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PROJECT PERFORMANCE AUDIT REPORT

UGANDA FIRST EDUCATION PROJECT

(CREDIT 101-UG)

February 17, 1977

Operations Evaluation Department

PROJECT PERFORMANCE AUDIT REPORT

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TABLE OF CONTENTS

PROJECT PERFORMANCE AUDIT REPORT

UGANDA FIRST EDUCATION PROJECT (CREDIT 101-UG)

Preface

This memorandum presents a performance audit of experience under the Uganda First Education Project for which the final disbursement under Credit 101-UG of 1967, in the amount of US$10.0 million, was made in March 1974. It is based on the attached Project Completion Report (PCR), prepared by the Eastern Africa Regional Office, and on a brief visit to Uganda during April 1976. The cooperation of the Ugandan authorities is gratefully acknowledged.

The PCR provides a comprehensive review of the project experience and outcomes, and gives special attention to secondary school boarding in Uganda. With a view to improving the effectiveness and efficiency of project operating outcomes, it recommends implementation of specific measures for strengthening educational management and supervision, curricula revision and preparation of practical subject teachers, to which the Bank might contribute through its continued involvement in the Uganda Second Education Project (Credit 258-UG). The audit memorandum adds a brief discussion on the project's background and expands on selected issues related to the Bank's contributions to project preparation and implementation, centering on project justification, content and management, and on the boarding question.

PROJECT PERFORMANCE AUDIT REPORT

UGANDA FIRST EDUCATION PROJECT (CREDIT 101-UG)

Highlights

The project supported an expansion of general secondary education and a broadening of secondary curricula to provide more science and practical subjects. All project physical facilities were provided as planned, although with considerable delay. However, the main purposes of the project have thus far been achieved in only limited degree. Quantitative results, specifically an oversupply of first-cycle secondary school leavers, illustrate the limitations of basing project justification on economic growth and related manpower demand projections. The underutilization of practical subject facilities, arising mainly from a shortage of qualified teachers, raises questions as to how best to ensure that complementary educational inputs are provided. Finally, expansion rather than a planned reduction in secondary school boarding under the project suggests both differences in Bank and Borrower approaches to boarding and a possible need for further investigation of the relation between diversified secondary education and boarding in some Borrower countries.

Particular points of interest:

Cost-effective Borrower application of an innovative portal-frame construction system (paras. 4, 16-17, 23)

Risks inherent in basing project justification solely on manpower demand projections (paras. 5, 10-11, 20)

Difficulties encountered by Borrower in attempting to control general secondary enrollment expansion (paras. 5, 11, 20)

Importance of systematic planning and scheduling of all project elements (paras. 7, 12-13, 21)

The issue of boarding vs. day schools and their relative efficiencies (paras. 9, 14-15, 22)

PROJECT PERFORMANCE AUDIT BASIC DATA SHEET

Uganda First Education Project (CR 101-UG)

Key Project Data

	Appraisal Plan	Actual
Total Project Cost (US$ mln)	14.30	13.40
Underrun (%)		6
Credit Amount (US$ mln)		10.00
Disbursed		9.38
Physical Components Completed	3/71	6/73
Time Overrun (%)		56

Project Background Data

	Original Plan	Actual
First Mention in Files		4/63
Government's Application		2/64
Supplement		3/65
Negotiations		11/66
Board Approval		4/18/67
Credit Agreement		4/21/67
Effectiveness		5/24/67
Closing Date	12/31/71	3/5/74[1]/
Follow-on Project		
Credit Number		CR 258-UG
Credit Amt. (US$ mln)		7.3

Mission Data

	Sent by	Month/ Year	No. of Weeks	No. of Persons	Man-Weeks	Date of Report
Identification	Bank	5/63	.2	2	0.4	7/63
Preappraisal	Bank	4/64	.8	1	0.8	4/64
		5/65	.5	1	0.5	6/65
		8/65	.5	1	0.5	8/65

1/ Actual closing date is date of final disbursement.

	Sent by	Month/ Year	No. of Weeks	No. of Persons	Man-Weeks	Date of Report
Appraisal	Bank	11-12/65	3	3	9	4/67
Supervision [1/]	Bank	7/67	.8	2	1.6	8/67
		1/68	.8	1	0.8	3/68
		7/68	.8	1	0.8	9/68
		7/69	.8	2	1.6	8/69
		6-7/70	1	2	2.0	10/70
		1/71	1	2	2.0	3/71
		5/71	n.a.	2	n.a.	n.a.
		9/71	1	2	2.0	11/71
		2/72	1	1	1.0	3/72
		8/72	1	3	3.0	
		6/73	.6	1	0.6	8/72
		3/74	1	1	1.0	4/74
Subtotal					16.4+	
Completion		2-3/75	3	3	9	10/75

Exchange Rates

Ugandan Shillings (U. Shs.)

Appraisal 1967	US$1 = U. Shs. 7.20
Average Period 1967-72	US$1 = U. Shs. 7.14
" " 1973	US$1 = U. Shs. 7.02
" " 1974	US$1 = U. Shs. 7.14
" " Jan-June 1975	US$1 = U. Shs. 7.14
" " July 1975-June 1976	US$1 = U. Shs. 8.05

1/ Two additional special purpose missions were carried out to review award of contracts.

PROJECT PERFORMANCE AUDIT MEMORANDUM

UGANDA FIRST EDUCATION PROJECT (CREDIT 101-UG)

1. Project Summary

1. The general secondary education project assisted by Credit 101-UG was prepared by the Government with assistance from several brief Bank missions. The four-year lapse between initial discussion and final agreement on the project was due largely to the absence of detailed preparation and justification data (1963-65). Lesser delay (1966-March 1967) can be attributed in part to post-appraisal Bank recommendations for reducing project costs, mainly by intensifying utilization of planned student hostels and staff housing, and in part to difficulties encountered by Government in fulfilling special pre-signing requirements, including establishing and staffing of a project unit in the Ministry of Education (MOE).

2. The project comprised the largest component of the 1967-71 education sector investment program which attached high priority to expanding general secondary education. The appraisal justification rested mainly on the 1965 results of an initial manpower study which confirmed a need for increasing secondary output. Further justification derived from the need for, and anticipated benefits from, a broadening of secondary curricula. As appraised, the project included the expansion/upgrading of 65 of 66 existing government-aided secondary schools. Foreseeing the possibility of changes in manpower demand over time, and citing the uncertainty of teacher supply and the heavy management and recurrent cost burden implied by such a large project, the appraisal mission recommended a reduction in project size.

3. As finally agreed, the project comprised construction/upgrading (including provision of laboratories and workshops), furnishing and equipping of 39 secondary schools; construction of adjoining staff houses; and construction of student hostels at 29 of the schools. The major objectives were to: 1) provide 11,794 new secondary student places, roughly 66% of the total necessary to raise secondary enrollment capacity in Government-assisted schools from 17,300 in 1965 to a targeted 35,000 by 1972; and, 2) broaden secondary curricula to incorporate more practical (agricultural, industrial, commercial and home economics) and science subjects. Special and supplementary credit conditions, for which no credit financing was provided, called for: establishing local schemes for training practical subject teachers; reviewing secondary curricula and examinations with a view to increasing their relevance to the Ugandan situation; and, investigating the possibilities for converting the traditional secondary boarding system to a day school system. (Project school student hostels were to be designed for eventual conversion to classroom space.)

4. All project physical facilities were provided as planned. Civil works were largely completed by September 1972, 17 months behind original scheduling, but final equipment/furniture procurement lagged by nearly another year. As a result, the closing date was postponed from December

1971 to March 1974. Delay with civil works stemmed mainly from post-agreement adoption of a portal-frame system with pre-cast elements, in contrast to conventional construction methods envisaged at appraisal. The onset of construction was postponed by a Bank requirement for prototype construction testing and subsequent delay resulted largely from lack of contractor familiarity with the pre-cast system which, in turn, increased the supervision workload. The prolongation of furniture/equipment procurement resulted from a year's delay in initiation of the process by the project unit and from a retendering of furniture contracts necessitated by divergence from agreed international competitive bidding procedures. Delay, and a 20% overrun in the civil works category, did not significantly affect overall project costs which represented a 6% savings over the appraisal estimate of US$14.30 million equivalent, including contingencies. Despite numerous complaints by project school headmasters on substandard workmanship, project civil works are functionally appropriate and reflect an economical utilization of the portal-frame system. With the exception of several examples of overly-sophisticated items (PCR 5.07), the quality and quantities of project equipment inputs are also satisfactory.

5. During project implementation, overall secondary expansion targets were achieved and surpassed. Enrollment in government-aided schools reached roughly 44,000 by 1972. Of the 26% student surplus, which occurred entirely in the lower secondary cycle, standards (S) 1-4, about 2,500 were enrolled in project, and 6,500 in non-project schools (PCR 8.05).1/ During 1967-71, Government was not able to adhere to an agreed supplementary credit condition designed to limit expansion at aided schools mainly to the planned additional project places (PCR 8.06) and subsequent to 1972, the severe economic decline in Uganda completely invalidated the justification for the planned expansion and the manpower projections on which it was based (PCR 8.10). Accurate data on the employment of project school graduates is not yet available.2/ However, estimates of unemployment/substantial underemployment of all S-4 (Government-assisted and private) school leavers--those who do not continue on to further education or training--suggest an oversupply of 40% (Government) to upwards of 50% (UNESCO).3/

6. During the early operating period quantitative achievement of curricula broadening objectives at project schools has fallen short of appraisal expectations. With the exception of agriculture, special project facilities for practical subjects have been seriously underutilized in terms of the numbers of

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1/ Upper secondary (Standards 5-6) enrollment targets for 1972 were, by contrast, slightly under-achieved on a national basis but an upper cycle enrollment expansion of about 1,200 at project schools was in line with estimates (PCR 8.07).

2/ At the time the completion mission was undertaken, however, MOE was planning a student tracer study.

3/ There is no comparable employment problem for S-6 leavers, the majority of whom continue to university-level education.

courses actually offered and output of examination candidates (PCR 8.23). While Government has only required S-4 students to present terminal examinations in practical subject areas since 1975, the under-utilization has resulted mainly from a shortage of special teachers, particularly for the industrial arts and commercial subjects. Government did not fulfill the credit condition calling for a build-up of the local supply of practical teachers during implementation and the departure of the expatriate teaching force (comprising 60% of secondary teachers in Government-assisted schools in 1971) after 1972 exacerbated the shortage.1/ A general but less acute shortage of science teachers also persists owing largely to high failure rates and diversion of eligible candidates to other types of employment (PCR 8.38).

7. On the basis of evidence collected, it is not possible to conclude that the benefits to students enrolled in practical subjects are reaching the level expected at appraisal. In sum, students interviewed by the PCR mission had positive attitudes towards practical subjects but their exposure does not appear to have had an immediate effect on their future employment preferences (PCR 8.30-32). In respect of achievement, and with the exception of S-4 agricultural candidates, project student examination pass rates in practical subjects have been lower than those for non-project control school candidates who generally scored higher on secondary entrance qualifying scores and attend more established schools with higher applicant to admissions ratios (PCR 8.27). However, the non-project schools are ill-equipped (facility-wise) for effective practical subject teaching; and, project school special equipment is often ineffectively utilized owing to inadequate teacher orientation, inadequate maintenance and a shortage of consumable student materials owing to budgetary constraints.2/ In this context, practical subject examination pass rates at both project and non-project schools may simply demonstrate a low 'practical' (as compared with theoretical) course/examination content--in contrast to quality objectives set for project schools (PCR 5.09, 8.23).

1/ The Uganda Second Education Project (Credit 258-UG, of 1971) includes technical support for expanding practical secondary teacher output at the National Teachers College but progress has lagged considerably. For 1971/72-1975/76, targets were set for output of 120 industrial arts and 40 commercial teachers; actual output was roughly 38 and 18, respectively.

2/ There were no provisions for the commissioning of project school equipment or requirements for establishing a systematic equipment inventory system. There has been a high rate of equipment loss and arrangements made with local suppliers for equipment servicing and maintenance were terminated upon departure of the foreign business community (PCR 5.10). Present budgetary procedures provide only sporadic and inadequate grants for maintenance of both equipment and buildings.

8. In accordance with credit conditions, Government has succeeded in diverting more than 50% of all S-5 and S-6 students to science rather than arts specializations and considerable progress has been made with revision of secondary syllabi and examinations, in cooperation with the East African Examinations Council. An increase in the numbers of School Certificates awarded to S-4 leavers cannot, however, be attributed to improved curricula/ examination relevance, but rather to lower standards: since 1968, School Certificates have been awarded on the basis of only one pass out of six or more required examinations (PCR 8.40).

9. Finally, the project has contributed to expansion, rather than reduction, of secondary school boarding in Uganda (PCR 8.13). In retrospect, the relatively large sizes and low population density locations of project schools, in conjunction with the open national secondary competitive selective entrance system (based on merit alone), militate against all but a marginal growth in the numbers of project school day students. PCR interview results suggest that as many as 50% of sample boarders could, conceivably, have attended secondary schools close to their homes as day students (PCR 8.14).1/ However, the PCR supports only a cautious approach to increasing day school enrollments, emphasizing that potential public savings from day school operations must be carefully weighed against high social costs to qualified low-income (mainly non-urban) students who would not likely have access to secondary education without the benefit of a public boarding subsidy. (PCR 8.1620).2/

II. Main Issues

Project Size and Justification

10. The economic justification for expansion of general secondary education derives from actual or projected demand for middle and higher level manpower. The oversupply of S-4 school leavers in Uganda, to which the project contributed, exemplifies the difficulties encountered by Borrowers in controlling secondary expansion in the face of strong social demand 3/ and

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1/ The PCR sample included 15 project boarding schools, three project day schools and two non-project boarding schools.

2/ Under the competitive selection system, day schools generally serve as schools of last resort for students meeting minimum entrance targets but failing selection into the schools of their choice. In this context, even the sample day schools are "boarding" schools of sorts: only 40% of sample students came from homes nearby; nearly 50% paid for local living accommodations (PCR 8.15-16).

3/ *In Uganda*, the rapid Government-led expansion of secondary education from 1965-71 can likely be credited with temporarily slowing the proliferation of poor quality, mainly parent-initiated, private secondary schools, whose total enrollments nonetheless exceed those in Government-assisted schools.

by the Bank and its Borrowers in forecasting economic growth rates and related manpower demand projections. 1/ The Bank, for its part, was duly cautious in its approach to the project's economic justification (para. 2). An economic case for an even smaller project, and reduced expansion targets, would have been difficult to support in view of the apparent validity of forecast manpower requirements, to which Government was publicly committed (PCR 8.01-02). It should be noted, however, that the Bank accepted project expansion targets with some reservation since enrollment/output targets were based on the most optimistic of projections for economic growth and manpower requirements over the 1966-71 plan period.

11. A more appropriate questioning of the justification of project size and enrollment targets may follow from what appear to have been gaps in project design. First, during preparation, the Bank expressed some concern that the targets set for secondary expansion represented too rapid a growth of (certificated) middle level manpower in view of what Bank staff judged as a lack of relevance of existing secondary curricula to actual labor market needs in Uganda. With the possible exception of commercial courses, the project's curricula broadening objectives were not intended to provide vocational (or even pre-vocational) training. Moreover, there is no evidence that Bank or Borrower attempted to quantify and match existing and planned opportunities for further training (for teacher training, vocational or technical training, on-the-job apprenticeship training) of S-4 school leavers with targeted S-4 output.2/ Secondly, the secondary expansion targets were set for government-assisted schools only. S-4 examination candidates from private secondary schools comprise only 25% of all candidates, and have far lower pass rates than candidates from Government-assisted schools. Nonetheless, consideration of rough estimates of private school S-4 output might have suggested a need for some reduction in secondary expansion targets and/or project size.

1/ Results of the Kenya First Education Project, Credit 93-ET of 1966 (Audit Report SecM74-79), were very similar: during the project implementation period, economic growth was less than anticipated; secondary enrollment targets (set for Government schools only) were exceeded by 25% by 1972 and expansion of low quality self-help (Harambee) schools raised total secondary enrollments to 100% above the targets; actual employment demand estimates for 1970 suggested an initial surplus of 15% to 32% of S-4 leavers and forecast substantially larger surpluses thereafter.

2/ Results of the Jamaica First Education Project, Loan 468-JM of 1966 (Audit Report SecM75-150), emphasize the importance of considering the absorptive capacity of existing further training institutions for project school graduates. This project catered mainly for expansion of junior secondary education. Its main objective was to improve the quality of education and to enable junior secondary graduates to benefit from pre-employment and on-the-job training or from further formal education--the opportunities for which were virtually non-existent.

Support for Complementary Educational Inputs

12. While budgetary, supervisory and administrative constraints have hampered efficient utilization of special project facilities, a more severe constraint has been the shortage of teachers for industrial and commercial subjects. The credit, one of several (loans/credits) in support of early Bank-assisted general secondary education projects, was extended at a time when direct Bank education financing was limited to provision of physical facilities. As a result, the Bank accepted Government's assurances that it would train an adequate supply of practical subject teachers for project schools and fill interim shortages with expatriate teachers. Minimal progress towards establishment of training schemes and the sudden departure of the expatriate teachers suggest that arrangements were inadequate (PCR 3.01, 8.34) and highlight the deficiencies of education financing by the Bank related almost wholly to hardware.1/

13. The early utilization of project school facilities could have been improved had specific plans for teacher training been agreed and implemented, with outside technical assistance as deemed necessary by Bank and Borrower. Similar measures, designed to strengthen MOE supervisory functions and project school administration, including a provision for commissioning of specialized equipment items, might also have contributed to an improved effectiveness of early operations at completed project schools (PCR 2.07, 3.01).

Boarding

14. Despite agreement to a credit condition calling for investigation into the possibilities for gradual transition from the secondary boarding system to a day school system, no action was taken by Government during project implementation. The Government continues to emphasize that in Uganda low population densities necessitate boarding at the secondary level. Further, in terms of quality of education and facilitation of national integration, authorities prefer the competitive selection/boarding system--the arguments for which bear some validity (PCR 8.13-8.18). The general Bank position against boarding, argued mainly along lines of cost-effectiveness, is strongly supported in practice: for 15 sample project boarding schools the estimated average annual recurrent cost per student in 1975 prices was US$304 equivalent while the comparable costs at 3 day schools was US$175, or 42% less. A solution to the boarding question will depend largely on the Government's ability to continue subsidizing the high costs of boarding and, over the long run, on whether Government desires to broaden access to general secondary education or to continue catering for a relatively small proportion of the relevant age group. (The Government-assisted system catered for approximately 4% of the respective age group in 1972).

1/ Similar agreement, based on assurances of the University of Ethiopia that it would establish teacher training programs under the Ethiopia First Education Project, Credit 84-ET of 1966 (Audit Report SecM75-75), proved equally inadequate.

15. A review of PCR findings on boarding and short-term recommendations for limited expansion of day school enrollments in Uganda has been presented (para. 9). However, the finding that project school size necessitates boarding (PCR 8.13), merits further consideration. The simultaneous goals for diversifying secondary curricula and increasing the numbers of secondary day students appear to have been incompatible in the short run. Introducing practical subjects requires expensive new inputs (specially trained teachers, special equipment, special subject specific teaching spaces). The appraisal mission determined that economical utilization of these inputs could be achieved only at schools with three or more streams of students. Accordingly, all project schools (most of which had two streams pre-project) were expanded to three streams. In Uganda, and possibly other African countries where the majority of the population is rural and densities low, an economical introduction of diversified curricula implies capital investment in a relatively small number of large schools and an expansion of boarding owing to the fewer local catchment areas thereby provided. 1/

Management of Civil Works and Procurement

16. In view of the relative simplicity of the purely construction/procurement project directly assisted by the credit, the four-year project preparation and seven-year implementation periods were somewhat drawn-out (PCR 4.02). In terms of cost-effectiveness, however, the overall delay becomes negligible when weighed against the durability/quality of project buildings which exemplify a functional, economical utilization of an innovative pre-cast school construction system. Construction costs per planned student place, at US$277 equivalent, fall among the lowest financed with Bank assistance (PCR 7.01).

17. Implementation delays and specific inefficiencies in project management were probably most costly for the Bank, which paid a high price in supervision (PCR 4.02). Fourteen routine or special purpose missions were carried out regularly by Bank staff between 1967 and 1974, although the credit was nearly fully disbursed by the end of 1972. In respect of civil works, unavoidable delay and close Bank supervision were necessitated by agreement on the utilization of the portal-frame system. However, a reduced need for Bank supervision might have resulted from a strengthened project unit architectural staff (PCR 4.04). Contrary to credit conditions, only one out of two agreed architects was retained by the project unit during implementation.

1/ The alternative would be construction of a larger number of small schools without practical subjects.

18. Initial inefficiencies encountered in the procurement of equipment and furniture resulted from delayed preparation of final lists and tender documents by the project unit, which was also inadequately staffed as regards procurement and accounting officers. Subsequent delay, caused by non-adherence to agreed international competitive bidding procedures, might have been averted had current Bank provisions for simplified procurement procedures and local competitive bidding, favored by the Ugandans, been in effect.

III. Conclusions

19. Despite delays throughout the project cycle, suitable physical facilities under the Uganda First Education project were fully and economically provided. While Government continues to endorse the policy of broadening general secondary curricula, special practical and science subject facilities provided at project schools have suffered early underutilization owing mainly to a shortage of practical subject teachers and consumable student materials. Objective assessment of the quality and relevance of secondary school curricula/examinations has not been undertaken though project school students have responded positively to the available practical courses. As regards the project's justification, lower than forecast manpower demand, in conjunction with expansion of secondary enrollments beyond targets, has resulted in a surplus of lower cycle secondary school leavers.

20. Project results demonstrate the risks inherent in basing project justification too heavily on manpower demand projections (PCR 8.01) and, more specifically, in basing secondary enrollment expansion targets on optimal economic growth and related manpower projections. Outcomes suggest that where possible consideration be given to projecting private as well as economic requirements (returns) for expansion of lower cycle general secondary education and to estimating the strength of social demand for secondary education, prior to agreement on project size and enrollment targets. The former implies investigation into availability of existing and planned opportunities for necessary further training of graduates, and the latter, investigation into trends with regard to expansion of non-government-assisted secondary education.

21. Project school operating shortfalls, especially the shortage of practical teachers and education administrative and supervisory inefficiencies, support more recent Bank education policy and related requirements for detailed pre-agreement planning (including built-in technical assistance as necessary) for the timely provision of complementary educational and institutional inputs. Similarly, the lack of available data for assessing and strengthening the project's curricula broadening and examination revision achievements reinforces the potential usefulness of project monitoring schemes (as well as the need for participation of Bank and Borrower educators in project preparation and implementation).

22. The PCR analysis of secondary boarding in Uganda represents an important contribution to the Bank's knowledge on the topic of boarding. The investigation highlights the differing positions of the Bank and Borrower and indicates a possible need for review of experience in other African countries in connection with assessing the compatibility of the Bank's interest in the more economical day school systems, with its support for diversified secondary education.

23. Inefficiencies suffered during implementation of civil works and equipment/furniture procurement support a continuing need for careful Bank review of Borrowers' technical and administrative capacities and reconfirm the suitability of the Bank's more flexible recent procurement procedures. Finally, utilization of the ultimately successful portal-frame construction system under the project suggests that significant, innovative post-agreement changes in design of civil works may require a higher than normal Bank supervision input.

COMPLETION REPORT

UGANDA - CREDIT No. 101-UG

FIRST EDUCATION PROJECT

Project Data

1.01 The project comprised:

(a) (i) the construction of about 24 new [1/] general secondary schools,

(ii) additional facilities at about 15 existing general secondary schools,

(iii) student hostels, and

(iv) staff houses; and

(b) furnishing and equipping of the schools and facilities referred to in paragraph (a) above.

1.02 The project, which was expected to be completed by December 31, 1970, with a Closing Date of December 31, 1971, was estimated to cost US$14.3 million; the IDA credit of US$10 million covering about 70% of total project costs.

1.03 The project objectives were as follows:

(a) to increase the total enrollment of general secondary schools to 35,000 by 1972 in order to produce annual outputs of nearly 9,000;

(b) to raise the general standard of secondary schools by broadening the curriculum through the addition of science subjects and practical courses;

(c) to provide student dormitories which could subsequently be converted to instructional facilities to increase day enrollments and reduce boarding; and

(d) to encourage the Government to:

(i) investigate examination procedures and the contents of the secondary school curriculum and to adjust them to the needs of Uganda,

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1/ The Credit Agreement refers to 24 "new" schools, implying that the post-project enrollment of each school represented additional capacity. In fact, only Lubiri Senior Secondary School was entirely new. However, the Government regarded the 24 "new" schools as virtual replacement of existing small, ineffectual units, and the classification used in the Agreement is therefore retained for purposes of this report.

(ii) investigate the possibilities of a gradual transfer to a day school system as urbanization increased, and improved transportation became available, and

(iii) formulate schemes to train secondary teachers of practical subjects.

Summary and Conclusion

2.01 Project physical facilities were completed as appraised, and the Credit closed on March 5, 1974, after a 26-month deferment of the Closing Date.

2.02 The project overfulfilled its target objective by adding 15,500 places by 1974 compared with the planned 11,794 in 1972 and increasing enrollments in project schools to 21,800 in 1974 compared with planned enrollment of 18,140 for 1972 (Annex 1).

2.03 Final total project cost was US$13.4 million compared with US$14.3 million including contingencies estimated at appraisal. An amount of US$615,206.08 of the Credit was cancelled.

2.04 The project facilities are economical, structurally sound, durable, and functional. The structures suffer from some relatively minor defects which can be remedied. Because of the louvered windows the schools are vulnerable to vandalism.

2.05 The project achieved its objectives in terms of the provision of equipment, science facilities and practical workshops. However, the performance of the schools and of the educational system in making effective educational use of the buildings and equipment is unsatisfactory.

2.06 The performance of the system in providing consumable teaching materials, maintaining facilities, staffing special subject areas, and supervising of instruction, is also unsatisfactory.

2.07 The administration of schools and of the system generally requires strengthening.

2.08 The project did not achieve its objective of arranging for the training of practical subject teachers in adequate numbers.

2.09 Significant progress has been made with the review of the examination system and curriculum revision, but much remains to be done to make actual instruction responsive to the teaching of practical subjects.

2.10 There is no significant trend away from boarding shcools in the direction of day schools; in fact, the boarding tradition has been extended through the project.

2.11 On balance, the project might be adjudged of limited success, because its present contribution to education in Uganda has been considerably reduced by weak administration of schools and inadequate response to teacher requirement of the project. However, given urgent attention to, and rectification of these shortcomings, the full objectives of the project could be attained in the foreseeable future.

Recommendations

3.01 For future projects the Association should ensure that planned educational reforms can be sustained by necessary staff training or retraining. In case of doubt, the Association should take the necessary remedial action (para. 4.04).

3.02 The Association should take advantage of its continuing participation in Uganda's education through the Second Education Project (Credit 258-UG) to exert its influence in correcting the deficiencies identified in this project. In particular, the Government should be asked to:

(a) accelerate the practical teacher training program included in the second education project; 1/

(b) revitalize the supervisory 2/ functions of the inspectorate by filling its vacancies, organizing seminars for inspectors to heighten their awareness of problems and of the measures and resources required to resolve them;

(c) strengthen the administrative capabilities of the headmasters by more frequent supervisory visits, and through seminars and workshops, help identify their common problems and methods of dealing with them;

(d) organize central administrative support services for schools, including:

(i) the creation of an 'organization and methods' section for the development of standard forms for school records, including inventory control systems,

(ii) the establishment of a buildings and equipment maintenance and repair service, and

(iii) a system for the supply and control of expendable materials, and

(e) include in the curriculum relevant practical experiences designed to improve student attitudes to learning. These could include school garden and horticulture projects, school buildings and equipment maintenance and repair, school clothing and fabrics projects, business management projects in conjuction with club activities, canteen management, and the distribution and control of school books and materials.

1/ Second Education Project (Credit 258-UG).

2/ "supervisory functions" refers to the responsibilities of the inspectorate for the improvement of instruction.

(f) review the practical subjects content of curricula in technical teachers' colleges and secondary schools to reflect the country's increasing dependence upon agriculture;

(g) revitalize the statistical services of the Ministry of Education and reinstate one of the Ministry's most important management tools, the Annual Report of Operations;

(h) undertake an immediate survey of buildings and equipment with a view to authorizing the award of contracts for urgently required repairs, pending the organization of standing provisions for school maintenance as mentioned in para. 3.02(c);

(i) undertake a review of the deficiencies in administrative processes which have led to the present uneven quality of school administration;

(j) establish a list of equipment repair agents for the guidance of principals of schools; and

(k) review admission procedures into secondary education in order to steadily increase the percentage of day students by converting some dormitories into classrooms and requiring boarding schools to take in as day students any qualified candidate within a 3-5 mile radius.

Project Organization and Management

4.01 Project Unit. In accordance with the provisions of the Credit Agreement, a project implementation unit was established in the Ministry of Education. The unit was headed by a Project Director (a retired official of the Ministry of Education), and staffed with a Project Architect provided by German Technical Aid, a part-time procurement officer, and supporting staff.

4.02 The Project Unit was given extensive assistance from the Association's headquarters, although it had been anticipated that because of the relative sophistication of Uganda's education system, and the simplicity of the project, this would not be necessary. Close supervision (14 missions) became necessary when the consulting engineers adopted a precast reinforced concrete portal frame type of modular structure for all project schools.

4.03 The Project Unit, with assistance from Association personnel, successfully negotiated development of the modular structures and development of the management and supervisory techniques required for the large and widely dispersed construction program. For lack of timely attention, initial furniture and equipment procurement aspects of the project fell behind schedule as much as 18 months, but later came nearly into phase when the construction program lagged by the same period of time.

4.04 The Ministry depended upon German Technical Aid to finance the services of the Project Architect over the entire life of the project. No counterpart was appointed and consequently, the second education project

assisted under Credit 258-UG is suffering from this lack of foresight of the Project Unit and the Ministry. The Association should have insisted upon the appointment of a counterpart architect as soon as practicable.

4.05 Architectural and Engineering Services. Unavoidable overall delays were caused by the Association's insistence upon the construction of a prototype school to demonstrate that the design was technically feasible, that quality control could be achieved, and that unit costs were comparable with conventional construction costs. Delays were also caused by the failure of two contractors from Ghana to make a prompt start under contracts for three schools.

Physical Facilities

5.01 General. All physical elements of the project were completed within an 18 month extension of the original Credit Closing Date of December 31, 1971. Originally estimated to be completed by December 31, 1970, the project was completed by June 1973 and the Credit closed on March 5, 1974. Apart from delays caused by the failure of Ghanian firms to complete their civil works contract, and the dislocation of sources of supply of building materials during the political and economic upheavals, no serious implementation problems appeared.

5.02 Site Development. The sites appear to have been well selected and utilized. In isolated instances buildings should have been changed in orientation in order to take better advantage of natural drainage and contours.

5.03 Building Design. The modular structural design of the buildings necessitated the organization of extensive supervisory services to ensure that contractors adhered to the exacting technical specifications. Design defects were relatively minor, and for the most part remediable.

5.04 Supervision of Civil Works. In general, apart from some isolated examples of poor siting, construction supervision was effective. In a few instances reinforcing steel was placed too close to the surface, particularly in the case of thin panels used for louvers and wall sections. The degree of technical skill required for accurate placing of reinforcing steel had been underestimated. In a few instances, walkways were made of pre-cast concrete of inadequate strength, and in some instances no gutter was provided at the edge of walkways which were consequently undermined by water shed from the roof, although the prototype building included such gutters.

5.05 Provision of and Standard of Accommodation.

(a) The list in Credit Agreement Side Letter No. 3 of April 21, 1967 (Annex 3 shows the list) sets out the numbers of Forms 1-4 and Forms 5-6 students (18,140 students)1/ to be accommodated in project schools at

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1/ Based on planning figures of 35 students per class in Form 1-4 and 30 students in Form 5 and 6.

completion as well as the numbers of student hostels and staff houses to be provided. The appraisal survey of existing 1/ school buildings under the project showed that to accommodate 18,140 students, the following new buildings should be provided:

Project Schedule of Accommodation

(a) Teaching and Communal Spaces, (b) Student Hostels, and (c) Staff Houses.

New Facilities to be Constructed	Appraisal Estimate			Actually Constructed 2/		
	(a)	(b)	(c)	(a)	(b)	(c)
Classrooms	173	-	-	168	-	-
Laboratories	79	-	-	82	-	-
Geography rooms	6	-	-	5	-	-
Commerce rooms	26	-	-	17	-	-
Workshops	52	-	-	47	-	-
Agricultural shops	6	-	-	8	-	-
Libraries	30	-	-	29	-	-
Home economics areas	21	-	-	22	-	-
Arts and crafts shops	24	-	-	23	-	-
Ablution/Latrines	39		-	102		-
Administration areas	25	-	-	32	-	-
Dining hall and kitchen	26	-	-	25	-	-
Student hostels	-	104 (7,280 places in double bunks)	-	-	174 (7,308 places in double bunks)	-
Staff houses	-	-	262	-	-	263

There is little difference between the appraisal estimate of accommodation to be provided and that actually constructed. Changes were brought about when, for example, detailed surveys showed that it would be better economy to construct a new building (say a laboratory) instead of making extensive alterations to an existing building which in turn could be adequately used as a classroom or storage space.

1/ All but one (Lubiri Secondary School) project school comprise new buildings, extensions of existing buildings and alterations and improvements of existing buildings. Lubiri S.S. project school was originally an existing school to be extended, but at the design stage during implementation a survey showed that it would be better economy to construct Lubiri as a complete new school in the vicinity.

2/ Annex 4 sets out details.

(b) Standard of Accommodation. Teaching spaces provided under the project were designed for classes of 40 students 1/ and groups of 20 students in practical subjects. The following sets out areas provided:

	Net area in m^2 per unit	per student
Classrooms	60 2/	1.50
Laboratories	100 3/	2.50
Geography room	110 2/	2.75
Commerce room	110 2/	2.75
Workshop	100 2/	5.00
Agricultural workshop	194 4/	5.00
Library	194 5/	0.30 to 0.40
Home economics room	129	3.25
Arts and crafts room	123	3.08
and other spaces:		
Dining hall and kitchen	624	0.75 to 1.00
Students hostels	129	3.00
Staff house	113	-
Headmaster house	135	-

The space standard for some buildings is generous (geography and commerce rooms and staff houses) whereas for others it is minimal (home economics rooms and hostels) but over-all the space standard is reasonable and comparable to standards in other IDA financed projects in East Africa.

5.06 Utilization of Teaching Spaces The schools are in use five days per week and eight periods per day. On this basis the utilization of teaching spaces varies from 80% (Moroto S.S.) to about 66% with about 70% for the majority of the schools.

Instructional Equipment

5.07 The equipment lists were prepared by committees comprised of subject specialists and, following revisions incorporating suggestions, were approved by the Association. The following principal comments can be made on the equipment provided:

1/ Instead of 35 students per group, which was the planning figure at appraisal.

2/ In addition about 10% storage space is provided.

3/ In addition work room and preparation/material room is provided between each two laboratories.

4/ Includes storage and lecture spaces in addition to demonstration space.

5/ Standard building at each school.

(a) In general the teachers considered equipment lists to be appropriate. The most common criticism was that the purchase of more expendable items such as test tubes and other glassware, would have been a better investment than some of the more sophisticated apparatus.

(b) For secondary schools the electronic automatic balances provided are too complicated and sensitive for the physical surroundings, and too difficult to service.

(c) Home economics facilities had inadequate worktables and were not adequately equipped with cooking or sewing facilities, in accordance with the requirements of the syllabus, but, on the other hand, were provided with unnecessary automatic washer/dryer machines.

5.08 The distribution of equipment to schools was well organized. For the most part, equipment was pre-packaged by the supplier, and delivered to schools who had received equipment lists in advance and were aware of its allotment. However, the issue of equipment to the schools, although formalized by signature, thus clearing the Project Unit of responsibility, was not properly documented; there is virtually no control of inventories of equipment. Partly as a result of inadequate control, and partly through attrition, serious deficiencies in equipment have occurred, to the detriment of the program. There are no procedural or budgetary provisions for the emergency replacement of equipment.

5.09 More important, it is the exception rather than the rule to find equipment being effectively used. Because of equipment losses and the shortage of expendable instructional materials, such as foodstuffs for home economics, skill activities in the practical areas are minimal, and the result is an essentially academic program. It is apparent that instructors and assistants lack experience and methodology in the organization and management of practical programs. In only about one-third of the schools visited was there evidence of systematic development of practical science programs and laboratory experiences. The deficiency must be attributed to (a) inadequate training of teachers, (b) inadequate supervision on the part of headmasters and inspectors, and (c) inadequate support services of the Ministry of Education.

5.10 Suppliers of equipment, as a condition of the award of contract, were required to nominate an agent in Uganda for repair service. With the exodus of the Asians in 1972, this system broke down, and it is now apparent that the Ministry must organize a service to fill the gap.

Procurement

6.01 Invitations, in accordance with IBRD/IDA guidelines, for civil works contractors to register their interest in tendering for project schools, were announced in September 1967, and 39 contractors from Uganda, seven from Eastern Africa (six Kenyan and one Tanzanian) and 16 from other countries (from Western Africa, Europe, Middle East, U.S.A. and Asia) registered. Four (local) builders were not short-listed because they lacked capacity and experience and two overseas (U.K.) firms and one (Kenyan) contractor were not interested in tendering unless their proprietary pre-fabricated construction systems would be used for the project.

6.02 Tenders for the pilot school 1/ (para. 4.05(b)) were invited in February 1968, and the contract awarded February 27, 1968. IDA had agreed that to speedily build/test 2/ the reinforced concrete construction system, tendering for this one school would be amongst local pre-qualified contractors. Construction of this school was completed in September 1968.

6.03 Tenders for the first group of (25) schools were opened July 8, 1968. Of the 52 contractors invited, 31 actually tendered. Tenders for the second group of (13) remaining schools were opened October 7, 1968, and of the 44 contractors invited, 27 actually tendered. Regional and local contractors were successful; overseas contractors did not participate. Contracts for three schools (of the second group) awarded to two contractors from Ghana were cancelled July 8, 1969, because, due to financial problems, about seven months after contract awards they had not commenced construction. The contracts were subsequently awarded to the second lowest tenderer on August 12, 1969. Construction tendering was competitive and was reflected in moderate unit and total costs.

6.04 Construction of project schools was carried out over a period of about 42 months (from March 1968 through September 1971) with some remedial works completed under guaranty periods during 1971-72. Construction time per school varied from 6 - 8 months to 20- 24 months and the value of work performed per site per month varied from U.Shs. 130,000 - U.Shs. 160,000 to U.Shs. 260,000 - U.Shs. 320,000.

6.05 International tenders for the bulk of equipment and furniture were received during the first quarter 1970, and contracts awarded during the first semester 1970 and tenders for remaining equipment and furniture were received during the second quarter 1971. Delivery and installation of most equipment and furniture was phased with construction completion.

6.06 International tendering for electrical generators for five schools took place in March-April 1970, and the contract was awarded in mid 1970. International tendering and award of contracts for bulk procurement of building materials and components took place during the last semester 1968 with deliveries to contractors in phase with their building programs. Bulk procured materials and installation/connections comprised 17% of the total cost of civil works.

6.07 With the bulk of construction executed in 1969 and 1970 and with only guaranty/completion work carried out in 1971-72, most of the severe construction cost increases which occurred in Uganda in 1971 and 1972 had only little effect on the project and it was completed in time before the extraordinary increases in construction cost took effect in 1973 and 1974.

1/ Nabisunsa Secondary (Girls) School.

2/ The cost of a structural system of steel proved more expensive than the proposed reinforced concrete (r.c.) system. Subsequently, after successful testing of the r.c. system for Nabisunsa S.S., all new project buildings incorporated the r.c. system.

Project Cost and Financing

7.01 Unit Costs Actual costs by school are detailed in Annex 5. In summary, the cost of physical facilities per unit and per student place, based on Lubiri Secondary School (the only new school in the project) is as follows:

Lubiri Secondary School

Teaching and Communal Facilities:

Construction (net) area per student place	4.48 m^2
Construction (gross) area per student place 1/	4.93 m^2
Building cost per unit of (net) floor area	U.S.$ 62/ m^2
Building cost per unit of (gross) floor area	U.S.$ 56/ m^2
Construction cost per student place	U.S.$ 277
Furniture cost per student place	U.S.$ 28 2/
Equipment cost per student place	U.S.$ 51 2/
Total cost per student place	U.S.$ 356

Staff Houses:

Building cost per unit of (net) floor area	U.S.$ 86 m^2
Building cost per unit of (gross) floor area	U.S.$ 78 m^2
Total construction cost per staff house	U.S.$ 9,900

The above costs per student place (and area per student place) are equal to or lower than comparable costs in Eastern Africa and are amongst the most economical financed by the Association worldwide.

7.02 Unit Costs, Hostels. Although cost figures per unit or place of hostels deducted from project cost tables would not be strictly comparable 3/ with those from other IDA/Bank financed projects, the following figures would indicate the range of costs under the project:

Hostels	Project Schools: Kako	Nabisunsa	St. Henry Kitovu
Construction cost/m^2 net area	U.S.$ 72	U.S.$ 92	U.S.$ 71
Construction cost/m^2 gross area	U.S.$ 65	U.S.$ 84	U.S.$ 64
Construction cost/place	U.S.$235	U.S.$296	U.S.$230
Furniture cost/place	U.S.$ 24	U.S.$ 30	U.S.$ 23
Total cost/place	U.S.$259	U.S.$326	U.S.$253

1/ New project buildings are designed with wide roof overhangs giving some protection against rain and sun. Only administration buildings are designed with a short veranda.

2/ Based on 35 students instead of 40 students per class these costs would be about 14% higher or U.S.$ 32 and U.S.$ 58.

3/ The proportion of ablution and toilet facilities to hostel space varies from school to school.

7.03 Average cost per m^2 net area of new project classroom buildings is U.Shs. 320 except that in the Western Province the cost averages U.Shs. 340/m^2 indicating a local cost adjustment for construction of about 7% over and above costs in the Kampala area and the northern and eastern parts of the country and reflecting, inter alia, the higher cost of transport to the hilly Western Province.

7.04 The total 15% contingencies included in the project cost estimate at appraisal was nevertheless absorbed (para. 6.12 above) by construction cost increases during implementation. There were however cost savings in procurement of equipment and furniture and in particular professional fees were U.S.$300,000 lower than estimated at appraisal, reflecting the high degree of standardization in project building designs. The following sets out the base-cost estimate at appraisal in comparison with final total project cost.

	Costs in Millions			
	Appraisal Estimate 1/		Actual Costs 2/	
Categories	U. Shs.	U.S.$	U. Shs.	U.S.$
1. Academic and General Service Buildings.	27.78	3.89	28.27	3.96
2. Student hostels	14.80	2.07	20.92	2.93
3. Staff housing	15.68	2.20	17.56	2.46
4. Site works	8.60	1.20	13.35	1.87
Sub-total 1 through 4:	66.86	9.36	80.10	11.22
5. Furniture	6.00	0.84	4.78	0.67
and equipment	9.74	1.36	6.72	0.94
Sub-total Category 5:	15.74	2.20	11.50	1.61
6. Professional Services	6.20	0.87	4.07	0.57
Totals:	88.80	12.43	-	-
Contingencies 15%	13.34	1.87	-	-
Grand Total:	102.14	14.30	95.67	13.40

7.05 In accordance with the Credit Agreement, proceeds of the Credit were disbursed at the rate of 70% of total expenditures. This disbursement rate continued throughout project implementation. Annex 7 shows the schedule of disbursement per semester and Chart 1 sets out the relationship of expenditures and disbursement during the life of the project.

7.06 The estimated average per student annual cost is about U.Shs. 2,450 (US$304) at project boarding schools. This sum is inadequate to cover the cost of teachers' salaries, boarding and teaching materials. Under the existing circumstances of rising food costs and virtually fixed allocations from central government sources, it is evident that building and equipment maintenance and teaching materials are the most vulnerable to budget cuts.

7.07 It is evident that persistence in present policies of unearmarked grants will result in continuing deterioration of buildings and equipment, and regression of science and practical subject programs into theoretical subjects, for the lack of adequate teaching materials. To alleviate the situation, schools could devote greater time to the cultivation of school gardens as a medium of instruction, and to produce revenue in kind. School workshops could direct instruction to maintenance of the school and to the production of useful and saleable items. Similarly classes and extra-curricular clubs and student organizations could organize the production and sale of foodstuffs and handicrafts, and the management of materials and book sales. Moreover, schools could solicit orders for school products from parents and community organizations. Students could and should assume greater responsibility than they now do for housekeeping and horticulture at school premises.

Operational Results and Benefits

8.01 Manpower Demands. The primary justification for the project was Uganda's projected high level manpower requirements for the 1970s. But changes in the Ugandan economy during the project implementation period created a case study in the hazards of resting educational planning too exclusively on manpower projections. During appraisal in 1965, the target requirement for new Ugandan African manpower to be trained at secondary school certificate level or higher between 1966 and 1972 was set at 17,400. (Six thousand of these positions were to result from Africanization.). If this figure could be met by new output from the schools and university, then the stock of high level African manpower in 1972 would be about 29,000.

8.02 The only subsequent High-Level Manpower Survey (HLMS) conducted in 1967, found a 50% under-estimation of requirements in the first survey, and further, projected that whereas the cumulative high level manpower need by 1971 would be over 42,000, the available supply would then be slightly over 43,000, producing a small net surplus. Within the overall balance, it forecast "real shortages" of secondary and post-secondary level trained technicians, but a supply-demand balance for holders of general secondary School Certificate and Higher School Certificate, bearing out the project's target estimates.

8.03 However, in 1972 Uganda's new Third Five-Year Plan for 1971-72 - 1975-76 criticized the inflated projections of the 1967 study: it had assumed a too high rate of economic growth for the late '60s/early '70s. As a result it found secondary intake and output targets for those years to be far too high.

Secondary Education Targets

8.04 The IDA project, working back from its manpower requirements, adopted a target of a total secondary school (S1-S6) capacity of 35,000 in order to produce annual outputs of 1,950 from Higher School (S6) and 6,930 from School Certificate (S4). This meant provision of nearly 15,000 new places S1 to S4, and roughly 2,850 in S5-S6. The IDA project was to provide two-thirds of this new capacity, the rest coming from expansion of non-project schools.

8.05 The secondary school capacity targets on the whole were over-fulfilled by 1972, as a result of over-expansion at the S1-S4 level by about 9,000 places. Of this number, about 2,500 places were in IDA project-assisted schools. Spread among 39 schools, each three stream or larger, this share of the increase may easily result from more intensive use of existing physical facilities, e.g., by increasing class size or double shifting. Part of the expansion of about 6,500 places in non-project schools appears to have resulted from the conversion of several former farm schools to general secondary schools with an agricultural bias.

8.06 Side Letter No. 1 to the Credit Agreement included an agreement that the Uganda Government would "not undertake any expansion of general secondary education other than this Project" without consulting IDA. There is no record of consultation, but the enrollment expansion could have occurred without any planned expansion in the sense of physical construction. Moreover, the Appraisal Report anticipated an expansion in non-Project schools of over 4,000 S1-S4 places.

8.07 At the Higher School level (S5-S6), overall enrollment targets for 1972 were actually underfulfilled slightly. However, in the project-assisted schools the target of 1,200 was achieved.

8.08 The Third Five-Year Plan evaluated the suitability of the enrollment and output targets - and of their overfulfillment in practice - as seen from 1972, just before the drastic economic changes of that year. It found that the new output at S4 level has been far larger than the economy has been able to absorb. Certificate of Education holders, even those with adequate grades, had great difficulty in securing employment in any way commensurate with their qualifications. It attributes this to the economic slowdown and to the overfulfillment of enrollment targets. Based on its own revisions of the high level manpower projections made in 1967, the Plan concluded that by 1971, S1 intakes should have been 7,000 instead of 11,000.

8.09 Although performance fell somewhat short of the target for Higher School enrollment, the Plan concluded that this was just as well. In light of its revised manpower projections it predicted, in fact, a slight but worrisome surplus of S6 output after 1971.

8.10 Since 1972, the Ugandan economy has taken such a sharp downward turn that it becomes doubtful whether any earlier forecasts or projections are any longer relevant. The mass exodus of expatriate high level manpower, nearly a decade earlier than projections had indicated, suggested that

assumed S4 and S6 output surpluses would overnight become shortages. But just as suddenly economic growth started to fall, perhaps restoring the pre-1972 status quo in African high level manpower demand. No reliable data are available, the 1972 manpower survey having been postponed. Since 1972, growth at both levels of secondary enrollment has slowed appreciably.

Boarding Facilities at Project Schools

8.11 Because the case for providing a maximum amount of boarding accommodation at project schools was put persuasively in the Government's request, the appraisal mission examined the merits of day versus boarding enrollment. Noting low population densities in areas, the thin distribution of secondary schools, combined with a nationally open, selection-by-merit system, the mission concluded that a heavy reliance on boarding was "inescapable" for the present. However, to anticipate future urbanization, increases in enrollment rate and improved transportation capabilities, project-built dormitories were designed to be easily convertible into teaching areas when appropriate. Moreover, the Government undertook to investigate possibilities of gradual transition to a predominantly day-school system.

8.12 The project documents identified 10 of the 39 project schools as "for the most part day schools," but this was partly a misapprehension from the start. Four of these schools have had minimal day enrollment or none at all. In addition, with the notable exception of one day school, the eight year trend among these schools has been toward increasing the proportion of boarders rather than vice versa. This is in spite of an increase in the secondary enrollment rate nationally from 2.5 to 4%.

8.13 The sharp increase in secondary enrollment from 17,000 in 1965 to 44,000 in 1972 largely attributable to the project, might imply a wider geographic availability of schools, which in turn would permit less reliance on boarding. Two specific factors related to the project seem to have prevented this from happending. First, several of the new project schools were situated too far from even local district population centers to maximize day enrollment. Sites had already been determined well before the project request. Secondly, the addition of new practical subjects in the curricula (largely as a result of this project) required a minimum school size of three streams to make economic use of both specialized equipment and staff. The larger the school, almost invariably the higher the proportion of student boarders - given a location in an area of low population density.

8.14 The Completion Mission gave special attention to some aspects of the boarding versus day enrollment policies in view of the importance attached to the question at the project design and appraisal stages. In the completion questionnaire survey of S4 students in 20 secondary schools (including two not in the project for the sake of comparisons) we determined that 17% of the boarding students could have enrolled as day students in their present schools and another 41% could have enrolled as day students in another government secondary school on the basis of the location of their homes, or

of their (day) primary schools. Some of the 41% would be of the opposite sex of their potential day school, however. Thus, depending on the representativeness of our sample of schools, as many as half of the present boarding students up to S4 level could plausibly become day students at schools near to where their families live, without having to rent private or hostel accommodation.

8.15 One indication of the inefficiency of the present recruitment arrangements is that 40% of present day students came from homes within five miles. It appears that relatively few day students actually choose to attend a nearby day school; rather, many enrolled in their present school after they had failed selection into their first choice schools due to less than adequate performance in the Primary Leaving Examination. In our survey nearly half the day students confirmed failing entry into their first choice school while only 11% of the boarders had the same problem. The relatively poorer examination performance of day students is summarized below:

Entrance Examination Performance

Examination Scores	Day Students	Boarding Students	All Students
High (225 or better)	12%	51%	57%
Low (less than 225)	88%	49%	43%
	100%	100%	100%

8.16 Thus we are seeing how the day schools are serving a special, perhaps unintended function, which has no intrinsic relationship to their being day schools as such: they tend to be schools of last resort for the academically less successful student, who may come from many miles away. Nearly half, 46% of the surveyed day students, were living in some form of rented accommodation rather than with parents and families.

8.17 Day students may also be described in terms of their socio-economic backgrounds. When the students in our survey are grouped according to such indicators of social status as (a) parental education (in years), (b) number of expensive consumer items found in the home, or (c) father's occupational status, the conclusion is that day students come from more "advantaged" home backgrounds than do boarding students. For example, while roughly one third of the day students come from the wealthiest and the best educated categories of parents, only one sixth of the boarders fall into these same

groups. This may suggest that when students from poorer homes are not fortunate enough to perform well and gain entry to a boarding school, they tend to be more easily discouraged from pursuing secondary education as day students, since they cannot bear the room and board costs which for boarders are heavily government subsidized. From this perspective boarding has a special equity role in providing greater educational opportunity for poorer families to send youth to school, while day schools provide a further opportunity for more advantaged youth.

8.18 Finally, boarding in an African context is often justified as increasing national integration by mixing students of different ethnic backgrounds. The school survey probed this important theory by including a measurement of ethnocentrism. The results show that while only 13 percent of all S4 students are classified as "ethnocentric", day students fall into this category twice as often, in proportion to their numbers, as do boarders. Without a comparative measure of the students' attitudes before school entry the relevant evidence to confirm or deny the theory is incomplete. But the survey results indicate that boarding has some added effect to schooling alone in diluting ethnocentric sentiments.

8.19 These findings argue for a cautious approach to a policy to increase day school enrollment. Reducing boarding places, while saving on public expenditures, could mitigate the positive socialization role of the schools and operate to the disadvantage of children of poor homes without reducing the social cost of education.

8.20 Nevertheless, it should be possible to ensure that more students from homes with "an educational environment" apply first to a nearby school, if there is one, to reduce anomalous public subsidy of un-needy cases. About one-in-six of the boarding students in the survey came from relatively advantaged homes, and a sizeable proportion of them will also have lived within bicycling distance of a government school, especially near urban centers. This group could be the focus of a gradual building up of the day-school student population. At the same time, the number of the boarding places which are made vacant by this policy could be allocated to students who neither gain a competitive boarding school place nor have a day school near home but now must migrate to a day school in a distant town, and seek private accommodation. Provided they meet the minimum secondary school entrance standards, these are the type of candidates for whom boarding school is intended.

8.21 Practical Subjects in Secondary Schools. Clearly the most innovative aspect to the whole project was its provision of specialized classrooms, workshops, and equipment, so that all 39 project schools could begin to offer (or, in a few cases, increase their offerings in) some non-academic subjects. The purpose in adding these "practical subjects" was not to provide vocational training as such, but to broaden the curriculum.

8.22 With such an educational objective an appropriate focus for evaluating outcomes is a comparison of the attitudes and aspirations about future work of those who studied such subjects, and of those who did not. But the first consideration is to know just how far the new subjects, woodwork, metalwork, technical drawing (collectively called industrial arts), agriculture, home economics and commerce, were actually brought into being. At appraisal the practical subject facilities were intended for distribution among the 39 project schools as follows: industrial arts, 31 schools; home economics, 20; commerce 26; and agriculture 6 schools. The particular figures fluctuated slightly during the implementation period 1967-1971. Annex 9 shows the actual distribution of facilities as of 1971; slight increases in agriculture and home economics and a decrease in commerce, to 8, 21 and 22 schools respectively.

8.23 Although the facilities were apparently allocated nearly according to original project plans, their use had fallen far short of expectation even as late as 1974. In the three industrial arts subjets, no enrollment whatever has been reported in half the schools where facilities were assigned. In the case of metalwork, only one school out of the designated 23 has produced candidates for examination. On the other hand, agriculture had been almost fully implemented by 1974, by producing examinable students in seven out of eight cases. In commerce, the rate of producing candidates was two-thirds and for home economics, nearly one-half. However, nine out of seventeen project schools which did not receive special facilities for commerce, have managed to produce candidates suggesting that the availability of specialized facilities (and, therefore, their use) is not indispensable to the achievement of this measurable objective. This holds to a lesser extent for agriculture. These indicators may simply reflect prevailing "pencil and paper" content of examinations, which, if true, suggests a need to inquire into their appropriateness for these types of learning.

8.24 In many schools which were given specialized facilities, students enrolled for two or even more years, but did not offer themselves as examination candidates. The project documentation does not specify any objective beyond the inclusion of these subjects in the secondary school curriculum. However, it is questionable whether students will approach these subjects with the same purposefulness if they are not accorded parity in examinations. This may not require a four-year course, and, indeed, a few schools show enrollment in these subjects only in the final two years before examination candidacy.

8.25 The question has now been directly dealt with by the Ministry of Education. Starting with the current 1975 school year, S1 and S2 students must include three practical subjects in their study programs, and S3 students must, this year, follow up two practical subjects which they will carry through the examinations after S4. This decision to put "practical subjects on the same footing with theoretical subjects" signifies a full commitment to the main curricular innovation around which the IDA project was designed.

8.26 The project schools are in a better position to carry out the new curriculum than the remaining, non-project schools. However, the absence of specialized facilities in the other 34 schools is likely to result in rapid enrollment growth in commerce particularly, and a necessarily bookish form of instruction generally, unless further capital development is possible.

8.27 Although non-project schools are now producing only one-fifth as many examination candidates in the practical subjects as are project schools, their pass rate is actually better. Only in agriculture is this pattern reversed. However, the difference has much to do with the very different standards of intake between the mostly newer, less prestigious project schools, and the older, high-applicant-demand schools outside the project. Our sample survey found that while only 26% of S4 students in the project schools came in with entrance examination scores of 230 or better, 76% of the S4 students in the two "control" schools had such high scores. Viewed in this light, the project school examination results are encouraging, especially in agriculture.

8.28 Practical Subjects and Student Attitudes. The Ministry of Education's new curriculum directive referred to above states the aim of producing "people who are job makers, instead of job seekers." Heavier exposure to practical subjects is seen as the principal vehicle for bringing about this change. The questionnaire survey included in the completion mission undertook to measure some of the attitudes which bear on this broad, if difficult to evaluate, curriculum objective.

8.29 To begin with, the questionnaire results confirmed the official course enrollment statistics discussed above. While 58% of project school S.4 students had followed at least three years of practical subjects, only 22% of non-project school S.4 students had had the same degree of exposure. Significant differences between these two groups also exist in stated intentions to sit examinations in these subjects. In the project schools, nearly 90% of S4 students plan to sit at least one practical subject exam at year's end, while this is true for only one-quarter of the students in the other schools. These results also suggest that there will be an increase over the examination candidacy figures in 1974.

8.30 Students were asked questions to probe their relative preferences for practical vs. conventional academic subjects. When forced to make a choice 87% of project school students preferred a practical subject as the type of subject they would like to add to their program, while only 70% made that choice in non-project schools. This suggests that the project schools are indeed creating a specially favorable "climate" for pursuing the newer subjects. In addition when the students (in both groups of schools) are divided according to the amount of their actual study of practical subjects, those who had more, also tend to want more. In other words, the availability of supply has not satisfied demand, but perhaps has even increased it. On the other hand, in the non-project schools 80 per cent of the students who had little or no chance to study practical subjects, indicated an unsatisfied demand to have such an opportunity.

8.31 Given this favorable response to practical subjects as a study option, the question narrows to whether a greater degree of practical study produces noteworthy effects on outlook on life? In a word, the survey results showed that there are no appreciable effects, at least on the specific items measured. Students with more practical subject exposure also tended to have somewhat higher occupational status aspirations than those who did not. Probably both are related to the student's personal ambitions to get ahead and try new things.

8.32 When students were asked whether they hoped to work in a city, town, or rural area, their responses were entirely unrelated to their enrollment in practical studies. Likewise, improved opportunity for practical studies had only the slightest effect on preferences for employment as a farmer earning more income rather than employment in an office with less income. Finally, experience in the studies seems not to influence elitist attitudes as measured by value choices between educational qualification vs. intelligence, and mental vs. physical labor.

8.33 Needless to say these results are not very encouraging. However they should not be over-interpreted. They may mean that the subjects were not taught as expected, or they may mean that any expectations as to the attitudinal efficacy of just different subjects were never justified in the first place. But if the latter is true, then the possible benefits of the newer subjects are narrowly circumscribed. Vocational skill training has already been excluded as an objective. Perhaps skill training for avocational use deserves exploration. Perhaps attitudes other than those measured here are being affected. Perhaps, as is always possible, the instruments used were unsuited for measuring the intended concepts. Or perhaps some attitudinal effects will appear only later in life.

8.34 The Supply of Specialized Teachers. The Appraisal Mission foresaw that the curriculum reforms embodied in this project would raise sharply the demand for teachers in the sciences, and, especially, in the practical subjects. The project itself did not include provision for creating this needed supply. Instead the Ugandan Government gave an assurance that it would formulate schemes to train the scarce practical subject teachers. With the benefit of hindsight, this type of solution appears to have been inadequate. Practical subject teachers are the least substitutable of all, and require careful supply planning. The shortage of qualified, or even in some cases of unqualified staff, has been a major factor in the lower than expected enrollment in practical subjects in project schools. Only in the cases of agriculture and home economics has there been an adequate teaching staff. The relationship of teacher supply to student output is confirmed in the high output of examination candidates in agriculture, the only subject where there has been an average of two specialists staff per school.

8.35 There was an almost universal drop in staff in 1973 over the previous year. This directly reflects the withdrawal of many expatriates. Without that event, the aggregate staff position in 1974 would certainly have been better and probably satisfactory.

8.36 However, the low 1972 staffing figures are just as critical. By that year nearly all the project-ordered equipment had been delivered to the schools. The completion mission members observed schools where expensive equipment had been badly handled. The best explanation available was that no specialist staff had been appointed to the school at the time of deliveries who could initiate controlled use of the material. The sudden departure of many of the existing specialist teachers in 1973 could only have worsened this situation.

8.37 The current output of teachers is still a cause for some concern. There is as yet no program for commercial teacher training in Uganda, although one is included in the second education project (258-UG). Some Ugandans are being trained in Kenya. The supply of agriculture teachers is nearly adequate but, industrial arts teachers are not coming in large enough numbers from the National Teachers College.

8.38 Facilities for training science teachers have long been adequate in Uganda. The problem has been in raising intake numbers and in the relatively high failure rates in maths and physics, as well as alternative employment. In spite of the expatriate withdrawals in recent years, the supply of arts teachers has actually reached a condition of surplus in several subjects, especially the social studies whose share of the new school timetable is now being reduced. The survey of schools conducted during the mission interviewed staff as well as the students. It found that half of the staff were trained in arts subjects, nearly two-fifths in sciences, and the rest in the technical and practical subjects. This distribution requires considerable alteration to reflect the new physical investment, and, now, the new school syllabus. The Ugandanization of secondary school teaching is 90% completed, even though the current development plan only envisaged this occurring by 1981.

Secondary School Examinations

8.39 The appraisal report took note of the fact that from thirty to forty percent of secondary examination candidates failed each year. The Government agreed as a project condition to investigate examination procedures and content so as to relate them more to Uganda's needs and to decrease the number of failures. Both of these separate objectives have been achieved, though it is not possible to ascribe the decrease in the failure rate to greater examination content "relevance". Coincident with this project's implementation an East African Examinations Council headquartered in Kampala was created which has gradually taken over the management of the examinations from the Cambridge Examinations Syndicate. Various subject panels have been active under the Council in drawing up new syllabi and examination papers with distinctly local emphases.

8.40 The problem of failure rates was handled by simple administrative fiat in 1968. From that year the performance requirement for receiving the East African Certificate of Education in Uganda (and Tanzania) was changed to include even those with a pass mark in only one of the six or more examination subjects. Thus while in 1967 only 65% received an examination pass, in the following year the rate went up suddenly to 89%. This figure is a significant numerical change, but its functional significance is not so simple. A certificate alone has no particular currency for gaining access to further training or positions when the supply of holders becomes inflated. In such conditions the quality of the performance has clearly become more important. However, it is conceivable that those who now leave full-time schooling after the examination will not as frequently as before have to bear a visible stigma of failure. If this could contribute to their "job-making" propensities, then the change has clear value.

Eastern Africa Regional Office
October 14, 1975.

Annex 1

Uganda, Credit 101-UG

Completion Report

Places and Enrollments

Schools	Streams		Places		
	S1 - S4	S5 & S6	S1 - S4	S5 & S6	Total
At appraisal:	80 1/	8	6,120 2/	226	6,346
Project at completion:	121	20	19,360	1,600	20,960
Additional streams and places:	41	12	13,240	1,374	14,614
At appraisal:	80	8	6,120	226	6,346
Additional streams and places: 3/	41	12	13,240	1,374	14,614
Project at completion:	121	20	19,360	1,600	20,960
At appraisal:	80	8	6,120	226	6,346
Additional stream and places planned at appraisal: 4/	41	12	10,820	974	11,794
Project at completion as planned at appraisal:	121	20	16,940	1,200	18,140

1/ 48 of 80 streams were in provisional facilities opened in 1965.

2/ 2,121 of 6,121 students were in provisional facilities opened in 1965.

3/ The physical facilities as constructed accommodate classes of 40 students compared with appraisal sizes of 35 and 30 students for S1 - S4 and S5 and S6.

4/ Appraisal Report Annex 10.

Uganda, Credit 101-UG

Completion Report

Project Finance

Categories	Estimated at Appraisal						Actual 1/					
	U.Shs. in Millions			U.S. $ in Millions			U.Shs. in Millions			U.S. $ in Millions		
	Government Account	IDA Account	Total	Government Account	IDA 2/ Account	Total	Government Account	IDA Account	Total	Government Account	IDA Account	Total
1. Academic and General Service Buildings:	9.57	22.35	31.92	1.34	3.13	4.47	8.48	19.79	28.27	1.19	2.77	3.96
2. Student's Hostels:	5.14	11.86	17.00	0.72	1.66	2.38	6.28	14.64	20.92	0.88	2.05	2.93
3. Staff Housing:	5.43	12.57	18.00	0.76	1.76	2.52	5.27	12.29	17.56	0.74	1.72	2.46
4. Site Works:	2.93	6.93	9.86	0.41	0.97	1.38	4.00	9.35	13.35	0.55	1.31	1.87
Sub-total 1 through 4	23.07	53.71	76.78	3.23	7.52	10.75	24.03	56.07	80.10	3.37	7.85	11.22
5. Furniture:	-	-	-	-	-	-	1.43	3.35	4.78 3/	0.20	0.47	0.67
and Equipment:	-	-	-	-	-	-	2.02	4.70	6.72 3/	0.28	0.66	0.94
Sub-total Category 5:	5.43	12.71	18.14	0.76	1.78	2.54	3.45	8.05	11.50	0.48	1.13	1.61
6. Professional Services and Supervision:	2.14	5.00	7.14	0.30	0.70	1.00	1.22	2.85	4.07	0.17	0.40	0.57
Totals	30.64	71.42	102.06	4.29	10.00	14.29	28.70	66.97	95.67	4.02	9.38	13.40
Credit Amount Cancelled:											0.62	
The Credit:											10.00	

1/ Rate: U.S.$ 1.00 at U.Shs.7.14.

2/ Source: List of Goods and Withdrawals of Credit Proceeds; Side Letter No.2 of April 21, 1967.

3/ Mission's estimates.

Annex 2

Annex 3

Uganda - Credit 101-UG

Completion Report

List of Project Facilities 1/

Province	No.	Structure	Name of School	No. of Hostels	No. of Staff Houses
Buganda	1	3S2H	Kibuli (expansion)	2	3
	2	3S	Kako (new)	3	9
	3	3S	Ndejje (new)	3	8
	4	3S	Nabisunsa (new)	3	8
	5	4S	Mengo (new)	-	12
	6	3S2H	Aga Khan Masaka (new)	2	12
	7	4S	Mukono (expansion)	-	8
	8	4S	Lubiri (expansion)	-	4
	9	3S	Kitovu (expansion)	2	2
	10	3S2H	Gayaza (expansion)	2	3
	11	3S2H	Namilyango (expansion)	2	2
Eastern	12	3S2H	St. Peter's College (expansion)	4	6
	13	3S	Ngora (new)	3	8
	14	3S	Sebei (new)	3	10
	15	3S	Masaba (new)	3	8
	16	3S	Kachonga (new)	4	7
	17	3S	Iganga (new)	3	8
	18	3S	Nkoma (new)	-	8
	19	3S	Jinja College (new)	3	9
	20	3S2H	Mwiri College (expansion)	2	3
	21	3S	Manjasi (expansion)	2	4
	22	4S	Soroti (expansion)	-	3
Northern	23	3S2H	Lango College (expansion)	2	4
	24	3S	Gulu High (new)	4	7
	25	3S2H	Dr. Obote College Lira (new)	6	10
	26	3S	St. Charles' College, Iwanga, Koboko (new)	5	11
	27	3S	Moroto (new)	2	5
	28	3S2H	Samuel Baker, Gulu (expansion)	1	2
	29	3S	Layibi (expansion)	1	2
	30	3S	Mvara (expansion)	1	4
Western	31	3S	St. Edward's Bukumi (new)	3	7
	32	3S2H	Kigezi High (new)	6	10
	33	3S	Kinyasano (new)	5	9
	34	3S	Bweranyangi (new)	3	9
	35	3S	Kyebambe (new)	5	9
	36	3S	Mutolere (new)	4	9
	37	3S	Duhaga (new)	4	8
	38	3S	Kitunga (new)	5	9
	39	3S	Virika (expansion)	1	2
			18,140 Student Places.	104	262

KEY TO STRUCTURE:

3S=3 School Certificate Streams (25 schools).
4S=4 School Certificate Streams (4 schools).
3S2H=3 School Certificate Streams and 2 Higher School Certificate (10 schools).

1/ List attached to Side Letter No. 3 of April 21, 1967.

Completion Report

Schedule of Facilities.

Item No.	Structure	Name/Location of Secondary Schools	Classrooms	Laboratories	Geography	Commerce	Work-shops	Agricultural	Library	Home Economics	Arts and Crafts	Ablution/Latrine	Administration	Dining and Kitchen	Hostels	Staff Houses
1.	3S 2H	*Kibuti	5	2	1	1	2	-	-	1	-	-	1	-	-	3
2.	3S	Kako 1/	6	-	-	1	2	-	1	1	-	3	1	1	5	8
3.	3S	*Ndejje 1/	4	3	-	-	2	-	1	1	1	2	1	1	5	6
4.	3S	Nabisunsa 1/	5	3	-	1	-	-	1	1	1	2	1	1	4	8
5.	4S	Mengo 1/	5	3	-	1	1	-	1	1	1	2	-	1	-	12
6.	3S 2H	*Aga Khan, Masaka 1/	8	3	-	1	2	-	1	1	1	-	-	1	-	7
7.	4S	*Bishop School, Mukono	6	3	-	-	2	1	1	1	1	-	1	1	-	12
8.	4S	*Lubiri	11	4	-	1	2	-	1	1	1	2	1	1	-	14
9.	4S	St. Henry, Kitoru	6	3	-	-	-	-	1	-	-	4	-	1	8	7
10.	3S 2H	Gayaza	2	-	-	-	-	-	-	1	-	2	1	-	4	3
11.	3S 2H	*Namilgango College	2	-	-	-	-	-	-	-	-	2	-	-	4	2
12.	3S 2H	*St. Peters, Tororo	3	1	1	1	2	-	-	-	1	1	1	-	3	6
13.	3S	*Ngora 1/	4	3	-	-	1	-	1	1	-	4	1	1	6	7
14.	3S	*Sebei 1/	4	2	-	-	1	1	1	-	1	1	1	1	4	9
15.	3S	*Masaba 1/	5	3	-	-	-	-	1	-	1	4	1	-	5	7
16.	3S	Kachonga 1/	5	3	-	-	2	-	1	-	1	2	1	-	4	7
17.	3S	Iganga 1/	2	3	-	-	2	1	1	1	-	3	1	1	6	7
18.	3S	Nkoma 1/	3	2	-	1	2	-	1	1	1	1	1	-	-	8
19.	3S	Jinja College	3	3	-	1	-	-	1	-	1	3	1	1	6	9
20.	3S 2H	*Busoga College, Mviri	-	-	-	1	1	-	-	-	-	2	1	-	4	3
21.	3S	*Manjasi	-	-	-	-	-	-	1	-	1	2	-	-	3	4
22.	4S	*Soroti	5	1	-	-	1	-	1	1	-	-	-	-	-	3
23.	3S 2H	*Lango College	3	1	1	1	2	-	-	-	1	2	1	-	5	3
24.	3S	*Gulu 1/	8	3	-	1	2	-	1	1	1	4	1	1	9	6
25.	3S 2H	*Boroboro	3	2	1	1	2	-	1	1	1	5	1	1	9	9
26.	3S	*Koboko 1/	2	3	-	-	1	1	1	-	-	4	1	1	8	9
27.	3S	*Moroto 1/	8	3	-	-	2	-	1	-	1	2	1	1	4	8
28.	3S 2H	Pongdwongo	-	-	-	1	1	-	-	-	-	1	1	-	2	2
29.	3S	*Layibi	3	-	-	-	-	-	-	-	-	1	1	1	3	2
30.	3S 1/	*Mvara	6	3	-	-	1	-	1	1	1	3	1	1	6	4
31.	3S	*St. Edward's, Bukumi	3	2	-	-	2	1	1	-	1	3	1	1	5	6
32.	3S 2H	*Kigezi 1/	6	4	1	1	2	1	1	1	1	6	1	1	10	10
33.	3S	*Kinyasano 1/	5	2	-	-	2	-	1	1	1	5	1	1	7	8
34.	3S	*Bweranyangi 1/	4	3	-	-	-	1	1	1	1	6	1	1	6	8
35.	3S	*Kyembambe 1/	3	2	-	-	-	-	1	2	-	4	1	1	6	9
36.	3S	*Motolere 1/	7	3	-	-	-	-	-	-	-	5	1	1	9	8
37.	3S	*Duhaga 1/	5	3	-	1	2	-	1	1	1	2	1	1	5	8
38.	3S	*Kitunga 1/	4	3	-	-	2	1	1	-	1	7	1	-	8	9
39.	3S	*St. Leo's, Virika	4	-	-	1	1	-	-	-	-	-	-	-	1	2
		Totals	168	82	5	17	47	8	29	22	23	102	32	25	174	263

* Alteration works carried out in addition to improvements of existing buildings and new facilities.

1/ Designated "new school".

Uganda, Credit 101-UG

Completion Report

Summary of Areas and Costs

Item No.	Name and Location of Secondary School.	Student Places (a) Teaching and Communal & (b) Hostels (a)	(b)	Staff Houses Nos.	Net Area in m^2 (a) Teaching and Communal, (b) Hostels and (c) Houses (a)	(b)	(c)	Total Area in m^2 Net	Gross	Costs in U.Shs. in Thousands Site Works	Teaching & Communal	Hostels	Houses	Cost of Construction	Professional Fees and Supervision	Cost of Equipment	Cost of Furniture	Total Cost	U.S.$ Total Cost+
1.	Kibuli	640	-	3	1,354	-	340	1,694	1,863	36	* 702	-	244	932	50	129	70	1,230	172
2.	Kako 1/ 2/	480	200	8	2,207	646	* 928	3,781	4,159	445	1,516	335	611	2,407	122	185	135	2,849	399
3.	Ndejje 3/	480	200	6	2,455	646	680	3,781	4,159	327	*1,126	309	461	2,223	113	205	143	2,684	376
4.	Nabisunsa 1/	480	160	8	2,429	517	428	3,874	4,261	297	1,326	339	586	2,548	130	242	166	3,086	432
5.	Nkoma 1/	640	-	12	2,166	-	1,382	3,548	3,903	604	1,006	-	951	2,561	131	183	101	2,976	417
6.	Aga Khan, Mazaka 1/ 3/	640	-	7	2,357	-	815	3,172	3,489	346	*1,057	-	529	1,932	96	193	108	2,331	326
7.	Bishop School, Mukono 4/	640	-	12	2,488	-	1,382	3,870	4,257	795	*1,206	-	905	2,907	148	220	121	3,396	476
8.	Lubiri 5/	640	-	14	2,866	-	1,608	4,474	4,921	418	1,266	-	990	2,674	136	231	127	3,168	444
9.	St. Henry, Kitovu.	480	320	7	2,154	1,033	815	4,002	4,402	692	1,085	525	534	2,836	144	198	160	3,338	467
10.	Gayaza	640	160	3	538	517	362	1,417	1,559	9	311	284	247	851	43	57	60	1,011	142
11.	Namilyango College	640	160	2	301	517	22	1,045	1,150	159	* 187	234	144	724	37	34	42	837	117
12.	St. Peter's, Tororo	640	120	6	1,105	442	660	2,227	2,450	119	* 502	185	419	1,225	62	92	69	1,448	203
13.	Ngoro 1/	480	240	7	2,380	775	815	3,970	4,367	255	1,054	336	465	2,120	108	192	138	2,558	358
	Sub-totals A	7,520	1,560	95	24,800	5,093	10,962	40,855	44,940	4,512	11,844	2,547	7,087	25,990	1,322	2,160	1,440	30,912	4,329

1/ Designated "new school".

2/ 1975, enrollment is 477, full boarding.

3/ 1975 enrollment is 1,330, 82 boarders.

4/ 1975 enrollment is 720, no boarding.

5/ 1975 enrollment is 620, no boarding.

* Alteration works included.

\+ In thousands.

Uganda, Credit 101-UG

Completion Report

Summary of Areas and Costs

Item No.	Name/Location of Secondary School.	Student Places (a) Teaching and Communal	Student Places (b) Hostels	Staff Houses Nos.	Net Area in m^2 (a) Teaching and Communal	Net Area in m^2 (b) Hostels and (c) Houses	Net Area in m^2 (c)	Total Area in m^2 Net	Total Area in m^2 Gross	Costs in U.Shs. in Thousands: Site Works	Teaching & Communal	Hostels	Houses	Cost of Construction	Professional Fees and Supervision	Cost of Equipment	Cost of Furniture	Total Cost	U.S.$ Total Cost+
	Brought forward A	7,520	1,560	95	24,800	5,093	10,952	40,855	44,940	4,512	11,844	2,547	7,087	25,990	1,322	2,160	1,440	30,912	4,329
14.	Sebei 1/ 2/	480	160	9	2,140	516	1,042	3,698	4,068	560	* 915	213	599	2,287	116	167	113	2,683	376
15.	Masaba 1/	480	200	7	1,627	646	815	3,088	3,397	434	*1,259	265	466	2,424	123	230	152	2,929	410
16.	Kachonga 1/	480	160	7	1,769	516	815	3,100	3,410	300	727	200	445	1,672	85	133	93	1,983	278
17.	Iganga 1/ 3/	480	240	7	2,295	775	793	3,864	4,250	320	1,120	367	499	2,306	117	204	149	2,776	389
18.	Nkoma 1/ 4/	480	-	8	1,501	-	928	2,429	2,672	350	581	-	499	1,430	73	106	58	1,667	234
19.	Jinja College 1/ 5/	480	240	9	2,011	775	1,042	3,828	4,211	405	994	366	654	2,419	123	181	136	2,859	400
20.	Busoga College 6/	640	160	3	559	517	344	1,420	1,562	220	* 342	255	227	1,044	53	62	60	1,219	171
21.	Manjasi	480	120	4	489	387	475	1,351	1,486	84	* 287	185	290	846	43	52	47	988	138
22.	Soroti	640	-	3	907	-	362	1,269	1,395	121	* 440	-	220	781	40	80	44	945	132
23.	Lango College	640	200	3	1,313	646	340	2,299	2,529	145	* 599	252	194	1,200	61	109	86	1,456	204
24.	Gulu 1/	480	360	6	2,965	1,162	680	4,807	5,288	444	*1,459	561	447	2,911	148	266	201	3,526	494
25.	Boroboro 7/	640	360	9	2,715	1,162	1,042	4,919	5,411	583	*1,181	465	649	2,878	147	215	165	3,405	477
26.	Koboko 1/ 8/	480	320	9	2,316	1,033	1,042	4,391	4,830	341	*1,287	524	715	2,867	146	235	181	3,429	480
	Sub-total B	6,880	2,520	84	22,608	8,135	9,720	40,463	44,510	4,307	11,191	3,663	5,904	25,065	1,275	2,040	1,485	29,865	4,183
	A + B	14,400	4,080	179	47,408	13,228	20,682	81,318	89,450	8,819	23,035	6,210	12,991	51,055	2,597	4,200	2,925	60,777	8,512

1/ Designed "new school".
2/ 1975 enrollment is 480, full boarding.
3/ 1975 enrollment is 507, full boarding.
4/ 1975 enrollment is 400, no boarding.
5/ 1975 enrollment is 448, full boarding.
6/ Formerly Mwiri College.
7/ Formerly Dr. Obote College, Lira.
8/ Sir Charles Lwanga College.

* Alteration works included.

\+ In thousands.

Uganda, Credit 101-UG

Completion Report

Summary of Areas and Costs

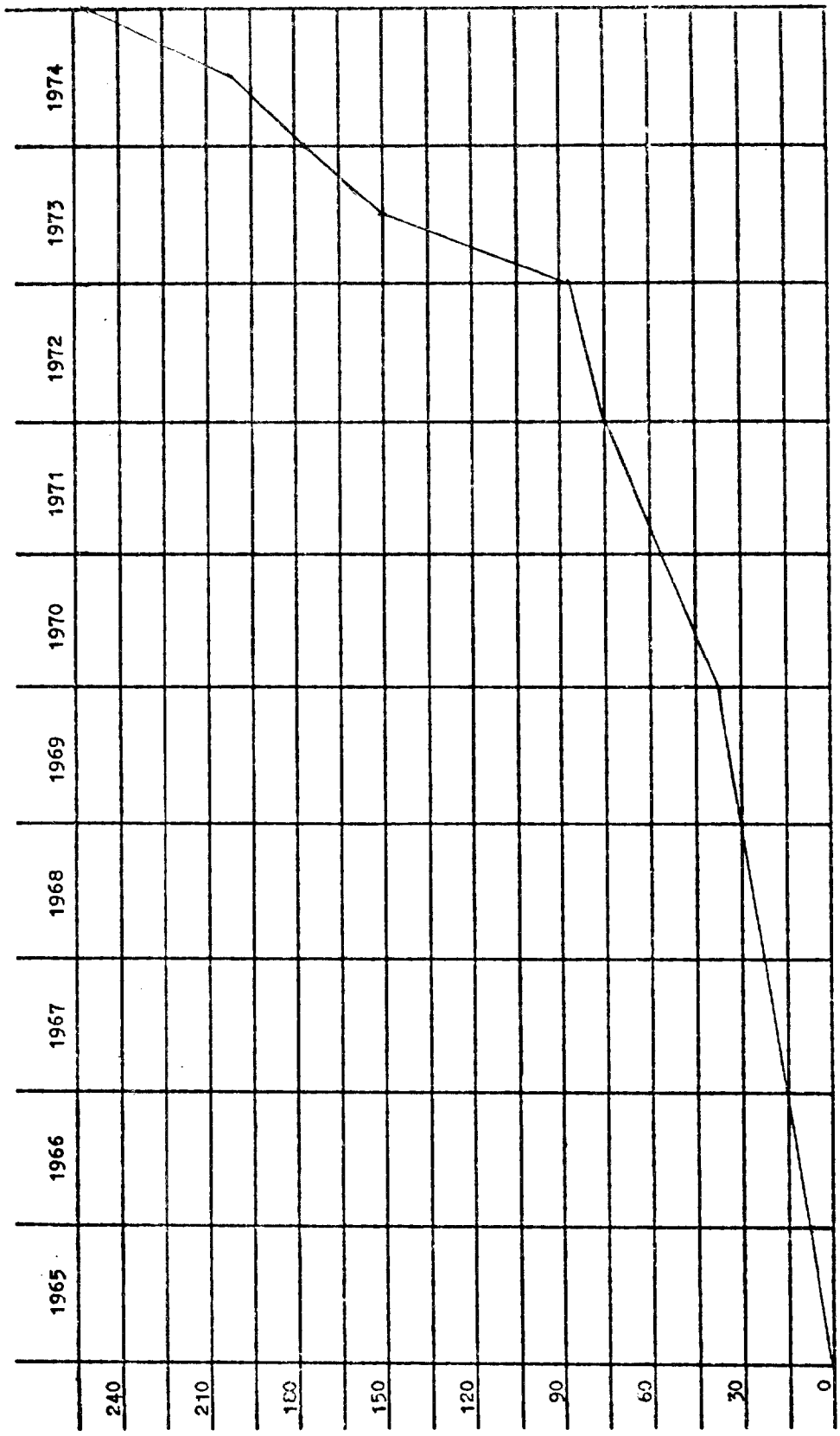
Item No.	Name/Location of Secondary School.	Student Places (a) Teaching and Communal & (b) Hostels (a)	(b)	Staff Houses Nos.	Net Area in m^2 (a) Teaching and Communal, (b) Hostels and (c) Houses (a)	(b)	(c)	Total Area in m^2 Net	Gross	Costs in U.Shs. in Thousands Site Works	Teaching & Communal	Hostels	Houses	Cost of Construction	Professional Fees and Supervision	Cost of Equipment	Cost of Furniture	Total Cost	U.S.$ Total + Costs
	Sub-totals A + B	14,400	4,080	179	47,408	13,228	20,682	81,318	89,450	8,819	23,035	6,210	12,991	51,055	2,597	4,200	2,925	60,777	8,512
27.	Moroto 1/ 2/	480	160	8	2,467	517	928	3,912	4,303	652	*1,022	208	545	2,427	123	186	123	2,859	400
28.	Pongdwongo 3/	640	80	2	407	258	227	892	981	47	191	121	149	508	26	35	31	600	84
29.	Laibi (St.Joseph's) 4/	480	120	2	991	388	227	1,606	1,767	112	* 547	163	132	954	49	100	71	1,174	164
30.	Nvara 5/	480	240	4	2.429	775	475	3,679	4,047	257	*1,185	393	313	2,148	109	216	158	2,831	368
31.	St. Edward's, Bukami	480	200	6	2,314	646	702	3,662	4,028	430	*1,148	340	444	2,352	120	209	149	2,840	398
32.	Kigezi 1/ 6/	640	400	10	3.499	1,291	1,133	5,923	6,515	469	*1,695	574	733	3,471	176	310	227	4,184	586
33.	Kinyasano 1/	480	280	8	2,252	904	928	4,034	4,492	407	*1,259	492	623	2,791	142	231	176	3,340	468
34.	Bweranyangi 1/ 7/	480	240	8	2,105	775	928	3,808	4,189	370	*1,240	435	609	2,654	135	226	168	3.183	446
35.	Kyambambe 1/	480	240	9	1,978	775	1,042	3,795	4,175	295	* 988	395	652	2,330	119	180	138	2,767	388
36.	Motolere 1/ 8/	480	360	8	2,248	1,162	928	4,338	4,772	287	*1,324	623	632	2,866	146	241	195	3,448	483
37.	Buhaga 1/ 9/	480	200	8	2,614	646	928	4,188	4,607	279	*1,302	342	588	2,511	128	237	164	3,040	426
38.	Kitunga 1/	480	320	9	1,765	1,033	1,042	3,840	4,224	522	*1,273	557	673	3,025	153	232	183	3,593	503
39.	St. Leo's Virika	480	40	2	489	129	227	845	929	138	* 645	68	143	994	51	118	71	1,234	173
	Sub-total C	6,560	2,880	84	25,558	9,299	9,715	44,572	49,029	4,265	13,829	4,711	6,236	29,041	1,477	2,521	1,854	34,893	4,887
	A + B + C	20,960	6,960	263	72,966	22,527	30,397	125,890	138,479	13,084	36,864	10921	19,227	80,096	4,074.	6,721	4,779	95,670	13,399

1/ Designated "new school".
2/ 1975 enrollment is 466 with 436 boarders.
3/ Formerly Sir Samuel Baker, Gulu.
4/ 1975 enrollment 481, full boarding.
5/ 1975 enrollment 473 in 3S and 114 in 2H, full boarding.
6/ 1975 enrollment 468 in 3S and 124 in 2H and 557 boarders.
7/ 1975 enrollment 477, full boarding.
8/ 1975 enrollment 460, full boarding.
9/ 1975 enrollment is 465, full boarding.

*Alteration work included.
+In thousands.

UGANDA

SUMMARY OF GENERAL INCREASE IN CONSTRUCTION COSTS 1965 - 74



Source: Armstrong, Duncan and Russell,
Chartered Quantity Surveyors,
Kampala.

UGANDA

SUMMARY OF GENERAL INCREASE IN CONSTRUCTION COSTS 1965-74

In year:	Increase %	Notes
1965	7.5	General Increase.
1966	7.5	" "
1967	7.5	" "
1968	7.5	" "
1969	7.5	" "
Sub-total for 1965-69	37.5	
1970	12.5	Government & Public Bodies
1971	25.0	Participation in companies
1972	25.0	(60% ownship of shares).
Sub-total for 1970-72	62.5	
1973	50.0	Declaration of Economic War
1973	25.0	August 72 effect, and General
1974	25.0	shortage due to blackmarket
1974	50.0	earing acute by mid 74.
	150.0	
Total 1965 to 1974	250	

MARCH 1975

Source: Armstrong, Duncan and Russell,
Chartered Quantity Surveyors,
Kampala.

SCHEDULE OF DISBURSEMENTS

Record at Completion

Uganda - Credit 101-UG

IBRD/IDA Fiscal Year and Semester	Accumulated Disbursements in Thousands of U.S. Dollars Equivalent							Actual Disbursements as a Percentage of Appraisal Estimate (up to latest semester) or New Estimate of Disbursements as a Percentage of Appraisal Estimate (for future semester) (1÷2)x100 or (4÷2)x100					
	Actual Total Disbursements	Appraisal Estimate 1/	Revised Estimates										
			September 1970	March 1971	September 1971	March 1972	September 1972						
	1	2	4	4	4	4	4						
1968													
1st	-	-	-	-	-	-	-	-	-	-	-	-	-
2nd	60	400	-	-	-	-	-	15	-	-	-	-	-
1969													
1st	570	-	-	-	-	-	-	-	-	-	-	-	-
2nd	2,390	3,900	-	-	-	-	-	61	-	-	-	-	-
1970													
1st	4,130	-	-	-	-	-	-	-	-	-	-	-	-
2nd	5,600	7,000	5,590	-	-	-	-	80	80	-	-	-	-
1971													
1st	6,440	-	6,890	-	-	-	-	-	-	-	-	-	-
2nd	7,290	9,800	8,220	7,541	-	-	-	74	84	77	-	-	-
1972													
1st	8,360	- 2/	9,310	8,645	8,550	-	-	-	-	-	-	-	-
2nd	8,900	10,000 2/	10,000	9,750	9,525	9,520	-	89	100	98	95	95	-
1973													
1st	9,160	-	-	-	-	-	9,500	-	-	-	-	-	-
2nd	9,380 3/	-	-	-	-	-	-	-	-	-	-	-	-
1974													
1st													
2nd													
Closing Date:	6.30.73 4/ 12.31.71.												

1/ Appraisal Report para. 6.42.

2/ Discrepancy between Appraisal Report para. 6.42 and its Annex 13, which shows the last expenditure after four years and nine months(i.e. Feb.24, 1972) after effectiveness.

3/ U.S.$ 615,206.08 was cancelled.

4/ The actual closing date.

ANNEX 8

RECURRENT EXPENDITURES, REVENUES FOR EACE STUDENTS ONLY (S1-S4)

Name of School: Kigezi High School Headmaster: John Martin

Address: P.O. Box 58, KABALE (Uganda) Date: 5 - 3 - 75

	Actual Recurrent Expenditures in 1974	Recurrent Estimate in 1975
A. Salaries		
1. Administrative staff	49,356.00	70,000.00
2. Teaching staff (including assistants)	385,993.40	385,993.40
3. Kitchen staff	35,152.80	50,000.00
4. Drivers, quartermaster, nurse, etc.	104,972.75	100,000.00
Sub-Total	575,474.95	605,993.40
B. Recurrent Materials directly related to instructional facilities		
1. Consumable materials in classrooms, laboratories, workshops	49,404.00	85,000.00
2. Books and other reading materials	47,954.75	65,000.00
3. Learning equipment, books	1,867.00	2,000.00
4. Other consumables	170,310.05	186,000.00
Sub-Total	269,535.80	238,000.00
C. Recurrent Materials not directly related to instruction		
1. Uniforms, games, excursions	107,452.50	131,000.00
2. Boarding equipment (and maintenance thereof)	12,433.20	3,000.00
3. Food, fuel	555,069.00	577,000.00
4. Transportation	29,166.50	17,000.00
5. Maintenance of buildings and facilities	94,246.95	91,000.00
6. Public utilities	84,457.75	67,000.00
7. Other administrative overheads	80,557.80	50,200.00
Sub-total	963,383.70	936,200.00
TOTALS	1,808,394.45	1,780,193.40
D. Enrollments	1974	1975
1. Boarders	555	557
2. Day	40	35
3. Total enrollment	595	592
Average per student cost in teacher salaries (A2 above): (A2 ÷ D3)	648/70	652/00
Average per student cost in total school budget: (School total ÷ D3)	3039/30	3007/70

	Actual Revenues 1974 school year	Projected Revenues 1974 school year
Revenues		
From Central Government (Grants)	1,386,483.30	
From Local Authorities (Bursaries)	170,158.95	
From Basic Fees (Non-Bursary)*	299,692.75	
Sale of Produce	115,758.60	
Other Sources	78.911.55	
TOTAL	2,051.005.15	

* Basic Boarder fee is Shs 650/= p.a.

Basic Day Student fee is Shs. 400/=.

_____: PRACTICAL SUBJECT TEACHING IN 39 IDA I SCHOOLS
NUMBERS OF EXAMINATION CANDIDATES, 1974, PER SUBJECT
OR HIGHEST GRADE OF INSTRUCTION (IN PARENTHESES)

School	Industrial Arts			Agri-culture	Home Eco.	Commerce
	Metal-work	Wood-work	Technical Drawing			
1. Kibuli		(4)	10	*	10	2
2. Kako			(2)	*	(3)	37
3. Ndejje		(3)		*	(2)	75
4. Nabisunsa	*	*	*	*	26	(4)
5. Mengo	(3)		24	*		7
6. Masaka (Aga Khan)	( )		45	*	10	155
7. Mukono		18		141	18	2*
8. Lubiri			(4)	*		
9. Kitovu	*	*	*	*	*	38
10. Gayaza	*	*	*	50*	22	*
11. Namilyango	*	*	*	*	*	2
12. St. Peters			28	*	*	85
13. Ngora	*	*	(4)	109*	(4)	2
14. Sebei	*	17	9	23	*	2*
15. Maseba	*	*		64*	*	2*
16. Kachonga	(2)	(3)		75*	*	55*
17. Iganga		(2)	(2)	112	11	4*
18. Nkoma	(1)	18	(2)	*	16	4
19. Jinja College	*	*	*	*	*	48
20. Mwiri	*		6	*	*	60
21. Manjasi	(4)*	28*	29*	*	*	*
22. Soroti	*			*	(3)	13*
23. Lango College			(1)	*	(4)	104
24. Gulu High		(4)	13	*	22	
25. Boroboro (Dr. Obote)	(3)			*	(2)	(4)
26. Koboko	*	40		(2)	*	*
27. Moroto	(2)	(2)	(2)	*	*	7*
28. Pongdwongo (Sam Baker)	(1)	*		*	*	(3)
29. Layibi	40	24	100	*	*	*
30. Mvara	*			*	(1)	*
31. Bukumi				79	*	1*
32. Kigezi High		13	10	47	19	
33. Kinyasano				*		*
34. Bweranyangi	*	*	*	109	18	*
35. Kyebambe	*	*	*	*	80	
36. Mutolere	*	(1)*		(2)*	*	1*
37. Duhaga		7	7	*		118
38. Kitunga				97	*	*
39. Virika		*		*	*	4

* Indicates the subject was not intended for this school as of 1971 documents. A number plus asterisk indicates that the school likely received the necessary facilities subside the project, except in the case of commerce where it is not mandatory to have facilities in order to give some instruction.

Key: (1) = highest class enrolled is S.1 (3) = highest class enrolled is S.3
(2) = highest class enrolled is S.2 (4) = highest class enrolled is S.4
Empty spaces indicate no enrollment has been reported.

UGANDA EDUCATION I COMPLETION

Enrollment and Teacher Supply in Practical Subjects (Secondary Schools)
and examination candidates in 1974

METAL WORK

	IDA				NON-IDA				TOTAL			
	1972	1973	1974	Candidates	1972	1973	1974	Candidates	1972	1973	1974	Candidates
S1	460	649	1,157		192	193	239		652	781	1,396	
S2	305	652	736		186	190	85		491	782	821	
S3	96	222	210		46	112	68		142	274	278	
S4	82	111	80	40	102	98	40	35	184	172	120	75
Total	943	1,416	2,183		526	593	432		1,469	2,009	2,121	
Qualified Staff	7	8	10		5	2	2		12	8	12	

September 25, 1975

UGANDA EDUCATION I COMPLETION

Enrollment and Teacher Supply in Practical Subjects (Secondary Schools)
and Examination Candidates in 1974

WOOD WORK

	IDA				NON-IDA				TOTAL			
	1972	1973	1974	Candidates	1972	1973	1974	Candidates	1972	1973	1974	Candidates
S1	941	1,136	1,238		275	586	408		1,216	1,722	1,646	
S2	735	1,225	1,240		264	603	321		999	1,828	1,561	
S3	301	762	671		47	120	162		348	882	833	
								0				165
S4	85	303	345	165	30	34	134		115	337	479	
Total	2,062	3,426	3,494		616	1,343	1,025		2,678	4,769	4,519	
Qualified Staff	14	11	13		6	3	6		20	14	19	

September 24, 1975

UGANDA EDUCATION I COMPLETION

Enrollment and Teacher Supply in Practical Subjects (Secondary Schools)
and examination candidates in 1974

TECHNICAL DRAWING

	IDA				NON-IDA				TOTAL			
	1972	1973	1974	Candidates	1972	1973	1974	Candidates	1972	1973	1974	Candidates
S1	799	1,234	1,580		753	805	907		1,552	2,039	2,487	
S2	750	1,198	1,527		695	866	888		1,445	2,064	2,415	
S3	261	558	581	270	332	175	457	53	593	733	1,038	323
S4	179	203	329		244	140	307		423	343	636	
Total	1,989	3,193	4,017		2,024	1,986	2,559		4,013	5,179	6,576	
Qualified Staff	11	13	19		9	6	2		20	19	21	

September 25, 1975

UGANDA EDUCATION I COMPLETION

Enrollment and Teacher Supply in Practical Subjects (Secondary Schools)
and Examination Candidates in 1974

AGRICULTURE

	IDA				NON-IDA				TOTAL			
	1972 /1	1973	1974 /1	Candidates	1972	1973	1974	Candidates	1972	1973	1974	Candidates
S1	1,060	1,040	1,283		533	903	1,011		1,593	1,943	2,294	
S2	1,005	1,056	1,261		435	1,017	926		1,440	2,073	2,187	
S3	697	832	885		305	598	779		1,002	1,430	1,664	
				0				79				829
S4	273	604	791		172	271	478		445	875	1,269	
Total	2,686	3,532	4,220		1,445	2,789	3,194		4,131	6,321	7,414	
Qualified Staff	15	13	16		9	7	11		22	20	27	

/1 Figures unavailable for one school.

September 24, 1975

UGANDA EDUCATION I COMPLETION

Enrollment and Teacher Supply in Practical Subjects (Secondary Schools)
and examination candidates in 1974

HOME ECONOMICS

	1972	1973	1974	Candidates	1972	1973	1974	Candidates	1972	1973	1974	Candidates
S1	710	736	840		856	1,201	1,044		1,566	1,937	1,884	
S2	810	780	832		988	1,115	1,145		1,798	1,895	1,977	
S3	334	473	476	226	429	330	338	120	763	803	814	346
S4	178	226	349		195	174	254		373	400	603	
Total	2,032	2,215	2,497		2,554	2,820	2,781		4,500	5,035	5,278	
Qualified Staff	19	16	20		19	21	16		38	37	36	

September 25, 1975

UGANDA EDUCATION I COMPLETION

Enrollment and Teacher Supply in Practical Subjects (Secondary Schools)
and examination candidates in 1974

COMMERCE

	IDA				NON-IDA				TOTAL			
	1972	1973	1974	Candidates	1972	1973	1974	Candidates	1972	1973	1974	Candidates
S1	284	120	240		1,271	825	975		1,555	945	1,215	
S2	379	452	786		1,275	948	1,088		1,654	1,400	1,874	
S3	741	943	1,122	813	1,003	1,364	1,314	174	1,744	2,307	2,436	987
S4	416	763	847		947	901	844		1,363	1,664	1,691	
Total	1,820	2,278	2,995		4,496	4,038	4,221		6,316	6,316	7,216	
Qualified Staff	7	3	11		13	13	10		20	16	21	

September 24, 1975

SECONDARY SCHOOL STOCKS, ADDITIONS AND TARGETS, 1965 TO 1972

(from Appraisal Report Annex 10)

Classes \ Category of Schools	1965 Basis			Additional Capacity, 1966-72			1972 Targets		
	Project	Non-Project	Total	Project	Non-Project	Total	Project	Non-Project	Total
S1-S4 Places	6,120[1/]	10,072	16,192	10,820	4,173	14,993	16,940	14,245	31,185
S5-S6 Places	226	905	1,131	974	1,885	2,859	1,200	2,790	3,990
of which:									
S4 Output (Places)	894	1,605	2,499	3,341	1,090	4,431	4,235	2,695	6,930
S6 Output (Places	107	416	523	493	934	1,427	600	1,350	1,950
Total Places in S1-S6	6,346[1/]	10,977	17,323	11,794	6,058	17,852	18,140	17,035	35,175
of which:									
Total Output in S4, S6	1,001	2,021	3,022	3,834	2,024	5,858	4,835	4,045	8,880

1/ Included 2,121 in temporary facilities.

ANNEX 11

UGANDA EDUCATION I COMPLETION

Enrollment in Project and non-Project Secondary Schools

Grades	IDA Project Schools					Non-Project Schools					Total				
	1970	1971	1972	1973	1974	1970	1971	1972	1973	1974	1970	1971	1972	1973	1974
Secondary 1	4,765	5,426	5,015	5,165	5,188	5,559	5,841	5,519	5,195	5,578	10,324	11,267	10,534	10,360	10,766
Secondary 2	4,685	4,830	5,272	5,070	5,175	5,322	5,537	5,633	5,358	5,371	10,007	10,367	10,905	10,428	10,546
Secondary 3	4,269	4,737	4,676	5,104	4,995	4,791	5,157	5,035	5,207	5,035	9,060	9,894	9,729	10,311	10,030
Secondary 4	3,345	4,135	4,477	4,446	4,928	4,497	4,517	4,621	4,616	5,025	7,842	8,652	9,098	9,062	9,953
Sub-Total	17,084	19,128	19,440	19,785	20,286	20,169	21,052	20,808	20,376	21,009	37,233	40,180	40,266	40,161	41,295
Secondary 5	637	669	759	776	840	1,179	1,293	1,237	1,244	1,264	1,816	1,962	1,996	2,020	2,104
Secondary 6	470	628	673	739	749	948	1,094	1,130	1,128	1,258	1,418	1,722	1,803	1,867	2,007
Sub-Total	1,107	1,297	1,432	1,515	1,589	2,127	2,387	2,367	2,372	2,522	3,234	3,684	3,799	3,887	4,111
TOTAL	18,191	20,425	20,872	21,300	21,875	22,296	23,439	23,175	22,748	23,531	40,467	43,864	44,065	44,048	45,406

ANNEX 12

ANNEX 13

NON-BOARDING ENROLLMENT IN TEN IDA PROJECT SCHOOLS, 1966, 1970, 1974 (percentage)

10 "Day Schools" Listed in Appraisal Report, Annex 10	1966	1970	1974
Mengo	100%	100%	n.a.
Masaka-Aga Khan	100%	100%	100%
Mukono	100%	100%	100%
Lubiri	100%	100%	100%
Nkoma	57%	100%	100%
Soroti	100%	100%	n.a.
Pongdwongo (Sam Baker)	0%	2%	0%
Layibi	3%	2%	0%
Muara	0%	22%	0%
Virika	10%	3%	n.a.
TOTAL	58%	68%	65%

September 19, 1975

ANNEX 14

PRACTICAL SUBJECT UTILIZATION IN 39 IDA SCHOOLS, 1974

No. of schools Where: -	Metal-work	Wood-work	Tech. Draw.	Agri-culture	Home Eco.	Com-merce	Total
A. ...Special facilities were provided, /1 but...	23	26	31	8	21	22	
1. no enrollment whatever	16 (70%)	12 (46%)	14 (45%)	0 (0%)	4 (19%)	4 18%	
enrollment up to S.1 level	3	0	1	0	1	0	
to S.2 level	2	2	4	1	2	0	
to S.3 level	2	2	0	0	2	1	
to S.4 level	0	2	2	0	2	2	
to examination (exam rate)	1 (4%)	7 (27%)	10 (32%)	7 (88%)	10 (48%)	15 (66%)	
B. ... facilities were not provided /1 but...	16	13	8	31	18	17	
1. students take examination	0	1	1	4	0	9	
2. students enroll without exams	1	1	0	1	1	0	

/1 According to project documentation 1969-1971.

September 23, 1975

ANNEX 15

DISTRIBUTION OF ACTUAL PRACTICAL SUBJECT INSTRUCTION BETWEEN PROJECT AND NON-PROJECT SCHOOLS, 1974 (ENROLLMENT AT S.2 LEVEL OR HIGHER)

Subject	IDA Project Schools	Non-project Schools
Metalwork	6	2
Woodwork	16	4
Technical Drawing	17	3
Agriculture	13	8
Home Economics	17	11
Commerce	27	11

September 24, 1975

ANNEX 16

EXAMINATION PASS RATES IN PRACTICAL SUBJECTS, 1974

	IDA Schools	Other Schools
Metalwork	n.a.	80%
Woodwork	66%	(no candidates)
Technical Drawing	54%	81%
Agriculture	79%	56%
Home Economics	74%	83%
Commerce	55%	85%

September 24, 1975

Name/Location of Secondary Schools Visited

Project Schools

Kako

Aga Khan, Masaka.

Bishop's School, Mukono.

Lubiri.

St Peter's Tororo.

Sebei.

Iganga.

Nkoma.

Jinja.

St. Charles Lwanga College, Koboko.

Pongdwongo (formerly Sir Samuel Baker).

Layibi (St. Joseph's).

Mvara.

Moroto.

Kigezi.

Bweranyangi.

Mutolere.

Duhaga.

Non-Project Schools

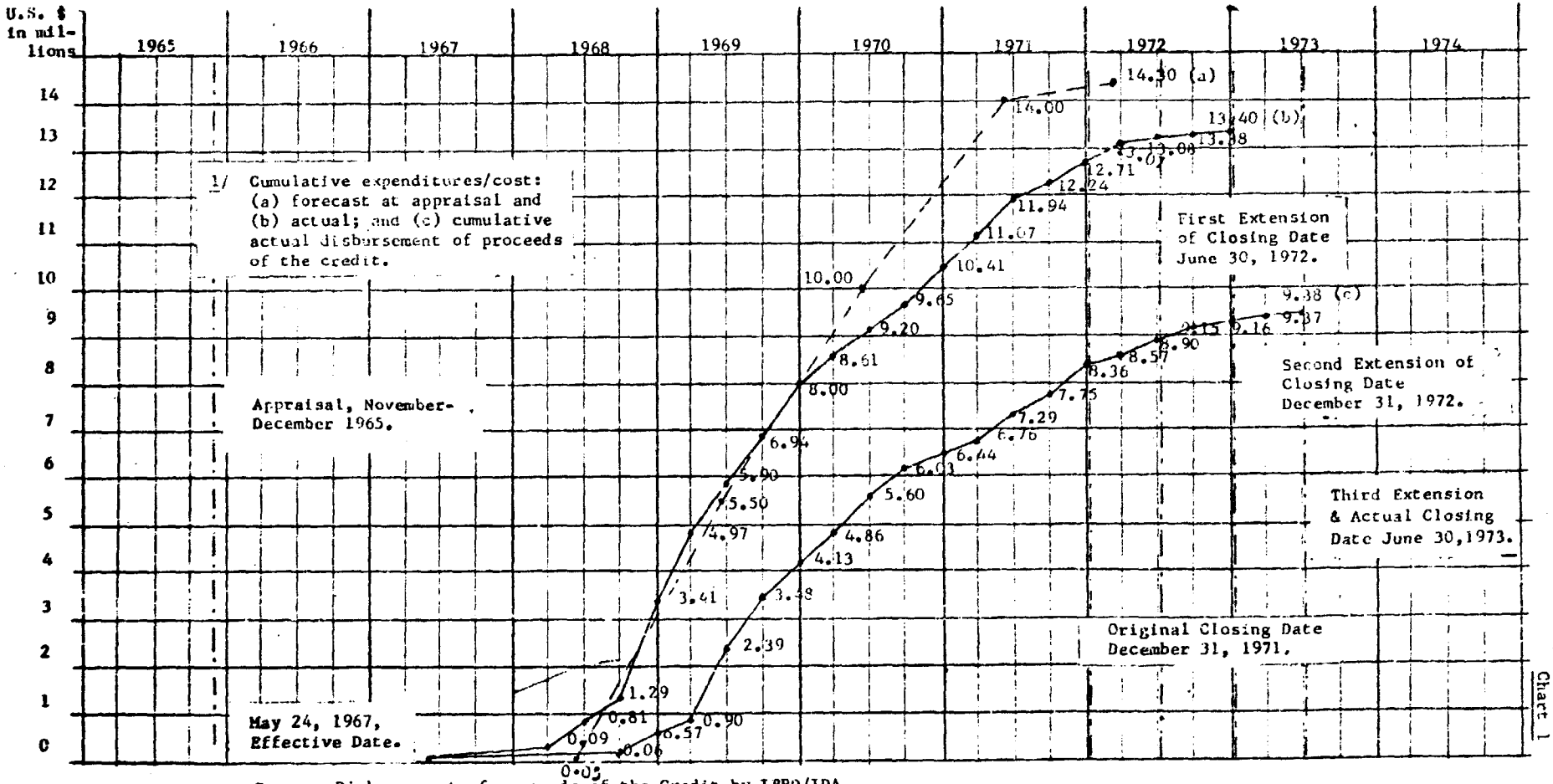
Ntare.

Nabumali.

Uganda, Credit 101-UG

Completion Report

Flow Chart 1/



Source: Disbursement of proceeds of the Credit by IBRD/IDA.