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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PERFORMANCE AUDIT OF  
FIRST UGANDA TEA PROJECT

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Operations Evaluation Department



## PREFACE

Disbursements of IDA Credit 109-UG to the Republic of Uganda were completed in September 1972 and the following report represents an audit of achievements under the loan against the objectives on the basis of which it was approved.

The valuable assistance provided by the Uganda Government, the Uganda Tea Growers Corporation and the Commonwealth Development Corporation is gratefully acknowledged.

Note: Currency Equivalent (Uganda Shilling)

1967-73	USh 1.00 = US\$0.14
Since July 1973	USh 1.00 = US\$0.145



## SUMMARY

On September 15, 1967, IDA approved a credit of \$3.4 million to the Republic of Uganda (Credit 109-UG) to assist, together with the Commonwealth Development Corporation of the U.K., in the Government program to promote the expansion of smallholder tea. The program was expected to be carried out by the newly created Uganda Tea Growers Corporation (UTGC) and the Credit was to cover UTGC's cash deficit in the field sector, as well as a large part of the cost of staff to be provided by the Uganda Government. UTGC's cash deficit would be incurred until plantings under the scheme would mature, and cesses on green leaf would cover expected costs.

Although negotiations were largely completed by November 1965, credit approval was delayed for two years, until September 1967, because of differences of opinion between CDC and IDA and the Uganda Government about the structure and powers of UTGC and the composition of its management. The outcome of these discussions was that UTGC emerged as a stronger institution than what the Government had originally envisaged. In retrospect, this outcome was important to assure proper project implementation.

The planting target of 3,925 hectares of new tea was completed on schedule in 1970. Savings under the project permitted an extension of the planting program by another 1,508 hectares in 1971 and 1972. A total of \$269,000, representing 8% of the credit, was eventually cancelled in March 1973 (nine months after the revised closing date), as a result mainly of delays in submission of reimbursement requests.

Investments in the first factories of the factory sector of the tea program, which were financed outside the IDA credit, were completed with about six months' delay, but no major problems arose, except for a few months in 1970 when the existing estate factories were not able to adequately process all the green leaf delivered to them from smallholders, with a consequent decline in the quality and price of the product. Roads were built with some delays throughout the 1967-72 period but no major transport bottleneck has occurred.

The program helped 8,200 largely subsistence farmers to introduce tea as a cash crop -- 50% more than expected -- with an average holding of 0.7 hectares. This development is expected to provide each of them with a cash income of about \$280 from the late 1970s, which according to Bank estimates made in 1972, is a figure above the income obtainable from alternative cash crops. Declining world tea prices and lower than expected yields have been compensated by lower investment costs and larger hectareage of tea planted. Thus, the internal rate of return of the project is now estimated at 14% over an expected lifetime of tea bushes of 50 years, against

a rate of about 13% estimated at appraisal time. Output from the project is expected to contribute at full maturity (1977-78) with \$2.2 million in net annual foreign exchange earnings until 1986, and \$4.1 million thereafter.

There are at present problems of financial planning related to the operation of UTGC factories and to the tea price subsidy given between 1968 and 1971. IDA was expected to discuss this subject in late 1971, but events in the country since then have delayed action.

## Audit of the First Uganda Tea Growers Project

On September 15, 1967, IDA approved a US\$3.4 million Credit to the Republic of Uganda, to be partially onlent to the Uganda Tea Growers Corporation. The purpose of the Credit was to help finance a smallholder tea development program. The loan became effective on January 31, 1968, after the period for completing effectiveness conditions had been extended beyond the original target of December 15, 1967.

### I. The Project

The project was part of the smallholder tea development program of the Uganda Government and the Uganda Tea Growers Corporation (UTGC). The field sector of the program, covering about 1,620 hectares of smallholders' tea estimated to have been planted prior to January 1, 1966, and some 3,925 hectares to be planted between 1966 and 1970, consisted of two parts: Part A included the following UTGC obligations:

(a) To secure and distribute to qualified smallholders well-grown planting material, and to provide credit for the purchase of the planting material during the 1966-70 period. The Credit would cover 100% of the cost of the planting material for the first two hectares of tea planted by any smallholder, and up to 50% of the cost of seedlings for another two hectares.

(b) To secure and distribute to qualified smallholders fertilizers for immature tea (during the first four years after planting), and to provide credit for the purchase of fertilizers on the same basis specified in (a) above.

(c) To provide a training center for smallholders and for staff supervising tea cultivation in the field.

(d) To organize and finance the collection, inspection and transport of green leaf to factories.

Part B of the field sector included the following Government obligations:

(a) To supervise in the field, through staff to be provided under a Supervision Agreement signed in March 1967, smallholder tea cultivation, and to provide housing and transportation for the supervisory staff.

(b) To organize and supervise, through staff especially provided, tea growers' cooperatives.

(c) To train smallholders, either at the training center referred to above, or in the field.

The factory sector of the program included the extension of existing factories and/or the construction and operation of new factories, as needed for the processing of smallholder tea.

IDA had agreed to finance up to \$2.6 million, equivalent to 75% of the expected cash deficit under Part A of the field sector. This cash deficit would be incurred for a number of years as costs would only be recouped through a levy on green leaf when tea matured. This cumulative cash deficit was capitalized. The remaining 25% of the cash deficit was to be financed (up to \$843,000) by the Commonwealth Development Corporation (CDC) in the form of a loan to UTGC. In addition, IDA was to contribute up to \$800,000, equivalent to 80% of expenditures on Part B of the field sector. The IDA Credit also provided for retroactive financing of expenditures incurred from September 15, 1966 shortly after UTGC had become operational.

The IDA Credit represented 53% of the total cost of the investment in the field sector, estimated at \$6.4 million; the CDC contribution amounted to 13% of the investment cost, and the remaining 34% was to be provided by the Government, UTGC (income of the revenue-producing areas of the Tea Training Center) and the smallholders themselves (down payments and payments of the UTGC levies).

The financing of extensions to the existing factories or of new factories was expected to be arranged shortly before the factories would be needed, and would not include participation by IDA. CDC had expressed interest in financing up to 50% of the investment (not to exceed \$2.52 million overall), and it was expected that Agricultural Enterprises Limited (AEL), a subsidiary of the Government-owned Uganda Development Corporation, would also participate. At any rate, the Government had agreed to provide tea-processing facilities.

#### Negotiations

IDA was first approached by the Uganda Government in early 1964. Project preparation had been carried out by CDC, at the Government's request, and the CDC report -- Uganda Tea Survey 1964 -- was published in June 1964. By November 1964, both IDA and CDC had expressed their willingness to proceed with a project, based on the findings of the CDC Tea Survey Mission, after



the Government had accepted the main recommendation from the Mission's report, which was to set up a separate tea authority. A joint IDA/CDC appraisal mission visited Uganda in April/May 1965. Negotiations between IDA, CDC and the Uganda Government were held in Washington in October and were substantially completed by early November 1965. However, from that time it took nearly two years before the credit was approved in September 1967.

Two major areas of conflict existed between IDA and CDC on the one hand and the Uganda Government on the other, in addition to frequent misunderstandings derived from the fact that the tea project was the first experience for Uganda of doing business with IDA. These two areas of conflict refer to institutional and management problems.

#### Institutional Problems

CDC and IDA favored a strong and centralized authority to be set up in analogy to the Kenya Tea Development Authority (KTDA). The Uganda Government thought that a major role could be played by cooperatives, and that a tea authority, if initially necessary, would as soon as possible transfer responsibilities to the cooperatives. After the Tea Survey Mission the Uganda Government accepted that the development of smallholder tea required closer coordination between the field and factory sectors and closer supervision to maintain tea quality than what is required for coffee and cotton. Therefore, it agreed that the creation of an Authority would be desirable. The Uganda Tea Growers Corporation was established in February 1966, although the Government conceived of UTGC more as a coordinating body. During 1967, when UTGC became operational, it was apparent that UTGC had authority to impose levies only over growers who had voluntarily registered with UTGC. It was thought that it would be difficult to persuade the 2,000 growers who had planted tea prior to 1967 to register under the UTGC scheme, as UTGC offered them few, if any, benefits. Most of the growers had signed individual agreements with factories, whereby they paid a levy of 8 cents per pound of green leaf only, to repay the cost of stumps. Registration under UTGC would involve an additional payment of 9 cents/lb to cover fertilizer costs, if applicable, and UTGC's estimated long-term operating expenditures. UTGC at that time did not provide any leaf-collecting services. Non-registration of pre-project growers would mean, however, a substantial loss of income for UTGC from already established tea, although this would be offset somewhat by savings in capital and recurrent costs.

These problems were brought to the attention of IDA through CDC, which was represented on the Board of UTGC. In April 1967, IDA recommended to the Government that steps be taken to register pre-project growers, as

agreed in a draft supplementary letter during negotiations. Whereas it was thought that a statutory instrument would suffice, it became apparent that the UTGC Act was defective. In November 1967, an Amended Bill was published which considerably strengthened the position of UTGC because it provided for compulsory registration of all smallholders; it forbade any person to maintain a tea seed garden or sell tea plants without a permit from the Board of UTGC; it prohibited growers from planting tea in the scheduled areas without a license, and it gave the UTGC Board powers to make by-laws on cultivation practices, administration, organization and management of the schemes. These changes in the law were necessary to make UTGC an organization that could effectively operate, and would be capable of attracting long-term finance from outside sources.

### Management Problems

IDA came to regret that it had softened its position on management aspects during negotiations. It had asked for the right to approve appointments to key management posts, but eventually accepted to be merely consulted about them. It did insist that a senior expatriate Deputy General Manager be appointed but, particularly since it felt that Uganda had accepted this only as a necessary condition to obtain the IDA credit, it was worried that he would not be enough to shore up the Ugandan management appointed, which IDA considered weak. Another issue was the composition of the UTGC Board; IDA feared that, as selected, it was such that UTGC would be subordinated to the directives of the Minister of Agriculture even in day-to-day operations; there were differences of opinion between UTGC and the Government over the interpretation of a clause defining the Minister of Agriculture's ultimate control over UTGC. Although the General Manager was appointed in August 1966, he had no staff in post until the middle of 1967. Neither had UTGC any finances, because the Treasury was unwilling to provide advances, as it was uncertain whether the IDA credit would materialize in view of IDA's objections about staff appointments. In fact IDA came very close to calling the project off on project grounds, but the President of IDA intervened, and renewed efforts were made by the Uganda Government and IDA to solve outstanding issues.

In addition, constitutional problems developed in 1966 which led to the ouster of the King of Buganda and the establishment of the Republic. Given the political and institutional realities in Uganda at the time, a number of the conditions of effectiveness, notably the establishment of a well-staffed UTGC, required decisions on the part of the Government which were genuinely difficult to make. Furthermore, Africanization had progressed much further in Uganda than in neighboring African countries. The

establishment of a strong centralized Tea Authority, which was to operate in different parts of the country where sentiments for regional autonomy and regional loyalties were strong, naturally provoked antagonism. A solution to these different issues acceptable to all parties concerned took almost two years to be worked out.

## II. Project Implementation

### Disbursements

Actual disbursements under Credit 109-UG are shown in Annex Table III. They finally reached 92% of the original amount of the credit; the remaining \$269,000 was cancelled in March 1973 (nine months after the extended closing date of June 30, 1972), reflecting partly small savings in the larger investment program eventually undertaken but mainly delays in submission to IDA of requests for reimbursement, particularly for staff salaries, under Part B of the project. There was no List of Goods, since IDA financed UTGC's cash deficit, in analogy with the Kenya smallholder tea project. The lack of incentives to hold down costs and maximize revenues in relation to this method of project financing has been recognized by IDA, although the impact of the method on the relative efficiency of UTGC's operations would be very difficult to assess. In the appraisal of a follow-up UTGC project the usual procedure -- with a list of goods -- of financing project items was envisaged.

Due to the delays which occurred between negotiations and approval, it was decided to allow retroactive financing for expenditures extending back 12 months prior to credit signature in September 1967. Since UTGC was not operative until September 1966, and senior staff other than the General Manager did not take up their positions until the middle of 1967, this clause on retroactive financing did not seriously affect UTGC's financial position. The amount of retroactive financing required and approved was about \$200,000. Until UTGC became operative new plantings continued to be supervised by the Ministry of Agriculture.

Disbursements under Part A of the Credit affecting UTGC's obligations did not present major difficulties, even though problems occurred during the project period, which obscured somewhat the financial situation of UTGC (see page 14-15). A special supervision mission visited Uganda in June 1972 to investigate in detail disbursement claims since early 1971, in view of some accounting procedures which IDA considered unsatisfactory but which did affect UTGC's cash deficit. Since December 1970 the post of Chief Accountant has changed twice, and there were accounting complications

connected with the acquisition and operation by UTGC of factories, and the termination of the Government price support. Disbursement claims could be satisfactorily reconciled with the UTGC accounts, which convinced IDA that disbursements had been properly made. UTGC costs were largely for head office, transportation and seed and nursery development.

Disbursements under Part B of the Credit, largely for supervisory staff salaries, were less satisfactory because, due to frequent changes in accounting staff, substantial delays occurred in claiming reimbursements. In addition, savings under Part B occurred because a number of houses for field staff required under the supervision agreement were not built, despite repeated representations by IDA over the years.

#### Planting Program

The project provided for the planting of 3,925 hectares of tea in the 1966-70 period. A total of 4,223 hectares, or 8% more than planned was actually planted, a figure which remains within the limits permitted by the Credit Agreement. Pre-project plantings, which were carried out from the early 1960s, were found to exceed estimated totals in the appraisal report by 486 hectares, or 30%. Aggregate total plantings at the end of 1970 thus stood at 6,329 hectares, 14% higher than the expected 5,545 hectares. Planting targets were exceeded in the Western Region (except in Toro District) a region generally more suitable for tea than Buganda, where plantings fell short of targets.

When part of the funds under the credit were expected to remain undisbursed, IDA agreed in May 1971 that they be used for the planting of an additional 1,538 hectares in 1971. In addition, CDC agreed to increase the amount of its original loan, to compensate for the effects of the devaluation of sterling. Due to severe drought this additional planting program was extended into 1972. In these two years 1,508 hectares, or 98% of target, were actually planted. A special condition of these additional plantings was that they should benefit smallholders who would not need hired labor -- which was provided in part by refugees from neighboring countries -- to cultivate their fields, thus allowing them to adjust better to the deterioration of world tea prices because of the lower cash costs to be incurred.

About 5,500 smallholders were expected to benefit from the project between 1966-70, with an average holding of 0.71 hectares per grower. In fact 5,416 growers benefitted with an average holding of 0.78 hectares. Another 2,800 farmers benefitted from the plantings in 1971 and 1972 bringing

the total number of new growers under the project to about 8,200. The average plot size for plantings in 1971 was 0.54 hectares and about the same in 1972, in line with the condition for the additional plantings put by CDC and IDA, following extensive analysis by IDA of the revised rate of return taking into account declining prices and alternative plot sizes. The average tea holding in July 1973, for all smallholders, was estimated at 0.78 hectares. However, for most holdings in Ankole, Kigezi, Bunyoro, and Buganda, the average was about 0.5 hectares. In Toro District much tea was planted prior to the establishment of UTGC in plots averaging 2.6 hectares. Some growers had in excess of 80 hectares in tea.

### Supervision

Tea cultivation by smallholders is supervised in the field by tea specialist staff seconded to UTGC by the Ministry of Agriculture, under the terms of a Supervision Agreement dated March 8, 1967. During 1967 and 1968 actual staffing levels overall remained below agreed levels. However, during these years plantings were also behind schedule. A staff upgrading policy was effected which reduced the number of instructors and increased the number of tea officers. Through 1970 the middle level staff (Tea Officers and Instructors) remained below strength, and it is doubtful whether they could supervise Assistant Instructors as effectively as implied in the staffing pattern envisaged in the Supervision Agreement. The staff upgrading policy apparently had been decided upon prior to the IDA project. IDA was aware of these changes, but it agreed because the upgrading was expected to lead to improved quality of available staff. In 1971, the lower rank of instructor was reintroduced, largely for budgetary reasons. From 1969 an increased number of Assistant Instructors was posted to UTGC to bring their total above agreed strength. Much closer adherence to the Supervision Agreement has existed regarding staff for cooperatives, except for Supervisors, who were not available until 1968 (see Annex Table IV). It has not been possible to assess the impact of these variations in the availability of supervisory staff on the project.

Problems of maintaining staff morale have been prevalent for some time. Tea Officers, seconded from the Ministry of Agriculture, felt that they were passed over for promotion and upgrading courses. Seconded officers in fact had divided loyalties, the Ministry and UTGC. IDA recommended that staff be transferred to UTGC and that a separate, somewhat higher, pay scale be adopted. This proposal was rejected because it had never been done for any other semi-public body and contravened Government policy not to raise salaries during the then current Five Year Plan period. For several years limitations on mileage allowance and lack of housing facilities in the growing

areas have further tended to have an adverse effect on the efficiency of field staff. This lack of facilities partially eliminated the potentially beneficial effects of the better trained staff resulting from upgrading policies. On the whole, however, the quality of supervision appears to have been reasonable, but with considerable room for improvement.

### Leaf Collection Service

Leaf collection services have been satisfactorily organized by UTGC. They were begun on a voluntary basis in parts of the Toro and Ankole Districts in 1967 and between 1968 and 1970 were extended to cover all of the Western Region and the Mityana Area in Buganda. No collection services were organized in other parts of Buganda since the number of growers and their dispersion made such services uneconomic.

Control over the location of tea plots in the program has not been as tight as may have been desirable. Consequently, plots tend to be widely dispersed in certain areas explaining why extension and collection services are relatively inefficient. Moreover, the planting plan was drawn up prior to determining the detailed location and size of future factories.

Growers in Buganda deliver their green leaf to nearby estate factories. Initially large growers, particularly in Toro District, objected to the imposition of UTGC services: they had made their own arrangements for deliveries to estate factories, often with transport equipment of their own, and they did not feel that they would benefit much from UTGC. Those growers who transported their own leaf were given a reduction of the UTGC levy. As thickening up of plantings in subsequent years proceeds, and the tea road network expands, the efficiency of collection services, which is rather low at present, can and should be improved through lengthening of the plucking day, a reduction of underplucking, and shorter collecting trips. The introduction of leaf collection and inspection services by UTGC led to a reduction in the spread of green leaf prices paid by estate factories to farmers.

### III. Other Investments

#### Factory Sector

Serious problems arose in arranging processing facilities for smallholder tea. However, in the end, most of the problems have been overcome, and the period when existing factories were unable to cope with green

leaf deliveries was confined to only several months in early 1970. During this period, overcrowding of facilities led to a deterioration of quality and price for made tea.

The provision of processing facilities was not financed by IDA. CDC was expected to finance up to 50% of the factories needed. Long negotiations ensued between the Government, UTGC and various commercial interests. In the end CDC withdrew because it was not convinced that the quality of management agents appointed by the Uganda Government was such as to make CDC participation possible. Two new factories were built and became operational in September 1970, about six months behind schedule. Total cost was US\$ 9.5 million. Funds were obtained from the International Coffee Organization Diversification Fund (US\$ 4.8 million), the East African Development Bank (US\$ 3.2 million), a machinery loan from the British Government (US\$ 1.3 million), and the remaining US\$ 0.2 million from UTGC resources.

The withdrawal of CDC led to a heavy involvement on the part of IDA in the negotiations leading to the setting up of factories. This was a case in which the continuity of IDA staff on supervision proved to be particularly useful.

Agricultural Enterprises Limited (AEL), a subsidiary of the Government-owned Uganda Development Corporation, is engaged as managing agent. The choice of AEL as managing agent is questionable because AEL did not have the resources to provide for working capital as is customary in the tea industry. Moreover, AEL did not participate in the financing plan of the factories and had no interest beyond the amount and nature of the various commissions charged for the managing agents' contracts. The burden of financing part of the factory program was thus laid on UTGC itself. An IDA appraisal mission, in September/October 1971, for the Second Phase of the UTGC program recommended that the factory layout and fermenting equipment in the two factories be changed. This recommendation, which contradicted an observation of an earlier IDA supervision mission, was contested by the Uganda Government, but a factory consultant subsequently engaged by IDA confirmed in April 1972 most of the recommendations, because the factories were not felt to be capable of producing tea of satisfactory quality. Underlying this conflict about factories were diverging views by different engineers about the wisdom of introducing more automated handling procedures which were not yet widely used in East Africa, but which had been successfully introduced elsewhere. The issue is apparently not closed, but tea from the Igara factory obtained a premium over the average for all Uganda tea sold in the London market, of 11% in 1972 and 5% in 1973. Tea from Mabale commanded a premium of 5% in 1972 and 2% in 1973.

In January 1971, a third factory at Kigezi (since known as Kayonza Tea Factory) was taken over by UTGC from AEL, which some years before had planned an extension of a tea estate near the factory that did not materialize, thus making the factory uneconomic to operate on that limited basis. The price of the factory was agreed at UShs. 1.3 million.

Negotiations for the construction of a fourth UTGC factory, Mpanga Tea Factory, were concluded in 1971, financed by UShs. 4.2 million from the East African Development Bank. Construction is not yet completed.

#### Roads

The Government had agreed to construct and maintain all roads necessary for the collection of green leaf and for its delivery to the factories. The roads did not form part of the project. IDA Credit 108 of July 28, 1967, which was approved shortly before the Tea Project Credit, provided funds for the construction of two tea roads totalling 38 km in length, and expected to cost \$0.4 million, exclusive of detailed engineering and supervision. Delays occurred in the execution of this project mainly because of staff shortages in the Ministry of Works. A technical assistance component was included in a follow-up highway project, IDA Credit 164 of September 29, 1969. In addition, this second project provided funds for the construction of an additional 330 km of tea roads, at an estimated cost of \$2.45 million.

The 38 km of tea roads under Credit 108 were constructed between June 1969 and April 1970 at a cost of \$0.2 million, or less than half of what was originally envisaged. Construction of the tea roads under Credit 164 began in the second half of 1971 and were largely completed by early 1973, at costs probably close to estimates or somewhat below, although no IDA supervision mission has been in the field since April 1972 to confirm these estimates.

#### IV. Institutional Aspects

##### Cooperatives

The Government and IDA expected UTGC to be active in promoting tea farmers' cooperatives. The Government envisaged that in due course most of the activities carried out by UTGC itself could be taken over by these cooperatives. Contrary to the situation with regard to other cash crops, tea cooperatives had not yet become effectively established in the



mid-1960s, thus requiring the prior establishment of UTGC. In practice, efforts at organizing cooperatives were made by staff from the Ministry of Agriculture as well as staff seconded to UTGC. About 50% of the farmers are organized in 12 cooperatives, with another seven cooperatives reportedly in formation.

It has not been possible to investigate in detail the role and future functions of these cooperatives. However, some observations can be made at this point. Early in the history of the project a proposal was discussed to organize small-scale, cottage industry type tea factories, which might have been suitable to process green leaf produced by a single relatively small cooperative. This proposal had not been studied in detail and in fact several large factories were constructed. Relatively large cooperatives are necessary in order to have sufficient volume of green leaf to realize economies of scale in leaf collecting services. A fortiori it will take considerable time for individual cooperatives to become effective in handling sufficient production to let the rather large factories produce at full capacity. The computerization of growers' accounts, by helping further centralization, will also delay the handing over of UTGC's functions to individual cooperatives.

#### Institutional Problems

The institutional problems related to the establishment of UTGC have already been discussed. IDA played an important role in promoting a structure for UTGC which proved to be a workable one, in spite of the problems faced by UTGC since its creation. A large proportion of IDA's supervision missions' time was devoted to providing advice on institutional matters, on the relations -- and conflicts -- of UTGC with other Government agencies and with CDC and IDA themselves. These problems have continued to influence UTGC operations, leading to slow decision making, frequent lack of coordination, and changing positions on major issues. In addition, IDA's role in pushing for a timely decision on the factory investments was crucial for ensuring that the fruits of the planting program would be properly used.

Over the years UTGC's capabilities for handling tea programs as the one partially financed by the IDA Credit have increased considerably. However, in view of emerging problems related to financial planning continued institution-building support would still seem highly desirable. Considerable problems stemmed from the fact that UTGC's initial membership was very heterogeneous. It included a large number of small growers who

were expected to be gradually organized in cooperatives, and also a small number of established and very large growers, whose interests differed substantially from those of the small farmers. These two groups proved to be a divisive element in the UTGC Board, making UTGC's management difficult. In retrospect, these large growers should have been excluded from the project, or the Government should have made a study of the potential conflicts stemming from their participation. The CDC Tea Survey did not touch upon this issue, nor did IDA become aware of it until early in 1967.

In the end, some of the early opponents to UTGC became warm supporters. The Government green leaf price subsidy to growers, which did not benefit growers and estates outside UTGC, proved to be particularly important in this changing attitude. Some of the large holdings suffered from poor management and absentee ownership. Without the subsidy they would have been very hard pressed for survival in view of the decline in tea prices and the devaluation of sterling.

#### V. Project's Impact

##### Yields

Yield build-ups were estimated again in 1971. As in Kenya, initial yield assumptions had been too optimistic. The Uganda estimates underlying the appraisal report are compared with the more recent estimates below (in kg/made tea per hectare).

	Year	4	5	6	7	8	9	10
Appraisal Report (1967)		280	560	900	1125	1125	1125	1125
1971 Estimate		270	480	700	860	960	1020	1070

Yields in Toro, where much of the tea is in relatively large holdings, often with absentee ownership, are generally below average. In Buganda the low yields are due to less favorable growing conditions. Plucking standards vary from grower to grower, but there has been a need for improving standards overall. A number of plots were found in 1970 to have been abandoned, apparently because of labor shortages due to a Government ban on migrant labor from neighboring countries.

Generally the supply of planting material to farmers has been adequate. Some delays, in part due to poor seed quality, occurred in the early years. UTGC has apparently not had tight control over areas planted as discrepancies between areas supplied from UTGC and actual bush counts were reported at times, indicating that some growers had obtained stumps, of unknown quality, from outside sources. Experimentation with vegetatively propagated (VP) material, which generally is superior to stumps in that it facilitates better control over quality, and gives higher yields, continued

during the project period. Starting in 1968, VP material was gradually distributed to growers. In 1971 about 30% of plantings were carried out with VP material, against 10% in 1970. The rather slow rate of introducing VP material stems from the fact that some of the varieties which appeared to do well in Kenya gave disappointing results in Uganda, thus requiring additional testing. In addition, it is doubtful whether UTGC was capable of handling a rapid acceleration of plantings, as occurred in Kenya following the introduction of VP material.

The Credit Agreement stipulated that fertilizers for immature tea should be provided on credit to farmers. This has not been done, one of the reasons being that it proved difficult to persuade farmers to apply fertilizer to immature tea, in addition to applying fertilizer at the time of planting, because they were not convinced that this additional debt burden would be justified. Moreover, UTGC argued that fertilizer was difficult to distribute and funds difficult to collect due to complications in deciding whether tea was immature or mature. In some areas plucking started within two years and in others only after three years. UTGC has provided fertilizer and implements for mature tea on 3-4 months credit, with growing acceptance by farmers. In 1971, fertilizer usage was still 50% below Tea Research Institute recommendations. In April 1969, UTGC requested, and was granted, IDA approval for reducing the capital levy by two cents per pound, the rate at which fertilizer credit was to be repaid. The net effect on the UTGC cash flow was small.

The application of fertilizer to immature tea has been somewhat controversial in the past. The appraisal report of the First Kenya Smallholder Tea project asserted in 1964 that the use of fertilizers and plant protection materials was not necessary for the time being. However, it is not clear whether this holds for the immature or for the mature tea. Also, it has not been possible to assess the impact on the final outcome of the project of these changes in fertilizer use.

The training center school was not completed until June 1970. Protracted delays extending over several years have occurred due to conflicts between ministries, contractors and subcontractors, mainly on the water connection. In 1970, 242 tea growers attended a one-week course, and 842 farmers attended the course in 1971. In both years a number of courses, varying in length from one to two weeks, were held for about half the supervisory staff.

#### Financial Aspects

Over the 1966-71 period UTGC expenditures were 7% below forecasts, for an actual planting program 31% larger than foreseen in the appraisal

report. Expenditures for head office and training center were higher than forecasted with savings effected on planting materials and nurseries, mainly because of the lower cost of VP planting material (Table V). Savings on fertilizers were due to the replacement of the fertilizer scheme for immature tea by one for mature tea, and the partial acceptance by farmers of the latter. Due to a slower than anticipated establishment of leaf collection services, early savings occurred in 1967 and 1968, which were compensated in later years.

Receipts for the 1966-71 period were 18% lower than expected at the time of appraisal. Down payments were only about 10% of forecast. The reason for this low level of down payments is that at appraisal time it was assumed that smallholders would be given credit for the total of their investments on the first two hectares, but they were expected to make a down payment of 50% of the investments on the additional two hectares. In practice, most developments of up to four hectares have received 100% credit; the appraisal report apparently overestimated the farmers' ability to make the downpayment required, in addition to the charges for UTGC operating expenses.

The revenue levy yielded more than expected, apparently because of the larger than expected pre-project plantings. The capital levy on project plantings was collected from 1970, when computerized accounts were introduced (see Table VI). A number of tea growers had borrowed from the Uganda Commercial Bank and from Agricultural Enterprises Ltd., prior to the establishment of UTGC, to develop their tea, and had also later obtained credit from UTGC. The latter then deferred recovery of its loans from those farmers until they had paid to the Bank or the AEL so as to alleviate the farmers' debt burden. Had UTGC become operational as early as originally envisaged, some of these problems would have been avoided. The savings on expenditures outweighed the shortfall in revenues, leading to a cash deficit 3% smaller than expected for the 1966-71 period.

The devaluation of sterling in November 1967, which was not followed by Uganda, led to a sharp reduction in farmers' receipts. The imposition of UTGC and its revenue levy at the same time would have meant additional expenses for the farmers. It was thought that the combination of these two factors would adversely affect incentives to farmers and the prospects for UTGC establishing itself successfully. Hence, the Government decided to subsidize the green leaf price to keep it up to 40 Ucents per pound. As prices did not rebound, subsidies were extended in subsequent years. The subsidies, amounting to 4.2 Ucents per pound of green leaf in 1968,

6.0 Ucents in 1969, 6.6 Ucents in 1970 and 6.3 Ucents in 1971, totalled US\$ 3.36 million at the end of 1971. These amounts were provided as loans and were repayable when green leaf payments were to exceed 40 Ucents per pound. IDA agreed in January 1969 to these procedures. Although IDA was generally not in favor of subsidization, the acceptance of this particular subsidy seems to have been based on the wish not to jeopardize the project at the outset after it had finally materialized at the cost of a rather strained relationship between the Uganda Government and IDA. IDA had expected that prices would not return to pre-devaluation levels and insisted that, if there was to be a subsidy, it should be in the form of a grant and not of a loan, so as not to affect UTGC's financial position. At present there are serious doubts whether these loans will be repaid.

Several problems which have emerged recently may undermine UTGC's financial position in future years. The UTGC factories have been behind schedule with their green leaf payments to UTGC. Furthermore, the Managing Agency Agreements need to be amended to establish that Agents rather than UTGC provide the working capital for the factories, as is customary in the tea industry. UTGC financial operations should be tightened. If a further expansion of smallholders' tea were to take place overhead expenditures would be reduced and the efficiency of leaf collection services could be improved. Apparently, the current level of the revenue levy would be insufficient to cover UTGC's operating expenditures. However, a decision to expand tea growing would have to be taken in the wider context of expectations about the development of the world tea market. IDA was expected to discuss these subjects in late 1971, but events in the country since then have delayed action.

### Project Benefits

The benefits from the project will largely accrue in the future because tea plantings in the first years are only now beginning to mature. Some 5,500 smallholders were expected to benefit from the project, each planting an average of 0.71 hectares of tea. In practice about 8,200 growers participated under the expanded project, averaging 0.70 hectares of tea per grower. The project will help Uganda's balance of payments considerably: at appraisal it was estimated that the gross foreign exchange value of production at full development (1976 onwards) would amount to about \$4.1 million per year; that figure is now expected to be about \$4.9 million per year. Deducting the estimated foreign exchange component of production costs and debt services, the net increase in foreign exchange earnings due to the project would be about \$2.2 million per year until about 1986 and about \$4.1 million thereafter, against appraisal estimates of \$1.8 million and \$3.4 million, respectively.

Reductions in yield estimates (16%) and in expected tea prices (15-20%) have been compensated by the much larger hectareage (50%) that was planted at the same cost of the smaller program envisaged in the appraisal report. The internal rate of return to the project, including investments in roads (see page 10), is now estimated at 14% based on otherwise the same assumptions as the appraisal report, which estimated an internal rate of return of about 13%.<sup>1/</sup>

Farmers' benefits were estimated at appraisal time at \$187 for the first 0.4 hectares of tea, assuming a payment of 88 Ucents per kg of green leaf. At the lower tea prices now expected towards the late 1970s, but assuming that UTGC efficiency increases so that no increase in revenue levy will be required, and that factory-operating costs will be as envisaged in the appraisal report for the second UTGC project, farmers' income may be about \$165 from the first 0.4 hectares or about \$280 for the current average holding of 0.7 hectares. According to Bank estimates made in 1972, this income is substantially above that obtainable from alternative cash crops in Uganda. This estimate assumes that output from this project will not further depress world tea prices.

## VI. Conclusions

Despite rather ominous beginnings project implementation improved considerably over time and the objectives of the project were accomplished. A much larger hectareage, involving more farmers, could be planted at the same cost of the original program. Because most new growers are relatively small farmers, benefits from the project will be widespread in the future as tea planted under the project matures. The rate of return is re-estimated at 14% against 13% at appraisal.

The institutional aspects of this project were very important, and IDA's insistence on having a relatively strong institution such as UTGC to manage and supervise the program, seems to have been justified. The

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<sup>1/</sup> In calculating the rate of return all investment costs in the Field Sector and the Factory Sector, including supervision over an 11-year development period were taken into account. Operating costs in the Field Sector and in the Factory Sector have been taken for the 50-year life expectancy of the project. The benefits have been calculated by adjusting the expected London prices -- the average tea price has been about the same as prices for all Uganda tea in recent years -- to UTGC ex-factory prices, at constant exchange rates between sterling and the Uganda Shilling.

tea cooperatives do not seem to have had as yet the impact expected by the Uganda Government. Whereas in many IDA-financed projects initial project management is provided by expatriates, it is important to note that this project has been managed from the very beginning by Ugandans (with the single exception of the Deputy General Manager, who remained three years in his post). Also, IDA's and CDC's insistence that UTGC adopt policies and practices analogous to those prevailing in the Kenya Tea Development Authority sometimes overlooked the substantial differences which existed between the two countries with respect to institutional and political realities.





TABLE 1

## Uganda Smallholder Tea Project

UTGC: Planned and Actual Hectares Planted

	Appraisal Report	Up to 1965 Actual <sup>1/</sup>	1966		1967		1968		1969		1970		Sub Total 1966/70		1971	1972	Grand Total Actual
			Planned/Actual	Planned/Actual	Planned/Actual	Planned/Actual	Planned/Actual	Planned/Actual	Planned/Actual	Planned/Actual	Planned/Actual	Planned/Actual	Actual	Actual			
Toro	907	1397	275	229	221	258	381	330	381	304	385	239	1642	1360	157	139	3052
Ankole	296	354	97	144	138	202	178	291	178	292	182	203	774	1133	101	137	1724
Kigezi	239	131	105	78	73	66	130	115	130	327	138	205	575	790	343	69	1334
Bunyoro	65	29	36	24	45	59	93	51	93	124	93	169	360	427	173	76	705
Western Region	1507	1910	514	475	476	585	782	786	782	1047	798	816	3349	3709	774	421	6814
Mubende	73	154	14	24	49	24	97	110	97	134	97	98	354	390	97	85	725
Masaka	28	27	8	7	16	8	32	23	32	15	32	34	122	89	32	43	190
West Mengo	-	-	-	-	-	2	-	5	-	-	-	-	-	7	-	-	7
East Mengo/Bombo	12	16	-	1	16	3	28	3	28	6	28	17	100	29	19	36	101
Buganda Region <sup>2/</sup>	113	196	22	32	81	37	158	142	158	155	158	149	576	514	148	164	1022
Grand Total	1620	2106	536	507	557	622	940	928	940	1202	956	964	3925	4223	923	585	7836

<sup>1/</sup> The plantings of tea during the early 1960's had been loosely controlled by the Ministry of Agriculture. Stumps could be obtained from various sources. When UPIC began registrations based on actual bush counts a revision of the assumed hectareage of pre-project plantings was necessary.

<sup>2/</sup> The figures in the Districts of Buganda region are not strictly comparable, due to the different classification in the appraisal report.

Source: UTGC

TABLE II

Uganda Smallholder Tea ProjectUTGC: Number of New Growers Added

	<u>Up to 1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>Total</u>
Toro	537	152	139	31	177	181	97	1314
Kigezi	401	127	75	206	919	722	918	3368
Bunyoro	43	34	50	81	194	149	100	651
Ankole	357	98	214	447	433	599	206	2354
Western Region	<u>1338</u>	<u>411</u>	<u>478</u>	<u>765</u>	<u>1723</u>	<u>1651</u>	<u>1321</u>	<u>7687</u>
Mubende	56	20	9	79	94	37	311	606
Masaka	10	9	9	6	8	56	51	149
West Mengo	-	-	1	-	-	-	-	1
East Mengo	1	1	1	-	5	53	37	98
Buganda Region	<u>67</u>	<u>30</u>	<u>20</u>	<u>85</u>	<u>107</u>	<u>146</u>	<u>399</u>	<u>854</u>
Total	1405	441	498	850	1830	1797	1720	8541

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Source: UTGC

TABLE III

Uganda Smallholder Tea Project

IDA Actual Disbursements under Credit 109-UG (\$'000)  
For the Field Sector

	<u>Part A</u> <sup>1/</sup>	<u>Part B</u> <sup>2/</sup>	<u>Total</u>
1967/68	507	-	507
68/69	597	112	709
69/70	316	90	406
70/71	360	87	447
71/72	736	229	965
72/73	-	97	97
Total disbursed	<u>2516</u>	<u>615</u>	<u>3131</u>
Cancelled	<u>84</u>	<u>185</u>	<u>269</u>
Amount of Credit	<u>2600</u>	<u>800</u>	<u>3400</u>

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1/ Included UTGC responsibilities

2/ Included government responsibilities, mainly supervision of cultivation of tea in the field.

TABLE IV  
Uganda Smallholder Tea Project  
UTGC: Planned and Actual Staffing for the Field Sector

	1966 Actual	1967 Planned/Actual	1968 Planned/Actual	1969 Planned/Actual	1970 <sup>2/</sup> Planned/Actual	1971 <sup>2/</sup> Planned/Actual	1972 <sup>2/</sup> Actual	1973 Actual
<u>Field Supervision<sup>1/</sup></u>								
Senior Tea Officers	2	2	2	3	2	3	2	2
Tea Officers	4	6(3)	4	9	10	9	13	15
Instructors	3	11(2)	2	13	3	13	-	7
Assistant Instructors	32	32	35	32	32	63	32	107
Total	41	51(5)	43	56	48	56	79	131
<u>Cooperative Staff</u>								
Senior Co-op. Officer	1	1	-	1	-	1	1	1
Co-op. Officers	1	1	1	1	1	-	1	1
Asst. Co-op. Officer	1	3	1	3	1	3	4	4
Supervisors	-	13	-	13	13	13	14	18
Total	3	18	2	18	15	18	17	24
<u>Training Center</u>								
Senior Tea Officer	-	-	-	1	-	1	1	1
Tea Officers	-	-	1	1	2	1	1	1
Instructors	-	-	-	3	-	3	-	-
Total	-	-	1	5	2	5	2	2

<sup>1/</sup> Figures in ( ) indicate numbers of staff being trained.

<sup>2/</sup> The appraisal report assumed staffing levels to remain constant from 1968.

In practice, actual staffing levels since then take account of the increased hectareage planted. Comparison of planned and actual staffing for recent years is thus not very meaningful.

Source: UTGC

TABLE V

## Uganda Smallholder Tea Project

UTGC: Expenditures, Forecast and Actual of the Field Sector

(UShs. '000)

		<u>1966</u>	<u>67</u>	<u>68</u>	<u>69</u>	<u>70</u>	<u>71</u>	<u>Total</u>
Head Office	forecast	111	837	794	744	780	768	4034
	actual	<u>146</u>	<u>703</u>	<u>1115</u>	<u>1166</u>	<u>1296</u>	<u>1722</u>	<u>6198</u>
	difference	(35)	134	(321)	(422)	(516)	(1004)	(2164)
Training Center <sup>1/</sup>	forecast	56	1335	576	583	594	562	3706
	actual	<u>1405</u>	<u>495</u>	<u>552</u>	<u>561</u>	<u>1167</u>	<u>564</u>	<u>4744</u>
	difference	(1349)	840	24	22	(573)	(2)	(1038)
Leaf Collection	forecast	-	676	2191	1305	1205	1325	6702
	actual	<u>-</u>	<u>458</u>	<u>757</u>	<u>1396</u>	<u>1880</u>	<u>1751</u>	<u>6242</u>
	difference	-	218	1434	(91)	(657)	(426)	460
Planting Material & Transportation	forecast	1333	1550	2615	2280 <sup>2/</sup>	285	285	8348
	actual	<u>-</u>	<u>1463</u>	<u>1740</u>	<u>293</u>	<u>371</u>	<u>375</u>	<u>4242</u>
	difference	1333	87	875	1987	(86)	(90)	4106
Nurseries	forecast	-	1644	1980	2416	104	-	6144
	actual	<u>59</u>	<u>799</u>	<u>2494</u>	<u>1928</u>	<u>1523</u>	<u>1645</u>	<u>8448</u>
	difference	(59)	845	(514)	488	(1419)	(1645)	(2304)
Fertilizer - immature tea - mature tea	forecast	-	400	555	604	678	482	2719
	actual	<u>-</u>	<u>43</u>	<u>206</u>	<u>417</u>	<u>481</u>	<u>660</u>	<u>1807</u>
	difference	-	357	349	187	197	(178)	912
Contingencies	forecast	-	759	957	590	547	628	3481
Interest on Loans	forecast	-	-	516	761	874	952	3103
	actual	<u>2</u>	<u>73</u>	<u>394</u>	<u>647</u>	<u>987</u>	<u>1732</u>	<u>3835</u>
	difference	(2)	(73)	122	114	(113)	(780)	(732)
Total	forecast	1500	7201	10184	9283	5067	5002	38237
	actual	<u>1612</u>	<u>4034</u>	<u>7258</u>	<u>6408</u>	<u>7705</u>	<u>8499</u>	<u>35516</u>
	difference	(112)	3167	2926	2875	(2638)	(3497)	2721

<sup>1/</sup> The training center was not transferred until early 1967. The training school was opened in 1970.

<sup>2/</sup> Includes additional planting material for plantings in 1971 and 1972.

Source: UTGC

TABLE VI

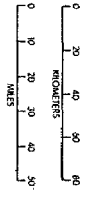
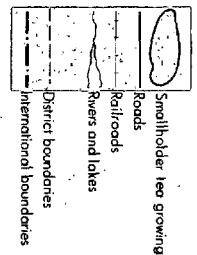
## Uganda Smallholder Tea Project

UTGC: Receipts, Forecast and Actual of the Field Sector  
('000 US\$)

		1966	67	68	69	70	71	Total	
Down Payments	forecast	-	195	317	322	334	48	1216	
	actual	-	39	42	29	11	7	128	
	difference	-	156	275	293	323	41	1088	
Tea Training Center	forecast	31	160	242	324	384	436	1577	
	actual	31	178	215	259	329	495	1560	
	difference	-	(18)	(24)	65	5	(59)	17	
Revenue Levy	forecast	-	-	773	1103	1495	1993	5364	
	actual	-	63	918	1352	1595	1790	5718	
	difference	-	(63)	(145)	(249)	(100)	203	(354)	
Capital Levy	forecast	-	10	68	241	533	1102	1954	
	actual	-	-	-	-	262	598	860	
	difference	-	10	68	241	271	504	1094	
Total	forecast	31	365	1400	1990	2746	3579	10111	
	actual	31	280	1178	1640	2247	2890	8266	
	difference	-	85	222	350	499	689	1845	
Excess of Expenditures over Receipts	forecast	1469	6836	8784	7293	2321	1423	28126	
	actual	1581	3754	6080	4768	5458	5609	27250	
	difference	(112)	3082	2704	2525	(3137)	(4186)	876	
<u>Development Grants and Loans</u>									
Uganda Government Tea Training Center		-	1533	132	-	-	-	1665	interest free, repayable over 20 years from 1970
IDA Credit 109-UG		-	-	5755	2536	3001	5067	16359	interest 6%, repayable over 14 years from 1973
CDC		-	-	1918	846	1000	1702	5466	1 1/4% first 7 years, repayable over 14 years
Government Short Term Loans		320	5380	-	-	-	-	5700	5%, no repayment terms
Total		320	5380	7605	3362	4001	6769	24190	

1/ Source: UTGC

# UGANDA SMALLHOLDER TEA DEVELOPMENT PROJECT



The boundaries shown on this map are not necessarily authoritative or accepted by the United Nations and the United Kingdom.

