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Report No. 18087

PERFORMANCE AUDIT REPORT

REPUBLIC OF UGANDA

SOUTH WEST REGION AGRICULTURAL REHABILITATION PROJECT (CREDIT 1869-UG)

June 26, 1998

Operations Evaluation Department

Currency Equivalents (annual averages)
Currency Unit = Ugandan Shilling(USh)

At Appraisal:	Ush 60 = US$ 1
At Completion:	Ush 1,000 = US$ 1

Abbreviations and Acronyms

AEP	Agricultural Extension Project
ARTP	Agricultural Research and Training Project
ASIP	Agricultural Sector Investment Program
CS	credit scheme
DFI	District Farm Institute
ERR	economic rate of return
FAO-CP	FAO/World Bank Cooperative Program
GDP	gross domestic product
GOU	Government of Uganda
ICR	Implementation Completion Report
IDA	International Development Association
IFAD	International Fund for Agricultural Development
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
M&E	monitoring and evaluation
MOF	Ministry of Finance
MOLG	Ministry of Local Government
MTR	Mid-Term Review
NARO	National Agricultural Research Organization
OED	Operations Evaluation Department
PAR	Performance Audit Report
PCU	project coordination unit
PY	project year
RFI	rural financial intermediary
RM	resident mission
SAR	Staff Appraisal Report
SOF	Special Operation Facility
SWUADA	South West Uganda Agricultural Development Agency
SWRARP	South West Region Agricultural Rehabilitation Project
TA	technical assistance
UCB	Uganda Commercial Bank

Fiscal Year

Government:	July 1 - June 30

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Office of the Director-General
Operations Evaluation

June 26, 1998

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Uganda: South West Region Agricultural Rehabilitation Project (Cr. 1869-UG)

Attached is the Performance Audit Report prepared by the Operations Evaluation Department (OED) on the above project, which was supported by Credit 1869-UG for US$10 million. The credit was approved in February 1988 and closed in June 1996 after a two-year extension. The project was cofinanced by the International Fund for Agricultural Development (IFAD) for which a loan of US$12 million was approved in February 1988. In addition, a grant of US$300,000 was approved by IFAD from its Special Operation Facility. A total of US$0.71 million was canceled.

The project's objectives were to increase food production and raise the incomes and living standards of small farmers in four (later six) districts. At appraisal, the project rationale was agricultural rehabilitation; it comprised four components: (i) adaptive research and extension; (ii) supply of agricultural inputs; (iii) rehabilitation of rural feeder roads; and (iv) project management, monitoring and evaluation to coordinate implementation, evaluate impact, and administer a community development fund. The rural roads and agricultural inputs components commanded about 80 percent of project resources. The community development component was developed after project approval to become a separate component and included a pilot credit sub-component. IFAD's loan agreement was amended twice: once in 1992 to include a pilot credit sub-component and then in 1994, at the request of the borrower, to incorporate a small valley dams component. The project was appropriate to the region's needs at appraisal and were consistent with the government's development strategy.

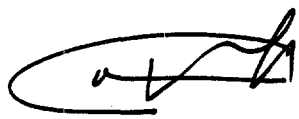
The project only partially achieved its objectives. Implementation was slow until the mid-term review (MTR) in 1992, at which time the project rationale was changed from rehabilitation to long-term development. However, no change was made either in the design of the project components or to the development agreement. Inadequate counterpart funding was a persistent problem, although the situation improved in the post-MTR period. The share of project investment in final costs was significantly lower than planned; that of recurrent costs (operating costs, technical assistance, and overseas training) was significantly higher. The project helped revive adaptive research and extension and had a positive impact on the production of bananas and Irish potatoes in the region. The community development component had a positive impact as well by providing training and financial assistance mostly to women's groups. However, the grant and credit programs could have been better targeted.

The agricultural inputs component suffered from delays resulting in lower than expected volume of imports. Inadequate market monitoring and procurement delays led to the importation of inappropriate inputs and pricing difficulties. The component soon became redundant with the rapid emergence of the private sector, but the imports continued well beyond the time they were necessary. As a result, although the project lent some early support to the development of retailers by providing timely stocks, overall it

had a distortionary impact on the inputs market as it subsidized inputs and often crowded out wholesalers. The project's biggest component, rural feeder roads, got off to a poor start because of an underestimation of rehabilitation costs at appraisal and it was further affected by procedural delays and counterpart funding constraints. The original target of rehabilitating 2,000 km of roads to an all-weather standard was not feasible. The project helped rehabilitate 488 km of roads to dry-weather status and spot repair another 1,060 km to dry-weather status. Once the component got underway, the emphasis was on opening as many roads as possible without regard to their maintenance. The use of project-funded road maintenance equipment for spot repairs, while convenient at the time, accelerated the machinery's depreciation. The lack of adequate maintenance, routine or periodic, has compromised the investment in roads as many of them need to be rehabilitated again. Project management was problematic until the MTR with a high turnover of technical consultants and an overstretched local management capacity. Management improved after the review, although some procurement problems continued. The M&E performance fell short of its objectives. The inclusion of the dams component toward the end of the project cycle was an expedient political decision; its outcome is as yet unknown because the dams have not yet been put to full use. The ICR estimates the economic rate of return (applicable to 85 percent of project costs) to be 17 percent. The ERR estimated by this audit is a much lower 3 percent.

The ICR rated project outcome as satisfactory, institutional development as modest, sustainability as uncertain, and Bank performance as satisfactory. The audit rates project outcome as marginally unsatisfactory and Bank performance as unsatisfactory but agrees with the other two ratings. The audit agrees with the ICR and the borrower on the difficulty of attributing benefits to this project in light of the government's Economic Recovery Program (initiated in 1987) and the operation of several concurrent donor projects in the region. Nevertheless, an analysis of individual components reveals that while the project yielded some benefits from its research and extension and community development components, the outcome of the inputs supply component was not satisfactory and the benefits from rural roads rehabilitation are likely to be short-lived because of lack of maintenance. This leads the audit to rate project outcome as marginally unsatisfactory. The audit notes the flexibility, responsiveness, and good judgments demonstrated by the Bank at several stages during project implementation. However, the compromised quality at entry and critical oversight with respect to the two main components significantly affected the project's outcome. On balance, Bank performance is rated as unsatisfactory.

The project offers several lessons, some of which are not new but are worth reiterating. First, all components should be well prepared to ensure the implementation readiness of the project. Second, local procedures and coordination arrangements need to be incorporated into project design to ensure a reasonable start-up period. Third, orientation of key project and government staff involved in implementation with Bank procedures and processes is essential to avoid unnecessary delays. Fourth, the reality of the financial capacity of the government should be recognized to appropriately scale the project and make contingency plans. Fifth, when substantial technical assistance is required, adequate training periods should be built into project design to ensure smooth implementation and particular attention should be paid to the selection of competent and suitable consultants. Sixth, continuity in Bank task management and the involvement of the Resident Mission staff are critical for timely and suitable response to emerging issues. Seventh, a familiar lesson is reiterated in the need to scale the roads rehabilitation program to take account of the adequacy of financial and institutional arrangements for road maintenance.



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Principal Ratings

	Credit 1869-UG	
	Audit	*ICR*
Outcome	Marginally Unsatisfactory	Satisfactory
Sustainability	Uncertain	Uncertain
Institutional Development	Modest	Modest
Bank Performance	Unsatisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory

Key Staff Responsible

	Credit 1869-UG		
	Task Manager	*Division Chief/ Technical Manager*	*Country Director*
Appraisal	J. Stemp/J. Coates	J. Shivakumar	C.Madavo
Midterm	B. Falconer	J. Shivakumar	F. Colaco
Completion	T. Sharif	S. Ganguly	J. Adams

Preface

This is a Performance Audit Report (PAR) for the South West Region Agricultural Rehabilitation Project (SWRARP) in Uganda, for which Credit 1896-UG for SDR 7.6 million (US$10 million equivalent) was approved by the International Development Association (IDA) on February 9, 1988, and made effective on August 26, 1988. The project was cofinanced by the International Fund for Agricultural Development (IFAD) for which a loan of SDR 9.1 million (US$12 million equivalent) was approved on February 23, 1988. In addition, a grant of US$300,000 was approved by IFAD from its Special Operation Facility (SOF). The project was appraised and administered by IDA.

The IDA credit and IFAD loans were closed on June 30, 1996, after two extensions of the original closing date of June 30, 1994. About 93 percent of the IDA credit and 89 percent of the IFAD loan were disbursed, with the last disbursement taking place in July 1996.

The PAR is based on the Implementation Completion Report (ICR), prepared by FAO-CP for the Africa Region, the Staff Appraisal Report (SAR), the President's Report, the credit documents, a study of project files, and discussions with government officials and Bank, cofinancier, and project staff. An OED mission visited Uganda in October 1997 and discussed the effectiveness of the Bank's assistance and project execution with the relevant agencies. The cooperation and assistance provided by the Government of Uganda and the staff of the concerned ministries is gratefully acknowledged.

The ICR provides an adequate account of the implementation of the project. However, its assessment of the key factors affecting the outcome is not fully satisfactory. The PAR, with the advantage of additional time and data, departs from the ICR in its ratings of the project.

Following standard OED procedures, copies of the draft PAR were sent to the borrower and cofinancier for comments. Comments received from the borrower are attached as Annex C and OED's response to the comments is attached as Annex D. No comments were received from the cofinancier.

1. Background

1.1 During the period 1980-1988, IDA supported the agricultural sector in Uganda by providing credits which focused on sector reconstruction, agricultural development, sugar, and forestry rehabilitation. The South West Region Agricultural Rehabilitation Project (SWRARP) followed a similar Bank/IFAD-funded Agricultural Development Project in Eastern Uganda, and was part of a program intended to revitalize agriculture in the aftermath of many years of internal disruption.

1.2 At the time of appraisal (1987), the gross domestic product (GDP) per capita was 40 percent below the 1970 level, with the ravages of war and insecurity having had a serious, negative impact on the rural economy. As part of its development strategy, the government initiated its national Economic Recovery Program (ERP) in mid-1987. The focus of the ERP was to provide a sound policy framework to promote economic growth. Its objectives included rehabilitation of existing infrastructure and restoration of producer incentives through appropriate price policies and market liberalization.

1.3 At appraisal, the project covered four districts of the South West region of Uganda (Mbarara, Bushenyi, Rukungiri, and Kabale); by closing two additional districts which had been created within the same area (Kisoro and Ntungamo). The region spans about 22,400 sq. km., and has a population of about 2.4 million people (330,000 households). The SAR noted that the per capita income in the region was well below the national average and that the majority of farmers were smallholders and poor. However, the region had relatively good agricultural potential with adequate rains. The key constraints identified were the development and transfer of agricultural production technology, the availability of agricultural inputs, and high transport and communication costs because of the severely run down road infrastructure. After years of neglect, about 20 percent of the 2,700 km of rural roads was virtually impassable and another 40 percent was passable only in the dry season. Marketing, input distribution channels, and agricultural support services had largely disintegrated.

1.4 The South West region was identified by the Government of Uganda (GOU) as a high-priority area and, accordingly, considered SWRARP integral to its growth strategy. However, SWRARP was one among a number of complementary development activities that were either ongoing or were planned for the region at the time. These included several donor-funded projects supporting the improvement and multiplication of food-crop seeds (EEC, CIAT, Germany); a rural health and water supply project (UNICEF, SIDA); livestock sector projects (UNDP, UNCDF, IDA); trunk roads network projects (IDA, EEC, Yugoslavia); and a feeder roads project (ILO/UNCDF).

2. The Project

Objectives

2.1 The project's objectives were to increase food production and raise the incomes and living standards of small farmers in four (later six) districts of the region. At appraisal, the project rationale was agricultural rehabilitation, with a view that once the basic infrastructure, agricultural support services, and sound policies were in place, agricultural growth would become self-sustaining. The ERP was expected to help improve agricultural production and marketing rapidly. Hence, the project intervention was expected to be relatively short-lived.

Components

2.2 The project originally included four components: (i) establishment of an adaptive research program and revival of the extension services through rehabilitation of two District Farm Institutes (DFI), improvement of facilities at research substations, and provision of vehicles, equipment, technical assistance, training, and operating costs; (ii) importation and wholesale distribution of small agricultural inputs, procurement of vehicles, material, and equipment for strengthening marketing infrastructure, and construction of a warehouse for imported inputs at Mbarara; (iii) rehabilitation of 2,000 km of rural feeder roads and strengthening of districts' road maintenance capacity by providing equipment, operating costs, and in-service training to MOLG staff; (iv) project management, monitoring, and evaluation to coordinate implementation, evaluate impact, and administer a community development fund. The rural roads and input supply components accounted for about 80 percent of project costs.

2.3 After appraisal, IFAD elaborated proposals for community development, at which time they became a separate component. In 1992, a Pilot Credit Subcomponent (under community development) was incorporated in an amendment to the IFAD loan agreement and following a request from the GOU, a new component for the construction of small valley dams was introduced under the IFAD's loan agreement in 1994. The IDA development credit agreement was not modified at any stage.

Costs

2.4 The final project costs are estimated at US$26 million, or about 95 percent of the SAR estimate. Investment costs were much lower than forecast (US$12.5 million compared to US$19.3 million at appraisal) because of shortfalls in civil works (road contracts) and agricultural inputs. On the other hand, recurrent costs were significantly higher (US$13.5 million instead of US$8.1 million), mainly due to greater expenditure on operating costs attributed to the project coordination unit (PCU), technical assistance (TA), and overseas training.

2.5 There were severe shortfalls in the government's counterpart contribution until 1992. Overall, the contribution amounted to the equivalent of about US$3.9 million (compared to US$5.1 million at appraisal, including taxes). Of this, 40 percent was from the Special Inputs Fund (that is, revenues from the sale of agricultural inputs), 14 percent from MAAIF, and 44 percent from MOLG (US$900,000 USAID contribution and US$800,000 MOLG budget). Had the input supply component been implemented earlier and in full, and had the Ministry of

Finance relented earlier to allow the project to use the sales revenues, the shortfall in counterpart funds, especially critical in the project's early years, could have been reduced considerably.

Evaluation of objectives and design

2.6 At appraisal, the project objectives and design were appropriate to the region's priority needs and were consistent with GOU's development strategy. Over time, as the national and local economies revived, the ICR notes that project objectives were adjusted from strict rehabilitation to long-term development. However, no formal change was made in the project's agreements nor was any change made in the design of its major components. The changes made were an elaboration of the community development component (group mobilization and training, and addition of a credit subcomponent) and the inclusion of a small valley dams component.

2.7 The community development component was not included in the original appraisal design. At IFAD's insistence the component was added just before negotiations, leaving no time for preparation. The component was developed after effectiveness and expanded to include a pilot credit scheme. The aim was to further the project's core objectives by directly supporting small farmers through groups. This activity was a high priority for IFAD with its emphasis on targeting the poor.

2.8 The addition of small valley dams near the end of the project was an expedient political decision. It aimed to reduce water shortages for both livestock and human consumption. No cost-benefit or environmental impact assessments were made for the component and, given the time constraint, it diverted project efforts away from original project objectives.

3. Implementation

3.1 The project had two distinguishable phases. In the first phase, up to the Mid-term Review (MTR) in 1992, implementation was very slow. The project design had failed to appreciate the complexities in local bureaucratic procedures. Nor was there any attempt to familiarize project staff with the Bank's procurement procedures or with the project's rationale, objectives, or design.[1] Overall, the project was not ready for implementation and the initial learning and start-up phase lasted well beyond that envisaged at appraisal, resulting in costly delays.

3.2 Until the MTR, project activities were limited to adaptive research and extension, training (mostly overseas) for project management staff, and procurement and resale of limited quantities of agricultural inputs. The key problems were project management, cumbersome procurement procedures, delays in appointing appropriate TA consultants to key positions, and a chronic shortage of counterpart funds. By the MTR, the project financial controller had been replaced twice. Constraints to implementation (procurement, tendering, and funds release) kept the main component of the project, rural roads rehabilitation, from making any headway.

3.3 The second phase fared relatively better. At the MTR, agreements were reached on financial control and reporting, deployment of feeder road units, roads' contract, and the design of the credit component. However, complicated procurement procedures continued to affect implementation even after the MTR. The flow of counterpart funds improved, although the funds released were still less than requested. Nevertheless, considering that government's funding was a general problem, the significant allocation of USAID grants by MOLG for the roads component suggests that SWRARP fared better than other development projects.

3.4 The *adaptive research and extension* component (ARE) appears to have been implemented well, despite the funding constraint. The project helped prioritize the region's research agenda, facilitated on-farm trials and extension activities, and provided training for a number of research and extension staff. Initially, ARE activities were restricted to seven priority counties. In 1992 the approach shifted to cover the entire region. Research emphasis was on the introduction of exotic germplasm and screening of promising varieties of Irish and sweet potatoes, maize, wheat, and upland rice, and trials for technologies for soil management and to control banana weevil. Little attention was paid to seed multiplication and improving basic agronomic practices. The project provided some equipment but the existing conditions at the two DFIs limited farmers' training and seed multiplication activities. The latter was done at the Kalengyere Research Sub-Station and Rubare Farm, which distracted from their adaptive research focus. In 1994, ARE activities, including the DFI rehabilitation, were taken over by the national research and extension programs, both supported by IDA (Credits 2446-UG and 2424-UG). Unfortunately, the priorities of the national programs are different and both suffer from inadequate funding; as a result there has been a lack of interest in following up or in consolidating the gains achieved by SWRARP.

[1] A number of project staff thought that the implementation manuals were too "terse," lacking sufficient details on the design of project components. This, combined with incomplete comprehension of the project's objectives and goals, resulted in a learning-by-doing process, slowing implementation and project impact.

3.5 The *community development* component (CD), including the *pilot credit subcomponent* (PCS), is also widely believed to have been implemented well. Despite a slow start, CD reportedly reached over 500 farmer groups.[2] Priority was given to women members who comprised about 65 percent of the total membership. These groups were also used as channels for extension and seed production activities. The PCS was indigenously designed and was implemented with a concerted effort of several local authorities. With start-up funds of US$414,000, a total of US$1.01 million was disbursed using reflows. Initially, intensive supervision resulted in high recovery rates but also very high administrative costs. Over time, recovery rates deteriorated, falling to a mere 20 percent by the close of the project, presumably because of reduced supervision and the anticipated end of the pilot program due to project closing. The overall recovery rates, although significantly better than other credit programs in Uganda, were still at an unsustainable level of 70 percent.

3.6 The *agricultural input supply* (AIS) component suffered from delays and was eventually overtaken by events. Total imports amounted to US$3.0 million or 58 percent of SAR estimates. The size of the initial orders was reduced due to lack of storage capacity and, subsequently, procedural delays in procurement. Eventually, the storage warehouse provided for by the project was found to be unnecessary and was never constructed. The project was unable to compete effectively with the private sector, despite its subsidized prices. While some inputs moved quickly in the initial phases, the inability to predict demand (both in terms of quantity and type of items in demand), inadequate market monitoring and procurement delays led to difficulties in pricing and ordering appropriate items, resulting in a build up of stocks and losses.[3] Eventually, the component was terminated. However, despite the original intent to keep this component a timed intervention (that is, yield to the private sector in project year four), the last of the four import orders was placed in the middle of 1994 and the contract was signed as late as 1995.

3.7 The project's biggest component was the *rural feeder roads* (RFR) rehabilitation program. At appraisal, the objective was to rehabilitate 2,000 km of RFR to all-weather status over a three-year period using private contractors. Implementation suffered because of long delays in selecting consultants to carry out a roads inventory study to identify priority roads.[4] On completion, the study established that the resources provided were not sufficient to rehabilitate 2,000 km of roads. The SAR had significantly underestimated the cost of rehabilitation and the roads had deteriorated further since appraisal, adding to rehabilitation costs. The MTR revised the target to rehabilitate 488 km of roads by contract, and spot repair another 275 km by the District Road Units (DRU) of the MOLG. It was also decided to use the maintenance plant and equipment provided by the project for DRU repair work. While convenient at the time, the decision resulted in premature depreciation of the equipment by putting it to a use for which it was not designed.

3.8 Once started, the DRU work progressed at a satisfactory rate, with the motivation to reach as close to the original target of 2,000 km as possible. By project closing, about 1,060 km

[2] However, documentation is available only for about 300 groups.

[3] The auction mechanism, an innovation in the project design, was never used. The project instead used other methods, usually distortionary, to price its inputs.

[4] The study was expected to be completed during the eight-month start-up phase. It was not conducted during project preparation for lack of sufficient time and resources.

of roads were spot repaired, albeit to dry weather status. However, with all energies and resources devoted to spot repairs, virtually no attention was paid to maintaining the roads. The result was an almost simultaneous deterioration of the rehabilitated roads. Inadequate counterpart funds, for the DRU roads, and procurement and tendering delays, for contract work, were the key constraints to implementation. Contract work finally started in 1994. This delay was the main reason for extending the project completion date by two years.

3.9 *Project management* was a problem initially due to the lack of experience of newly-appointed staff, a high turnover of TA consultants, and infrequent meetings of the Interministerial Coordinating Committee (ICC). This affected the initiation and coordination of project activities. The combination of infrastructure and agricultural support components, totaling seven in all, under the PCU overstretched the management capacity. The regional location of the PCU in Mbarara led to liaison problems with the key ministries (MOLG and MAAIF) in the first half of the project. Project restructuring and changes in senior management in 1992 improved project performance. Better collaboration with local authorities also resulted in enhanced political and administrative support from district administrations, and the ICC started to play its anticipated coordination and oversight role.

3.10 The ICR notes that the *Monitoring and Evaluation* (M&E) unit's performance fell short of its main objective, which was to monitor and evaluate project impact. The unit carried out baseline, mid-term, and final household surveys, as well as several thematic surveys, intended to provide information on project impact. Initially, M&E's performance drew praise from various supervision missions. Later, perhaps due to complacency, there was a reluctance to use available TA and with the redeployment of experienced staff (on account of decentralization), the unit became less effective. The mid-term and final household surveys were simplified and the revised survey design failed to capture data on agricultural production, and the data collected were not comparable to those of the baseline survey. The sample size was arbitrarily reduced from 800 to 200, reportedly at the behest of the Bank, and the survey questionnaire was not adequately scrutinized for consistency before data collection. While the unit provided project management with periodic monitoring data, the thematic surveys were ad hoc and were neither timely nor consistent. The unit also failed to provide regular financial (cost) monitoring. Despite the recommendation of the MTR, low priority was given to the monitoring of agricultural activities, cropping surveys were not undertaken, and no analysis was done on the financial viability of crop recommendations or income-generating activities.

3.11 The *small valley dams and tanks* (SVD) component aimed first at rehabilitating existing small valley dams and tanks. The implementation performance before project closing was predictably slow and unsatisfactory. Of the 15 sites considered, five were selected and had engineering designs prepared; of these one had to be dropped because of time and budget limitations. No economic or environmental assessment was done to support either the sites or the number of dams to be undertaken. The contractors failed to meet the completion deadlines by project closing, and one of them failed to comply with the construction specifications. The work was, however, subsequently completed. Needless to say, the component was adversely affected by the time constraint. It also affected other components in that it used the same project staff and supervising consultant as the rural road component.

4. Project Outcome and Ratings

4.1 *Outcome.* By the time project implementation got underway in earnest, general economic activity had picked up significantly as a result of the ERP and the re-establishment of peace and security. At the same time, several other development projects in the region also started having an impact. Against this background, the lack of appropriate data make it difficult to assess the contribution of SWRARP alone in the project area. To determine outcome, then, this audit first considers the performance of individual components and their contribution towards achieving project objectives. The potential synergistic effects of the various components are then assessed through an economic analysis of the project's impact, subject to data limitations.

4.2 The benefits from two of the components are quite evident. The adaptive research and extension component is widely believed to have had a positive impact on the production of Irish potatoes and banana. Although the project had little or no success with other crops, it substantively facilitated the field trials of ongoing research, which led to the release of new varieties of Irish potatoes. The project also helped popularize an old but effective husbandry practice to control banana weevil.

4.3 The second successful component was community development, which promoted diversified enterprises and fostered local management capacity. The program was widely dispersed in the project area and a majority of the group members were women. The training and technical assistance imparted is likely to benefit the recipients over the long run. However, the late start of the program and inadvertent design problems have localized the direct impact on incomes and nutrition. The grant and credit programs could have been targeted, as they appear to have favored the relatively better off individuals within the communities reached.

4.4 The component with the largest potential for benefit was the rural feeder roads program. The primary benefit was expected to be the impact on agricultural production through better access to markets.[5] The ICR estimates that about 175,000 rural families, or roughly about one million people, reside in the zone of influence of the improved roads. In some areas the road program must have had a positive impact on general economic activity, especially where previously impassable roads have been opened to traffic. However, the impact was neither uniform nor was it felt along the entire network of the project's roads. There are stretches of improved roads with vegetation growing, suggesting little or no use.[6] There are other stretches where traffic has not picked up appreciably. Most importantly, the impact has been or is likely to be restricted because of the rapid deterioration of the roads for lack of maintenance. Both routine and periodic maintenance, which are critically important for earth roads, are inadequate. In many instances roads rehabilitated as recently as a year ago have seriously deteriorated. A large number

[5] The roads inventory study conducted an elaborate cost-benefit analysis for each road in the region and concluded that over 90 percent of expected project benefits would derive from incremental value added in agricultural production.

[6] Project staff indicated that while the roads inventory guidelines were generally applied, there were several instances where local political considerations may have influenced the road selection criterion.

of the roads are in need of rehabilitation again.[7] As a result, the primary benefit of improved roads, that is the impact on agricultural production through access to markets, appears to have been short lived and the substantial investment in roads compromised.

4.5 Another problematic component was the agricultural inputs supply. Initially, with severe market disruptions and scarcity of foreign exchange, there was a rationale for the component. Toward this end, the project did provide some early support to the private retailers by importing small quantities of inputs, mostly small implements. However, implementation delays significantly reduced the effectiveness of the program. Subsequently, neither project management nor the Bank paid sufficient attention to the rapidly emerging private sector. The biggest import order was signed after mid-1992 (and delivered in mid-1993), by which time there was sufficient evidence that the marketing chains were developing well.[8] Despite the intent to help develop the private sector, SWRARP (and many other donor projects) ironically had a distortionary impact on input marketing. This is evident from the patterns of market development. The private sector was effectively crowded out of the market for small agricultural implements, whereas the market for other hardware items, agricultural chemicals, and veterinary inputs was dominated by the private sector in the same area.[9] In some cases, despite the distortions introduced by the project, the private sector managed to do quite well. For example, the biggest import item under the project was bicycles, which were resold at subsidized prices. Yet, over the life of the project, SWRARP's share in the total sales to the region was only about 5 percent suggesting that the project was directly competing for market share with the private sector, contrary to the objectives of the component.

4.6 Finally, the outcome of the small valley dams component is still indeterminate. The dams are still being filled and their benefit will become apparent when they are put to their full use. However, at one of the sites visited during the audit mission, the rationale for the construction was not clear as the local residents could not remember the last time there was a shortage of water. More importantly, no attention has been paid to the potential negative health consequences from the human consumption of the stagnant water from the dams.

4.7 The SAR estimated an economic rate of return (ERR) for the project, over a 20-year period, in excess of 15 percent. The ICR recalculates the ERR using some additional data (from the baseline household survey on crop areas, and the roads inventory study for farms in the rehabilitated roads' zone of influence).[10] The ICR limits the time horizon to three years beyond project closing, arguing that benefits beyond 2000 will depend on the level of road maintenance, which is considered uncertain. The ICR estimates the ERR to be about 17 percent.

4.8 The critical assumptions in the ICR's economic analysis concern the level of base year crop yields and that there would be no change in either the yields or the area planted in the

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[7] On the roads traveled during the audit mission (19 segments in all), very few could sustain a speed in excess of 40 kph. Most of the roads could sustain an average speed well below 30 kph and some only about 10 kph.

[8] The Bank's own sector work at the time was advising the government to withdraw from input marketing.

[9] According to the data provided by the project's own Inputs Marketing Study, completed in June 1992.

[10] The ERR is based on costs and benefits associated with all project components, except community development, credit, valley dams, overseas training, and M&E. Thus, the ERR applies to about 85 percent of the final project costs.

without-project case. The ICR uses the same yields as the SAR.[11] The MAAIF data suggest much lower yields at the start of the project than is assumed by the ICR.[12] The MAAIF data are also consistent with the yield estimates arrived at by the Roads Inventory study, for which yields were estimated using a combination of the Ministry of Agriculture data available at the time, primary data collected by the study, and consultations with the Adaptive Research Unit of SWRARP based in Mbarara. The aggregate district level data also show a significant increase in agricultural production and acreage in the pre-project period 1985 - 90, raising doubts about the validity of no change in the without-project case. Thus, even if the attribution issue is set aside, the assumption about the marginal benefit from the project is rather optimistic.

4.9 Nevertheless, given the paucity of the data, the optimism about the project's benefit is retained to reestimate the ERR for this audit. The data and assumptions used in the analysis are essentially the same as in the ICR, with some modifications. It is still assumed that in the without-project case, the yield and area growth rates are zero. The adoption rates for the technologies and the with-project total yield and area increases are of the same magnitude, and input cost and price coefficients are assumed to be the same.[13]

4.10 The modifications introduced are: (i) the annual increment in area directly influenced by the roads rehabilitation program is adjusted to reflect the actual length of roads completed each year by the project; (ii) according to the MAAIF data, Irish potato yields were underestimated in the SAR/ICR and are raised from 6 to 6.5 tons per hectare in zones 1 and 2; (iii) also based on MAAIF data, the base-year banana yields are raised from 5 to 7 tons per hectare in zone 3, and reduced to 5.5 from 7.5 tons per hectare in zone 1 and to 7 from 9.375 tons per hectare in zone 2.

4.11 With these assumptions, the ERR is estimated to be 3 percent. Even if increases in yields are assumed to be 30 percent instead of 25 percent for bananas and 50 percent instead of 25 percent for potatoes (for all zones instead of just two assumed in the ICR), the ERR is still estimated at 8%. It is also important to note that roads are assumed to yield benefits without any maintenance till project closing. Given the rate at which the roads deteriorate, this is a generous assumption since some roads were completed as early as 1992.[14]

4.12 Thus, based on the audit's findings, OED disagrees with the ICR's satisfactory rating for overall project outcome. The poor performance of the main components of the project (summarized in annex B), namely roads and agricultural inputs, is not fully compensated by the performance of the adaptive research and extension and the community development components. Hence, OED rates project outcome as **marginally unsatisfactory**.

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[11] It should be noted, however, that the ICR does update the estimates of area under each crop (using the baseline household survey data) and the number of farmers affected by the project roads (from the roads inventory study).

[12] Arguably the MOA data are generally unreliable in that annual changes are derived using several data sources to update the baseline estimates from a 1989 household survey. However, while the data for later years may be suspect, at least for the survey year 1989, the first year of the project, the data presumably reflect reality reasonably well.

[13] IFAD's evaluation report estimates the adoption rate of SWRARP technologies to be between 3 and 8.5 percent, while the ICR and this analysis assumes 20 percent uptake. On production costs, a sensitivity analysis indicated little or no influence of up to 10 percent fluctuations in producer costs.

[14] More realistically, if annual maintenance costs for the rehabilitated roads during the project term are included to balance the flow of benefits over the same period, the ERR (for 25 percent yield increases) is reduced to 0.

4.13 *Sustainability.* Sustainability is also assessed individually for each component of the project. Agricultural inputs supply is now firmly in the hands of the private sector and is likely to be sustained, although the project's contribution to this outcome was limited if not negative overall. The benefit from the technical and financial assistance provided by the project to groups under the community development component is likely to be sustained, as evident from the continued existence and activities of several of the mobilized groups. The future of the pilot credit scheme, however, is not as promising. The project's beneficiaries, with the help of project staff, initiated a non-governmental organization called the South West Uganda Agricultural Development Agency (SWUADA) in the hope of continuing credit operations. However, the government has so far not been very receptive to the initiative, essentially because of significant need for technical assistance, high administrative costs and continuing outstanding loans, the continuation of the credit activity is unlikely.

4.14 The adaptive research and extension components were merged with the two national programs for research and extension. However, significant funding constraints and different priorities have made the sustainability of the gains under the project uncertain. The civil works and repairs undertaken by the project at the DFIs and Rubare Farm have not been maintained and these facilities are currently severely underused. The maintenance of rural feeder roads is inadequate. Even though the GOU has made rural feeder roads maintenance a top priority, supported by dedicated federal grants, the funds are inadequate and the local authorities are unable to contribute their half of the required resources. Moreover, there are still no provisions for periodic maintenance. The maintenance equipment bought under the project has depreciated significantly and breaks down frequently, further hampering maintenance work. Thus, at present the sustainability of the benefits from the rural roads rehabilitation is uncertain at best. If the current budgetary situation continues, sustainability is unlikely. The benefits from small valley dams and tanks are yet to materialize. Eventually, the sustainability of the benefits will depend on the organization, management and self-financing of the water users' associations. So far, despite mobilization efforts, the intended beneficiaries have shown little interest in such associations.

4.15 It should be noted that GOU continued to support the project management unit beyond the closing date. The rationale was to complete the unfinished tasks at project closing. While the MOLG is using the project's premises for its road operations, the rest of the unit is maintained to dispose of the remaining stocks of agricultural inputs and to recover the overdue loans from the pilot credit scheme. Overall, the sustainability of the project's outcomes is rated as **uncertain.**

4.16 *Institutional Development.* The ICR does not discuss institutional development in any detail. Perhaps this is because no institution was directly affected as the project was administered through an independent project management unit. However, significant resources were spent on technical assistance and training for the project management staff, the M&E staff, and others. These staff have been absorbed in other parts of MAAIF, MOLG, and district governments and will continue to benefit the country. The institutional capacity of MOLG to undertake rural road rehabilitation was increased although not to the extent hoped for at appraisal. SWRARP, along with other projects, also helped identify problems with the procurement and tendering procedures in the country. To the extent that SWRARP contributed to the rationalization of GOU procedures, it helped the broader institutional mechanisms for project implementation. The project contributed to the social mobilization and development of local groups, and to a limited extent to the development of the private sector in agricultural input markets. Overall, institutional development is rated as **modest**.

4.17 *Bank Performance.* The Bank's performance at entry was mixed. The project was well identified and highly relevant to the country's needs at the time. The project design also included some innovations for implementing certain components and the appraisal team correctly modified the project to suit the country's circumstances. However, its performance in other areas was deficient. The rural roads component, commanding the major share of project resources, was poorly appraised; the community development component was included but not adequately designed; the capacity of local staff to coordinate and implement a multisectoral project in a relatively short start-up period was overestimated; and logistical arrangements for project implementation were not anticipated and prepared. Based on experiences with other projects, the Bank was fully aware of the severely limited capacity of GOU to meet its financial obligations to the project. Yet it was naive to accept government assurances on the availability of counterpart funds without insisting on alternative arrangements or scaling down the project.

4.18 The Bank's performance during implementation was also mixed. Initially, the Bank's supervision was inadequate and there was a high turnover of Bank staff. From 1991 the situation improved and the supervision missions were quite effective in addressing several issues. Bank efforts focused on facilitating implementation and the agreements reached during the MTR considerably improved project performance. The Bank, however, failed to attend adequately to two key issues. One was the continuation of imports and sales of agricultural inputs, mostly at subsidized rates, despite the rapidly emerging private sector. This should have been rectified by effective supervision of the M&E unit of the project, which was essentially left on its own for most of the post-MTR period.[15] The second issue of considerable importance is the apparent preoccupation with rehabilitating new roads and inadequate attention to maintaining the roads. This is particularly important in the light of known budgetary constraints of the government as well as the lessons regarding road maintenance, by then well known, from experiences with roads projects both in the country and in the Africa region.

4.19 Thus, while the Bank demonstrated flexibility, responsiveness, and good judgments in resolving serious issues at several stages during project implementation, the compromised quality at entry and critical oversight during implementation significantly affected project outcome. For these reasons, Bank performance is rated as **unsatisfactory.**

4.20 *Borrower Performance.* As the ICR notes, borrower performance was markedly different in the pre- and post-MTR phases. Until around 1992, borrower performance was deficient, especially due to poor project management, inadequate counterpart funding, and failure to comply with the covenants on accounts and audit. From 1992, some of the deficiencies were rectified, and the borrower's performance and commitment to the project significantly improved. Some agencies performed better than others, and in particular the performance of MOLG and the ICC significantly improved. Lack of counterpart funds and procurement delays continued to hurt project implementation and performance in the second phase, but these were generic problems and not specific to the project. To address these issues, the government did take corrective actions by allocating a major share of available USAID grants for SWRARP, which got the roads component moving, and undertook a much needed overhaul of the procurement procedures, which improved implementation. On balance, borrower performance is rated as **satisfactory**.

[15] Inadequate guidance to the M&E unit also resulted in the poor design of the mid-term and terminal household surveys, as well as the ad hoc thematic surveys.

5. Lessons

5.1 The main lessons emerging are:

a) *Implementation readiness.* SWRARP experience with delays and the limited impact of the rural feeder roads and community development components attest to the need for adequate attention to the appraisal and preparation before implementation of each project component. The experience with the small valley dams component reinforces the need for a thorough technical, environmental and economic assessment, as well as the capacity of the project and contractors to undertake the task, before any component is included late in the project cycle.

b) *Appreciation of local procedures.* An understanding of local procurement procedures and elapsed times is essential for realistic implementation and start-up timetables. The ICR recommends that the Bank's appraisal team should include an experienced project manager who might, in addition to defining implementation schedules, also set in motion the procurement process by arranging document preparation in time for effectiveness. OED fully endorses this recommendation. This could be supplemented with a workshop with relevant stakeholders to identify potential problems but also to design a project that the stakeholders can identify with. The experience with rural roads maintenance highlights the need for participation by beneficiaries for sustainability of common property assets.

c) *Orientation for implementing staff.* Adequate effort should be made to familiarize key project and government staff with Bank procedures, the project's objectives, and the specific roles of individual components in achieving those objectives. SWRARP's experience specifically highlights the need for the M&E unit to be made aware of the types of data needed for project management and evaluation to maximize project impact.

d) *Financial realism.* Project design needs to be particularly cognizant of the government's capacity to provide timely counterpart funds. The appraisal should provide contingency plans which adjust the scale of the project to be compatible with available resources.

e) *Management capacity.* A proper appraisal should be made of the local management capacity to manage complex projects. When substantial technical assistance is required, the design should build in adequate training periods to ensure smooth implementation and pay particular attention to the selection and appointment of competent and suitable candidates.

f) *Bank's task management.* SWRARP's experience demonstrates the benefits of continuity in Bank's task managers and the involvement of resident mission staff in project supervision and implementation. Adequate capability in the resident mission can address problems more effectively by responding faster and devising mechanisms to suit local needs.

g) *Rural roads maintenance.* A familiar lesson is the need to ensure institutional and financial arrangements for the regular maintenance of rehabilitated roads. Accordingly, either the rehabilitation program should be scaled down in the light of budgetary realities or alternative funding and institutional arrangements should be made for adequate road maintenance.

Annex A

Basic Data Sheet

SOUTH WEST REGION AGRICULTURAL REHABILITATION PROJECT (CREDIT 1869-UG)

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

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*[a]
Total project costs	27.4	26.05	95%
Credit amount	10.0	10.09	93%
Cofinancing	12.3	11.82	89%
Cancellation		2.19	9%
Date physical components completed	12/93	6/98	
Economic rate of return	15%	3%	20%

[a] Percentages based on SDR estimates. Discrepancies arise due to exchange rate fluctuations.

Cumulative Estimated and Actual Disbursements (US$ million)[a]

FY	*87/88*	*88/89*	*89/90*	*90/91*	*91/92*	*92/93*	*93/94*	*94/95*	*95/96*	*96/97*
SAR Estimate										
IDA	0.1	1.0	3.0	5.5	7.9	9.5	10.0			
IFAD[b]	0.7	2.6	5.1	7.8	10.1	11.6	12.3			
Total	0.8	3.6	8.1	13.3	18.0	21.1	22.3			
Actual[c]										
IDA	0	0	0.10	0.40	2.08	3.46	3.87	6.53	9.98	10.09
IFAD	0	0	0.65	1.67	3.03	5.13	8.09	10.03	11.28	11.53
SOF (Grant)			0.19	0.22	0.22	0.22	0.29	0.29	0.29	0.29
TOTAL	0.00	0.00	0.95	2.29	5.33	8.81	12.25	16.85	21.55	21.90
	0%	0%	12%	17%	30%	42%	55%	76%	97%	98

[a] Small discrepancies due to use of differing exchange rates and rounding.
[b] Including SOF Grant (US$ 0.3 million).
[c] Date of final disbursement: July 19, 1996.

Annex A

Project Timetable

Steps in project cycle	*Date planned*	*Date actual/ Latest estimate*
Identification[a]	-	Jan./Feb. 1984
Preparation[b]	-	March/April 1985
Pre-appraisal	-	Oct./Nov. 1985
Appraisal	May/June 1987	May/June 1987
Negotiations	Nov. 1987	Nov. 1987
Board presentation	Dec. 1987	Jan. 1988
Signing	Feb. 1988	Feb. 1988
Effectiveness	May 1988	Aug. 1988
Project completion	Dec. 1993	Feb. 1996
Credit closing	June 1994	June 1996

[a] Carried out by IFAD.
[b] Carried out by the FAO Investment Center on behalf of IFAD.

Bank Resources: Staff Inputs[a]

Stage of project cycle	*Planned*		*Revised*		*Actual*	
	Weeks	US$ (000)	Weeks	US$ (000)	Weeks	US$ (000)
Completion Report[b]	-[b]	-[b]				
TOTAL	123.9	226.5			118.9	257.5

[a] Data on Bank Resources by stage of project cycle are not available due to internal Bank reorganizations.
[b] Excluding FAO inputs, these figures are 5.0 weeks and US$ 10,500.

Annex A

Mission Data

Stage of project cycle	*Date (month/yr)*	*No. of persons*	*Staff days in field*	*Specializations represented*[a]	*Performance ratings*		*Types of problems*[a]
					Implem. status[c]	Develop. status[c]	
Identification					-	-	-
Preparation	3-4/85	7	23	A, CE, E, HE, LE	-	-	-
Pre-appraisal	10-11/86	5	20	A, CE, E, R/E	-	-	-
Appraisal	5-6/87	6	20	A, IS, M&E	-	-	-
Negotiations	1-2/88	2	7	A	-	-	-
Supervision							
2	7-8/89	3	17	A, CD[d]	3	2	CF, OS, PM, PR, T
3	3/90	5	7	A, A[d], CD[d]	3	2	CF, PM
4	9-10/90	4	5	E, FA, PR, R/E	3	2	CF, PM, PR
5	4/91	5	5	CD, E, FA, R/E	3	2	CF, PDI, PM, R/E
6	9/91	5	7	E, FA, PR, RD, R/E	3U	2	AFC, CF, PM, RD
7	11/91	1	8	FA	-[e]	-[e]	AFC, RD
8	2/92	1	22	FA	-[e]	-[e]	AFC, RD
9[f]	5/92	5	13	DI, FA, FA, PR, RD	2	2	AFC, FC, RD
10	10-11/93	4	12	A, CE, E, FA	S	S	AFC, RD
11	4-5/94	3	14	E, FA, RD	S	S	PR, RD
12	10/94	3	10	E, FA, RD	S	S	CS, PDI, RD
13	4/95	3	6	E, FA, RD	S	S	PR
14	12/95	2	14	FA, RD	S	S	RD, VD
15	6/96	2	14	FA, RD	S	S	PR
Completion	10/96	3	14	A, E, CE	-	-	

[a] A = Agriculture; CD = Community Development; CE = Civil Engineer; E = Economist; FA = Financial Analyst; IS = Institution Specialist; R/E = Research - Extension; PR = Procurement Specialist; RD = Roads Engineer; R/E - Research - Extension.

[b] AFC = Accounts, Audit and Financial control; CF = Counterpart funding; OS = Office Space; PDI = Pricing and Distribution of Inputs; PM = Project Management; PR = Procurement; RD = Feeder roads component; RTA = Recruitment of TA; T = Transport; VD = Valley dams.

[c] 1 = Non significant problems; 2 = Moderate problems; 3 = Major problems (appropriate actions are being taken to address those problems); S = Satisfactory.

[d] Funded by IFAD.

[e] No form 590 prepared.

[f] Midterm Review.

Annex A

Other Project Data

RELATED BANK OPERATIONS			
Operation	*Credit no.*	*Amount (US$ million)*	*Board date*
Preceding SWRARP			
First Reconstruction Program	0983-UG	72.5	1980
Second Reconstruction Program	1252-UG	62.9	1982
Agricultural Rehabilitation Project	1328-UG	63.5	1983
Second Technical Assistance	1434-UG	14.2	1983
Third Highways Project	1445-UG	56.1	1984
Third Reconstruction Program	1474-UG	47.2	1984
Agricultural Development Project	1539-UG	10.0	1985
Fourth Highways Project	1803-UG	14.1	1987
Forestry Rehabilitation	1824-UG	10.0	1987
Economic Recovery	1844-UG	72.4	1988
Sugar Rehabilitation	1893-UG	18.9	1988
Following SWRARP Effectiveness			
Economic Recovery	2087-UG	100.8	1990
Livestock Services	2176-UG	16.1	1990
Agricultural Sector Adjustment Credit	2190-UG	69.5	1990
Structural Adjustment Credit I	2734-UG	92.9	1992
Northern Reconstruction	2362-UG	51.9	1992
Agricultural Extension	2424-UG	11.0	1992
Agricultural Research and Training	2446-UG	17.8	1993
Transport Rehabilitation	2587-UG	54.5	1994
Structural Adjustment Credit II	2608-UG	58.2	1994
Cotton Subsector Development	2609-UG	10.0	1994
Agricultural Sector Management	2845-UG	12.1	1996

Annex B

Direct Component Costs and Outcomes[1]

Component	ActualCost (US$m)	Share (%)	Outcome	Sustainability	Institutional Development Impact
Adaptive Research and Extension	2.75	14	Satisfactory	Uncertain	Negligible
Community Development	1.42	7	Satisfactory	Likely	Substantial
Rural Roads	9.80	50	Unsatisfactory	Uncertain	Modest
Inputs Supply	4.99	25	Unsatisfactory	Likely[2]	Negligible
Small Dams	0.71	4	Indeterminate	Uncertain	Negligible
Total	19.67	100			

[1]: The costs reperesented in the table are costs directly attributable to the individual components. The remaining US$6.39 of the costs were due to M&E (US$0.64) and Project Coordination (US$5.75).

[2]: The sustainability of the outcome of the inputs supply component is likely, but the role of the project was minimal, if not negative.

Annex C

Borrower Comments

MINISTRY OF AGRICULTURE,
SOUTH WEST REGION AGRICULTURAL
REHABILITATION PROJECT,
P.O. BOX 1395,
TEL: 20714/20914
FAX: 21037
MBARARA, UGANDA.

Our Ref: SWRARP/6

Your Ref:

THE REPUBLIC OF UGANDA

Date 15/06/98 19

The Permanent Secretary
MAAIF

RE: RESPONSE TO DRAFT PERFORMANCE AUDIT REPORT ON SWRARP BY IDA

I wish to refer to the Draft Performance Audit Report (PAR) on Uganda: South West Region Agricultural Rehabilitation Project (Credit 1869 - UG) Draft Performance Audit Report Dated May 14, 1998.

1.0 BACKGROUND

The Southwest region Agricultural rehabilitation project (SWRARP), co-funded by IFAD (US $ 12.3m), IDA (US$ 10.0m) and Government of Uganda (GOU) (US $ 5.1m), was originally a five-year project - from 1998/89 to 1993/94 financial year but it has had two extensions totalling to 20 months.

The project objectives were to increase food production, income and living standards of small farmers in the Southwest of Uganda. It was envisaged the project would increase production of food by small holders resulting in increased incomes and nutrition. Improvements in rural access roads would reduce transport costs of inputs and consumer goods and at the same time increase produce prices.

1.1 ORIGINAL DESIGN

The original components were:-

(1) Adaptive research and Extension for rehabilitation of District Farm Institutes, improving facilities at research substations, strengthening of the agricultural ministry's adaptive research and extension activities through provision of vehicles, equipment, technical assistance, training and other logistics.

(ii) Agricultural Input Supply (a) (US $ 4.1m):- for procurement and sale of small, high volume inputs, e.g. handtools, seeds, etc.

(b) US $ 4.0 for procurement of vehicles and equipment needed to strengthen marketing infrastructure, and establishment of depots for reception and distribution of goods;

(iii) Rural Access Roads (US $ 13.3m) - for rehabilitation and spot repairs on 2000km rural access roads provision of plant, equipment and other logistics for maintenance of access road network and in-service training for staff engaged in road construction work;

(iv) Project Management, Monitoring and Evaluation (US$ 2.1m) - To coordinate and supervise project implementation. This involved, among other things, deployment and supervision of staff, preparation of workplans and budgets, routine monitoring, periodic surveys and reviews, performance assessments, financial control and management, and liaison with other collaborating organisations and individuals.

(v) Community Group Support (US$ 95,000): A sum of US $ 95,000 under management Support, was specified as Community development fund (CDF). This fund was designed to support formation of community and women groups in the project area and financing some of their activities. The fund was to assist groups and societies which were engaged in productive activities such as marketing of agricultural inputs, agricultural products, processing of agricultural commodities or manufacture of agricultural tools.

1.2 SUBSEQUENT COMPONENTS:-

During the course of implementation it became necessary to modify the structure of the project and incorporate (a) Women Organization Unit (b) Pilot Credit Scheme and (c) Construction/Rehabilitation of Dams/Tanks.

(1) Women Organization Unit:-

The Staff Appraisal emphasized the need for enhanced involvement and active participation of rural women in project activities. A sub-component of Women Organization was created to cater specifically for priority needs of women. Its main objectives were to establish the priority needs of women, organizing women into viable groups which could engage in income generating activities (IGA), training the women in selection and management of IGAS, and soliciting additional financial and material support.

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(ii) Pilot Credit Scheme:- SDR 300,000 (US $ 414,000) The Credit Component was initiated in 1993 with US$ 414,000 with two main objectives: (1) to provide credit to farmers so as to increase production and (ii) to mobilize rural savings so as to ensure capital for agricultural development. At the end of April, 1995 all the US$ 414,000 had been disbursed which created a Revolving Fund totalling over U. shs. 490m. Disbursement of this fund was closed at the end of February 1996, the closing date of the donor funding.

(iii)Construction/ Rehabilitation of Dams and Valley Tank This came about as a result of GOU request to IFAD to consider provision of water for livestock in the semi-arid parts of the project area. IFAD consented and reallocated SDR 380,000= US$ 570.000. The funds were used to rehabilitate one dam, construct two new dams and one Valley Tank. The fund was not fully disbursed due to limited period the project had to construct the dams.

2.0 Issues Raised by Performance Audit Report

2.1 Implementation of Project Components

2.1.1 Project Management Unit Performance:-
The Audit Report distinguishes two phases:-

Phase 1 1988 to 1992
Phase 2 1992 to 1996

Implementation during phase 1 was very slow due to delayed procurement of vehicles and agricultural inputs, and inadequate counterpart funding. The highturn of Technical Assistance consultants to key positions and management inefficiencies were responsible for this slow start. Implementation during phase 2 improved drastically due to improved harmony within the management and a continuous flow of both counterpart funding and foreign exchange disbursements.

2.1.2 Adaptive Research and Extension Component
The PAR commends the project for having helped prioritize the region's research agenda and facilitated on-farm trials and extension activities. The project is accused of paying little attention to seed multiplication and improving basic Agronomic Practices. The Project however trained staff in various disciplines to the tune of 17 at Master's level and over 50 on short courses and in turn these trained staff would train farmers in various agronomical practices.

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2.1.3 Rehabilitation of DFIs:-

The project did not rehabilitate the DFIs as expected because the civil works due to take place in the second phase were not approved. Instead the IDA mission in 1993, recommended that AEP undertake these civil works. However, the DFIs were equipped with transport facilities, media centre and demonstration materials to help in training farmers. All District Agricultural Officers and Principals of DFIs were trained at MSC level and were prepared to train farmers in all aspects of Agronomic practices.

2.1.4 Seed Multiplication at Research Station

The project provided assistance to Kalengere Research Sub-station and Rubare Farm to multiply seed which were in short supply in the region as stop gap measure. The responsibility to supply seed to farmers was an activity of the Seed Multiplication Project and NARO to which this responsibility was handed over in 1994.

2.1.5. The Community Development Component (CD) including Pilot Credit Subcomponent (PCS)

Training of farmers groups, women groups given priority, was the success behind this activity. Farmers were trained in leadership development, accounts, Agronomical practices and Income generating Activities. The Credit Scheme Performance was significantly high during the first seven phases of disbursements due to supervision by credit staff and Peer Pressure created within the Group Members.

2.1.6. The Agricultural Input Supply (AIS)

Procurement of Agricultural Inputs for sale to farmers were coordinated by Input Supply Manager originally a T.A consultant and later on the project staff. Uganda Commercial Bank was the procurement Agent until June 1993 when the contract was terminated. The component suffered delays due to delayed opening of letters of credit.

(L.C) without reference to CTB, inadequate knowledge of ICB procedures, bureaucratic procedures in approving lists of items to be procured, clearing and forwarding of goods by Transocean Uganda Ltd, and insufficient funds at UCB for local payments and in Special Accounts for initial payments and opening of L.Cs. The situation however improved when the Financial Controller (F.C) of the PMU became responsible for all payments including opening of LCs and affecting payments to suppliers.

Due to all the above bureaucratic procedures, some inputs arrived in the project area when the price per unit item

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was higher than the market price. This, however, was not the case until Liberalisation of the Economy strategy was in place and foreign exchange availed to manufacturers. The component, through training in loan acquisition, input sales procedure and taxation, the retailers' capacity to distribute the inputs was enhanced. The build up of stocks is a result of the differing foreign exchange rates according to time of purchase and delivery, which, sometimes, took over a year.

2.1.7. Rural Feeder Roads (RFR) Rehabilitation Programme

At appraisal the objective was to rehabilitate 200km of RFP to all weather status over a three year period using private contractors. The SAR had significantly underestimated the cost of rehabilitation. The MTR revised the target to 488km of roads by contract and spot repair another 275km by the District Road Units (DRU). The component suffered a 44 months delay in implementation by April 1992 as a result of delayed start-up activities.

However, by June 1996

- all the contracts for the feeder roads had been substantially completed and handed over to the District Authorities.
- 880km of second priority had been opened to traffic using the equipment purchased by the Project.
- All District Authorities had been sensitized to budget substantial funds for maintenance of roads.

2.1.8. Monitoring and Evaluation (M & E)

The Unit carried out baseline, Mid-term, and final household surveys as well as several thematic surveys, intended to provide information on project impact. M & E's performance was greatly extolled by various Supervision Missions. However, the ICR asserts that the Mid-term and Final household surveys were simplified and failed to captured data on agricultural production and data collected were not comparable to those of the baseline survey. They, too, did not carry out cost-benefit income analysis of crop recommendations and Income Generating Activities. The M & E staff observed that the same sample size as advised by World Bank Mid-term Review Mission was maintained for Mid-Term and Terminal household surveys. The same questionnaire was used in the three surveys but some indicators were refined to better capture the impact at household level. That despite the good intentions, some indicators were found to be strictly not comparable later in trend analysis. In addition use of farmers estimates of crop production allocated in development literature for

accuracy were preferred to crop surveys with their inherent large errors of measurement. In short, valuable experience had been acquired on the job inspite of the shortcomings.

2.1.9. The Small Valley Dams & Tanks (SVD)

In May 1994, IFAD commissioned a Project Formulation Mission for provision of water for humans and large livestock population in the project area. The team recommended that a consultant be engaged to lead a team of GOU civil/water Engineers, Surveyors and Technicians to carry out a baseline survey, prepare Detailed designs and Specifications, Bills of Quantities and prepare Tender Documents for the Construction and Rehabilitation of Water Valley Dams. Following the approval of this recommendation by IFAD Management and GOU, Engr. Jide Fatokun, a consultant Water Development Engineer was appointed, following the normal guidelines of recruitment of consultants. The consultant did not commence his consultancy work until May 1995 and Tendering procedures were completed in December 1995. Construction/Rehabilitation of the SVD commenced January 1996 and Donor Funding of this activity closed in June 1996 when two new Dams and one Tank had been constructed and one Dam rehabilitated and were substantially complete.

3.0 Project Outcome and Rating

The audit report asserts that as a result of Economic Recovery Programme (ERP) and the establishment of peace and security, the contribution of SWRARP to the economic activity have to be assessed in conjunction with other development activities in the region. To determine outcome, the potential contribution of individual project components is considered.

3.1 The Adaptive Research and Extension

It is believed to have had a positive impact on the production of irish potatoes and bananas. The PAR agrees that it substantively facilitated the field trials of on-going research which led to the release of new varieties of irish potatoes. It also helped to popularise an old but effective husbandry practice to control banana weevils.

3.2 Community Development (CD)

The PAR asserts that CD promoted diversified enterprises and fostered local management capacity. The training and technical assistance imparted is likely to benefit the recipients over the long run.

Annex C

3.3 Pilot Credit Scheme

The PAR observes that the program was poorly targeted as they appear to have benefitted the relatively better off or politically well placed individuals within the communities reached. The management's review was that the targeted groups were well chosen covering all rural areas. 65% of the groups were women.

3.4 Rural Feeder Roads (RFR)

The PAR observes that in some areas, the road programme must have had a positive impact on general economic activity, especially where impassable roads have been opened to traffic. However, the impact was neither uniform nor was it felt along the entire network. The Management's view is that maintenance is a key factor to such a costly investment and all District Authorities should be sensitized to budget adequate funds for maintenance and supervision of such roads.

3.5 Agricultural Inputs Supply (AIS)

The PAR observes that initially, with severe market disruptions and scarcity of foreign exchange, there was a rationale for the component. The project provided early support to private retailers by importing small quantities of inputs. Later on, the program significantly reduced its effectiveness due to competition with the private sector.

3.6 Small Valley/Dams (SVD)

The PAR asserts that the program is still indeterminate because they are still being filled and their benefit will become apparent when they are put to their full use. It also alleged that some residents could not remember when they last had a shortage of water. The management's view is that the sites selected were very competitive in terms of real need for water. We are fortunate that over the last two years, we have had steady rains otherwise cattle keepers used to migrate in search of water during the dry spells of December to March and June to October every year.

4.0 Conclusion - Sustainability

The Audit report disagrees with the ICR's satisfactory rating for overall project outcome. This disagreement is based according to Audit report on poor performance of the feeder roads and Agricultural Inputs. It, however, agrees with ICR's rating of satisfactory performance of the Adaptive research and extension and the Community Development Components.

The Management's view is that Agricultural Inputs' performance which involved purchase of Agricultural Inputs for sale worth US$ 3m and so far over shs. 2.8 billion has been recovered is not a poor performance. The same component was responsible for provision of vehicles and other equipment for use by the Project. This, too, was carried out despite the initial delays.

The feeder road component, though delayed to start, picked up and the target was completed and surpassed making more roads available to traffic. The District Authorities need to be reminded of their obligation to maintain them as their responsiblity after the project closure.

On sustainability:-

a) The agricultural Inputs supply is now in the hands of the private sector.

b) The Adaptive Research and Extension components were merged with the two national programs for Research and Extension. However, Adequate funding and different priorities for the project area may render the benefits gained under the project uncertain.

c) The Civil works undertaken at the project headquarters offices, residential houses, office block at Rukungiri district headquarters, stores constructed at Kalengere Research Sub-station and Rubare farm, repairs and equipment provided at D.F.Is, need to be maintained and utilized fully.

d) Rural Feeder Roads require periodic and regular maintenance for sustainability. The equipment purchased under the project require supplementary equipment and spares. Mbarara district has already bought additional maintenance equipment.

e) The Water User's Associations require more training and organisation in order to manage and self-finance the operations of the small Valley Dams.

f) The project trained 17 staff at MSC level and over 50 on short courses. The staff have been absorbed in other parts of MAAIF and MOLG, District Authorities, and will continue to benefit the country.

g) The District Authorities staff who were trained on the job especially on rural road rehabilitation will continue to benefit future programs.

Annex C

h) The Pilot Credit scheme was able to mobilize farmers' groups which were able to save their own money and eventually distribute amongst themselves on credit. The rural savings and credit schemes have been mobilized in all rural communities in the project area.

EDWARD K. TUMUSIIME
PROJECT COORDINATOR

Annex D

OED Response to Borrower's Comments

1. The borrower does not disagree with any of the principal ratings. Most of the comments are also in agreement with the findings and statements made in the PAR. Where appropriate, clarifications and the borrower's views have been incorporated in the PAR. The following changes have been made to the PAR. In three instances where no action has been taken, the reasons are explained.

2. In response to the comments 2.1.2 and 2.1.3, para. 3.4 has been modified.

3. In response to comment 2.1.6, para. 3.6 has been modified.

4. In response to comment 3.3, para. 4.3 has been suitably modified.

5. The PAR agrees with comment 3.4, so no changes are necessary.

6. No change has been made in response to comment 3.6 since the statement on the rationale for the construction of a dam at one of the sights (PAR para. 4.6) reflects an assessment by the intended beneficiaries. In the absence of evidence to the contrary, no changes have been made to the PAR.

7. No change has been made in response to comment 4.0 (section on sustainability) referring to the performance of the agricultural inputs component. The comment states that about US$2.8 million of the US$3.0 million cost of the inputs was recovered and hence, the component is considered satisfactory. While these figures support the statement made elsewhere in the PAR that the component incurred a loss, the key issue is the distortionary impact of the project on the development of the private sector. The comment does not disagree on this issue, so no changes have been made to the PAR.

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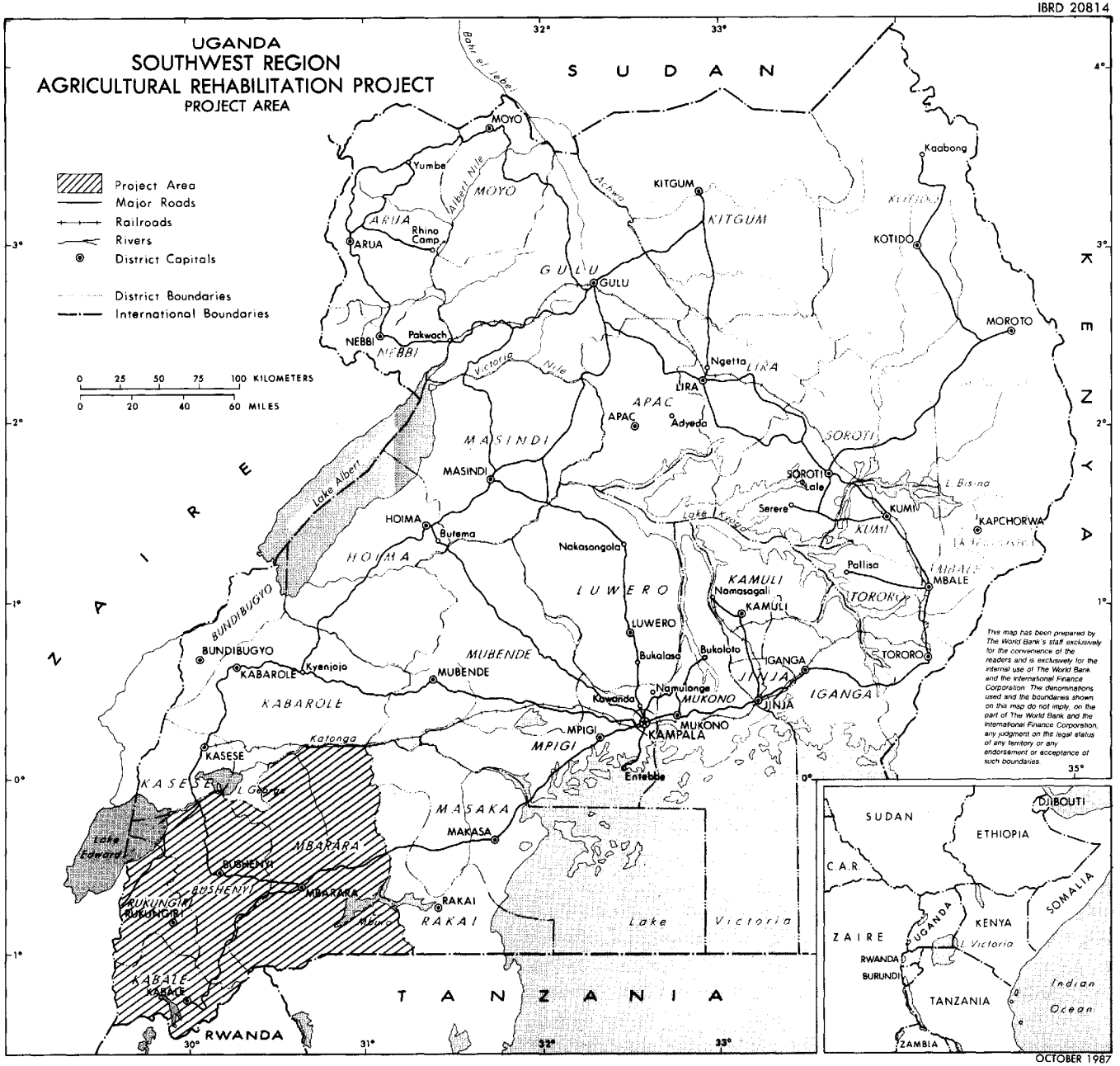

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