Document of

The World Bank

FOR OFFICIAL USE ONLY

CR. 1687-TA

Report No. P-4282-TA

REPORT AND RECOMMENDATION

OF THE

PRESIDENT OF THE

INTERNATIONAL DEVELOPMENT ASSOCIATION

TO THE EXECUTIVE DIRECTORS

ON A

PROPOSED CREDIT

OF SDR 34.7 MILLION

TO THE

UNITED REPUBLIC OF TANZANIA

FOR A

POWER REHABILITATION PROJECT

April 10, 1986

CURRENCY EQUIVALENTS a/

Currency Unit	=	Tanzania Shilling (TSh)
TSh 1.00	=	US$ 0.0609
US$ 1.00	=	TSh 16.415
US$ 1.00	=	SDR 0.87

ABBREVIATIONS AND ACRONYMS

CIDA	-	Canadian International Development Authority
EIB	-	European Investment Bank
ESMAP	-	Energy Sector Management Assistance Program
GASCO	-	Gas Corporation
GWh	-	gigawatt hour
ICS	-	Interconnected System
kV	-	kilovolt
kWh	-	kilowatt hour
LPG	-	Liquefied Petroleum Gas
m3	-	cubic meter
MEM	-	Ministry of Energy and Minerals
MNRT	-	Ministry of Natural Resources and Tourism
MW	-	megawatt
MWh	-	megawatt hour
NUWA	-	National Urban Water Authority
SIDA	-	Swedish International Development Agency
TAC	-	Tanzania Audit Corporation
TANESCO	-	Tanzania Electricity Supply Company, Limited
TARECO	-	Tanzania Rural Electrification Corporation
TPDC	-	Tanzania Petroleum Development Corporation
tpy	-	tons per year
TTI	-	Technician Training Institute
TIPER	-	Tanzanian and Italian Refining Company, Ltd.
UNDP	-	United Nations Development Program

FISCAL YEAR

United Republic of Tanzania	-	July 1 to June 30
TANESCO	-	Calendar Year

---

a/ As the Tanzania Shilling is officially valued in relation to a basket of the currencies of Tanzania's trading partners, the USDollar/Tanzania Shilling exchange rate is subject to change. Conversions in this

TANZANIA

POWER REHABILITATION PROJECT

CREDIT AND PROJECT SUMMARY

Borrower:	United Republic of Tanzania.
Beneficiaries:	The Tanzania Electric Supply Company, Limited (TANESCO), the Ministry of Energy and Minerals (MEM) and the National Urban Water Authority (NUWA).
Credit Amount:	SDR 34.7 million (US$40 million equivalent).
Terms:	Standard.
Re-lending Terms:	The Government would onlend US$37.3 million out of the proceeds of the credit to TANESCO at an interest rate of 9% over 20 years, with 4 years of grace, TANESCO to bear the foreign exchange risk; and make available US$2.4 million to MEM and US$0.3 million to NUWA, both as grants.
Cofinancing:	The United Republic of Tanzania is arranging cofinancing as follows: grants from the Governments of Canada (US$10.2 million equivalent), Finland (US$2.3 million equivalent), and Norway (US$8.3 million equivalent); and a loan from the European Investment Bank (US$6 million equivalent). An additional amount of cofinancing for about US$10.6 million is being sought, but for which commitments have not yet been confirmed.
Project Objectives:	The main objectives of the proposed project are (i) to help restore Tanzania's power system, which is in urgent need of rehabilitation, to reasonable levels of reliability and service, and (ii) to encourage efficient domestic energy resource development and management. The proposed project would re-establish the operating performance of TANESCO's power system and assist in improving its financial performance through appropriate pricing policies. It would also help the Government and TANESCO to develop an invest- ment program for the power sector based on least-cost criteria, consistent with Tanzania's available financial and foreign exchange resources. It is also designed to improve availability and production of household energy supplies by pilot activities in more efficient commercial charcoal and charcoal stove production.

Project Description: The project comprises, for the power subsector: rehabilitation of power stations with a total nameplate rating of about 120 MW; rehabilitation of existing transmission lines, substations and distribution networks; improvement of associated communications facilities and supply of transport, spares and tools. Technical assistance would be provided for project implementation, financial operations, engineering and training programs in all areas of TANESCO's operations. For the other energy sector components, the project comprises: two or three commercial-sized pilot charcoal production operations based on the use of natural forests that have to be cleared for agricultural purposes; training of charcoal cooker manufacturers and artisans in production and dissemination of improved cookers; and a study of the feasibility of manufacturing or importing low-cost electric cookers. For NUWA, the project would provide technical support to improve its billing and collection procedures to ensure more timely repayment of its debts to TANESCO.

Project Risks: The major risk is financial. The projected load growth and TANESCO revenues take the existing depressed state of the Tanzanian economy into consideration and also assume that it will continue for the immediate future. As a result, high tariff increases are required in order to provide adequate cash generation for TANESCO's overall operations and investments (even with an investment program that has been curtailed). A 67% tariff increase has recently been implemented and a semi-annual tariff review and adjustment mechanism is provided for under the project. No major physical risks are anticipated in implementing the proposed project. The charcoal cookers and production components depend on a newly-created organization for their management. This risk, as well as the problem of designing a workable arrangement between Government-supported training and financing activities and initiatives for private sector operation and marketing, would be reduced by the involvement of Tanzanian institutions experienced in private enterprise development and from experience from ongoing similar projects in other African countries.

Estimated Project Costs: a/	Local	Foreign	Total
		US$ million	
Power Components:			
Generation	0.4	8.5	8.9
Transmission	0.4	3.9	4.3
Transmission Substations	0.3	2.9	3.2
Distribution	5.1	24.8	29.9
Telecommunications	0.1	1.2	1.4
Workshops	1.7	8.0	9.7
Training & Technical Assistance	0.7	6.4	7.1
Tech. Asst. and Eqpt. for Acctg. Dept.	-	2.4	2.4
Engineering	-	1.4	1.4
Sub-total Base Cost	8.7	59.6	68.3
Physical Contingencies	0.9	5.7	6.6
Price Contingencies	1.6	9.4	11.0
Power Total Cost	11.2	74.7	85.9
Energy Components:			
Pilot Charcoal Manufacturing Program	0.6	0.3	0.9
Charcoal Cooker Program	0.4	0.3	0.7
Feasibility Study for Electric Cookers	-	0.1	0.1
Energy Management	-	0.1	0.1
Unallocated	-	0.2	0.2
Sub-total Base Cost	1.0	1.0	2.0
Physical Contingencies	0.1	0.1	0.2
Price Contingencies	0.1	0.1	0.2
Energy Total Cost	1.2	1.2	2.4
Technical Assistance to NUWA	-	0.3	0.3
TOTAL PROJECT COST a/	12.4	76.2	88.6
Interest During Construction	14.0	-	14.0
TOTAL FINANCING REQUIREMENT	26.4	76.2	102.6

a/ Net of duties and taxes, which are minimal, since TANESCO is exempt.

	Local	Foreign	Total
	US$ million		
Financing Plan:			
Sources:			
IDA	1.2	38.8	40.0
Canada	-	10.2	10.2
Finland	-	2.3	2.3
European Investment Bank	-	6.0	6.0
Norway		8.3	8.3
Other Cofinanciers (tentative)	-	10.6	10.6
TANESCO	11.2	-	11.2
Government	14.0	-	14.0
TOTAL	26.4	76.2	102.6

Estimated Disbursements: IDA FY	87	88	89	90
	US$ million			
Annual	14.9	14.8	7.4	2.9
Cumulative	14.9	29.7	37.1	40.0

Economic Rate of Return: About 12%

Staff Appraisal Report: No. 6026-TA, dated April 10, 1986

Map: IBRD No. 16231R

INTERNATIONAL DEVELOPMENT ASSOCIATION

REPORT AND RECOMMENDATION OF THE PRESIDENT TO THE EXECUTIVE DIRECTORS FOR A PROPOSED CREDIT TO THE UNITED REPUBLIC OF TANZANIA FOR A POWER REHABILITATION PROJECT

1. I submit the following report and recommendation for a proposed credit to the United Republic of Tanzania of SDR 34.7 million (US$40.0 million equivalent) on standard IDA terms to help finance a Power Rehabilitation Project. US$37.3 million would be relent to the Tanzania Electric Supply Company, Limited (TANESCO) at an interest rate of 9% for 20 years, including 4 years of grace. TANESCO would bear the foreign exchange risk. In addition, the United Republic of Tanzania is arranging cofinancing with the Governments of Canada, Finland and Norway, and with the European Investment Bank.

PART I - THE ECONOMY 1/

2. An economic memorandum on Tanzania (Report No. 5019-TA), based on the work of an economic mission which visited the country in September/October 1983, was issued in August 1984. Subsequently, economic missions have visited the country in September and December 1985. A Country Economic Memorandum based on the findings of these missions is currently under preparation. A Summary of Social and Economic Data is in Annex I.

Background

3. At Independence in 1961, Tanzania was one of the poorest countries in the world. Almost solely dependent on subsistence agriculture and a few estate crops, the country had a very modest industrial base, which accounted for less than 5% of Gross Domestic Product (GDP), and a very small number of educated and trained personnel. For the first six years after Independence, the Government's development objectives resembled those of many other less developed countries, stressing growth in per capita income and national self-sufficiency in skilled manpower, based on market forces and capital intensive agricultural projects. This approach has a number of drawbacks, such as high investment costs in the agricultural sector. It led, in the Government's view, to unacceptable economic and social conditions, such as widening income differentials and unequal opportunities for advancement in the rural areas. In response to this situation, the national development strategy was reassessed in 1967. The new priorities, enunciated in the Arusha Declaration and related policy statements, were directed toward establishing a socialist society, with emphasis on broad-based rural development, self-reliance in development efforts, and mass education. To accomplish these ends, the State, with guidance from the Party, was expected to play the leading role, especially in the reform and creation of appropriate institutions. This led in the late 1960s to the nationalization of large-scale industry, commerce and finance, the creation of numerous parastatal bodies, the formation of Ujamaa (cooperative) villages, the decentralization of Government (1972), and the mass campaign of villagization (1974-76).

1/ Parts I and II of this Report are substantially similar to the corresponding parts of the President's Report for the Sixth Highway (Rehabilitation) Project being circulated at the about same time as this Report.

4. Despite some disruption arising from these major institutional changes during the period, Tanzania managed to show improvements both in social welfare and in macroeconomic performance. Since Independence, primary school enrollment increased by more than 50%, life expectancy rose by almost 5 years, and access to safe water increased in both the rural and urban areas. GDP grew by 4.4% per annum from 1966 to 1973, investment averaged 24% of GDP from 1970 to 1973, and domestic resource mobilization improved with recurrent revenues rising as a proportion of GDP from 15% in 1967/68 to 19% in the mid-1970s. However, the productive sectors grew slowly and the rate of return on new investments (which were concentrated on the industry and transport sectors) was poor. Perhaps the principal disappointment was in agriculture, the dominant sector of the economy, which grew by only 2.3% per annum from 1966 to 1973. Growth was also uneven among regions and precluded any narrowing of rural-urban income differentials. Tanzania made rapid progress toward the Africanization of key posts in the economy, but large gaps in manpower requirements remained. Dependence on foreign aid to finance both domestic investment and the widening balance of payments gap also increased. By 1973, the issues that were to be so important for Tanzania throughout the later 1970s and early 1980s were becoming clear. How quickly could a country with limited trained personnel develop a strong and efficient centrally administered economy? How long could the country afford the costs, in terms of efficiency and incentives, often resulting from the Government's emphasis on equity? What could be done to improve the growth rate of the monetized, productive sectors?

5. The oil price increases and world recession of 1973-74 coincided with two years of below average rainfall in Tanzania, which had a detrimental effect on agricultural production. Agricultural production also was affected by disruptive changes in the rural areas at this time (decentralization and villagization), and foodgrain production was reduced. The Government was forced into the world market, making large purchases of foodgrains for cash. Export crop production also fell during this period and the barter terms of trade dropped by about one-third during these two years. As a result, the current account deficit rose from US$118 million in 1973 to around US$340 million in both 1974 and 1975. Domestically, the recurrent budget fell into deficit and Government bank borrowing rose from TSh 416 million in 1973/74 to TSh 1,061 million in 1975/76.

6. The Government prepared a program to deal with at least the short-term effects of the crisis and received some assistance from the IMF and a program loan from the Bank Group. Under the Government program, import levels were tightly restricted, wages were frozen, government development expenditures were redirected towards the productive sectors, and the Tanzanian shilling was devalued by 10% against the SDR. Producer prices for food crops were substantially increased and, at the same time, the National Milling Corporation (NMC) was instructed to purchase a number of drought-resistant crops such as cassava, sorghum, and pigeon peas in addition to the usual foodgrains like maize. While these steps were taken to increase food production, they also discouraged the production of export crops, weakened the financial position of NMC, and required the banking system to extend large amounts of credit to NMC. Aside from the devaluation, little scope was given to market forces and Tanzania made no basic changes in its system of administered prices and government controls. The

basic weaknesses of the economy persisted -- declining export volumes, limited trained manpower, disappointing growth in the monetized and productive sectors, and poor maintenance of existing capital stock and infrastructure, especially in agriculture and transport.

7. Nonetheless, the Government program, boosted greatly by the coffee boom of 1977, additional foreign assistance, and reasonable weather for agriculture, was able to keep the economy in balance until 1978. During 1978, the overly stringent import controls were relaxed at the same time as the terms of trade began to deteriorate again. The balance of payments went into deficit and foreign reserves were drawn down. Then, in October 1978, the country was invaded by forces from Uganda. The resulting war, the oil price increases of 1979, and the flooding and drought in different parts of Tanzania led to a worsening balance of payments deficit. The Government built up major arrears on its import payments for the first time since Independence. The domestic budget fell heavily into deficit as expenditures (led by defense) rose by 50% and revenues improved by only 10% from 1977/78 to 1978/79. As a result, Government borrowing from the banking system increased from TSh 600 million in 1977/78 to more than TSh 3,000 million in 1978/79. Such borrowing was the major factor in money supply growth, which exceeded 53% in this period.

8. During the late-1970s and into the 1980s the economy became troubled by major problems of falling production in agriculture and industry and declining factor productivity. In the mid 1970s, average GDP and per capita income growth rates were similar to those of other Sub-Saharan African countries. The average GDP grew by 5.2% per annum between 1970 and 1978. With population growing at 3.3% annually, per capita GDP increased at an average rate of about 2% annually. Between 1978 and 1980, growth in aggregate output slowed to 3.3% per annum. In 1981, falling agricultural and industrial production caused GDP to decline by 1.7%; the rate of decline accelerated to 3.2% in 1982. Since then there has been some recovery, with the GDP growing between 2 to 3% per annum. This has however, been hardly adequate to stem the decline in the living standards of a population which continues to grow by 3.3% annually. Output in subsistence agriculture and manufacturing, which had experienced high growth rates of 6% to 7% per annum before 1978, fell by 8% and 16.6% per annum respectively over the next four years, while output in the services sector continued to grow steadily. The services sector, which accounted for only 9% of value added in 1966, currently accounts for more than 25%. Output in the services sector reflects remuneration rather than output, and trends in subsistence production are at best guess-estimates with potentially large margins of error. For these reasons, trends in the rate of growth of GDP are in some doubt, but the shift away from a monetary to an informal economy is confirmed by the decline in the share of output marketed through official channels.

9. Although Tanzania has sustained a high investment ratio, this has not been matched by a similar success in the mobilization of domestic savings or in the return on investments. Up to the mid-1970s, foreign savings had financed 20-40% of domestic investment. However, the dependence on foreign savings rose sharply to more than 60% of domestic investment during the crisis years of 1974-75 and again from 1978. The

major shortfalls in domestic savings have occurred in the Government sector, where they have actually been negative in some years since 1975.

10. Agriculture remains the most important sector in Tanzania, accounting for 83% of total employment, 45% of GDP, and 80% of exports. The long-term trend growth rate of agricultural production has hardly kept pace with population growth and apparently has fallen in more recent years as the initial expansion of export crop production (through the mid-1960s) has been reversed. This poor performance cannot be adequately explained by the limitations of the natural environment. Although the importance of rural development has continuously been highlighted in Government statements, including the Arusha Declaration and successive plans, this has not always been reflected in the allocation of resources to the agricultural sector or in policy formulation and implementation. The general direction of the Government's post-Arusha agriculture strategy has also tended to emphasize the transformation of the institutional structure of rural development (through the formation of villages and increasing public involvement in the sector) over measures designed to improve agricultural production directly. Many of these institutional changes were introduced too rapidly, without careful planning or sufficient recognition that by themselves they could not compensate for inadequate incentives and shortages of skilled manpower and managers. More recently there has been a greater awareness of the role of incentives, and recent price adjustments attest to the Government's willingness to use incentives to influence the pattern of agricultural production. Available manpower, however, is still stretched rather thinly throughout the sector, mainly because of the predominant role assigned to the public sector. This has resulted in weakened capacity for policy planning and implementation, especially in the areas of research and extension, and deficient distribution of fertilizers and other on-farm supplies and equipment. Another factor underlying the poor performance of agriculture has been the deterioration of transport services. Road, rail, and water services have declined owing to a lack of spare parts, poor maintenance, and inadequate planning and management.

The Current Balance of Payments Crisis and Medium Term Prospects

11. The slow growth in agricultural production, transport bottlenecks, and external shocks described above have all contributed to the severe deterioration in the balance of payments since 1979. By 1985, export volumes had fallen to a level one-third below the peaks of the mid-1960s and early 1970s. Furthermore, while terms of trade have improved by about 5% in 1984/1985 over the previous two years, they remain nearly 40% below the coffee boom years 1977-78. Owing to these adverse developments, the purchasing power of Tanzania's exports in 1985 was more than one-third lower than in 1977 and only one-half of the 1966 level. The basic adjustment to the high current account deficits following the second oil shock was through a cutback in imports. By 1985, import volumes were 23% below the level in 1978-80 and 18% below the level prevailing in the early 1970s. Aid inflows have been maintained in nominal terms, which implies a significant reduction in real terms. Currently, food, oil and debt service account for almost all of export earnings resulting in a severe shortage of foreign exchange for many categories of imports for which aid resources are not available. As a result, Tanzania has built up almost US$400 million of import arrears, and has drawn down all of its reserves.

12. Even with the immediate encouraging prospects for coffee and oil prices; given the limited scope for further external aid and at best a sluggish export recovery, there is little immediate prospect for a dramatic improvement in the balance of payments. This continuing balance of payments constraint is inevitably having a debilitating effect on the economy, with lower imports reducing production and maintenance of existing assets, resulting in further falls in exports and available foreign exchange. This vicious circle will be difficult to break unless there is a substantial injection of foreign exchange and major improvements in producer incentives, parastatal operations, import allocations, promotion of non-traditional exports, and overall government planning and budgeting.

13. Following intensive discussions with the Government in 1980 and 1981, an Export Rehabilitation Program Credit (Credit 1133-TA) in the amount of US$50 million was negotiated in March 1981 to support a limited but sharply defined set of measures intended to assist the Government in arresting the decline in earnings from the country's major export crops. During negotiations of this Program Credit, agreement was also reached on a Memorandum of Understanding on Follow-Up Measures. These included more restraint and selectivity in the public investment program, more emphasis in the recurrent budget on the operations and maintenance needs of the economy, improved foreign exchange budgeting, reexamination of the roles (particularly purchasing mandates) of the State-owned crop authorities, introduction of more payment-by-results schemes in industry, and review of subsidy and cost recovery arrangements in the public sector. A special agricultural account was established to channel imports into agriculture with surprisingly little friction among the institutions concerned, although the Government was not able to meet its own obligation to contribute US$50 million to the account. The Government also agreed that an independent Advisory Group would be established to assist in preparing a comprehensive program of economic rehabilitation and recovery.

14. The Advisory Group began work in November 1981 and completed its Report in April 1982. A large number of its recommendations were adopted by the Government and incorporated into a Structural Adjustment Program (SAPs), which was issued in July 1982. This Program includes a series of important initiatives and proposals. The development budget was substantially cut back in 1982/83 for the second year in a row to release resources for the operations and maintenance needs of the economy. Agricultural producer prices were increased in 1982/83 and in 1983/84, in line with inflation. The Government also announced its intention to relax restrictions on interregional trade. It also opened up the marketing of some crops (mainly minor grains such as millet) to anyone interested in conducting such trade.

15. In the 1984/85 budget submitted to Parliament on June 14, 1984, the Government announced a series of new measures. These measures included an exchange rate adjustment (36%), the second in two years, an increase in agricultural producer prices of between 46% and 55%, and an initiation of a program to improve the efficiency and productivity of agricultural parastatals. These pricing changes were sufficient to allow agricultural

parastatals as a group to break even while resulting in an increase of 5% in real incomes of export crop producers. The budget also attempted to make the NMC, the parastatal responsible for grain marketing, financially viable through an increase in the consumer price for maize and a decontrol of the price of maize flour (sembe). These measures together have eliminated the budgetary transfers to the parastatals, which had amounted to nearly 11% of total recurrent expenditures in 1982/83. The measures also included politically sensitive actions such as the removal of subsidies on fertilizer and insecticides and the introduction of fees for secondary schools to cover a part of the costs.

16. While the FY86 budget speech continued to emphasize liberalization of economic activity and improvement of public sector efficiency, the actual measures were disappointing. The increase in agriculture producer's prices, 20% in nominal terms, fell short of the going inflation rate of above 36% p.a. Also no exchange rate change was announced, creating the possibility of increased deficits in the parastatal sector. On the positive side, the budget offered a number of tax breaks to encourage private business activity. The Government abolished the partnership tax and export tax on timber and cardamom. The scope of foreign exchange retention accounts was expanded to include imports of incentive goods, in addition to recurrent inputs. Finally the scope and the coverage of the own funded imports scheme was expanded considerably.

17. The adjustment measures implemented by the Government so far have been successful in stabilizing the budget deficit. This has paid off in terms of reduction in the rate of growth of money supply and has resulted in a deceleration of inflation towards end-1985. Improving the working of the grain market has been reflected in improved food grain availability in the country. On the other hand, the measures have not succeeded in increasing the incentives for export crop production, nor correcting the growing overvaluation of the shilling and removing the rigidities in the market for foreign exchange. Furthermore, these measures have not been sufficient to stimulate an increase in external assistance. The resulting decline in real import capability has limited the efficacy of many of the policy reforms and frustrated economic recovery.

18. Tanzania has not had access to IMF facilities since December 1980, when the Government failed to meet performance targets under a previous Standby. Despite several rounds of discussions since 1982, no agreement has been reached on a reform program. An IMF mission will visit Tanzania in April 1986 for further discussions.

19. Even with a much improved export performance, Tanzania will continue to face a very difficult balance of payments situation, especially over the next three to five years. A halt in the decline in per capita GDP will require increasing amounts of aid in real terms and a careful review of import requirements, especially those for low-priority projects with long gestation periods and high foreign exchange costs. Otherwise the prospects would be for generally stagnant economic activity over the 1980s as a whole, with a substantial decline in per capita incomes. To avoid this situation, continued emphasis will be needed on export performance and

concerted effort will be required to improve the level of capacity utilization and efficiency in the economy. Furthermore, this must be done without jeopardizing vital food production.

20. Although it may be possible to finance a small portion of the current account gap through commercial borrowings, the scope for this is clearly limited; in addition to the difficulties of raising commercial credit during a period of balance of payments problems, Tanzania simply cannot afford the heavy burden of debt service payments. Therefore, the bulk of the financing requirements will have to be met by additional foreign assistance. Possible sources for this assistance include deferred payment arrangements and other concessional financing from oil-supplying countries, additional new commitments from traditional bilateral and multilateral sources, and continued movement toward non-project assistance.

External Debt

21. Owing to the very concessional terms on which past aid has been given to Tanzania and the Government's previous reluctance to use higher cost commercial loans and suppliers' credits, the country's overall debt service ratios have historically been less than 10%. In recent years, there has been somewhat greater reliance on non-concessional borrowing. This borrowing, combined with falling exports, has resulted in an increase in the debt service ratio, which was estimated in 1984 to have been about 20%. The Bank Group is assisting the Government in carrying out a complete review of its external debt and improving its debt management system. This effort, which is still under way, has revealed that the reports on publicly guaranteed debt are incomplete and projected debt service payments may rise sharply as a number of old loans begin to fall due and coverage of the debt information improves. Unless Tanzania's poor export performance is reversed, the debt service ratio over the next several years may be significantly higher than indicated above. Based on existing data, the Bank Group held 33% of Tanzania's external debt outstanding and disbursed in 1984 (IBRD 10%) and obligations to the Bank Group accounted for 63% of total debt service.

PART II - BANK GROUP OPERATIONS IN TANZANIA

22. Tanzania joined the Bank, the Association, and the International Finance Corporation in 1962. Beginning with an IDA credit for education in 1963, 60 IDA credits and 19 Bank loans, two of these on Third Window terms, amounting to US$1,134.5 million have so far been approved for Tanzania. In addition, Tanzania has been a beneficiary of 11 loans totalling US$244.8 million which were extended for the development of the common services and development bank operated regionally by Tanzania, Kenya, and Uganda through their association in the former East African Community. IFC investments in Tanzania, totalling US$4.7 million, were made to the Kilombero Sugar Company in 1960 and 1964. This Company encountered financial difficulties and in 1969, IFC and other investors sold their interest in the Company to the Government. Another IFC investment of US$1.7 million in soap manufacturing in Mbeya was approved by the Executive Directors in June 1978, an investment of US$1.5 million in metal product manufacturing was approved in May 1979 and in June 1984 an investment of US$3.2 million was approved for

the Amboni sisal rehabilitation project. Annex II contains summary statements of Bank loans, IDA credits and IFC investments to Tanzania as of March 31, 1986.

23. Bank Group lending in Tanzania has been centered on: (i) agriculture; (ii) transport and communications; (iii) industry; and (iv) education and manpower development. Since FY81, new Bank Group lending has been focussed primarily on the rehabilitation and use of existing productive facilities and the introduction of infrastructure and services (such as power generation and education facilities) of long term use to the economy. Projects have been designed to minimize new demands on the Government's recurrent, development, and foreign exchange budgets; have been centered on already experienced or financially viable institutions; and have been logistically insulated, as far as possible, from general supply difficulties in the economy. They have included technical assistance and training for better maintenance and use of existing capital facilities and more effective resource allocation in the economy. Lending during FY82-FY85 along these lines included a second petroleum exploration project, and a Petroleum Sector Technical Assistance Project, third and fourth technical assistance projects (focussed on key manpower gaps in the agricultural sector), a rehabilitation project for the Dar es Salaam sewerage system, a coal engineering project, a hydroelectric power project, and a port rehabilitation project.

24. A small number of other projects may be proposed in the agricultural, energy, and transport sectors during the next three years. A Sixth Highway (Rehabilitation) Project, involving rehabilitation of high priority roads and assistance to the trucking industry, is being submitted simultaneously with this one, and agriculture and industrial rehabilitation projects are under preparation. However, the design and implementation of viable projects including new investments in the productive sectors of the economy, especially agriculture and industry, will remain problematical in the absence of a wide-ranging economic adjustment program. In addition to financing specific projects, the Bank Group has provided non-project assistance on three occasions in support of Government efforts to deal with its balance of payments difficulties. The first such Credit was made in 1974, the second in 1977, and the most recent, an Export Rehabilitation Program Credit (No. 1133-TA), in April 1981. A rehabilitation program credit designed to provide import support to key sectors for economic recovery is under preparation and will be appraised when the Government completes a satisfactory economic adjustment program.

25. Project implementation in Tanzania has been adversely affected during the last six years by the disruptions of the Uganda War and the country's extreme foreign exchange difficulties, which have resulted in shortages of fuel and building materials, even when budgetary allocations for such purchases have been adequate. In addition, domestic policies have weakened the capacity of the agricultural sector to fulfill its traditional functions effectively. External financing agencies have been increasing the share of direct and indirect foreign exchange costs covered by project budgets; however, it is impossible to cushion projects completely, particularly in remote areas, from the ramifications of the economic crisis. Bank Group disbursements grew from US$58 million in FY78 to US$115.9 million in FY82 and then declined to US$53.3 million in FY85. A comparison with other portfolios in the Eastern Africa Region indicates that Tanzanian disburse-

ments have been about average for the Region, ranging as a proportion of outstanding commitments from 25.5% in FY78 to 19.9% in FY85 (compared with 24.5% and 19.7% in the same years for the Region as a whole).

26. Supervision missions have been concerned with adapting project implementation to difficult factors facing the country or individual sectors, which were not anticipated or have proved worse than expected at appraisal. A major Country Implementation Review was held in Dar es Salaam in October 1982 during which Government officials and Bank Group staff agreed to recommend the restructuring or discontinuation of several projects experiencing persistent implementation problems. Intensive supervision and, in the case of the Mufindi Pulp and Paper Project (Credit 1370-TA), timely assistance from co-financiers have already had some remedial results. Even in the agricultural sector, where constraints on implementation have been most severe, there have been improvements in some projects. However, considerable work remains to be done in improving project implementation and disbursements. The Country Implementation Review scheduled for May 1984 had to be deferred because of changes in the Government, but discussions were held on further rationalization of the project portfolio. The next Review is planned for Fall 1986.

27. Given the state of the Tanzania economy over the last five years, our strategy during this time has been to follow a two-track approach which involves the pursuit of structural adjustment issues on the one hand, but which in the absence of complete agreement with the Government on all elements leading to a structural adjustment type lending operation, has focussed on a few high priority projects in specific sectors (para. 23). Through these projects we can reinforce positive policies and reform, and give priority to important infrastructure which is in need of rehabilitation and is of long-term value to the economy. This proposed power rehabilitation project is an integral part of this strategy.

PART III - THE ENERGY SECTOR

Introduction

28. Tanzania's energy resources are substantial and diverse, but have not been substantially developed so far. In addition to large forestry resources, the country has coal deposits in the southwestern region and significant proven gas deposits on Songo Songo Island, some 200 km south of Dar es Salaam. Another substantial natural gas deposit of as yet undefined size has been located at Mnazi Bay north of the Mozambique border. Tanzania's hydro potential is estimated at about 4,500 MW, of which 247 MW have been developed so far and 80 MW are under construction. According to a recent joint UNDP/World Bank Energy Assessment Report 2/, Tanzania's energy consumption totalled about 9 million metric tons of oil equivalent in 1981, of which 92% was consumed as non-commercial energy (fuelwood and charcoal) and the balance as commercial energy (hydroelectricity, coal, and petroleum products). Overall per capita consumption, estimated to be about 470 kilograms of oil equivalent, is comparable to other developing countries at similar levels of per capita income.

2/ "Tanzania: Issues and Options in the Energy Sector", Report No. 4649-TA, November 1984.

The Government's Energy Sector Objectives, Strategy and Policy

29. The Government's five broad objectives in the energy sector are: (a) to assure minimum needed supplies of energy to the various sectors at reasonable cost; (b) to charge uniform prices for commercial energy within each subsector (petroleum, electricity) throughout the country; (c) to maintain the financial viability of the various supply organizations in the energy field (i.e. power, petroleum); (d) to promote some of the under-developed indigenous energy resources for domestic use and export; and (e) to secure and augment the supply of household fuels such as fuelwood and charcoal.

30. In pursuit of these objectives the Government has actively supported the expansion of electric power supply facilities, taken a majority equity position in the country's only refinery, and actively involved itself in the import of petroleum products. Attempts are made through pricing, import restrictions and curbs on private driving to reduce petroleum consumption as much as possible. The Government also actively promotes the search for oil and gas (with Bank Group assistance), generally in cooperation with foreign oil companies. In pursuit of its social objectives, unified prices and tariffs are charged for electricity, as well as for petroleum products, throughout the country regardless of the local costs of supply; however, this issue is being reviewed in the electric power sub-sector in a study being carried out under the ongoing Fourth Power Project (para. 38). The Government recovers significant net revenues from the petroleum sector. With respect to electricity prices, the Government is officially committed to maintaining the financial viability of the Tanzania Electricity Supply Company, Limited (TANESCO), the electric power supply entity. Although this objective has been in jeopardy, it has been addressed recently by the Government, and the proposed project provides additional measures for improvement (paras. 63-68).

31. For a number of years the Government has actively promoted the development of its ample hydro resources for export, which current and future surplus of generating capacity makes more urgent (para. 48). It is also actively considering development of gas (both for domestic and export purposes) and coal resources. In the household fuels sector, the Government is supporting reforestation and is actively involved in the renewable energy area. It is supporting increased supplies of liquefied petroleum gas (LPG) under Cr. 1604-TA.

Energy Sector Organization

32. Responsibility for energy supplies rests with several different agencies which have recently begun to more actively coordinate their activities. As recommended by the Energy Assessment Report, an Energy Coordinating Committee, on which several ministries and energy agencies are represented, has been established in the Ministry of Energy and Minerals (MEM), which is now in charge of coordinating all energy activities of the Government. MEM is directly responsible for hydrocarbons, electricity, coal and uranium. The Ministry of Natural Resources and Tourism (MNRT) deals with fuelwood through its Forestry Department, while the Prime Minister's office oversees development of village woodlots and village electrification. In the commercial energy sector, MEM supervises the Tanzania Petroleum Development Corporation (TPDC), the Tanzanian and

Italian Refining Company, Ltd. (TIPER), the Tanzania Electric Supply Company, Ltd. (TANESCO), and the State Mining Corporation (STAMICO). It is envisaged that MEM will also supervise the Tanzania Rural Electrification Corporation (TARECO) as well as a proposed gas corporation (GASCO).

Energy Resources

33. Fuelwood. Tanzania has approximately 440,000 km2 of forestry resources (40% of its land area). No national forest inventory has been made, but potential annual fuelwood production is estimated at about 20 million m3, though in major consumption areas annual consumption is estimated to be some two and a half times greater than sustainable supply. Market prices of charcoal in urban centers are rising rapidly in real terms, exceeding those of price-controlled, but scarce, kerosene and LPG, on a energy-equivalent basis. This imbalance has serious ecological consequences and implications for further fuelwood supply. As follow-up to the Energy Assessment Report, the Joint UNDP/World Bank Energy Assessment Sector Program (ESMAP) is discussing with the Government the possibility of a pilot fuelwood project. The proposed project has a charcoal component (para. 57).

34. Coal. Tanzania's coal resources are estimated at about 2 billion tons, of which 304 million are proven. Several potential mining projects, supported by the Governments of China and the Federal Republic of Germany, and by the IDA-financed Coal Engineering Project (Cr. 1371-TA), could produce more than 150,000 tons per year (tpy) by 1988 and 300,000-500,000 tpy after 1990. However, it is not clear whether markets large and close enough to source of supply exist to justify further exploitation.

35. Natural Gas. Tanzania's natural gas reserves of 0.72 trillion cubic feet were proven in 1983 under the IDA-financed Second Songo Songo Petroleum Exploration Project (Cr. 1199-TA); they are equivalent to Tanzania's total domestic commercial energy needs for the next 30 years at 1981 consumption levels. The principal proposed market at present is fertilizer production for export (90 percent). Potential financing for such a project, estimated to cost between $400 to $500 million, is being considered by an international consortium that includes IFC as a possible cofinancier. Under the IDA-financed Petroleum Sector Technical Assistance Project (Cr. 1604-TA), a domestic gas utilization study and a gas pipeline feasibility study will be carried out. Potential domestic uses for the gas include substitution for liquid fuels in industry and transport, and, in the longer term, power generation.

36. Petroleum. Since 1969, TPDC, under production-sharing or joint venture agreements with international oil companies, has drilled 23 exploration wells, but has so far succeeded only in the discovery of gas. Hence all petroleum is imported. Refining of imported crude is carried out TIPER at Dar es Salaam, and petroleum products are marketed by five Tanzanian subsidiaries of international oil companies. The Government, through TPDC, holds a 50% share in two of them, while the others are wholly owned by their parent companies. Although petroleum was only 7.4% of total energy consumed in 1981, it accounted for 92% of energy consumption other than biomass fuels. Despite Government rationing since 1978, the relative share of petroleum (crude and refined products) in total imports has continued to grow and amounted to 50% of export earnings in 1984.

37. Hydro. A total of 4,500 MW of potential power sites with 21,000 GWh of firm annual energy have been identified. Some 253 MW have been developed, with another 80 MW being built under the IFA financed Fourth Power (Mtera Hydroelectric) Project (Cr. 1405-TA). Including the Mtera hydroelectric plant, annual energy availability by 1988 will be 1,450 GWh, considerably in excess of projected demand, which has been depressed due to the delayed economic recovery of the country.

Energy Pricing

38. The retail petroleum product prices in Tanzania are generally higher than the international prices and reflect costs of imported crude oil products, domestic refining and distribution costs as well as economic and social considerations and recognition of the need for conservation. While the Government has rapidly increased the prices of petroleum products following the international oil price increase in 1979 (when oil product prices were revised upwards by more than 50%), it has not adequately increased power tariffs, although there have been some increases. The power tariff structure and levels need to be periodically reviewed. Because uniform power tariffs apply throughout Tanzania, a substantial cross-subsidy exists between consumers supplied by the interconnected system and those from isolated diesel plants. A tariff study has been undertaken under Cr. 1405-TA, the results of which have recently been received. A major element of its recommendations, an immediate tariff increase of 67%, has already been implemented as of March 1, 1986. After reviewing its findings, agreement would be reached between IDA and TANESCO on implementation of the other agreed recommendations by December 31, 1986. In addition, a semi-annual review and adjustment mechanism would be implemented (para. 65).

The Power Sub-Sector

39. Electricity supply is the responsibility of TANESCO, which is wholly owned by the Government and operates under the supervision of MEM. TANESCO supplies some 93% of the power consumed in the country, with the balance self-generated by parastatals and private organizations. A very modest rural electrification program exists under the Government-owned TARECO.

40. The present power system of TANESCO consists of an interconnected system in the east, northeast and southwest which provides services to seven urban centers and has an installed capacity of 335 MW. Twenty-three isolated service areas supply the urban and industrial centers in the rest of the country, with a total installed capacity of 66 MW, mostly by diesel generation, and less than 2 MW of hydro. TANESCO's total installed capacity of 401 MW comprises 253 MW hydro and 148 MW diesel and gas turbine power stations; 80 MW of additional hydro capacity is under construction at Mtera; 51% of the present installed capacity is at the Kidatu power station which supplies the main interconnected system.

41. There are pervasive signs of age, overloading, corrosion and lack of maintenance (primarily due to lack of spare parts) throughout the TANESCO interconnected system as well in the isolated diesel generating stations, and the whole supply system is in urgent need of rehabilitation. Service reliability has greatly deteriorated, with some 500 major outages

per year reported during 1981-83. These incidents are costly, with major outages on occasion cutting such vital services as water supply in Dar es Salaam for several days, and disrupting industrial output. A detailed study of these conditions carried out under Cr. 1405-TA provides the basis for this project.

TANESCO's Administrative and Organizational Structure

42. According to its governing act, TANESCO is intended to operate as an autonomous corporation. However, its autonomy is limited because major decisions are subject to Government approval, and it routinely obtains most of its funds for capital expenditures from the Government. The company's top management is of high quality and the company has been quite successful in filling its most senior managerial positions with competent Tanzanian staff.

43. Improvements are needed in TANESCO's organizational structure and management practices; an organization and management study being carried out under Cr. 1405-TA is to be completed by mid-1986. Agreement has been reached with TANESCO that, after taking account of IDA's comments, the agreed-upon recommendations of the study would be implemented by December 31, 1986. There is a serious shortage of qualified, mid-level administrative and technical personnel and no incentive structure to reward outstanding employees. Under the project TANESCO would prepare an incentive program to be reviewed by the Association and to be operative by June 30, 1987.

44. The Bank Group has a long-standing involvement in TANESCO's training and manpower development programs. Dating from the appraisal of the first power project in 1967, TANESCO's progress in manpower development has been considerable. TANESCO established a training school and training program in the mid-sixties and later with the help of the Swedish International Development Authority (SIDA) and the Bank Group, developed a long-term and sound training program with appropriate objectives for manpower development. TANESCO's Manpower Development and Training Section is responsible for assessing the training needs for all categories of staff within TANESCO, and for preparing short- and long-term staff development plans. As part of the proposed project, the Canadian International Development Authority (CIDA) would assist the Technician Training Institute (TTI) at Kidatu to expand its course offering, improve the quality of instruction and cater more specifically for the needs of TANESCO.

45. To modernize its commercial and financial side, TANESCO urgently needs an appropriate management information system. Under the proposed project, two experts would assist in putting in place an expanded data processing system. On the technical side, the project would include advisors/trainers who would work with TANESCO supervisors and work crews and organize on-the-job training.

Patterns of Electricity Consumption

46. In 1984, TANESCO's system-wide sales of energy were 734 GWh, after two successive years of decline from the previous peak of 723 GWh reached in 1981. Eighty-three percent of the total was supplied by the

interconnected system (ICS), the balance by the isolated branches. Generation reached 776 GWh in 1984, some 164 GWh (21%) higher than sales. Sales in 1984 to the major tariff classes were split approximately: residential, 25%; commercial, 19%; industrial, 50%; others, 6%.

47. Load Forecast. Detailed load forecasts were recently prepared as part of the Tanzania Power Sector Master Plan, carried out under a least-cost investment study financed under Cr. 1405-TA. These forecasts reflect the continued depressed state of the Tanzanian economy and are much lower than those prepared only a few years ago. Two forecasts were prepared: the optimistic "upper bound" one is based on the assumption that macro-economic policies would be put in place to enable economic recovery to get under way in 1986; the other assumes a two year delay until real recovery begins. The lower scenario has been used in the economic and financial analysis on which TANESCO's investment program and this proposed project are based. Continuous updating of these load forecasts will be the responsibility of TANESCO's Planning Department and will be closely monitored under the proposed project. Under neither forecast would peak or energy demand encroach upon available capacity before 1992. Nevertheless, proposed promotional programs to encourage substitution of electricity for other energy sources, as well as power exports (para. 49), could result in higher sales (a potential additional 275 GWh by 1990) than those projected now; such programs could reduce the projected energy surplus of the ICS from 450 GWh to about 175 GWh. The Government and TANESCO have agreed to prepare by December 31, 1986, for review by the Association, an analysis of potential markets for surplus energy.

48. ICS capabilities in the form of hydro, once the Mtera hydroelectric plant is completed in 1988, will be approximately 1,450 GWh of firm energy and 320 MW of dependable capacity, much higher than the projected peak demand of 196 MW. The back-up thermal generating capacity will be 85 MW. By far the heaviest load is in the Dar es Salaam area, with approximately 69% of ICS consumers.

49. Power Exports. In the foreseeable future, the only potential market for power exports is Kenya, where some import of electricity from Tanzania could be of mutual benefit. Kenya's future demand and supply options for power will be studied in detail under the Kenya National Power Development Plan, scheduled for completion by fall 1986. A joint interconnection study between the two countries, to be financed by CIDA, has been agreed upon in principle by all parties. The earliest date that a transmission line connecting the Tanzanian and Kenyan power systems could be in place is early 1989, which would be the period of maximum surplus capacity in the Tanzanian system.

Expansion Program

50. TANESCO's current investment program consists of completion of generation works, some additional transmission and distribution facilities, and substantial rehabilitation works. In addition to the completion of the Mtera hydroelectric plant, TANESCO is in the process of expanding its interconnected transmission system to interconnect currently isolated areas

of Tanzania with the main ICS. Also included are a 132 kV transmission line connecting Tanzania and Uganda, and other minor works of transmission and distribution. Altogether this program results in capital investments of about US$410 million between 1985 and 1992. TANESCO's and Tanzania's restricted financial resource situation, and urgent need for rehabilitation, make it essential that new investments be curtailed as much as possible. Agreement has been reached between IDA, the Government and TANESCO, on a reduced five-year investment program based on (a) the recently completed long-term least-cost power investment program carried out under the Cr. 1405-TA (which takes into account the static nature of the economy and related low demand growth for power), and (b) the actual realizable components of TANESCO's expansion program, taking into account the financial and economic burdens that this program would impose on both TANESCO's finances and the country's foreign exchange requirements. As a part of the revised investment program, it was also agreed that the construction of two transmission lines (totalling US$40 million) would be postponed until their economic viability is proven on the basis of further review and until completion of another higher priority transmission line is assured. The Government has also agreed that it would consult with the Association prior to undertaking any capital investment not included in TANESCO's investment program in excess of US$5 million for any individual project or an aggregate amount of capital investments in any financial year in excess of US$5 million.

Previous Bank Group Lending and Strategy

51. The Bank Group has long been involved in Tanzania's energy sector. The first Bank loan (518-TA, US$5.2 million, 1969) was to TANESCO for 20 MW of diesel generating plants. The second power loan (715-TA, US$30 million, 1970) helped finance the first phase of the Kidatu Hydro Project, increasing capacity by 115 MW and constructing a transmission line from Kidatu to Dar es Salaam. A third-window loan (1306-T-TA, US$30 million, 1976) financed the second phase of the Kidatu development, adding 100 MW of generating capacity. All three projects have been satisfactorily completed, broadly within their original construction schedules, though there were cost overruns in the second and third projects, due mainly to unexpected bad rock conditions during excavation and higher than forecast international inflation that affected civil works costs (Project Performance Audit Reports 2765 and 4622). The Bank Group provided supplementary funds to cover the cost overruns (US$5.0 million for Power II and US$7.0 million for Power III).

52. The Fourth Power Project was approved in 1983 (Cr. 1405-TA for US$35 million). This US$235 million project comprises the construction of an 80 MW powerhouse and related civil works at Mtera, the construction of a control center, and some rehabilitation work, training, and a number of management, planning and pricing studies. Italy, the Federal Republic of Germany (KfW), the Kuwait Fund, NORAD and SIDA are cofinanciers. This project is proceeding satisfactorily. The Bank also financed a petroleum project in 1980 to assess the gas potential at Songo-Songo (Cr. S-27-TA for US$30 million) and a second oil-gas exploration project (Cr. 1199-TA for US$20 million) in 1981. Substantial gas reserves were confirmed at Songo-Songo (para. 35). The Petroleum Sector Technical Assistance Project

(Cr. 1604-TA for US$8 million), which will assist the Government to implement the recommendations of the Energy Assessment Report for a long-term petroleum sector strategy, is proceeding well.

53. In 1984 the UNDP/Bank Energy Assessment Report completed a comprehensive analysis of the energy sector (para. 28). A number of the report's recommendations form the basis for the proposed project. In addition, the Government has agreed to a UNDP/Bank Energy Sector Management Assistance (ESMAP) Program whose specific components will be determined in 1986. IFC is currently taking the lead role for the Bank Group in examining the technical, economic and financial feasibility of an export-oriented fertilizer plant that would be the prime user of the Songo-Songo natural gas reserves (para. 35). The results of the gas feasibility studies will determine whether a gas infrastructure project might be proposed.

54. Past Bank/IDA activities in the energy sector have had a positive effect on sector developments principally in: influencing the creation of an important energy sector planning capability in MEM; assisting the expansion of the power sector from a minor diesel-based operation to a country-wide, hydro-based public utility system; assisting in the establishment of an active petroleum sector exploration program financed largely by international oil companies and/or outside donors; substantial training support to the power sector and, more recently, also to the petroleum sector, in developing needed skills so that these public enterprises are largely run by Tanzanians; and facilitating future power sector development through a long-term power development plan, a tariff study, a management study, and a rehabilitation study, which will provide much needed guidance for future planning, better management and redirection of development strategies. Considerable coordination and assistance with other multilateral and bilateral donors has been an important feature of these efforts.

PART IV - THE PROJECT

55. The project was appraised in May and September 1985 following the recommendations of the UNDP/Bank Energy Assessment Report, and those of TANESCO's consultants, for a thorough overhaul of TANESCO's power system. Negotiations were held in Washington from March 17 to 21. The Tanzanian delegation was led by Mr. F. Kazaura, Principal Secretary, Ministry of Energy and Minerals. A Credit and Project Summary is given at the beginning of this report and a Staff Appraisal Report entitled "Power Rehabilitation Project" (No. 6026-TA) dated April 10, 1986 is being distributed separately. Supplementary project data are given in Annex III.

Project Objectives and Description

56. The main objectives of the proposed project are: (a) to re-establish the operating performance of TANESCO's power system to reasonable levels of reliability and service; (b) to assist the Government and TANESCO in developing an economically sound and financially feasible least-cost development program for the power sector; (c) to assist TANESCO in improving its financial performance, including tariff levels and structure; (d) to assist TANESCO in expanding its management and operations

training programs, particularly in the areas of repair and maintenance activities, bill collection, accounting and financial management; and (e) to stimulate improved availability and production efficiency of household energy supplies.

57. The project would consist of the following main components:

(a) rehabilitation of the Mwanza-Nyakato and Mwanza South diesel stations, the Ubungo gas turbine and diesel station, and other isolated diesel power plants;

(b) rehabilitation of all 220 kV, 132 kV and 66 kV transmission lines, except those completed recently, as well as rehabilitation of about 3600 km of 33 kV and 11 kV main distribution lines;

(c) rehabilitation of substations, switchgear and compensation equipment;

(d) supply and installation of new communications equipment and repair of existing units;

(e) vehicles for maintenance work and for billing and collection services; spare parts; and tools and equipment for the electrical, mechanical, meter testing, telecommunication, and transport workshops;

(f) technical assistance and training, comprising, for a period of 42 months: (i) five engineers and seven distribution and/or diesel plant technicians to be financed by CIDA, to assist project implementation and provide on-the-job training to TANESCO counterparts; (ii) a senior financial advisor and a computer specialist to assist TANESCO in strengthening its financial and computer systems; and (iii) five technicians/operators-instructors to be financed by CIDA, to train technicians and tradesmen at the Technician Training Institute (TTI), as well as instruction materials and equipment. An additional 27 man-weeks of training will be provided under TANESCO's on-going program of training with overseas power utilities, such as the Irish Utility Board with which it has had an effective program for several years. In addition, 24 manmonths of technical assistance would be provided to the National Urban Water Authority (NUWA) to assist it in developing a proper billing, accounting and bill collection system;

(g) Charcoal production: to help alleviate the growing scarcity of cooking fuels in urban areas, two or three efficient, commercially-sized pilot charcoal production operations would be established, based on natural forests to be cleared for proposed fuelwood plantations, and on the utilization of waste wood from sawmills. Steel or brick kilns would be introduced, and the operations would include construction of access roads, vehicles, tools and operator training;

(h) Charcoal stoves: the systematic introduction of more energy-efficient charcoal stoves (jikos) of proven design into the Dar es Salaam market, training of stove manufacturers and/or artisans and the propagation and demonstration of these stoves in the market place; and

(i) a feasibility study for the manufacture or importation of electric cookers.

Project Implementation

58. TANESCO would implement the power rehabilitation component and MEM, in cooperation with the Forestry Department of MNRT, the charcoal cooker and charcoal production components. Consulting services have been engaged for the preparation of the construction contracts. As a condition of effectiveness of the proposed project, TANESCO would organize a Rehabilitation Implementation Department under its Operations Directorate for the duration of the project. TANESCO would employ 12 full-time experts for construction planning and implementation assistance to TANESCO staff. TANESCO would hire outside contractors to undertake the major works on the transmission lines, the main transmission substations and for about half of the work on distribution networks, the remaining services to be done by TANESCO staff. Implementation is projected to be three and a half years and is due to start in the third quarter of 1986.

59. The power rehabilitation component is based on a consultant study financed under Cr. 1405-TA. The consultants have also undertaken detailed project preparatory work up to and including tender preparation. Most tender documents are ready and will be issued in accordance with the cofinancing arrangements. The charcoal cooker and charcoal production components have been prepared by the Tanzania Industrial Studies and Consulting Organization with the help of foreign consultants, with financing arranged from Cr. 1060-TA through the Tanzania Investment Bank.

Project Cost Estimates and Financing Plan

60. The total project cost, including contingencies (estimated at US$18 million), but excluding interest during construction (estimated at US$14 million) and taxes and duties, from which TANESCO is exempt, is estimated at US$88.6 million, with a foreign exchange component of about US$76.2 million. Cost estimates are based on recent quotations from European manufacturers. Costs include physical contingencies of 10% for the power components and 15% for the energy components. Price contingencies have been applied in accordance with international inflation rates of 7.2% in 1986, 6.8% in 1987 and 1988, and 7.0% in 1989.

61. The borrower would be the Government of Tanzania. Of the proceeds of the IDA Credit (US$40 million), US$37.3 million would be onlent to TANESCO for the power rehabilitation component; the remainder would be provided to MEM (US$2.4 million) for the charcoal cooker and the charcoal production components; and to NUWA (US$0.3 million) for technical assistance. The Government would enter into a subsidiary loan agreement

with TANESCO providing for on-lending at an interest rate of 9% per annum with an amortization period of 20 years, including 4 years of grace. TANESCO would bear the foreign exchange risk.

62. Cofinancing commitments have been obtained from: Canada (a grant of approximately US$10.2 million equivalent) for technical assistance and training, and transmission line rehabilitation; Finland (a grant of approximately US$2.3 million equivalent) for rehabilitation of diesel generators; Norway (a grant of approximately US$8.3 million equivalent) for transmission and distribution equipment, and workshops; and the European Investment Bank (EIB) (grant/equity funds of approximately US$6 million equivalent) for rehabilitation of diesel generators. These commitments and the proposed IDA credit cover the estimated foreign exchange costs of the core components of TANESCO's rehabilitation program. Financing for the remaining components under the project (approximately US$10.6 million) is likely to be secured in 1986 or early 1987 from one or more of several additional donors who have expressed interest in cofinancing, but whose commitments have not yet been firmed up. This should not pose any undue problems or risk since TANESCO could defer those components for which no financing materializes without jeopardizing the implementation of the package of core components for which financing has been obtained (most of the components are not inextricably linked one to another nor phased sequentially in implementation). Completion of cofinancing arrangements with EIB, Finland, and Norway would be a condition of effectiveness of the proposed credit.

TANESCO's Financial Performance

63. After several years of reasonably satisfactory results, TANESCO's financial performance deteriorated during the 1982-1984 period. Contributing to this deterioration were an almost tripling of fuel costs, devaluation of the TSh (which had an adverse effect on TANESCO's debt service capability), high domestic inflation, and large increases in unaccounted for electricity consumption (primarily from technical losses in transmission/distribution). Inadequate revenues due to depressed demand and inadequate tariff increases, coinciding with the start of an ambitious investment program, including the Mtera Hydroelectric Project and an extensive transmission system expansion program, exacerbated TANESCO's deteriorating position, so that TANESCO ended each of these three years with negative working capital. Delayed action by the Government on tariff increases, a lack of sound billing and collection management, and inadequate enforcement of payment of overdue accounts (especially those of Government agencies) forced TANESCO to rely more and more on bank overdrafts, to default on debt payments to the Government and to delay payments of some of its bills. As of December 31, 1985, TANESCO's overdue debt service to the Government, including interest, was about TSh 720 million. As a consequence of the poor financial situation of TANESCO, neither the company nor the Government has met the performance requirements under Cr. 1405-TA which provided, inter alia, that cash generated from operations was to contribute 25% of the costs of investment (40% by 1986), and that receivables were to be reduced to 60 days of billing. These matters have been discussed at length with TANESCO and the Government, and a series of remedial actions have been agreed which are discussed below.

64. TANESCO was recently granted a 67% tariff increase and it has been agreed that TANESCO would return to the rate of return method of calculation for tariff adjustment it used prior to 1983 (para. 66), which, coupled with a semi-annual review process (para. 65), should improve TANESCO's financial performance. Furthermore, steps have recently been taken which should improve TANESCO's collection procedures and arrears situation (para. 67). In addition, to help ensure TANESCO's financial viability in the future the Government has agreed that: (a) TANESCO's overdue debt service payments to the Government as of December 31, 1985 would be rescheduled over the life of the various loans; (b) the grant portion of foreign financing for the Mtera project (US$29.5 million) would continue to be passed on to TANESCO as equity capital; and (c) TANESCO would not incur any new debt unless a reasonable forecast of its revenues and expenditures shows that projected internal cash generations would be at least 1.4 times the projected debt service requirement on all debt for the succeeding years, including the debt to be incurred.

65. Tariff Levels and Rate of Return. To improve its present financial situation and meet future operating costs and debt service requirements, as well as to make a reasonable contribution to its construction program from internally generated funds, TANESCO will have to make timely tariff increases. In addition to the recent tariff increase of67%, average increases of 24% in each year from 1987 through 1990 will be needed. The large increase in 1986 was needed to eliminate the overdrafts upon which TANESCO has been dependent in the past, and to provide cash to enable TANESCO to meet its debt obligations. Such tariff increases in constant terms are quite modest, given the heavy investment program and sluggish rate of load growth. The Government and TANESCO have agreed that (a) tariffs would be adjusted to allow TANESCO to earn an annual rate of return on average net revalued plant in operation of at least 10% in 1987 and thereafter, and (b) the Government and TANESCO would review semi-annually the adequacy of TANESCO's tariffs in order to meet the requirements set out in (a), and take appropriate action within 60 days.

66. In 1983 under Cr. 1405-TA, TANESCO's financial performance became linked to a cash contribution toward investment convenant; previously it had been using a rate of return measure of financial performance, but agreement had not been reached between the Government and TANESCO on a method for revaluing its assets, resulting in an impasse and inaction on tariff increases. As a result, under Cr. 1405-TA TANESCO was required to revalue its assets by January 1, 1986, and regularly thereafter, based on an index acceptable to TANESCO and IDA, and had the option of subsequently returning to a rate of return measure. Such an index has been agreed and the cash generation covenant has been replaced by a rate of return covenant. It is expected that relating TANESCO's future financial performance to an annual rate of return on revalued assets, will be less cumbersome for the Government and TANESCO to monitor because it would be based only on the actual results for one year.

67. Arrears. A major problem for the financial performance of TANESCO has been the poor payment record by its major customers. As of December 31, 1985, TANESCO's accounts receivable were estimated at TSh 662 million, equivalent to about 160 days of the last 12 months' sales. Of

these, about TSh 100 million are considered to be non-collectible. The largest single outstanding account is that of the former Dar es Salaam Water Supply Organization, now the National Urban Water Authority (NUWA), whose billing and collection procedures are unsatisfactory. To improve the situation the proposed project would provide US$300,000 in technical assistance to NUWA (para. 57). In the meantime, the Government has reduced NUWA's arrears to TANESCO from about TSh 212 million to about TSh 103 million and has agreed to provide the Association, as a condition of effectiveness, with a satisfactory plan of action for the reduction of NUWA's outstanding electricity accounts. As an additional condition of effectiveness, TANESCO would reduce all other accounts receivable to no more than 90 days of sales. It has also been agreed that TANESCO would reduce its accounts receivable to no more than 75 days of sales as of December 31, 1987 and maintain it no higher than that level thereafter. The Government has agreed to guarantee prompt payment of bills outstanding for more than 45 days of those customers who cannot be disconnected for safety or humanitarian reasons. Beginning on June 30, 1986, TANESCO would prepare a quarterly report summarizing its outstanding consumer accounts, stating the actions it proposes to take, and send a copy to the Association for review.

68. Future Financial Position and Operations. Projected balance sheets for the years ending December 31, 1986 through 1991 show that the current ratio would increase from 0.9 in 1986 to 1.2 in 1991. The debt equity ratio would vary from 51:49 for 1986 to a peak of 62:38 in 1988, and then decline to 44:56 in 1991, reflecting the need for less borrowings beyond 1988 as TANESCO's investment expenditures decrease sharply and debt repayments overtake drawdowns. These levels are within an acceptable range. The proposed tariff revisions, coupled with projected sales, operating costs and asset levels, are expected to produce rates of return on TANESCO's average revalued net fixed assets of 16% in 1986, and about 10% thereafter. The projected operations of TANESCO indicate that its financial performance would be satisfactory for the years 1986-1991, based on currently projected sales, costs and the proposed tariff levels, with a working ratio decreasing steadily from 0.40 to 0.23, and debt service coverage projected to be about 1.8 in 1986 and 1.5 between 1987 and 1988, declining to 1.3 in 1991. Although the debt service coverage appears to be low for the later years, TANESCO's cash position at that time is projected to be good. Net internal cash generation as a percentage of the investment program expenditures is projected to average 20 percent over the 1986-1990 period.

Procurement and Disbursement

69. Most transmission and distribution contractors, equipment, vehicles, and tools financed by IDA would be procured under ICB in accordance with IDA guidelines. Proprietary spare parts for generation and transmission equipment estimated to amount to about US$2.7 million would be purchased through negotiated contracts with the respective equipment manufacturers. Contracts for works and materials estimated to cost less than the US$100,000, would be procured by local competitive bidding which is satisfactory to the Association. It is estimated that the aggregate of such contracts would be US$2 million. Consultants financed by IDA would be selected according to standard Bank Group guidelines. Goods and services

financed by the cofinanciers would be procured in accordance with their respective guidelines. All contracts of US$100,000 or more to be financed under the proposed credit would be subject to prior review by the Association. The procurement arrangements are summarized in the following table:

	ICB	LCB	Other Methods a/	Cofinancing Agencies b/	Total Project Cost
1. Generation			1.8	9.4	11.2
			(1.8)		(1.8)
2. Transmission	1.9			3.5	5.4
	(1.9)				(1.9)
3. Transmission Substations			0.8	3.2	4.0
			(0.8)		(0.8)
4. Distribution	20.4			17.2	37.6
	(19.8)				(19.8)
5. Telecommunications	1.7	0.1			1.8
	(1.7)				(1.7)
6. Workshops	5.7	3.4		3.1	12.2
	(5.7)				(5.7)
7. TA & Training	0.4	0.4	0.9	7.2	8.9
	(0.4)		(0.4)		(0.8)
8. Tech. Asst. & Equipment	2.2		0.8		3.0
for Accounting Dept.	(2.2)		(0.8)		(3.0)
9. Engineering			1.8		1.8
			(1.8)		(1.8)
10. Energy Mgt.		0.1			0.1
		(0.1)			(0.1)
11. Elec. Cooker Program			0.1		0.1
			(0.1)		(0.1)
12. Charcoal Production		0.9	0.3		1.2
		(0.9)	(0.3)		(1.2)
13. Charcoal Cooker Program		0.6	0.4		1.0
		(0.6)	(0.4)		(1.0)
14. NUWA			0.3		0.3
			(0.3)		(0.3)
TOTAL	32.3	5.5	7.2	43.6	88.6
	(31.7)	(1.6)	(6.7)		(40.0)

Note : Amount financed by IDA in parentheses.

a/ Consulting contracts and proprietary parts and services.
b/ In accordance with cofinancing agencies' procurement rules.

70. The proceeds of the credit would be disbursed against 100% of foreign and 50% of the local expenditures for equipment and materials, and 100% of total expenditures for consultant services and training to be financed by IDA. The estimated disbursement schedule given in the Credit and Project Summary does not conform to the standard disbursement profile

for power projects in Eastern Africa because this is a rehabilitation project consisting mainly of replacement equipment and materials, and spare parts. Much of this material is available from stock or can be produced on short notice, and most deliveries will be staged over a period of no more than 30 months. Disbursements against the charcoal stove and kiln components would be conditional on satisfactory arrangements for their implementation being put in place. The project is expected to be completed by June 1990.

71. Two revolving funds (special accounts) would be established and maintained in the Bank of Tanzania, one for TANESCO, with an initial deposit of US$1.0 million, the other for MEM, with an initial deposit of US$500,000. These accounts would be replenished by the Association on receipt of withdrawal applications supported by appropriate documentation. Statements of Expenditures would be used for contracts up to US$100,000.

Accounting and Audit

72. Project accounts for the rehabilitation component would be maintained by TANESCO, which has had serious difficulties in maintaining its accounts, mainly from lack of experienced accounting staff and inadequate data processing facilities. The proposed project would finance the services of a consultant, and the required additional hardware and software, to assist in the implementation of a fully computerized accounting system and the training of staff. TANESCO's external auditors, the Government-owned Tanzania Audit Corporation (TAC), are satisfactory to the Association. TANESCO would continue to employ qualified auditors and adhere to an agreed detailed timetable with respect to closing its books and forwarding reports to the Association. The timetable provides that audited accounts would be sent to the Association within 11 months after the end of the 1985 fiscal year, within eight months after the end of 1986, and within six months thereafter. Project accounts for the energy components would be maintained by MEM's Renewable Energy Division and would also be audited by TAC.

Environmental Considerations

73. No adverse environmental effects are envisaged as a result of the power rehabilitation activities. The charcoal manufacturing component is designed in part to utilize stocks from natural forests, to be followed subsequently by systematic replanting of the cleared land, which, on balance, would improve environmental conditions and minimize erosion problems. The introduction of improved charcoal cookers and improved charcoal kilns would reduce the net consumption of wood resources per unit of useful energy produced, thereby reducing over-cutting, watershed damage and erosion.

Benefits

74. The power system rehabilitation components of the proposed project would restore the existing system to acceptable levels of operating performance. Not all of the specific project components can be evaluated in terms of economic rates of return. However, a significant percentage of the physical components of the project have been covered and by extension

provide a reliable indication of the value of other, similar components not specifically evaluated. The economic analysis of the various project components is based on a comparison of the costs of each evaluated component with its specific, projected benefits; that is, estimates of the net costs of not having power supplies available when needed or expected, or of receiving supplies at voltage levels that are either unusable for certain power consuming purposes, or are damaging to equipment. For productive activities, these estimates of the net costs of outages are based on detailed evaluations of the reductions in value added, net of potential recuperations of initial losses through possible rescheduling of activities. Domestic consumer costs are mainly based on estimates of the required use of alternative fuels and/or appliances, e.g. kerosene for lighting and charcoal, kerosene or LPG for cooking. The values thus estimated were subjected to a variety of sensitivity tests. For the economic analysis of the benefits from rehabilitating the distribution network, specific evaluations were undertaken of the four major load centers of the TANESCO system. Together, these accounted for about 62% of total national electricity consumption in 1984.

75. Two types of economic rates of return (ERR) have been calculated. The first is based on an evaluation of TANESCO's overall investment program, of which this project forms an integral and unseparable part. Average tariff revenue was used as the measure of benefits. This ERR is 12%, reflecting the significant increases in current tariff levels needed to meet the large cash requirements of TANESCO during the next few years of heavy investments and lagging sales. This rate of return indicates that tariffs could be adjusted downward in real terms once the current investments are completed and sales have recovered.

76. The second calculation of the ERR has been based on the analysis of the benefits from prevention of outage losses of some of the power system rehabilitation components, whose total costs account for about 46% of the total costs of the physical rehabilitation components of the project. The ERR for the major components and their combined total are as follows: distribution network rehabilitation 106%; transmission network rehabilitation 82%; Mwanza diesel station rehabilitation 1,068%; total, all components, 195%.

Risks

77. The major risk is financial. The projected future load growth and TANESCO revenues take the existing depressed state of the Tanzanian economy into consideration and also assume that it will continue for the immediate future. As a result, high tariff increases are required in order to provide adequate cash generation for TANESCO's overall operations and investments (even with an investment program that has been curtailed). Substantial tariff increases have recently been implemented and a semi-annual tariff review mechanism is provided for under the project. No major physical risks are anticipated in implementing the proposed project beyond those that are normally associated with the rehabilitation of transmission, distribution and generation works and for which provision has been made by continued use of consultants and advisors. The charcoal cookers and charcoal production components depend on a newly-created organization for their management. This risk, as well as the problem of

designing a workable arrangement between Government-supported training and financing activities and initiatives for private sector operation and marketing, would be reduced by the involvement of Tanzanian institutions experienced in private enterprise development and from experience from ongoing similar projects in other African countries.

PART V - RECOMMENDATION

78. I am satisfied that the proposed credit would comply with the Articles of Agreement of the Association and recommend that the Executive Directors approve the proposed credit.

A. W. Clausen
President

Attachments

Washington, D.C.
April 10, 1986

TABLE 3A

TANZANIA, UNITED REP. OF- SOCIAL INDICATORS DATA SHEET

	TANZANIA, UNITED REP. OF			REFERENCE GROUPS (WEIGHTED AVERAGES) /a	
	1960/b	1970/b	MOST RECENT ESTIMATE/b	(MOST RECENT ESTIMATE) /b LOW INCOME AFRICA SOUTH OF SAHARA	MIDDLE INCOME AFRICA S. OF SAHARA
AREA (THOUSAND SQ. KM)					
TOTAL	945.1	945.1	945.1	.	.
AGRICULTURAL	381.1	388.2	402.0	.	.
GNP PER CAPITA (US$)	..	..	240.0 /c	238.8	1063.8
ENERGY CONSUMPTION PER CAPITA					
(KILOGRAMS OF OIL EQUIVALENT)	17.0	49.0	30.0	62.3	581.5
POPULATION AND VITAL STATISTICS					
POPULATION,MID-YEAR (THOUSANDS)	10026.0	13513.0	20771.0	.	.
URBAN POPULATION (% OF TOTAL)	4.8	6.9	13.6	20.1	32.0
POPULATION PROJECTIONS					
POPULATION IN YEAR 2000 (MILL)			36.9	.	.
STATIONARY POPULATION (MILL)			123.0	.	.
POPULATION MOMENTUM			2.0	.	.
POPULATION DENSITY					
PER SQ. KM.	10.6	14.3	22.0	33.2	65.1
PER SQ. KM. AGRI. LAND	26.3	33.9	49.9	112.8	124.8
POPULATION AGE STRUCTURE (%)					
0-14 YRS	42.6	44.4	46.7	46.0	45.6
15-64 YRS	54.2	52.4	50.3	50.8	51.5
65 AND ABOVE	3.0	3.0	2.9	2.9	2.7
POPULATION GROWTH RATE (%)					
TOTAL	2.4	3.0	3.3	2.8	2.9
URBAN	5.3	6.6	8.5	6.4	5.1
CRUDE BIRTH RATE (PER THOUS)	48.5	49.1	50.0	47.2	47.0
CRUDE DEATH RATE (PER THOUS)	24.3	20.1	16.0	17.8	15.0
GROSS REPRODUCTION RATE	3.1	3.1	3.2	3.3	3.2
FAMILY PLANNING					
ACCEPTORS, ANNUAL (THOUS)	..	..	93.6 /d	.	.
USERS (% OF MARRIED WOMEN)	..	..	1.0 /e	3.3	6.4
FOOD AND NUTRITION					
INDEX OF FOOD PROD. PER CAPITA (1969-71=100)	95.0	104.0	80.0	83.3	82.9
PER CAPITA SUPPLY OF					
CALORIES (% OF REQUIREMENTS)	88.0	85.0	96.0	87.7	98.5
PROTEINS (GRAMS PER DAY)	45.0	44.0	51.0	51.9	55.4
OF WHICH ANIMAL AND PULSE	18.0	21.0	20.0 /g	18.7	16.5
CHILD (AGES 1-4) DEATH RATE	32.1	25.9	18.0	23.1	16.6
HEALTH					
LIFE EXPECT. AT BIRTH (YEARS)	40.4	44.9	50.6	47.8	52.0
INFANT MORT. RATE (PER THOUS)	152.0	125.0	97.0	119.5	108.8
ACCESS TO SAFE WATER (POP)					
TOTAL	..	13.0	34.3 /f	27.1	42.4
URBAN	..	61.0	83.3 /f	63.5	67.5
RURAL	..	9.0	28.0 /f	19.3	35.8
ACCESS TO EXCRETA DISPOSAL (% OF POPULATION)					
TOTAL	..	..	46.3 /f	26.5	28.9
URBAN	..	..	94.5 /f	65.4	57.7
RURAL	..	..	40.0 /f	20.8	20.7
POPULATION PER PHYSICIAN	17900.0	22600.0	17740.0 /e	27901.7	11791.7
POP. PER NURSING PERSON	11800.0 /g,h	7280.0	3010.0 /e	3308.4	2459.8
POP. PER HOSPITAL BED					
TOTAL	590.0 /g	730.0	510.0 /e	1273.6	981.1
URBAN	50.0 /g	60.0	80.0 /e	428.2	368.8
RURAL	1520.0 /g	..	1200.0 /e	3292.5	4371.9
ADMISSIONS PER HOSPITAL BED	..	..	..	..	27.2
HOUSING					
AVERAGE SIZE OF HOUSEHOLD					
TOTAL	..	4.4 /i	..	..	..
URBAN	3.1 /j	3.2 /i	..	..	..
RURAL	..	4.5 /i	..	..	..
AVERAGE NO. OF PERSONS/ROOM					
TOTAL	..	..	..	..	..
URBAN	1.8 /j	..	..	..	..
RURAL	..	..	..	..	..
PERCENTAGE OF DWELLINGS WITH ELECT.					
TOTAL	..	..	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..

TABLE 3A

TANZANIA, UNITED REP. OF- SOCIAL INDICATORS DATA SHEET

	TANZANIA, UNITED REP. OF			REFERENCE GROUPS (WEIGHTED AVERAGES) /a	
				(MOST RECENT ESTIMATE) /b	
	1960/b	1970/b	MOST RECENT ESTIMATE/b	LOW INCOME AFRICA SOUTH OF SAHARA	MIDDLE INCOME AFRICA S. OF SAHARA
EDUCATION					
ADJUSTED ENROLLMENT RATIOS					
PRIMARY: TOTAL	25.0	36.0	98.0	67.8	95.7
MALE	33.0	44.0	101.0	77.6	100.0
FEMALE	18.0	29.0	95.0	54.9	83.2
SECONDARY: TOTAL	2.0	3.0	3.0	13.5	17.3
MALE	2.0	4.0	4.0	17.9	25.0
FEMALE	1.0	2.0	2.0	9.1	14.8
VOCATIONAL (% OF SECONDARY)	22.6	..	3.0	13.2	5.9
PUPIL-TEACHER RATIO					
PRIMARY	45.0	46.0	43.0	44.9	41.1
SECONDARY	20.0	18.0	19.0	27.4	25.5
CONSUMPTION					
PASSENGER CARS/THOUSAND POP	2.5	2.5	2.6 /c	3.8	20.8
RADIO RECEIVERS/THOUSAND POP	2.0	11.1	26.4	55.8	107.8
TV RECEIVERS/THOUSAND POP	..	0.3	0.4	2.6	20.8
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION	2.5	4.7	10.4	5.0	18.4
CINEMA ANNUAL ATTENDANCE/CAPITA	0.5	..	0.2	0.5	0.4
LABOR FORCE					
TOTAL LABOR FORCE (THOUS)	4653.0	5935.0	8221.0	.	.
FEMALE (PERCENT)	37.2	36.7	36.0	34.2	36.2
AGRICULTURE (PERCENT)	89.0	86.0	83.0 /f	77.5	54.5
INDUSTRY (PERCENT)	4.0	5.0	6.0 /f	9.7	18.3
PARTICIPATION RATE (PERCENT)					
TOTAL	46.4	43.9	39.6	39.3	36.8
MALE	59.1	56.3	52.1	50.9	47.1
FEMALE	34.0	31.8	28.3	28.1	27.2
ECONOMIC DEPENDENCY RATIO	1.0	1.1	1.2	1.3	1.3
INCOME DISTRIBUTION					
PERCENT OF PRIVATE INCOME RECEIVED BY					
HIGHEST 5% OF HOUSEHOLDS	..	24.7	..	..	..
HIGHEST 20% OF HOUSEHOLDS	..	50.4	..	..	..
LOWEST 20% OF HOUSEHOLDS	..	5.8	..	..	..
LOWEST 40% OF HOUSEHOLDS	..	16.0	..	..	..
POVERTY TARGET GROUPS					
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US$ PER CAPITA)					
URBAN	..	..	147.0 /g	165.5	590.7
RURAL	..	..	109.0 /g	95.0	275.3
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US$ PER CAPITA)					
URBAN	..	..	125.0 /g	113.1	545.6
RURAL	..	..	74.0 /g	67.6	201.1
ESTIMATED POP. BELOW ABSOLUTE POVERTY INCOME LEVEL (%)					
URBAN	..	..	10.0 /g	36.6	..
RURAL	..	..	60.0 /g	61.8	..

.. NOT AVAILABLE
. NOT APPLICABLE

NOTES

/a The group averages for each indicator are population-weighted arithmetic means. Coverage of countries among the indicators depends on availability of data and is not uniform.

/b Unless otherwise noted, "Data for 1960" refer to any year between 1959 and 1961; "Data for 1970" between 1969 and 1971; and data for "Most Recent Estimate" between 1981 and 1983.

/c For Mainland Tanzania only; /d 1976; /e 1977; /f 1980; /g 1962; /h Registered, not all practising in the country; /i 1967; /j 1958; /k 1978.

DEFINITIONS OF SOCIAL INDICATORS

Notes: Although the data are drawn from sources generally judged the most authoritative and reliable, it should also be noted that they may not be internationally comparable because of the lack of standardized definitions and concepts used by different countries in collecting the data. The data are, nonetheless, useful to describe orders of magnitude, indicate trends, and characterize certain major differences between countries.

The reference groups are (1) the same country group of the subject country and (2) a country group with somewhat higher average income than the country group of the subject country (except for "High Income Oil Exporters" group where "Middle Income North Africa and Middle East" is chosen because of stronger socio-cultural affinities). In the reference group data the averages are population weighted arithmetic means for each indicator and shown only when majority of the countries in a group has data for that indicator. Since the coverage of countries among the indicators depends on the availability of data and is not uniform, caution must be exercised in relating averages of one indicator to another. These averages are only useful in comparing the value of one indicator at a time among the country and reference groups.

AREA (thousand sq.km.)

Total—Total surface area comprising land area and inland waters; 1960, 1970 and 1983 data.

Agricultural—Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to lie fallow, 1960, 1970 and 1982 data.

GNP PER CAPITA (US$)—GNP per capita estimates at current market prices, calculated by same conversion method as *World Bank Atlas* (1981-83 basis); 1983 data.

ENERGY CONSUMPTION PER CAPITA—Annual apparent consumption of commercial primary energy (coal and lignite, petroleum, natural gas and hydro-, nuclear and geothermal electricity) in kilograms of oil equivalent per capita; 1960, 1970, and 1982 data.

POPULATION AND VITAL STATISTICS

Total Population, Mid-Year (thousands)—As of July 1; 1960, 1970, and 1983 data.

Urban Population (percent of total)—Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries; 1960, 1970, and 1983 data.

Population Projections

Population in year 2000—The projection of population for 2000, made for each economy separately. Starting with information on total population by age and sex, fertility rates, mortality rates, and international migration in the base year 1980, these parameters were projected at five-year intervals on the basis of generalized assumptions until the population became stationary.

Stationary population—Is one in which age- and sex-specific mortality rates have not changed over a long period, while age-specific fertility rates have simultaneously remained at replacement level (net reproduction rate = 1). In such a population, the birth rate is constant and equal to the death rate, the age structure is also constant, and the growth rate is zero. The stationary population size was estimated on the basis of the projected characteristics of the population in the year 2000, and the rate of decline of fertility rate to replacement level.

Population Momentum—Is the tendency for population growth to continue beyond the time that replacement-level fertility has been achieved; that is, even after the net reproduction rate has reached unity. The momentum of a population in the year t is measured as a ratio of the ultimate stationary population to the population in the year t, given the assumption that fertility remains at replacement level from year t onward, 1985 data.

Population Density

Per sq.km.—Mid-year population per square kilometer (100 hectares) of total area; 1960, 1970, and 1983 data.

Per sq.km. agricultural land—Computed as above for agricultural land only, 1960, 1970, and 1982 data.

Population Age Structure (percent)—Children (0-14 years), working age (15-64 years), and retired (65 years and over) as percentage of mid-year population; 1960, 1970, and 1983 data.

Population Growth Rate (percent)—total—Annual growth rates of total mid-year population for 1950-60, 1960-70, and 1970-83.

Population Growth Rate (percent)—urban—Annual growth rates of urban population for 1950-60, 1960-70, and 1970-83 data.

Crude Birth Rate (per thousand)—Number of live births in the year per thousand of mid-year population; 1960, 1970, and 1983 data.

Crude Death Rate (per thousand)—Number of deaths in the year per thousand of mid-year population; 1960, 1970, and 1983 data.

Gross Reproduction Rate—Average number of daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970, and 1983.

Family Planning—Acceptors, Annual (thousands)—Annual number of acceptors of birth-control devices under auspices of national family planning program.

Family Planning—Users (percent of married women)—The percentage of married women of child-bearing age who are practicing or whose husbands are practicing any form of contraception. Women of child-bearing age are generally women aged 15-49, although for some countries contraceptive usage is measured for other age groups.

FOOD AND NUTRITION

Index of Food Production Per Capita (1969-71 = 100)—Index of per capita annual production of all food commodities. Production excludes animal feed and seed for agriculture. Food commodities include primary commodities (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded); they comprise cereals, root crops, pulses, oil seeds, vegetables, fruits, nuts, sugarcane and sugar beets, livestock, and livestock products. Aggregate production of each country is based on national average producer price weights; 1961-65, 1970, and 1982 data.

Per Capita Supply of Calories (percent of requirements)—Computed from calorie equivalent of net food supplies available in country per capita per day. Available supplies comprise domestic production, imports less exports, and changes in stock. Net supplies exclude animal feed, seeds for use in agriculture, quantities used in food processing, and losses in distribution. Requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distribution of population, and allowing 10 percent for waste at household level; 1961, 1970 and 1982 data.

Per Capita Supply of Protein (grams per day)—Protein content of per capita net supply of food per day. Net supply of food is defined as above. Requirements for all countries established by USDA provide for minimum allowances of 60 grams of total protein per day and 20 grams of animal and pulse protein, of which 10 grams should be animal protein. These standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Supply; 1961, 1970 and 1982 data.

Per Capita Protein Supply From Animal and Pulse—Protein supply of food derived from animals and pulses in grams per day; 1961-65, 1970 and 1977 data.

Child (ages 1-4) Death Rate (per thousand)—Number of deaths of children aged 1-4 years per thousand children in the same age group in a given year. For most developing countries data derived from life tables; 1960, 1970 and 1983 data.

HEALTH

Life Expectancy at Birth (years)—Number of years a newborn infant would live if prevailing patterns of mortality for all people

at the time of of its birth were to stay the same throughout its life; 1960, 1970 and 1983 data.

Infant Mortality Rate (per thousand)—Number of infants who die before reaching one year of age per thousand live births in a given year; 1960, 1970 and 1983 data.

Access to Safe Water (percent of population)—total, urban, and rural—Number of people (total, urban, and rural) with reasonable access to safe water supply (includes treated surface waters or untreated but uncontaminated water such as that from protected boreholes, springs and sanitary wells) as percentages of their respective populations. In an urban area a public fountain or standpost located not more than 200 meters from a house may be considered as being within reasonable access of that house. In rural areas reasonable access would imply that the housewife or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs.

Access to Excreta Disposal (percent of population)—total, urban, and rural—Number of people (total, urban, and rural) served by excreta disposal as percentages of their respective populations. Excreta disposal may include the collection and disposal, with or without treatment, of human excreta and waste-water by water-borne systems or the use of pit privies and similar installations.

Population per Physician—Population divided by number of practising physicians qualified from a medical school at university level.

Population per Nursing Person—Population divided by number of practicing male and female graduate nurses, assistant nurses, practical nurses and nursing auxiliaries.

Population per Hospital Bed—total, urban, and rural—Population (total, urban, and rural) divided by their respective number of hospital beds available in public and private, general and specialized hospitals and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments providing principally custodial care are not included. Rural hospitals, however, include health and medical centers not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.) which offer in-patient accommodation and provide a limited range of medical facilities.

Admissions per Hospital Bed—Total number of admissions to or discharges from hospitals divided by the number of beds.

HOUSING

Average Size of Household (persons per household)—total, urban, and rural—A household consists of a group of individuals who share living quarters and their main meals. A boarder or lodger may or may not be included in the household for statistical purposes.

Average Number of Persons per Room—total, urban, and rural—Average number of persons per room in all urban, and rural occupied conventional dwellings, respectively. Dwellings exclude non-permanent structures and unoccupied parts.

Percentage of Dwellings with Electricity—total, urban, and rural—Conventional dwellings with electricity in living quarters as percentage of total, urban, and rural dwellings respectively.

EDUCATION

Adjusted Enrollment Ratios

Primary school - total, male and female—Gross total, male and female enrollment of all ages at the primary level as percentages of respective primary school-age populations. While many countries consider primary school age to be 6-11 years, others do not. The differences in country practices in the ages and duration of school are reflected in the ratios given. For some countries with universal education, gross enrollment may exceed 100 percent since some pupils are below or above the country's standard primary-school age.

Secondary school - total, male and female—Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational, or teacher training instructions for pupils usually of 12 to 17 years of age; correspondence courses are generally excluded.

Vocational Enrollment (percent of secondary)—Vocational institutions include technical, industrial, or other programs which operate independently or as departments of secondary institutions.

Pupil-teacher Ratio - primary, and secondary—Total students enrolled in primary and secondary levels divided by numbers of teachers in the corresponding levels.

CONSUMPTION

Passenger Cars (per thousand population)—Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.

Radio Receivers (per thousand population)—All types of receivers for radio broadcasts to general public per thousand of population; excludes un-licensed receivers in countries and in years when registration of radio sets was in effect; data for recent years may not be comparable since most countries abolished licensing.

TV Receivers (per thousand population)—TV receivers for broadcast to general public per thousand population; excludes unlicensed TV receivers in countries and in years when registration of TV sets was in effect.

Newspaper Circulation (per thousand population)—Shows the average circulation of "daily general interest newspaper," defined as a periodical publication devoted primarily to recording general news. It is considered to be "daily" if it appears at least four times a week.

Cinema Annual Attendance per Capita per Year—Based on the number of tickets sold during the year, including admissions to drive-in cinemas and mobile units.

LABOR FORCE

Total Labor Force (thousands)—Economically active persons, including armed forces and unemployed but excluding housewives, students, etc., covering population of all ages. Definitions in various countries are not comparable; 1960, 1970 and 1983 data.

Female (percent)—Female labor force as percentage of total labor force.

Agriculture (percent)—Labor force in farming, forestry, hunting and fishing as percentage of total labor force; 1960, 1970 and 1980 data.

Industry (percent)—Labor force in mining, construction, manufacturing and electricity, water and gas as percentage of total labor force; 1960, 1970 and 1980 data.

Participation Rate (percent)—total, male, and female—Participation or activity rates are computed as total, male, and female labor force as percentages of total, male and female population of all ages respectively; 1960, 1970, and 1983 data. These are based on ILO's participation rates reflecting age-sex structure of the population, and long time trend. A few estimates are from national sources.

Economic Dependency Ratio—Ratio of population under 15, and 65 and over, to the working age population (those aged 15-64).

INCOME DISTRIBUTION

Percentage of Total Disposable Income (both in cash and kind)—Accruing to percentile groups of households ranked by total household income.

POVERTY TARGET GROUPS

The following estimates are very approximate measures of poverty levels, and should be interpreted with considerable caution.

Estimated Absolute Poverty Income Level (US$ per capita)—urban and rural—Absolute poverty income level is that income level below which a minimal nutritionally adequate diet plus essential non-food requirements is not affordable.

Estimated Relative Poverty Income Level (US$ per capita)—urban and rural—Rural relative poverty income level is one-third of average per capita personal income of the country. Urban level is derived from the rural level with adjustment for higher cost of living in urban areas.

Estimated Population Below Absolute Poverty Income Level (percent)—urban and rural— Percent of population (urban and rural who are "absolute poor."

Comparative Analysis and Data Division
Economic Analysis and Projections Department
June 1985

Population : 21.0 million (1984)
GNP Per Capita: US$240 (1983)

TANZANIA - ECONOMIC INDICATORS [a]

Indicator	Amount (million US$ at current prices) 1984	Annual Real Growth Rates (%) Actual 1978	1979	1980	1981	1982	1983	1984[b]	Projection 1985[b]	1990
NATIONAL ACCOUNTS										
Gross domestic product [c]	4,497.1	2.6	0.9	0.6	-1.3	0.9	-0.9	2.2	3.4	4.8
Agriculture	2,418.7	1.0	1.2	2.8	2.3	2.6	0.9	2.9	4.4	5.6
Industry	462.5	-0.4	-4.1	-10.8	-13.8	-7.2	-16.0	-7.9	2.5	4.0
Services	1,616.0	5.6	3.2	3.3	-0.4	3.0	2.1	4.3	2.5	4.0
Consumption	4,675.7	10.1	-7.9	6.8	-6.0	0.7	0.1	8.8	7.1	3.2
Gross investment	717.8	9.2	20.2	-13.6	4.3	0.8	-20.5	-9.8	-5.9	5.0
Exports of GNFS	472.9	-6.3	12.2	0.6	18.7	-18.5	-17.7	-10.8	0.6	10.2
Imports of GNFS	921.8	31.5	-17.4	-0.4	-7.9	-3.9	-19.7	5.3	11.6	-0.8
Gross domestic savings	266.8	-60.8	139.6	-29.0	34.3	9.9	-14.8	-54.2	-9.6	15.1
PRICES										
GDP deflator (1978 = 100)		100.0	110.8	130.9	154.7	185.4	183.2	180.0	191.7	255.5
Exchange rate (T.Sh. per US$)		7.7	8.3	8.2	8.3	9.3	11.1	15.3	17.5	17.5

	Share of GDP at Market Prices (%) (at current prices) 1978	1980	1982	1984	1985	1990	Average Annual Increase (%) (at constant prices) 1976-80	1980-84	1985-90
Gross domestic product [c]	100.0	100.0	100.0	100.0	100.0	100.0	2.0	0.5	4.3
Agriculture	40.0	41.6	47.6	48.9	48.4	50.5	1.4	2.1	5.2
Industry	16.6	14.8	11.5	9.4	7.0	6.9	-2.2	-10.8	3.9
Services	32.4	33.2	31.6	32.7	34.4	37.0	4.5	2.7	3.4
Consumption	91.5	90.5	89.3	94.6	99.4	84.5	1.9	0.7	3.9
Gross investment	19.5	22.4	20.2	14.5	13.8	15.7	4.8	-7.6	2.0
Exports of GNFS	15.8	12.7	8.1	9.6	9.8	12.0	-2.2	-8.5	9.3
Imports of GNFS	27.5	25.7	17.6	18.6	23.0	12.3	-2.3	-8.1	2.6
Gross domestic savings	7.8	9.4	10.7	5.5	0.6	15.4	4.4	-0.5	2.6

	As % of GDP FY81	FY83	FY86 [b]
PUBLIC FINANCE			
Current revenue	18.4	18.7	23.4
Current expenditures	20.0	22.2	25.3
Surplus (+) or deficit (-)	-1.6	-3.5	-1.9
Capital expenditures	10.2	6.9	6.5
Foreign financing	5.1	4.0	3.1

	1975-82	1982-85	1985-90
OTHER INDICATORS			
GNP growth rate (%)	2.8	2.1	4.4
GNP per capita growth rate (%)	-0.5	-1.2 [d]	1.1
ICOR	8.4	10.3	3.8
Marginal savings rate	0.4	-0.2	0.06
Import elasticity	-0.82	-0.7	0.6

[a] Mainland only.
[b] Estimate.
[c] At market price; components are expressed at factor cost.
[d] 1983-85.

Population : 21.0 million (1984)
GNP Per Capita: US$240 (1983)

TANZANIA - EXTERNAL TRADE [a/]

Indicator	Amount (million US$ at current prices) 1984	Actual Real Growth Rates (%) at constant prices) Actual 1978	1979	1980	1981	1982	1983	1984[b/]	Projection 1985[b/]	1990
EXTERNAL TRADE										
Merchandise exports	366.7	-3.5	14.5	-1.8	15.7	-12.7	-14.1	-10.7	0.9	10.6
Major primary products	265.8	-9.8	2.8	-8.5	33.5	-16.3	-18.7	-14.6	2.6	12.1
Others	100.9	16.4	43.3	9.9	-36.7	9.8	7.6	3.3	-3.9	4.4
Merchandise imports	839.3	32.6	-17.0	-2.3	-6.3	1.5	-21.8	1.0	12.9	-1.1
Foodgrains	72.7	-0.6	-48.2	286.3	-7.9	31.9	-28.0	-8.3	0.1	-49.7
Petroleum	227.4	4.1	-18.6	27.1	-15.9	-2.8	3.5	1.0	4.9	2.2
Machinery and equipment	251.3	52.1	-7.8	-25.5	10.4	-12.5	-35.3	-0.9	10.1	2.1
Others	287.9	20.1	-22.4	-7.7	-17.2	12.6	-19.5	6.9	26.6	3.3
PRICES										
Export price index	93.6	87.6	94.0	100.0	96.3	80.9	86.3	93.6	82.7	103.8
Import price index	91.2	69.4	86.5	100.0	100.9	95.7	92.4	91.2	89.7	114.9
Terms of trade index	102.6	126.1	108.6	100.0	95.5	84.5	93.4	102.6	92.2	90.4

	Composition of Merchandise Trade (%) (at current prices) 1970	1975	1980	1985	1990	Average Annual Increase (%) (at constant prices) 1970-75	1976-80	1980-85	1985-90
Exports	100.0	100.0	100.0	100.0	100.0	-4.2	-1.8	-7.1	10.1
Major primary products	59.2	66.3	55.6	61.7	72.9	-1.0	-5.8	-8.2	12.2
Others	40.8	33.7	44.4	38.3	27.1	-10.5	6.7	-2.3	3.1
Imports	100.0	100.0	100.0	100.0	100.0	1.9	-1.8	-4.8	2.3
Foodgrains	7.7	17.7	11.7	6.5	4.5	23.4	-6.2	-5.1	-8.5
Petroleum	3.1	8.0	22.9	24.3	17.3	-4.0	0.8	-1.3	2.9
Machinery and equipment	35.2	31.1	34.5	29.1	29.4	-1.1	2.2	-11.0	2.2
Others	54.0	43.2	30.9	40.1	48.8	0.9	-5.8	-0.7	3.6

	Share of Trade with Industrial Countries (%) 1975	1980	1984	Share of Trade with Developing Countries (%) 1975	1980	1984	Share of Trade with Capital Surplus Oil Exports (%) 1975	1980	1984
DIRECTION OF TRADE									
Exports	47.4	57.6	60.7	48.9	35.8	32.2	3.6	8.7	6.3
Imports	58.0	67.3	63.2	34.8	26.5	32.1	6.2	10.7	2.4

a/ Data are for all Tanzania (Mainland and Zanzibar).
b/ Estimate.

Population : 21.0 million (1984)
GNP Per Capita: US$240 (1983)

TANZANIA - BALANCE OF PAYMENTS, EXTERNAL CAPITAL AND DEBT
(Million US$ at current prices)

Indicator	Actual							Projection	
	1970	1975	1980	1981	1982	1983	1984 a/	1985 a/	1990
BALANCE OF PAYMENTS									
Export of goods and services	346	518	684	759	530	487	474	456	911
of which: Merchandise f.o.b.	252	376	505	563	413	379	367	327	699
Import of goods and services	375	840	1,380	1,288	1,173	904	934	1,107	1,485
of which: Merchandise c.i.f.	318	770	1,220	1,162	1,095	819	839	947	1,413
Net transfers b/	6	-10	19	22	24	14	59	127	43
Current account balance	-24	-332	-676	-508	-619	-403	-402	-524	-632
Official grant receipts	7	112	109	109	96	90	100	108	180
M & LT loans (net)	73	171	227	259	290	192	124	-19	242
Official	72	171	130	167	231	189	111	-19	262
Private	2	-	97	92	59	3	13	0	-20
Other capital c/	-9	66	337	107	202	122	173	425	250
Change in reserves (- = increase) d/	-47	-17	3	32	31	0	5	10	-40
International reserves d/	99	130	98	107	44	44	39	90	350
Reserves as months imports d/	3.7	2.0	1.0	1.1	0.5	0.6	0.6	1.0	3.0
EXTERNAL CAPITAL AND DEBT									
Gross disbursements	60	344	297	379	351	394	399		
Official grants	6	112	109	109	96	90	100		
Concessional loans	40	191	110	227	187	116	143		
DAC c/	20	88	20	69	53	14	38		
OPEC	-	-	3	17	2	-	22		
IDA	9	20	35	84	65	65	59		
Other	11	83	52	57	67	36	23		
Non-concessional loans	14	41	78	43	68	188	96		
Official export credits	-	1	27	11	29	126	45		
IBRD	5	40	22	17	10	25	16		
Other multilateral	-	-	-	4	6	7	11		
Private	9	-	29	11	23	30	24		
External Debt									
Debt outstanding and disbursed	323	798	1,338	1,497	1,647	1,820	2,594		
Official	193	747	1,261	1,411	1,526	1,705	n.a.		
Private	129	51	77	86	121	115	n.a.		
Undisbursed debt	408	419	919	906	874	725	593		
Debt service									
Total service payments	26	29	51	47	53	78	134		
Interest	10	11	31	27	33	38	12		
Payment as % exports	7.5	5.9	7.2	5.2	10.0	16.0	28.3		
Average interest rate on new loans (years)	1.6	3.0	2.4	2.7	2.5	2.5	n.a.		
Official	1.5	3.0	1.9	2.7	1.8	2.0	n.a.		
Private	7.0	-	9.4	-	7.5	13.6	n.a.		
Average maturity of new loans (years)	38.8	32.6	28.7	28.3	31.9	36.0	n.a.		
Official	39.7	32.6	29.9	28.3	34.7	37.3	n.a.		
Private	7.2	-	10.9	-	12.0	11.0	n.a.		

	As % of Debt Outstanding at End of	
	1983	1984 a/
Maturity structure of debt outstanding		
Maturities due within 5 years	32.6	37.4
Maturities due within 10 years	59.1	61.5
Interest structure of debt outstanding		
Interest due within first year	1.2	3.1

a/ Estimate.
b/ Excluding official grant receipts.
c/ Includes suppliers' credits, IMF credit, World Bank and OPEC program loans, IMF Trust Fund, errors and omissions, and build-up of arrears.
d/ Without IMF credit.

THE STATUS OF THE BANK GROUP OPERATIONS IN TANZANIA

A. STATEMENT OF BANK LOANS AND IDA CREDITS AS OF MARCH 31, 1986

(US$ million)

In./Cr. No.	Fiscal Year	Borrower	Purpose	Amount less cancellation: Bank	TW	IDA	Undisbursed
14 Loans, two Third Window Loans, and 38 Credits fully disbursed 1/				192.28	41.47	420.02	
Cr. 801-TA	78	Tanzania	Second Cashewnut			24.50	3.30
In. 1607-TA	78	Tanzania	Morogoro Textile	25.00			5.14
Cr. 833-TA	78	Tanzania	Morogoro Textile			20.00	0.40
Cr. 860-TA	79	Tanzania	Tourism Rehabilitation			12.50	1.15
Cr. 861-TA	79	Tanzania	Sixth Education			12.00	5.77
In. 1650-TA	79	Tanzania	Mufindi Pulp and Paper	30.00			2.43
Cr. 876-TA	79	Tanzania	Fifth Highway			20.50	3.13
In. 1750-TA	80	TIB	Tanzania Investment Bank	25.00			2.58
Cr. 987-TA	80	Tanzania	Tanzania Rural Dev. Bank			7.00	5.09
Cr. 1007-TA	80	Tanzania	Pyrethrum			10.00	5.33
Cr. 1015-TA	80	Tanzania	Grain Storage and Milling			43.00	37.03
Cr. 1037-TA	80	Tanzania	Smallholder Tea			14.00	9.59
Cr. 1056-TA	81	Tanzania	Seventh Education			25.00	19.35
Cr. 1060-TA	81	Tanzania	Technical Assistance II			11.00	4.77
Cr. 1070-TA	81	Tanzania	Coconut Pilot			6.80	3.33
Cr. 1173-TA	82	Tanzania	Telecommunications I			27.00	5.22
Cr. 1206-TA	82	Tanzania	Technical Assistance III			12.00	3.69
Cr. 1229-TA	82	Tanzania	Sao Hill Forestry-Phase II			12.00	6.62
Cr. 1312-TA	83	Tanzania	Dar-es-Salaam Sewerage and Sanitation			22.50	14.01
Cr. 1370-TA	83	Tanzania	Mufindi Pulp and Paper Mill Tech. Asst. & Energy Conv.			18.00	10.05
Cr. 1371-TA	83	Tanzania	Coal Engineering			6.30	5.49
Cr. 1405-TA	84	Tanzania	Mtera Hydroelectric Power			35.00	15.61
Cr. 1524-TA	85	Tanzania	Technical Assistance IV			10.00	10.08
Cr. 1536-TA	85	Tanzania	Port Rehabilitation			27.00	23.46
Cr. 1604-TA	85	Tanzania	Petroleum Sector Technical Assistance			8.00	8.46
Total				272.28	41.47	804.12	211.08
of which has been repaid				79.64	4.52	10.65	
Total now outstanding				192.64	36.95	793.47	
Amount sold			6.29				
of which has been repaid			6.29				
Total now held by Bank and IDA 2/				192.64	36.95	793.47	
Total undisbursed				10.15	—	200.93	211.08

1/ In addition, Tanzania has been the beneficiary of 11 loans totalling US$244.8 million which were extended for the development of the common services and development bank operated regionally by Tanzania, Kenya and Uganda through their association in the former East Africa Community.

2/ Net of exchange adjustments.

B. STATEMENT OF IFC INVESTMENT IN TANZANIA

AS OF MARCH 31, 1986

Fiscal Year	Obligor	Type of Business	Amount in US$ Million		
			Loan	Equity	Total
1960 & 1964	Kilombero Sugar Company	Food Processing	3.96	0.70	4.66
1978	Highland Soap and Allied Products Limited	Soap Manufacture	1.37	0.37	1.74
1979	Metal Products Limited	Household Utensils	1.33	0.18	1.51
1985	Amboni Limited	General Manufacturing	3.40	-	3.40
	Total gross commitments		10.06	1.25	11.31
	Less cancellations, terminations, repayments and sales		4.43	0.70	5.13
	Total commitments now held by IFC		5.63	0.55	6.18
	Total undisbursed		1.10	-	1.10

TANZANIA
POWER REHABILITATION PROJECT

SUPPLEMENTARY PROJECT DATA SHEET

I. Timetable of Key Events

(a) Time taken to prepare project:	1 year
(b) Project Prepared by:	Government and Consultants
(c) Project first identified:	1983
(d) Departure of appraisal mission:	May 13, 1985
(e) Date of completion of negotiations:	March 1986
(f) Planned date of effectiveness:	July 1986

II. Special Bank Implementation Actions

NONE.

III. Special Conditions

1. The following would be special conditions of effectiveness:

   (a) a Rehabilitation Implementation Department would be established within TANESCO (para. 58);

   (b) cofinancing arrangements with EIB, Norway, and Finland would be completed (para. 62); and

   (c) the Government would provide a satisfactory plan of action for reducing NUWA's outstanding accounts for TANESCO; and TANESCO would reduce all other accounts receivable to no more than 90 days of sales (para. 67).

2. Satisfactory implementation of the charcoal stove and kiln components would be a condition of disbursement of these components (para. 70).

3. Other Conditions:

   (a) By December 31, 1986, TANESCO would implement the recommendations of the tariff and organization and management studies being carried out under Credit 1405-TA (paras. 38 and 43);

   (b) by June 30, 1987 TANESCO would introduce a staff incentive program (para. 43);

   (c) by December 31, 1986, the Government and TANESCO would prepare

for IDA review an analysis of potential markets for surplus energy (para. 47);

(d) the Government would consult with IDA prior to undertaking any capital investment not included in TANESCO's investment program in excess of US$5 million for any individual project or in aggregate for any financial year (para. 50);

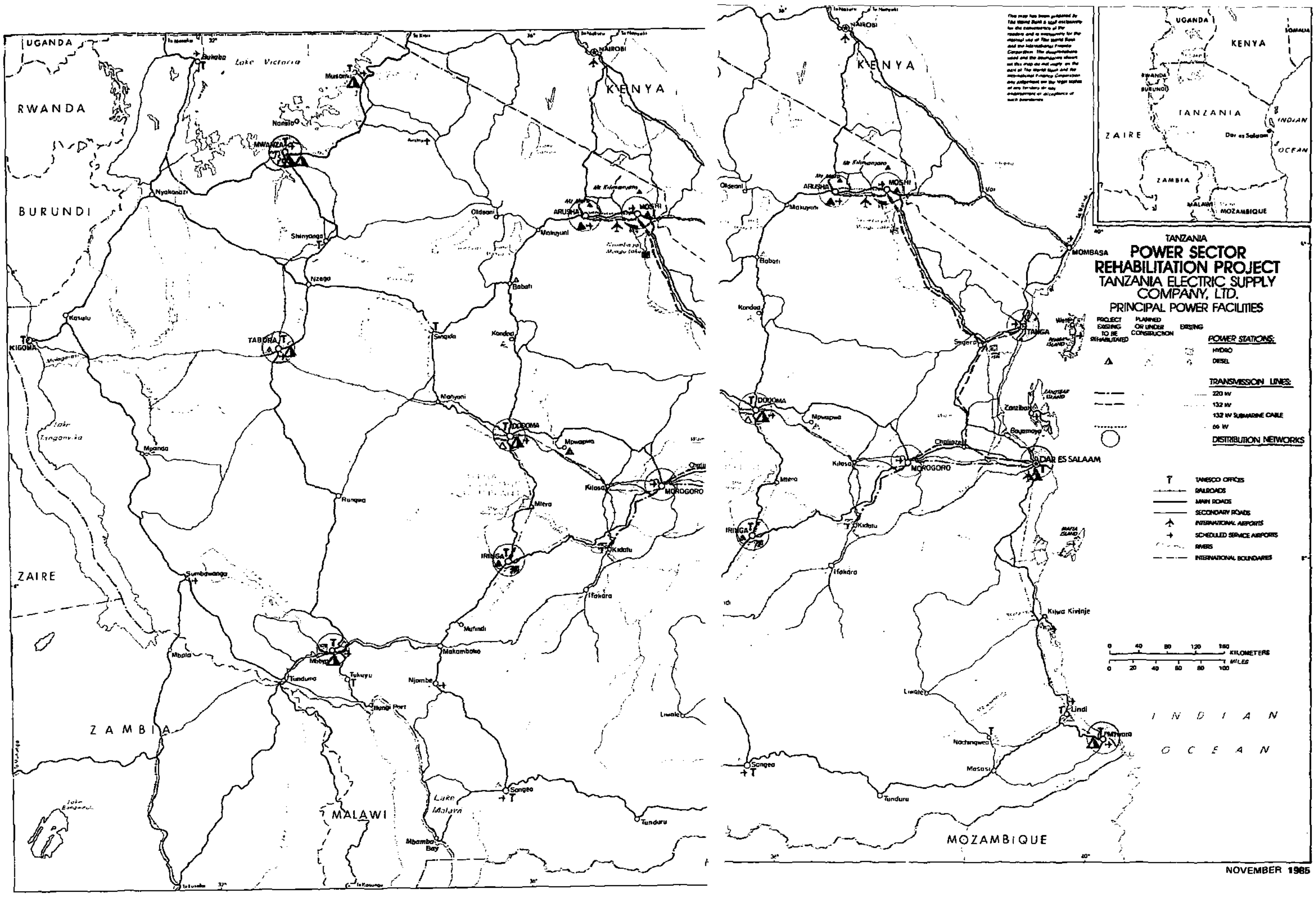
(e) TANESCO would not incur any new debt unless a reasonable forecast of its revenues and expenditures shows that projected internal cash generations would be 1.4 times the projected debt service requirement (para. 64);

(f) tariffs would be adjusted to allow TANESCO to earn an annual rate of return on average net revalued plant in operation of at least 10% in 1987 and thereafter; tariffs would be reviewed on a semi-annual basis and any necessary action taken within 60 days (para. 65);

(g) beginning on June 30, 1986, TANESCO would prepare a quarterly report summarizing its outstanding consumer accounts, stating the actions it proposes to take, and send a copy to the Association; and by December 31, 1987, would reduce its accounts receivable to no more than 75 days of sales (para. 67); and

(h) the Government would guarantee prompt payment of bills outstanding for more than 45 days for those customers who cannot be disconnected for safety and/or humanitarian reasons (para. 67).

(i) TANESCO would continue to employ qualified auditors and adhere to an agreed timetable with respect to closing its books and forwarding reports to the Association.


TANZANIA
POWER SECTOR
REHABILITATION PROJECT
TANZANIA ELECTRIC SUPPLY
COMPANY, LTD.
PRINCIPAL POWER FACILITIES
PROJECT EXISTING TO BE REHABILITATED
PLANNED OR UNDER CONSTRUCTION
EXISTING
POWER STATIONS:
HYDRO
DIESEL
TRANSMISSION LINES:
220 kV
132 kV
132 kV SUBMARINE CABLE
66 kV
DISTRIBUTION NETWORKS
TANESCO OFFICES
RAILROADS
MAIN ROADS
SECONDARY ROADS
INTERNATIONAL AIRPORTS
SCHEDULED SERVICE AIRPORTS
RIVERS
INTERNATIONAL BOUNDARIES
0 40 80 120 160 KILOMETERS
0 20 40 60 80 100 MILES
UGANDA
KENYA
RWANDA
BURUNDI
ZAIRE
ZAMBIA
MALAWI
MOZAMBIQUE
INDIAN OCEAN
TANZANIA
Dar es Salaam
Lake Victoria
Lake Tanganyika
Lake Malawi
NAIROBI
MOMBASA
MWANZA
ARUSHA
MOSHI
TABORA
KIGOMA
DODOMA
MOROGORO
IRINGA
TANGA
DAR ES SALAAM
Musoma
Nansio
Nyakanazi
Shinyanga
Nzega
Kasulu
Singida
Kondoa
Babati
Makuyuni
Oldeani
Manyoni
Mpwapwa
Kilosa
Mtera
Kidatu
Ifakara
Mufindi
Makambako
Njombe
Mbeya
Tukuyu
Tunduma
Mbala
Sumbawanga
Mpanda
Rungwa
Songea
Tunduru
Mbamba Bay
Itungi Port
Liwale
Segera
Chalinze
Bagamoyo
Zanzibar
Kilwa Kivinje
Lindi
Mtwara
Nachingwea
Masasi
Voi
INDIAN
OCEAN
NOVEMBER 1985