$thousands)	3.3	4.2	11.1	18.7	32.2	46.2	54.1	0	58.6
Actual as % of estimate	50.7	22.0	35.0	44.8	66.6	92.4	108.2	0	117.4
Date of final disbursement	3/87	6/88	6/89	6/90	6/91	6/92	6/93		10/94

Project Dates

Steps in project cycle	*Date planned*	*Date actual*
Identification	1982	1982
Preparation	1983	1983
Appraisal	May 1985	May 1985
Negotiations	March 1996	March 1986
Board presentation	April 1986	May 6, 1986
Signing	June 1986	June 25, 1986
Effectiveness	Sept. 24, 1986 revised	Dec. 4, 1986
Project completion	December 31, 1991	June 30, 1994
Loan Closing	June 30, 1992	June 30, 1994

Staff Inputs (staff weeks)

Stage	*Planned*		*Revised*		*Actual*	
	Weeks	*US$ (thousand)*	*Weeks*	*US$(thousand)*	*Weeks*	*US$ (thousand)*
Through appraisal					85.2	
Appraisal-Board					9.0	
Board-Effectiveness					2.0	
Supervision	67	6.2	104.8	11	84.4	0.5
Completion	10	52.3	20	72	6.2	11.1
Total	77	58.5	124.8	83	186.8	11.6

Mission Data

Stage of project cycle	Month/ year	No. of persons	Days in field[2]	Specialized staff skills [3]represented	Performance rating[1] Implementation Status	Development impact	Types of problems[4]
Through appraisal	05/85	4	19	HE, EC, Pr Ass, Constr			
Appraisal-Board	6/86	1	5	HE	2		
Supervision	01/87	2	15	HE, EC	2	2	
	12/87	2	9	Pr. TrEng. Sr Tr EC	2	2	
	03/88	3	16	HE, Op ASS, Pr Tr Eng	2	2	
	05/89	1	17	Sr Tr EC	2	2	
	02/89	5	20	Tr ENG, Train Sec, Sr Tr EC, Proc Spec Op Ass	2	2	
	97/89	5	12	Tr ENG, Train Sec, Sr. Tr EC, Proc Spec, Op Ass	2	2	Slowness in procurement proced.
	04/90	1	1	Tr ENG	2	2	Transfer of some of road rehabilitation to IRP I
	02/91	1	13	FA	2	2	Submission of an urban transport strategy
	04/91	1	15	FA	2	2	Establishment of PEHCOL not yet complete, project
	10/91	4	21	FA, proc Spec, EQ Spec, HE	2	2	should be completed with CODAP and implementators
	07/92	2	17	FA, FA	2	2	Project substantially completed except TANZAM civil works and equipment rehabilitation component
	03/93	4	24	OA, Proc Spec, ENG, FA	2	2	Extension of the closing date because of outstanding disbursements
	05/94	3	14	OA, ENG, FA	S	S	Despite the difficulties with the equipment rehabilitation program and delays in completing roads works
	05/94	3	14	OA, ENG, FA	S	S	
	11/94	2		ENG, Sr HE	S	S	Ask Borrower to submit a draft of ICR

1. I – Problem free; 2 – Moderate problems; S-Satisfactory
2. Combined with supervision/preparation missions for other highway projects
3. HE – Highway engineer; HE © - Highway Engineer, Consultant; EC - Economist
4. M – Managerial; T – Technical; F - Financial