

AFRICAN DEVELOPMENT FUND



PROJECT COMPLETION REPORT

**PROJECT FOR THE STRENGTHENING OF TECHNICAL
AND VOCATIONAL TRAINING II
(LOAN N° F/RWA/EDU/88/23)**

REPUBLIC OF RWANDA

**SOCIAL DEPARTMENT
CENTRAL AND WEST REGIONS**

**OCSD
DECEMBER 2005**

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CURRENCY EQUIVALENTS

Currency unit	=	Rwandan Franc (RWF)
UA 1	=	RWF 102,7101 at appraisal (March 1988)
UA 1	=	RWF 842,47 (November 2004)

WEIGHTS AND MEASURES

Metric system

FISCAL YEAR

1 January – 31 December

ACADEMIC YEAR

1 January – 30 September

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LIST OF ABBREVIATIONS AND ACRONYMS USED

ADF	African Development Fund
CIDA	Canadian International Development Agency
ENTS	<i>Ecole Normale Technique Supérieure</i> – Higher Technical Teacher Training School
ETO	<i>Ecole technique officielle</i> – Official Technical School
FAS	Faculty of Applied Science
ISAE	<i>Institut Supérieur d’Agronomie et d’Elevage</i> – Higher Institute of Agriculture and Livestock
KIST	Kigali Institute of Science, Technology and Management
MINECOFIN	Ministry of Finance and Economic Planning
MINEDUC	Ministry of Education, Scientific Research and Technology
NUR	National University of Rwanda
PIO	Project Implementation Office
PIU	Project Implementation Unit
RWF/FWR	Rwandan Franc
UA	Unit of Account
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children’s Education Fund

EXECUTIVE SUMMARY

1 The Project for the Strengthening of Technical and Vocational Training II was the Bank's second project in Rwanda in that sector. The project objective was to expand and strengthen vocational training establishments' intake capacity and improve the educational qualifications of teaching staff of general secondary and vocational education. It was planned to build three official technical schools (ETOs), strengthen the Faculty of Applied Science of the National University of Rwanda (NUR) at *Butaré*, and train instructors. Project implementation, which began in June 1991, was interrupted by the war that preceded the events of April 1994. Only one activity was embarked upon, namely, the construction works of the Official Technical School, ETO, at *Gitarama* almost 50 % of which has been implemented. In the framework of the portfolio restructuring in September 1995, only the construction of the ETO at *Gitarama* was maintained. An amount of UA 11.97 million was re-allocated out of the loan amount, and a UA 2.12 million provision made to finance the remaining activities of the ETO. Nonetheless, the Bank subsequently agreed that the loan resources be used to fund the works for water supply to the ETO which were not provided for in the initial project. Indeed, the water supply network initially envisaged was inoperative when the works were to be implemented, and it, therefore, became necessary to install a water supply system combining the collection of rainwater, tapping from 3 springs, and laying pipes over a long distance. **This completion report concerns the rescaled project, namely, the construction and equipment of the ETO of *Gitarama*. The implementation of the rescaled project actually began in late 2001.**

2. The loan became effective on 14 June 1991, i.e., 33 months after approval. The project began with a 23 months delay, and its implementation, initially planned for 3 years, was spread over 13 years, including 8 without any disbursement. This long period of inactivity was linked to the events of 1994 and their repercussions, and to the difficulties that emerged in the execution of the construction contract. Project implementation actually began only in 2001 after the Bank had approved the Government's proposal that (i) the construction works be completed with counterpart resources and (ii) the loan balance be used in procuring equipment for the ETO. At completion, the project cost – without duties and taxes - was estimated at UA 2.42 million, comprising UA 1.67 million (68.72 %) in foreign exchange and UA 0.76 million (31.28 %) in local currency.

3. The rescaled project attained its objectives. The construction works were completed and were the subject of provisional and final acceptance. The equipment, furniture, textbooks and teaching aids were delivered and the water supply works fully completed and taken delivery of. The establishment has been completely operational since the 2002/2003 academic year, and there have been two graduations.

4. Overall, the project will impact positively on the development of technical and vocational (secondary) education. It provided the country with a new modern and equipped establishment for training young boys and girls on completion of the first cycle of secondary education (core course) in the following disciplines: electricity, electronics, automobile mechanics, construction, public works, carpentry and plumbing. In 2005, the establishment enrolled 410 students including 32 girls. However, there was a problem of lack of qualified teachers, which risked compromising project sustainability. Similarly, adequate measures should be adopted for the proper maintenance of this new equipment made available to the ETO.

Lessons

5. Several lessons were learned from project implementation, some of which have already been taken into account in the formulation of ensuing projects. The first relates to the need for initial training of teachers in technical and industrial disciplines in the framework of projects aimed at developing technical and vocational training. In addition to instructors in the general disciplines, there is a need for a critical mass of specialized teachers in the establishments, which must not count only on external teachers. The rescaled project no longer embraced the training of technical schoolteachers, which activity has been entrusted to the Education Project III underway. The lack of teachers of specialized disciplines in technical schools will thus be alleviated by the collaboration initiated between the ETO and KIST and the programme for an initial training of 70 teachers of technical education establishments to be carried out by KIST in the framework of Education Project III. Moreover, the modern equipment provided by the ETO will afford an adequate educational environment for training these teachers.

6. A second lesson is the need, within the establishment, for staff capable of ensuring minimum maintenance of the workshop and laboratory equipments, especially as they are modern and state-of-the-art. This level of staff is lacking in the establishment. Initial and continuing training of technical schoolteachers, which will be carried out by KIST (Education Project III), will help resolve the problem partially.

7. The third lesson concerns the importance of partnerships between the technical education establishments at various levels in a country. These partnerships can contribute considerably to the efficacy and efficiency of investments in the sub-sector by ensuring a complementarity of measures. The presence of KIST, on the one hand, ensured an adequate choice of equipment for the ETO, their assembly and testing and, on the other hand, safeguarded the monitoring of their operation. Similarly, the ETO site will serve as a framework for practical training of the country's technical schoolteachers in the framework of the initial training entrusted to KIST under Education Project III. The collaboration between KIST and the ETO will be of considerable advantage to the latter in training its teachers in specialized disciplines and basic equipment maintenance.

8. Finally, another lesson learnt from the project was the flexibility of the Bank and Government in seeking appropriate solutions with a view to completing a project encountering difficulties. That also led to the resolution of problems that arose during project implementation, especially relating to water supply to the establishment. In that framework, the following additional activities were carried out: (i) study on rainwater collection and supply system; (ii) rainwater collection works, (iii) works for tapping water from springs (iv) laying of pipes and (v) connection of the pumping station. Similarly, the decision to award project management to the PIU of the Emergency Project contributed to the smooth implementation of activities.

9. These lessons should be taken into account for the follow-up of the project and design of future projects, and are the subject of the recommendations set out below and in the matrix in Annex 6.

Recommendations

It is recommended that:

A. The Bank

- (i) ensure, before project completion, that the Government has made arrangements to cover the recurrent upkeep and maintenance costs of rehabilitated or constructed infrastructure and equipment;
- (ii) ensure that the Government is sensitized to the fundamental issue of availability of qualified teachers for the specialized disciplines of technical and vocational training; and
- (iii) ensure the smooth implementation of the technical school teacher-training programme underway at KIST under Education Project III.

B. The Government

- (i) take stock of the use of resources obtained from the special account of the project and transmit their justifications to the Bank; and
- (ii) encourage and support the partnership between the ETO of *Gitarama* and KIST.

BASIC PROJECT DATA

1. Loan N°	2100150000949 (F/RWA/EDU/88/23)
2. Borrower	Government of Rwanda
3. Beneficiary	Ministry of Education (Mineduc)
4. Executing Agency	Direction des Projets Education (DPE), Mineduc

A. LOAN DATA

ADF		
	<u>Estimate at appraisal</u>	<u>Actual</u>
1	UA 14.09 million	UA 1. 67 million
2	Repayment of principal: 1% a year, from the 11 th to the 20 th year, and 3% a year thereafter	
3	Repayment period	50 years
	Grace period	10 years
	Negotiation date	NA
	Approval date	20/09/1988
	Signature date	20/07/1989
	Effectiveness date	11 April 1991
GOVERNMENT		
	UA 1.56 million	UA 0.76 million

B. PROJECT DATA

	<u>Estimated cost</u>			<u>Actual cost</u>		
	<u>FE.</u>	<u>LC</u>	<u>Total</u>	<u>FE.</u>	<u>LC</u>	<u>Total</u>
1. Total cost (million UA)	8.95	6.70	15.65	1.67	0.76	2.42

2. Project cost by source of finance at appraisal (million UA)

<u>In million UA</u>			
<u>Sources</u>	<u>FE</u>	<u>LC</u>	<u>Total</u>
ADF	8.95	5.14	14.09
Government	0.00	1.56	1.56
Total	8.95	6.70	15.65
%	57.17	42.83	100.00

3. Estimated date of first disbursement	July 1989
4. Actual date of first disbursement	14/06/1991
5. Initial last disbursement deadline	31/12/1991
6. Revised last disbursement deadline	30/06/2004
7. Start-up of project activities	June 1991
8. Completion date of project activities	31/12/2004

C. PERFORMANCE INDICATORS

1. Total disbursed	UA 1.67 million
Amount cancelled	UA 11.97 million
Undrawn balance	UA 0.45 million
2. Time overrun	
▪ Slippage on effectiveness	24 months
▪ Slippage on completion date	156 months
▪ Slippage on last disbursement	150 months
▪ Number of deadline extensions	4
3. Status of project implementation	Completed (100 %)
4. Verifiable indicators in relation to allocations of expenditure categories	
A. Studies and Supervision	NA
B. Construction	100 % implemented
C. Furniture	100 % Delivered
D. Equipment/Supplies	100 % Delivered
G. Running/Operating expenses	100 % implemented
5. Institutional performance (Unsatisfactory, Fair, Satisfactory, Highly Satisfactory)	
▪ Bank Group	Satisfactory
▪ Government	Satisfactory
6. Performance of construction companies	Satisfactory
Performance of Consultants	Satisfactory

D. MISSIONS

<u>Mission</u>	<u>N° pers</u>	<u>Composition</u>	<u>Pers/day</u>	<u>Date</u>
Pre-investment study	NA	NA	NA	1987
Study on training disciplines and ENST teaching framework	NA	NA	NA	1987
Appraisal	2	NARD.3/NCPR.3	28	5-18 June 1988
Launching	NA	NA	NA	- June 1991???
Supervision	1	OCDC	7	15-22/12/1998
	1	OCDC	8	17-30/07/1999
	1	OCDC	8	16-30/05/2000
	1	OCDC	7	27/09-12/10/2000
	1	OCDC	8	15-30/03/2001
	2	OCDC	14	17-29/09/2001
	2	OCS D	10	10-23/03/2002
	1	OCS D	5	9-21/11/2002
	1	OCS D	5	9-23/09/2003
	2	OCS D	8	8-24/04/2004
Financial supervision	1	FFCO	10	2001
	1	FFCO	8	15-24/12/2004
Completion	2	OCS D	30	15-30/09/2004

E. DISBURSEMENTS (In million UA)

<u>ADF</u> :			
Amount approved	:	UA 14.09 million	
Amount re-allocated	:	UA 11.97 million	
Net loan amount after restructuring	:	UA 2.12 million	
<u>Year</u>	Estimate at appraisal	<u>Actual</u>	<u>Percentage disbursed</u>
1989	0.32		0.00
1990	6.10		0.00
1991	7.67	0.06	0.43
1992		0.03	0.22
1993		0.38	2.72
1994		0.00	0.00
1995		11.97	84.94*
1996		0.00	0.00
1997		0.00	0.00
1998		0.00	0.00
1999		0.00	0.00
2000		0.00	0.00
2001		1.06	7.51
2002		0.00	0.00
2003		0.00	0.00
2004		0.13	0.95
TOTAL	14.09	13.64	96.78
Un-disbursed balance to be cancelled:		UA 0.45 million	

* Amount re-allocated

F. Contractors/Suppliers

Name	Responsibility	Signature date	Amount
Ets EMUJECO	Construction of ETO <i>Gitarama</i> *	15/05/1994	RWF 21 725 710
Ets EMUJECO	Rainwater collection works (<i>Gitarama</i>)	01/06/2001	RWF 14 674 350
Ets EMUJECO	Construction of ETO <i>Ruhengeri</i> **	22/12/1993	RWF 22 218 789
Ets MUNYANSHOGORE	Construction of ETO <i>Cyangugu</i> **	22/12/1993	RWF 25 363 590
EMA RWANDA	Water supply to ETO <i>Gitarama</i>	17/12/2003	RWF 78 195 850
ELECTROGAZ	Connection of pumping station	08/08/2003	RWF 5 025 222
UNICEF	Supply of furniture/textbooks/teaching material	19/10/2001	USD 1 315 148.45

*Continuation of works after start-up advance was entirely borne by the Government

**Only the start-up advances were disbursed under the loan before the execution of these 2 contracts were abandoned

G. Consultants

Name	Responsibility	Signature date	Amount
MPORANANAYO I.	NA	23/03/1993	RWF 17 000
HUMBUSHO André	NA	22/12/1993	RWF 20 000
DELOITTE & TOUCHE	Audit of accounts	10/12/2003	RWF 4 500 000
K.I.S.T	Study on rainwater collection and water supply system	01/06/2001	RWF 8 676 250

RETROSPECTIVE LOGICAL FRAMEWORK MATRIX

<i>Narrative Summary (NS)</i>	Verifiable Indicators (VI)	Means of Verification (MV)	Important Assumptions
A SECTOR GOAL 1. Contribute to human resource development.	1. 1. Rate of satisfaction of intermediate technical jobs improved as from 2005.	Statistical reports of MINEDUC and job enquiries	(Sect Goal to Super Goal.):
B. PROJECT OBJECTIVE 1. Strengthen secondary vocational and technical training	1.1. One hundred (100) level A2 technicians provided yearly, as from 2005.	- MINEDUC statistics - job enquiries	(Proj obj., to Sect goal.): Anticipated level of economic growth attained by project.
C. ACHIEVEMENTS (Re-dimensioned project) At appraisal 1. One ETO constructed at <i>Gitarama</i> 2. ETO equipped	At completion 1. ETO constructed 2. ETO completely equipped 3. Computer laboratory set up (not anticipated at appraisal) 4. Water supply system installed: collection of rainwater and tapping of spring water (not anticipated at appraisal) 5. ETO teachers trained in the use of the equipment.	Contracts signed Acceptance report Quarterly activity reports	(Outputs to Proj obj.): - Adequate measures taken to ensure maintenance of infrastructure and equipment - Teachers of technical specialties in sufficient numbers.
D. ACTIVITIES Technical architectural studies Preparation of list of equipment, furniture and supplies Construction works Delivery of equipment/furniture. Supervision	Resources in million UA A. Goods 1.18 B. Works 1.23 C. Services 0.01 D. Operation 0.01 TOTAL 2.43	Reports on topographic and geo-technical studies Bidding documents Bid analysis reports Supervision reports	(Est.to outputs): Strengthened collaboration with KIST for teacher training.

1. INTRODUCTION

1.1 The Bank Group's operations in Rwanda began in 1973. To date, it has funded 5 operations in the education sector comprising one study and 4 projects. In March 1984, the Bank awarded a loan and grant for the first project for the strengthening of technical and vocational training. The loan of UA 6.93 million was used to set up the Official Technical School (ETO) of *Kibungo* and expand and equip the ETO at *Kicukiro*. The grant of UA 0.44 million financed a pre-investment study of a second Project for the Strengthening of Technical and Vocational training as well as a Higher Technical Teacher Training School (ENTS). This project, which also paved the way for the second Project for the Strengthening of Technical and Vocational Training, is completed. The Bank approved and granted a UA 14.09 million loan in September 1988 for a Project for the Strengthening of Technical and Vocational Education II. The third project, namely, Emergency Project for the Rehabilitation of Secondary Education and the Higher Institute of Agriculture and Livestock (ISAE) of *Busogo* - one of the operations deemed priority after the general review and restructuring of the Bank's portfolio as a result of the economic difficulties in the country - was approved in June 1996. The loan amount was UA 9.00 million. Finally, in December 1998, the Bank awarded a loan of UA 20.78 million to finance Education Project III "Improvement of Primary Education and the *Kigali* Institute of Science, Technology and Management (KIST)".

1.2 The Projects for the Strengthening of Technical and Vocational Training I and II were aimed at increasing the technical training establishments' intake capacity and improving the educational qualifications of the teaching staff of the general and technical secondary school. The objective of the Emergency Programme for the Rehabilitation of Secondary Education and the Higher Institute of Agriculture and Livestock (ISAE) of *Busogo* was to restore the services of secondary education and the Higher Institute of Agriculture and Livestock (ISAE) to their levels precedent to the events of April 1994. Education project III was aimed at building the institutional capacity of the Ministry of Education, increasing access to primary education, and creating a structure for the initial and continuing training of medium and high-level technicians.

1.3 This completion report of the Project for the Strengthening of Technical and Vocational Training II was prepared on the basis of the outcome of the Bank's mission to Rwanda in November 2004 and information available in the archives of the Project Unit and the Bank.

2. PROJECT OBJECTIVES AND FORMULATION

2.1 Project Objective

The objective of the initial project was to expand and strengthen the intake capacity of technical training establishments and improve the educational qualifications of teaching staff of general and technical secondary education. The principal areas of activity envisaged were:

- construction and equipment of the ETOs of *Gitarama*, *Cyangugu* and *Ruhengeri*;
- training of secondary education staff through the expansion of the Faculty of Applied Science (FAS) at *Butare* and the Higher Technical Teacher Training School (ENTS) at *Ruhengeri* ; and
- support to the Project Implementation Unit through the recruitment of national support staff and provision of furniture and equipment.

Nonetheless, in its rescaled form, the Project was reduced to the sole construction and equipment of the ETO of *Gitarama*. The retrospective logical framework matrix of the re-dimensioned project sets out the objectives and the principal expected project outputs.

2.2 **Project description**

The initial project scheduled for implementation over 3 years, comprised the following components:

(i) **Setting up of 3 ETOs**

Preparatory studies and bidding documents for the rehabilitation/expansion works and procurement of equipment, furniture, text books and teaching aids.

(ii) **Teacher training through the expansion of the Faculty of Applied Science (FAS) at Butare and ENS at Ruhengeri**

Preparatory studies and bidding documents (BD) for rehabilitation/expansion, procurement of equipment, furniture, textbooks and teaching aids. Award of scholarships for 8 persons/year for instructors at FAS and ENS.

(iii) **Support to the National Directorate for Educational Projects (DPE)**

PIU staff capacity building and provision of equipment, vehicles and operating costs.

2.3 **Project Origin and Formulation**

It was at a Round Table meeting on education in the Republic of Rwanda organized in Paris in April 1982 with UNESCO support that discussions between the Bank and the Rwandan Government were initiated for the strengthening of technical and vocational training, which was one of the priorities retained by the Government. This led to a first Project for the Strengthening of Technical and Vocational Training in respect of which the Bank awarded a loan and a grant. The loan of UA 6.93 million was used to set up the official technical school (ETO) at *Kibungo* and expand and equip the ETO at *Kicukiro*. The grant of UA 0.44 million was used to fund a pre-investments study of a second Project for the Strengthening of Technical and Vocational Training, as well as a Higher Technical Teacher Training College (ENTS).

2.4 **Identification, Preparation and Appraisal**

The Project for the Strengthening of Technical and Vocational Training II was appraised in June 1987 by the Bank's mission on the basis of (i) the report on the pre-investment study carried out by the German consultancy, Walter Keller; (ii) complementary study on training disciplines and pedagogical framework for ENTS projected at *Ruhenge* by the International Institute of Communication with the assistance of the Canadian International Development Agency (CIDA) and (iii) information provided by the Government and gathered on-site.

2.5 Negotiations and Approval

The archives on this phase were not available. This was due to the disappearance of the staff of the executing agency, i.e., Management of the Directorate for Financing and School Constructions (DFCS) after the events of 1994 and successive changes in the Bank when the project was successively assigned to the former NARD and OCDC Departments before being entrusted to OCSD. This led to losses in information archives, and it was only in 2001, after the actual re-start, that project management was entrusted to the PIU of the Emergency Education Project.

Further to these negotiations, the project was presented to the Bank's Board of Directors, which approved it at its session of 20/09/1988. The agreement was signed on 20 July 1989.

3. PROJECT IMPLEMENTATION

3.1 Effectiveness and Start-up

3.1.1 It was agreed that the Fund would not make the first disbursement until the Borrower had provided:

- (i) an undertaking to regularly include in its budget the required appropriations to fund part of its share of project costs, in keeping with the financing plan;
- (ii) an undertaking to find additional financial resources in case of overrun of the estimated project costs;
- (iii) an undertaking not to use the loan proceeds to pay the various duties and taxes relating to the goods and services necessary for project implementation;
- (iv) an undertaking to carry out, before the end of the construction works and no later than before December 1990, the necessary water and electricity connections to the premises of the Official Technical Schools;
- (v) evidence of the creation of the Inter-departmental Monitoring and Coordinating Committee;
- (vi) an undertaking to entrust project implementation to the Directorate of the Financial Department and School Constructions and, in case of changes, to submit the CVs of new staff to the Fund for approval;
- (vii) evidence of the demarcation and allocation of land to the Official Technical Schools of *Cyangugu*, *Ruhengeri* and *Gitarama*;
- (viii) copy of the bidding documents and relevant procedure referred to in Section 5.03 of this Agreement; and
- (ix) the list of goods and services relating to the project which will be financed with loan resources.

As other conditions, the Borrower was to:

- (i) provide PIU with adequate premises comprising a drafting room and 3 offices;
- (ii) assign an educational planner to PIU once project implementation has begun;
- (iii) submit to the Fund for approval the names and qualifications of scholarship and training candidates, as well as documents on the training institutions proposed; and
- (iv) submit to the Fund for appraisal the incentive measures adopted by the Government to facilitate the orientation of higher education graduates, especially scientific and technical branches in the teaching career.

3.1.3 The conditions precedent to first disbursement were fulfilled with 31 months delay, and the loan agreement became effective on 11/4/1991. There was also a delay in the fulfilment of the “other conditions”.

3.2 Modifications

3.2.1 The project underwent deep modifications. Project activities started in 1991 with the preparation of bidding documents (BD) for the implementation of the civil works. Invitations to bid were issued in June 1991, and it was not until August 1992 that contracts were awarded. The long delay between the bidding documents and contract signature dates was attributed to the settlement of disputes concerning the analysis of several bids. Contracts for the construction of the ETOs at *Gitarama* and *Ruhengeri* were awarded to EMUJECO, and the one for the construction of the ETO at *Cyangugu* was awarded to MUNYANSHONGORE Charles. The only project activity that started on the emergence of the April 1994 events was the construction workshop of the ETO at *Gitarama*, which started in May 1993.

3.2.2 The works began but were interrupted in April 1994 due to the war. In September 1995, following the restructuring exercise of the Bank’s portfolio in Rwanda, the project was trimmed down. By common agreement between the Government and the Bank, it was decided to focus on the construction of the ETO at *Gitarama*, the only site which had started up.

3.2.3 From UA 14.09 million, the total cost of the re-scaled project was UA 2.71 million, comprising UA 2.12 million under the ADF loan and UA 0.59 million as Government counterpart. The conditions precedent to the continuation of the rescaled project were fulfilled. These were the Bank’s approval of the list of goods and services and request for the extension of the last disbursement deadline of the loan in March and June 1998 respectively. The loan’s last disbursement deadline was extended to 31/12/1999.

3.2.4 Negotiations between the Borrower and the selected contractor, which were difficult, came up against the issue of the inclusion - in the amendment to the contract for the resumption of works - of the damages the company had suffered as a result of the war, and reimbursement of the start-up advance received by the same company under the *Ruhengeri* ETO construction contract implementation of which was abandoned after the portfolio restructuring exercise of September 1995.

3.2.5 The Borrower presented a draft amendment and estimates of the amounts proposed for payment requests. The Bank rejected the amendment, which it considered too high in relation to the original contract amount (+158 %), and asked the Government to prepare new BD. In response to

the Bank's request, the Government pointed out that it would be impossible for it to cancel the contract and called on the Bank to reconsider. The Government was notified of the cancellation of the loan balance on 13/12/2000.

3.2.6 In response to the notification of cancellation, the Borrower, in a letter of 19/02/2001 proposed that the Bank complete the civil works with its own funds while using the loan balance to procure equipment for the ETO. Under an exceptional waiver, the Bank approved the Borrower's proposal. Agreement was given for the allocation of the loan funds, and the last disbursement deadline was extended to 31/10/2001. The Borrower undertook to complete the civil works and take the relevant measures to ensure that the equipment was ordered and delivered on schedule. The list of expenditure categories was reviewed and a programme of activities prepared in that regard.

3.2.7 The Bank subsequently gave its consent to use the loan resources to fund the ETO water supply works, which was not provided for in the initial project. Indeed, the water supply network initially envisaged proved inoperative when the implementation of the works began. A water supply system combining rainwater collection, tapping of 5 springs, and laying of pipes over a long distance, was therefore installed.

3.3 **Implementation Schedule**

3.3.1 The project was scheduled to be implemented out over 3 years beginning in July 1989. The table below indicates the slippages between the estimated and actual project implementation schedule:

Activities	Estimated schedule	Actual schedule
Loan effectiveness	July 89	June 91
Technical studies and BD	June/August 92	Feb.-Dec. 95
Launch of invitations to bid for construction and expansion	June to Oct. 89	Feb.-Dec. 95
Analysis, awards of contracts	August and Nov. 89	August 92
Construction works of ETOs	Oct. 89/April 91	May 93/ Dec. 2001
Expansion works FAS and ENS	Jan. 90/July 91	NA
BD for equipment/furniture/supplies	April/August 90	NA
Analysis, awards and contracts	June/Nov.90	NA
Delivery and installation	Oct. 90-July 91	2002-2003
Scholarships	Oct.89-Oct.90	NA

3.3.2 The implementation schedule was not adhered to. Activities, which were scheduled to start in July 1989, only started in June 1991. The re-scaled project did not start immediately, owing to: (i) the inexistence of an implementation unit; (ii) periods of sanctions in 1996 and 1997, (iii) Government's delays in submitting the new list of goods and services and request for a last disbursement deadline extension; and (iv) freeze in the negotiations between the Government and the company selected for the initial contract with a view to resuming the works.

3.4 **Reporting**

Quarterly status reports were regularly prepared and transmitted to the Bank as soon as its activities resumed in 2001 after the management of activities had been entrusted to the PIU of the Emergency Education Project. These reports were an integral part of the quarterly report of the Emergency Project. Overall, 23 quarterly reports were transmitted covering the period from November 1998 to September 2004. Nonetheless, given the limited number of activities financed by ADF (procurement of equipment and water supply works), these were extremely brief reports, which constituted an integral part of the quarterly reports of the Emergency Project. Four audits were performed respectively for the 2001, 2002, 2003 and 2004 fiscal years. The Borrower prepared and transmitted its completion report.

3.5 **Procurement of Goods and Services**

3.5.1 The procurement of goods and services was in keeping with the procedures set out in the appraisal report, namely:

- Competition on the basis of a shortlist for technical studies and supervision of works, and for technical assistance services;
- International competitive bidding for the rehabilitation and construction works; and
- Competition on the basis of a shortlist for the audit of project accounts.

As already indicated above (section 3.2), the changes made in project implementation entailed modifications of the initial procurement methods and introduction of new ones, namely,:

- Completion of the construction of the ETO at *Gitarama*: direct negotiation and counterpart funding (EMUJECO)
- Procurement of equipment and teaching equipment: private agreement with UNICEF Purchasing Department
- Water supply: installation of a system for the collection of rainwater: private agreement with EMUJECO (definitive reception of the workshop not performed before the installation)
- Water supply: installation of the system for tapping water from springs, and laying of pipes: national competitive bidding.
- Water supply: additional electrical installation for pumping water from springs: private contract with ELECTROGAZ (company entrusted with ensuring electricity supply)

3.6 **Sources of Finance, and Disbursements**

The total cost of the project without taxes was estimated at UA 15.64 million, comprising UA 8.94 million in foreign exchange and UA 6.70 million in local currency. At completion, the project cost - without taxes and duties - was estimated at UA 2.43 million comprising UA 1.18 million (50.71 %) in foreign exchange and UA 1.25 million (49.29 %) in local currency. The project cost, as well as estimated and actual financing plans, are set out in Tables 1 and 2 below. The UA 0.43 million undrawn balance of the loan was cancelled.

Table 1: Project Cost by Source of Finance

In million UA					
Estimated cost			Actual cost		
FE	LC	Total	FE	LC	Total
8.95	6.70	15.65	1.18	1.25	2.43

Table 2: Estimated and Actual Financing Plan

	At appraisal			At completion		
<i>Sources</i>	FE	LC	Total	FE	LC	Total
ADF	8.95	5.14	14.09	1.18	0.49	1.67
Government	0.00	1.56	1.56	0.00	0.76	0.76
Total	8.95	6.70	15.65	1.18	1.25	2.43
%	57.17	42.83	100.00	48.56	51.44	100

4. **PROJECT PERFORMANCE**

4.1 **Overall performance**

The rescaled project was aimed at strengthening technical and vocational education through the construction and equipment of the ETO at *Gitarama*. Broadly speaking, the project activities were carried out satisfactorily: (i) the construction works were completed and buildings commissioned and operational; (ii) the equipment and furniture were delivered and installed. Textbooks and teaching aids were also delivered. Similarly, the water supply system based on the collection of rainwater and tapping of spring water in the surroundings resolved the ETO's water supply problems once and for all. The new establishment has been operational since November 2002. The operational performance of the project per component is set out below. The project implementation results set out in Annex 3 were satisfactory.

4.2 **Operational Performance**

The operational performance was analyzed through the main areas of project activities, namely, (i) ETO construction works, (ii) goods (furniture, equipment) and (iii) and installation of water supply.

Construction works

There was no significant modification to the distribution of the areas retained at appraisal. Thus, the ETO comprised 6 built areas, i.e.,:

- Technical education area: 4 workshops, 1 public works laboratory, and 1 mason's shed;
- General education area: 4 classrooms, 1 science room, and 2 drafting rooms with 16 and 32 seats;
- Administration area: 5 offices for management and administrative staff, 1 teachers' room, 1 dispensary, and 1 archives room;
- Common services area: toilets, maintenance room, canteen, hall, multi-purpose study room, kitchen, and store room;
- Accommodation: dormitories with washroom facilities, stores and supervisors' lodgings;
- Official housing: 4 studio apartments and 3 three-bedroom villas for management and some teaching staff.

The buildings were of extremely high quality and fully operational. The establishment has held its third graduation and currently boasts a total enrolment of 410 including 32 girls. The initial intake was 318, including 204 boarders.

Procurement of goods

Furniture.

These were: benches, blackboards, desks, drawing boards, chairs, stools, beds, and cupboards. All the furniture supplied by the UNICEF Purchase centre was of quite good quality. However, some articles were unsuitable: inadequate thickness of racks which deformed easily, benches with multiplex stands which became damaged in contact with water, thick wardrobes which made it impossible to move them through the doors of the rooms.

Equipment

These were:

- Office equipment: office machines (typewriters, photocopy machines, stencil reproducers etc...); small office equipment (staplers, desk and drafting lamps);
- Workshop equipment and materials (machines including accessories, collective and individual tools, test benches for engines and fungible equipment);
- Teaching aids: maps, teaching and demonstration equipment, fungible products, documentation, books;
- Kitchen and refectory equipment;
- IT equipment (20 computers) and peripherals for the computer room with internet connection.

All the equipment was also provided by the UNICEF purchasing department, and was of extremely good quality. The installation, tests, and operation of the laboratory and workshop equipment were carried out by teachers and experts of the Kigali Institute of Science, Technology and Management (KIST).

Water Supply

The water supply network initially envisaged for the ETO proved inoperative at the time of works implementation, so an alternative was found, namely, a mechanism based on (i) rainwater collection and (ii) tapping of the surrounding spring water.

The rainwater collection system was implemented on the basis of a private contract with the company that won the construction contract, since the final acceptance of the construction works had not yet been carried out. It consisted in (i) laying 450 m of metal channels with their accessories for the collection of water from the roofs of the laboratory blocks, construction workshops and dormitories and (ii) provision and installation of 5 10 m³ PVC cisterns with a water point and drainage system. The rainwater collection system was fully operational.

As regards drinking water supply, the works implemented related to tapping 5 drinking water springs located at the *Pondwa* swamps, near the school. Considering the high altitude of the springs in relation to that of the ETO, it became necessary to set up a pumping mechanism (tapping,

chambers, feeder conduits, suction tanks, pumping station, delivery, head tank, gravity water supply to the school). The total length of the conduits was 2 km. The works were carried out by the EMA Company.

The drinking water supply system installed was fully operational. Thanks to it, the establishment and neighbouring populations were provided with water on a permanent basis.

4.3 Institutional Performance

The Project Implementation Unit (PIU) was located within the Finance Division of School Constructions. During the events of 1994, PIU personnel were killed or disappeared without being replaced. After 1994, monitoring of the construction was ensured by the School Constructions and Equipment Division of the Ministry of Education (MINEDUC) whilst the equipment aspect was entrusted to the Implementation Unit of the Emergency Project for the Rehabilitation of Secondary Education and ISAE. However, since the DFCS no longer existed in the new structure of the Ministry of Education, following the resumption of project activities in 2001, the Government and Bank decided to entrust project management to the PIU of the Emergency project for the rehabilitation of secondary education and ISAE. The latter assumed this role satisfactorily, which led to a positive monitoring of the construction works, procurement and installation of all the equipment envisaged, and the daily management of the project. The PIU's performance was deemed satisfactory.

4.4 Performance of Consultants, Contractors, Suppliers

Performance of Consultants

4.4.1 The services provided by KIST (update of list of equipment, installation and testing of equipment, study on rainwater collection and supply system) were of good quality. This resulted in the procurement of appropriate and adequate equipment, as well as identification of possible solutions for water supply and on-site location of potential local springs. The performance of KIST was satisfactory.

Performance of Contractors

4.4.2 The two contractors involved in the civil works were EMUJECO (construction of the ETO and installation of a rainwater collection system) and EMA (drinking water supply). As mentioned above, following the events of 1994, the ETO construction works were funded with counterpart resources owing to the difficulties encountered in their continuation under the initial contract. The works executed by EMUJECO for the construction of the ETO and the rainwater collection system were of good quality. No major deficiencies were observed. Apart from contractual problems, the company's performance was satisfactory. The works of the water supply system carried out by EMA were also of good quality. The mechanism is fully operational and drinking water supply to the establishment and neighbouring localities was permanent. This company's performance was satisfactory.

Performance of Suppliers

4.4.3 All the equipment was procured from the UNICEF purchasing department. With the exception of a few deficiencies regarding the furniture, the equipment supplied (workshop, laboratory and office equipment) was of good quality. UNICEF is working in close cooperation with the PIU to ensure that the equipment meets requirements. Articles damaged during

transportation were replaced. KIST's assistance to PIU was vital in that regard. UNICEF's performance was satisfactory.

5. SOCIAL AND ENVIRONMENTAL IMPACT

5.1 Social impact

5.1.1 The project impacted positively on the strengthening of technical and vocational training in Rwanda and offered good prospects for its development. In fact, the ETO at *Gitarama* afforded over 400 young girls and boys on completion of the first cycle of secondary education access to quality training, and prepared them for jobs in companies or self-employment. The adapted buildings, modern teaching equipment and materials and boarding system afforded qualified students from various regions an enabling environment for quality education and training. The intake of students is 410, including 32 girls, all boarders. Without considering the new companies that will be created and jobs that will be generated in the informal sector, the ETO at *Gitarama* will help provide a sizeable portion of the requirements in A2 and A3 technicians estimated at over 300 between 2003 and 2008 for 28 % of the companies identified in 2003 by a study carried out by MINEDUC¹.

5.1.2 The special works realized in the framework of drinking water supply will permit not only a permanent supply of water to the establishment but also satisfaction of the needs of the neighbouring populations situated in the spring water area, through the development of specific water points. In total, over 7 000 inhabitants are benefiting from these water points.

5.2 Environmental Impact

Through the establishment of solid and modern infrastructure, tree planting, improvement of access roads, installation of a specific drinking water supply system, the project contributed to improving the ETO environment, thereby creating a more healthy and viable atmosphere liable to foster teaching and learning in good conditions. It also contributed to improving the living environment of the neighbouring populations through a sustainable satisfaction of their drinking water requirements.

6. SUSTAINABILITY

6.1 The quality of the buildings and equipment acquired offer good prospects of sustaining the project achievements if all measures are taken to ensure adequate upkeep. At preparation of the completion report, no major damage had been observed, especially regarding the workshop and laboratory equipment, which constitute the nerve centre of any quality training. Lack of sustained maintenance can affect project sustainability. To prevent such a situation, collaboration between the ETO and KIST (which is endowed with human resources for maintenance) must be encouraged. KIST will therefore use the ETO site for training technical schoolteachers while initiating them in equipment maintenance. The Government has provided for the allocation of sufficient resources for the operation of the establishment. Furthermore, a judicious operation of the equipment for production activities (without it affecting the training) will provide the ETO with additional resources.

6.2 Lack of qualified teachers for the specialized disciplines could also constitute an impediment to project sustainability. However, further to the cancellation of the teacher-training programme in the rescaled project, provision was made in Education Project III for the initial training of qualified teachers to be carried out by KIST. The programme destined for 70 teachers

¹ MINEDUC (GTZ-ETO Project), *Companies' job market needs in Rwanda*, July 2003

has already started and will be conducted partly (practical aspects) in the ETO premises, thereby fostering cooperation between the 2 institutions.

7. PERFORMANCE OF THE BANK, BORROWER AND OTHER DONORS

7.1 Performance of the Bank

7.1.1 The performance of the Bank in project implementation was satisfactory in general. Notwithstanding the difficult situation in which the project evolved, it managed to provide adequate solutions to continue project implementation. The modifications made were relevant. Of the 7 actual years of project implementation (during a period of 14 years since approval), the Bank undertook 10 supervision missions, i.e. a yearly average of 1.43.

7.1.2 The lasting and sustainable resolution of the problem of water supply for the establishment (rainwater collection and spring water tapping) constitute a positive contribution by the Bank in the framework of the project.

7.2 Performance of the Borrower

In addition to the initial delay due to the deadlines for meeting the conditions precedent to effectiveness and first disbursement, project implementation was hampered by many factors including the 1994 events, which led to the disappearance of the entire team of the initial PIU. Supervision of the ETO work site was subsequently well ensured by DFCS and PIU of the Emergency Education Project. Further to the Bank's rejection of the proposed amendment to the ETO construction contract, the Borrower also took charge of the completion of the construction work under good conditions. The performance of the Borrower was satisfactory on the whole.

8 OVERALL PROJECT PERFORMANCE AND RATINGS

The activities retained for the rescaled project were satisfactorily implemented. The additional activities identified during the project were relevant and executed satisfactorily. The project implementation performance set out in Annex 3 was satisfactory, as well as those of the Bank during the project cycle (Annex 4). Performance regarding project impact on development (Annex 5) was also satisfactory.

9. CONCLUSIONS, LESSONS AND RECOMMENDATIONS

9.1 Conclusions

In view of the foregoing analysis, it can be concluded that, overall, the project impacted positively on the development of technical and vocational (secondary) training. It provided the country with a new modern and equipped establishment for training young girls and boys on completion of their first cycle secondary education (core course) in the following disciplines: electricity, electronics, automobile mechanics, construction, public works, carpentry, and plumbing. In 2004, the establishment's enrolment was 410, including 32 girls. Nonetheless, there was the problem of lack of qualified teachers, which may well compromise project sustainability. Similarly, adequate measures must be adopted for the efficient maintenance of this new and modern equipment provided for the ETO.

9.2 Lessons

9.2.1 Several lessons were learnt from the implementation of this project, some of which have already been taken into account in the formulation of ensuing projects. The first relates to the importance of initial training of teachers in technical and industrial disciplines in the framework of projects aimed at developing technical and vocational training. In addition to instructors of general disciplines, there is need for a critical mass of available specialized teachers in the establishments, which must not depend only on external teachers. The re-scaled project no longer considered training technical schoolteachers, which has been entrusted to the ongoing Education Project III. Consequently, the lack of teachers of specialized disciplines in technical schools will be alleviated by the cooperation initiated between the ETO and KIST and through the programme for the initial training of 70 teachers for technical education establishments, which will be carried out by KIST under the Education III project. Moreover, the modern equipment provided by the ETO will provide an adequate pedagogical environment for training these teachers.

9.2.2 A second lesson learnt is the need, within the establishment, for staff capable of ensuring minimum maintenance of the workshop and laboratory equipment, especially as they are modern and state-of-the-art. This level of staff is wanting in the establishment. The initial and continuing training of schoolteachers to be carried out by KIST (Education Project III) will partially resolve the problem.

9.2.3 The third lesson concerns the importance of partnerships between technical education establishments of various levels in a country. Such partnerships can contribute considerably to the efficacy and efficiency of investments in this sub-sector by ensuring complementarity of measures. The presence of KIST enabled an adequate choice of equipments for ETO, their assembly and testing, and guaranteed the monitoring of their operation. Similarly, the ETO premises will be used for practical training of the country's technical schoolteachers in the framework of the initial training to be carried out by KIST under Education Project III. Cooperation between KIST and ETO will be a considerable advantage for ETO in the training of teachers in specialized disciplines and basic maintenance of equipment.

9.2.4 Finally, another lesson learnt from the project is the Bank's as well as Government's flexibility in providing appropriate solutions to complete a project encountering difficulties. That also led to finding solutions to the problems that arose during project implementation relating, among other things, to water supply to the establishment. In that framework, the following complementary activities were carried out: (i) study on rainwater collection and supply system; (ii) works for the collection of rainwater; (iii) works for spring water tapping; (iv) laying of pipes; and (v) connection of the pumping station. Similarly, the decision to entrust project management to the PIU of the Emergency Project contributed to the smooth implementation of activities.

9.2.5 These lessons, which should be taken into account in the follow up of project achievements and design of future ones, are the subject of the following recommendations also set out in the matrix in Annex 6.

9.3 **Recommendations**

In light of the foregoing, it is recommended that:

A. The Bank

- (i) ensure, before project completion, that the Government has made arrangements to cover the recurrent upkeep and maintenance costs of rehabilitated or constructed infrastructure and equipment;
- (ii) ensure that the Government is sensitized to the fundamental issue of availability of qualified teachers for the specialized disciplines of technical and vocational training; and
- (iii) ensure the smooth implementation of the technical school teacher-training programme underway at KIST under Education Project III.

B. The Government

- (i) take stock of the use of resources obtained from the special account of the project and transmit their justifications to the Bank; and
- (ii) encourage and support the partnership between the *Gitarama* ETO and the Kigali Institute of Science and Technology (KIST).

RWANDA: ADMINISTRATIVE MAP



This map was presented to the African Development Bank for the exclusive use of the authors of the report to which it is attached. The denominations used and boundaries on this map do not imply on the part of the ADB Group and its members any judgment on the legal status of a territory nor approval or acceptance of its boundaries.



Project site

ESTIMATED AND ACTUAL COSTS AND FINANCING PLANTable 2.1: Actual Project Cost per Expenditure Category and Source of Finance

Expenditure Categories	ADF	GVT	TOTAL
GOODS	1.18	0.00	1.18
WORKS	0.47	0.76	1.23
SERVICES	0.01	0.00	0.01
OPERATION	0.01	0.00	1.01
Total	1.67	0.76	2.43

Table 2.2: Estimated and Actual Financing Plan (ADF)

ADF: Amount approved : UA 14.09 million			
Amount re-allocated : UA 11.97million			
Net loan amount after restructuring : UA 2.12 million			
<u>Year</u>	<u>Estimate at appraisal</u>	<u>Actual</u>	<u>Percentage disbursed</u>
1989	0.32		0.00
1990	6.10		0.00
1991	7.67	0.06	0.43
1992		0.03	0.22
1993		0.38	2.72
1994		0.00	0.00
1995		11.97	84.94
1996		0.00	0.00
1997		0.00	0.00
1998		0.00	0.00
1999		0.00	0.00
2000		0.00	0.00
2001		1.06	7.51
2002		0.00	0.00
2003		0.00	0.00
2004		0.13	0.95
TOTAL	14.09	13.64²	96.78
Un-disbursed balance (and cancelled?) : UA 0.45 million			

* Amount transferred

² This amount comprises the transfer of UA 11.97 million for balance-of-payments support in 1995.

PROJECT IMPLEMENTATION PERFORMANCE

No	<u>Evaluation Criteria</u>	Ratings (1 to 4)	Observation
1	Adherence to implementation schedule	2	<i>The project should have been implemented in 3 years. There was a 10-year slippage between the initial date of completion and that of actual completion. However, this long delay was partly due to circumstances outside the Bank's and Government's control.</i>
2	Adherence to cost schedule	3	<i>The rescaled project was implemented within the limits of the package provided.</i>
3	Compliance with conditions	2	<i>The effectiveness conditions were fulfilled with 31 months delay. Nonetheless, the covenants were complied with .</i>
4	Adequacy of supervision	3	<i>The rate of technical supervisions was 1.43 per year on average during the project. Further to the rescaling of the project, the supervisions led to appropriate solutions for the continuation of the project. Quarterly activity reports, as well as audit reports, were prepared and transmitted to the Banks</i>
5	Satisfactory operations	--	.
<i>TOTAL</i>		12	
Overall assessment of implementation		2.5	Satisfactory

PERFORMANCE OF THE BANK DURING PROJECT CYCLE

No	Component indicators	Rating	Observations
1	At identification	3	<i>The project was identified at the Round Table meeting on Education organized by the Government and UNESCO in April 1982 attended by the Bank.</i>
2	At preparation	3	<i>Preparation was based on a pre-investments study and another on the training disciplines and teaching framework of ENST.</i>
3	At appraisal	3	<i>The Bank's appraisal mission was based on the reports of these studies.</i>
4	During supervision	3	<i>Technical supervisions were limited to 1 a year during the initial years, and rose to 2 a year as from 2000.</i>
5	Satisfactory operations (if applicable)	--	.
TOTAL		12	
Overall assessment of the Bank's performance		3	

PROJECT IMPACT ON DEVELOPMENT
(Project results)

No.	Component indicators	Rating (1 to4)	Observations
1	Relevance and achievement of objectives	3.25	
(i)	Macro-economic policy	NA	
(ii)	Sector policy	3	The project responded to the need for training the country's technicians on the basis of a pre-investment study. It enabled an increase in access of 1 st cycle graduates at secondary level, to quality technical and vocational training. It was fully in keeping with the Government's current policy aimed at enhancing scientific, technical and vocational training for development.
(iii)	Physical outputs	4	Project objectives (construction and equipment of ETO) were achieved.
(iv)	Financial policy	NA	
(v)	Poverty reduction (social, gender)	3	The ETO enabled quality training of all qualified young boys and girls who had completed the 1st cycle of secondary education. The water supply system installed by the project afforded the populations of localities of the tapped springs easy access to drinking water through the water points established.
(vi)	Environment	3	Various constructions and developments had positive impact on the ETO environment.
(vii)	Private sector promotion	NA	
(viii)	Others (to be specified)	NA	
2	Institutional capacity building	3	
(i)	Institutional framework, including restructuring	NA	
(ii)	Financial and management sources of information (including audit systems)	NA	
(iii)	Transfer of technology	3	The collaboration initiated between the ETO and KIST enabled transfer of skills and technology to the ETO.
(iv)	Human resources (including rate of rotation, training and counterpart staff)	NA	
3	Sustainability	2.50	
(i)	Sustained commitment of Borrower	3	Scientific, technological and vocational training was a Government priority in the framework of the sector's strategic education plan 2004-2008.
(ii)	Environmental policy	3	The infrastructures and equipment set up improved the environment and working atmosphere of students and teachers.
(iii)	Institutional framework	2	
iv	Technical viability and staff supervision	3	The infrastructure and equipment were constructed with solid and durable material. However, their durability depends on the capacity for upkeep and sustained maintenance.
(v)	Financial viability and cost recovery mechanisms	2	While ensuring quality training, the establishment, which has modern equipment and installations, can through production, finance part of its operating costs.
(vi)	Economic viability	2	The country's demand for technicians is increasing. ETO was aimed at meeting this demand while adapting to the new demands.
(vii)	Environmental viability	3	The infrastructure enhanced the physical environment. Similarly, the water supply system installed was beneficial to the locality.
(viii)	Operation and maintenance (availability of funds to cover recurrent charges)	2	The State budget provides for the upkeep and maintenance of equipment. Additional resources will be generated by production activities.
4	Rate of return	NA	
	Total	37	
	Overall assessment of impact on development	2.84	Satisfactory

MATRIX OF RECOMMENDATIONS AND FOLLOW-UP MEASURES

Main observations /Conclusions	Recommendations	Follow-up measures	Responsibility
<u>Formulation/rationale</u> The project responded to the needs through prior sector studies. However, the re-scaled project did not take account of teacher training.	Collaboration must be encouraged between KIST and ETO for teacher training. Ensure smooth implementation of the teacher training programme for technical schools being implemented by KIST under Education Project III Henceforth, it must be ensured that essential supplementary activities are maintained when a project is re-scaled.	Constant supervision of the implementation of the teacher-training programme.	Bank and Government
<u>Project implementation</u> There were various difficulties in project implementation, some of which were out of the Government's and Bank's control (1994 events). This led to a 9-year delay in the initial deadline. One of the causes of the delay was the difficulties encountered in the execution of the construction contract (<i>EMUJECO</i>).	The Bank's rules on procurement should be rigorously applied.		Government
<u>Compliance with loan agreement conditions</u> The conditions were fulfilled with much delay. As regards the construction of the ETO, the Government fully adhered to its commitment to finance the completion of the construction works, which was almost 50% achieved.	Ensure that conditions are relevant and realistic.		Government and Bank
<u>Performance assessment</u> The achievement of the project objectives led to increased access to quality technical and vocational training. All the activities anticipated under the re-scaled project were carried out.	ETO should be provided with the necessary resources for maintaining the infrastructure and equipment.		Government
<u>Sustainability</u> Project impact and sustainability risk being compromised in the absence of qualified teachers in the specialized disciplines and deficient maintenance of the infrastructure, equipment and education material.	Teachers must be recruited and assigned to the ETO. Collaboration between the ETO of <i>Gitarama</i> and KIST must be strengthened. The ETO must be provided with the appropriate legal framework to enable it to carry out its production activities and services compatible with teaching and learning.	Ensure smooth implementation of the teacher-training programme of the technical schools which has been assigned to KIST.	Government and Bank

SOURCES OF INFORMATION

Completion report of Borrower

Project appraisal report (ADF, August 1988)

CSPE Quarterly reports

Audit reports

Works, Equipment and Furniture Acceptance Report

Supervision report

Analysis of companies' requirements on the job market in Rwanda (MINEDUC, GTZ ETO Project, July 2003)

BORROWER'S PROJECT COMPLETION REPORT

The Borrower's completion report presents a positive status of project implementation.

1. PERFORMANCE OF THE DIFFERENT PARTIES INVOLVED IN THE PROJECT

The report deemed satisfactory the performance of the project implementation unit (role played by the PIU of the Emergency Project), that of the contractors (*EMUJECO*, *EMA* and *ELECTROGAZ*), as well as the services provided by *KIST*.

The Bank's performance was also deemed satisfactory, especially its expeditious appraisal of dossiers and regular supervision missions, as well as its provision of a sustainable solution to the drinking water supply problem.

2. OPERATIONAL PERFORMANCE

The report indicates that the objectives of the rescaled project were fully attained, and *ETO* is operational. However, it emphasizes the need for measures to ensure project sustainability. These are: (i) bearing the recurrent expenses on equipment maintenance and renewal, (ii) appointment of qualified teachers for practical courses; (iii) regulation of the flow of students with a view to reducing the situation of overcrowding currently facing the establishment.

In conclusion, the report addresses the following recommendations to the Government

- to provide the establishments with the necessary funding for the operation and maintenance of equipment;
- to get the qualified teachers (national or regional) to deliver practical courses, especially with acceptable salaries, and envisage the training of Rwandan technicians to take over; and
- consider the technical nature of the school and refrain from enrolling a large number of students, which will enhance the quality of education delivered and impact positively on the durability of the equipment.

GOVERNMENT'S COMMENTS ON THE BANK'S REPORT

By letter No. 3640/12.00/2005 of 10/11/2005, the Government notified the Bank that it “fully subscribed to the lessons learnt from project implementation and promised the Bank that it would take due account of them in the follow-up of its achievements and design of future projects”.