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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN TO THE TANA RIVER DEVELOPMENT COMPANY LIMITED FOR A HYDROELECTRIC POWER PROJECT WITH THE GUARANTEE OF THE REPUBLIC OF KENYA

May 19, 1971

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1. I submit the following report and recommendation on a proposed loan in an amount in various currencies equivalent to $23.0 million to the Tana River Development Company Limited (TRDC) with the guarantee of the Republic of Kenya.

PART I - INTRODUCTION

2. The Bank's association with the future development of electric power in Kenya began nearly five years ago when an economic mission to East Africa suggested that Kenya and Uganda might both derive important economies by exploiting the opportunity offered by an existing transmission line for the interchange of power between the two countries. The mission's recommendations as to the studies required was taken up by the two governments, which established a joint commission chaired by Lord Hinton, an independent expert recommended by the Bank. The Bank took part in the work of the commission as an observer. In 1969 the two countries reached an agreement in principle that the Kamburu hydroelectric project in Kenya, which is the second phase of the Seven Forks hydroelectric development on the Tana River, should be the first development to be undertaken.

3. In September 1969, the Government of Kenya requested the Bank to help in financing the Kamburu project, and early in 1970, Sweden agreed in principle to consider joint financing. A mission, in which the staff of the Swedish International Development Authority (SIDA) took part, appraised the project in Kenya in April 1970. Before the appraisal could be completed the Government and the Bank had to work out and reach agreement on a number of organizational questions, which are discussed further in PART IV.

4. Negotiations for the proposed loan and Swedish credit took place in Washington in mid-March 1971. The Kenya delegation consisted of Mr. S. Ogembo, Permanent Secretary, Ministry of Power and Communications; Mr. A.L. arap Ngeny, Under Secretary, Ministry of Finance and Economic Planning; Mr. J. Gecau, Chairman, Tana River Development Company Ltd. (TRDC), East African Power and Lighting Company Ltd. (EAP&L) and Kenya Power Company Ltd. (KPC); Mr. R. Webb, Chief Accountant, EAP&L; Mr. S. Wambaa, Assistant Secretary, TRDC and KPC; and Mr. J. Silvester, Counsel, EAP&L, TRDC and KPC. The Kingdom of Sweden was represented by Messrs. Ohlund, Aastrup, Cedergren and Kvarnbeck of the Swedish International Development Authority (SIDA).

PART II - CURRENT AND PROSPECTIVE OPERATIONS

5. The proposed loan would be the sixth Bank loan to Kenya. The first two loans were made before Independence and are guaranteed by the United Kingdom. In addition, Kenya has received eleven IDA credits. A summary statement of these loans and credits as of April 30, 1971 is provided in Annex 1 to this report. Kenya is also guarantor, jointly and severally with Tanzania and Uganda, of the six Bank loans for common services in East Africa (see Annex 2). The first of these loans is also guaranteed by the United Kingdom.

6. The problems encountered in the execution of agricultural projects in Kenya were dealt with in some detail in my Report and Recommendation on the loan to the City Council of Nairobi (No. P-872 of November 4, 1970). Some progress can now be recorded.

7. The Smallholder Agricultural Credit Project (Credit No. 105 KE), which had been seriously delayed by problems in recruiting and retaining satisfactory management and staff, is now gaining momentum. The bulk of the funds provided under the credit have now been committed, but it would require about eighteen months beyond the present Closing Date of June 30, 1971 to complete the corresponding disbursements. The Government has submitted a request for an extension, which is currently under examination by a mission reviewing the progress of the project.

8. Total commitments and disbursements under the Livestock Development Project (Credit No. 129 KE) are still far from satisfactory. However, the rate of commitment of funds to individual ranchers has latterly been improving and loans to commercial ranchers are now expected to be promoted vigorously. The project continues to be under close supervision.

9. The Association has recently approved an accelerated planting program under the Second Tea Development Project (Credit No. 119 KE) for which the Kenya Tea Development Authority expects to utilize the credit funds.

10. The Second Highway Project (Credit No. 120 KE) is on schedule. The Third Highway Project (Loan No. 639 KE) is getting under way satisfactorily. The Nairobi Water Supply Project (Loan No. 714 KE) and the Highway Maintenance Project (Credit No. 224 KE) were declared effective in late March 1971.

11. Other lending under active consideration is a Fourth Highway Project, which has been recently appraised, and the Nairobi Airport Development Project, the studies for which are currently being carried out by consultants. At the more preliminary stage of consideration are possible lending for financing industry through a development finance company and infrastructure for tourism.

PART III - DESCRIPTION OF THE PROPOSED LOAN

12.	BORROWER:	Tana River Development Company Ltd. (TRDC)
	GUARANTOR:	The Republic of Kenya
	AMOUNT:	US$23.0 million in various currencies
	PURPOSE:	To assist in financing the second phase of the Seven Forks hydroelectric development on the Tana River at Kamburu
	AMORTIZATION:	In 25 years, including a 3½-year period of grace, through semiannual installments beginning July 1, 1975 and ending July 1, 1996
	INTEREST RATE:	7¼% per annum
	COMMITMENT CHARGE:	3/4 of 1% per annum
	RATE OF RETURN:	Internal financial rate of return estimated at between 13 and 20 percent.

13. The proposed Swedish credit of $6 million equivalent to the Republic of Kenya will be on IDA terms. The Government would relend the proceeds of the Swedish credit to TRDC on terms similar to those of the proposed Bank loan.

PART IV - THE STRUCTURE OF THE POWER INDUSTRY

14. The principal problem in working out the proposed loan for the Kamburu project arose from the fact that, over the course of time, the structure of the power industry in Kenya has become somewhat complex and, moreover, is in the process of change. The main power company is the East African Power and Lighting Company Ltd. (EAP&L), which was incorporated in Kenya in 1922 as a private company operating throughout East Africa, but since 1964 has confined its operations to Kenya after its Uganda and Tanzania undertakings were bought out by the respective governments. EAP&L owns and operates all thermal plants in Kenya as well as a number of small hydroelectric installations. It is the sole distributor of the power produced in its own plants and power bought from two associated companies, the Kenya Power Company Ltd. (KPC), established in 1955, to own and operate the transmission line from the Owen Falls hydroelectric station in Uganda, and the Tana River Development Company Ltd. (TRDC), set up in 1964, to undertake hydroelectric development on the Tana River.

TRDC already owns and operates the Kindaruma power station downstream from Kamburu. The two associated companies have only a nominal share capital and their investments are wholly debt-financed. EAP&L staffs and manages KPC and TRDC and coordinates all power operations in Kenya. EAP&L purchases power from them under long-term contracts at prices calculated to cover precisely their actual operating expenses and debt service.

15. The Kenya Government has been a shareholder from the beginning in both KPC and TRDC. The Government has now acquired sole ownership of TRDC and proposes to acquire sole ownership of KPC, in which it has already effective control. The Government also recently acquired control over EAP&L through the purchase in the open market of over 51% of the outstanding voting stock and proposes to buy up further shares as they become available. The Kenya power industry is thus in transition from private to public ownership and control, but the corporate structure remains unchanged. The Kenya Government recognizes that this structure is cumbersome and is anxious to consolidate and rationalize it. To do so calls first for a careful study of the financial, legal and organizational problems that would be involved. Account has also to be taken of the obligations of the existing companies to shareholders and to creditors under various security arrangements. The Kenya Government intends to obtain expert advice in working out the reorganization of the power industry and has undertaken to consult the Bank on the measures to be adopted.

16. To avert a power shortage in Kenya, the Kamburu station must be commissioned by mid-1974 and construction therefore undertaken without delay. However desirable it might be to complete the reorganization before undertaking a major new investment, there is not time enough to do so satisfactorily. The Bank is thus faced with the need to work out an interim solution that will fit into the existing arrangements with a minimum of modification and not itself be a further obstacle to a rational reorganization. The proposed solution is for the Bank to lend to TRDC, which is already publicly owned, and to obtain from EAP&L the contractual undertakings (see paragraphs 23 to 25 below) necessary to take account of the fact that at the present time EAP&L will have to provide the local funds required for the project, as well as the management and staff, and will sell the power to be produced. In these circumstances TRDC is an acceptable borrower for the proposed loan.

PART V - THE PROJECT

17. A report entitled "Appraisal of the Kamburu Hydroelectric Project" (No. PU-70) is attached. The project, which would meet the demand for electric power in Kenya up to 1976, comprises: (a) a hydroelectric power station with an initial capacity of 60MW and provision for one more 30MW unit when needed; (b) a 220kV transmission line of about 105 km from Kamburu to Nairobi to link with the national grid; (c) a 132kV transmission line of about 15 km to connect Kamburu with TRDC's existing Kindaruma power station; and (d) necessary consulting services.

18. The cost of the project, excluding interest during construction, is estimated at $37.5 million. The foreign exchange component is $26.1 million (70%). Sweden will provide a credit of $6 million towards meeting the foreign exchange costs. The proposed Bank loan of $23 million to TRDC would cover the balance of the foreign exchange costs, $20.1 million, and interest on the Bank loan during construction, estimated at $2.9 million. The local currency expenditures, amounting to $11.4 million, would be financed from internally generated funds of EAP&L to be made available to TRDC.

19. EAP&L will provide the $11.4 million to TRDC in two ways. First, for the construction period of the project EAP&L has undertaken to pay a surcharge on the present level of its contractual payments under its bulk supply contract with TRDC, estimated at this time as being sufficient to increase TRDC's cash flow by approximately $2.4 million, which TRDC will apply to the local cost financing of the project. To complete TRDC's financing plan, EAP&L will make a loan to TRDC presently estimated at about $9.0 million. This loan will be for 25 years, including 3½ years of grace at 9% interest. The actual division of the $11.4 million to be provided by EAP&L to TRDC as between surcharge and loan will be adjusted during the construction period in such a way that the rate of return on average net fixed assets in service earned by EAP&L and by the two bulk supply companies, taken together, will be approximately equal. In addition, since the solvency of TRDC is dependent entirely on the level of payments from EAP&L, the Bank would need to be satisfied, as a condition of effectiveness of the proposed Bank loan, that the bulk supply agreement between them provides that EAP&L's payments for purchases from TRDC will be sufficient to cover TRDC's costs defined to include debt service as well as operating costs.

20. The growth of electricity consumption in Kenya during the period 1964-70 has kept pace with growth of the economy. Annual growth of electricity consumption ranged from 2% to 12.2% and averaged 7.1% p.a. during this period. The Nairobi area and the coastal region including Mombasa account for 85% of total consumption. The future rate of growth, taking into account all known major industrial and commercial developments, is projected at 9% p.a., but the economic justification of the project is not very sensitive to the assumed growth rate. The most likely internal financial rate of return is around 16%, ranging from 13% to 20%, on various combinations of assumptions about future costs and revenues.

21. The project is the least cost method of meeting the projected load growth, the most likely value for the equalizing discount rate compared with the alternative investment in thermal development being about 11%, ranging from 9% to 13%, on various combinations of assumptions. The economic analysis has also taken account of possible abstraction of water upstream of the proposed project for irrigation development in the Upper Tana area, the irrigation potential for which is considerable. Kenya's current plans do not envisage a major irrigation development in the near future, and indeed such development may not be justified at an early date in view of the possible alternative opportunities for less capital-intensive

dry farming development. Nevertheless, for purposes of analysis, the economics of the proposed project were tested under assumptions of rapid irrigation development starting in 1973. Even on these unlikely assumptions the economics of the proposed project were found not to be greatly affected.

22. The dependence of TRDC on EAP&L for funds, management and staff makes it necessary for the Bank to obtain certain assurances directly from EAP&L that would normally be given by the borrower. In addition, certain assurances are required from the Government covering the entire industry.

23. To ensure that EAP&L, as the only source of revenue for the power industry, remains in a satisfactory financial position, EAP&L has undertaken to earn a rate of return on net operating assets of not less than 9.5% for the years 1972, 1973 and 1974 and 8% thereafter. The Government has provided assurances that it will permit EAP&L to earn such a return.

24. Government and the three power companies have provided assurances that the companies will not incur further debt without the Bank's prior approval, unless the combined cash earnings before depreciation of the three companies for the 12 months period prior to incurrence of such debt are at least 1.5 times the maximum debt service of all the companies, including the debt to be incurred.

25. EAP&L and TRDC have agreed to enter into a revised Management Agreement, which would provide for the additional services required by TRDC to carry out the project. Entering into such a revised agreement acceptable to the Bank is a condition of effectiveness. EAP&L has further agreed to consult the Bank on any future appointments to the positions of the General Manager, the Chief Engineers in charge of Generation and Planning and the Chief Accountant.

26. The procurement of goods and the letting of civil works contracts would be in accordance with the Bank's normal international bidding procedures. Disbursements would be made against actual foreign exchange costs of imported goods and services and the foreign exchange component of civil works contracts. TRDC has requested that the Bank agree to reimburse the foreign exchange costs of consultant services incurred after January 1, 1970. The consultants retained are acceptable to the Bank, and the loan includes retroactive financing of about $600,000 for their fees and reimbursable expenses.

27. Experience with the existing Kindaruma power station situated 19 kilometers downstream from Kamburu, and the findings of a reconnaissance of the Kamburu area carried out by an expert commissioned by the Bank, indicate that the proposed project is unlikely to cause major ecological problems. On the other hand, there may be a change in land use patterns resulting from movement of population attracted into the project

area which might need to be controlled. Representatives of Kenya, Sweden and the Bank are discussing a study, which would evaluate the impact of changing land use patterns. Sweden has indicated its willingness to finance such a study, the findings of which are expected to help the Government evolve criteria for controlling land use in this and other areas.

PART VI - LEGAL INSTRUMENTS AND AUTHORITY

28. The draft Loan Agreement between the Bank and TRDC, the draft Guarantee Agreement between the Republic of Kenya and the Bank, the draft Joint Financing Agreement between the Republic of Kenya, the Kingdom of Sweden, the Bank, TRDC and EAP&L, the Report of the Committee provided for in Article III, Section 4(iii) of the Articles of Agreement of the Bank and the text of a draft Resolution approving the proposed loan are being distributed to the Executive Directors separately. An Administrative Letter from the Bank and IDA to the Kingdom of Sweden, which is the basic agreement governing all joint financing operations undertaken by the Bank and IDA with the Kingdom of Sweden, was distributed to the Executive Directors in connection with Loan No. 605 ET (R69-82-L).

29. The above-mentioned draft agreements contain the covenants usually found in the Bank's agreements for power projects and projects jointly financed by the Bank and the Kingdom of Sweden. The draft Joint Financing Agreement provides for the disbursement of the Bank loan and Swedish credit and the methods and procedures for procurement of goods and services and, because of the special position of EAP&L discussed in paragraph 22 above, also contains specific covenants by EAP&L,as well as Kenya and TRDC, designed to ensure the effective carrying out of the project.

PART VII - THE ECONOMY

30. An economic report entitled "Economic Development Prospects in Kenya" (Report No. AE-6a, in two parts) was distributed on October 31, 1969. An Economic and Preinvestment Studies Mission visited Kenya in October/November 1970, and its report will be distributed to the Executive Directors in the near future.

31. The 1969 economic report analyzed the Government's 1970-74 Development Plan and found it to be realistic and generally well conceived. The most recent mission found that a good start has been made in implementing the Plan, and that by the end of 1970 economic growth was approximately in line with the Plan target, despite a rather poor agricultural season in 1969. The 1970/71 budget was consistent with the public expenditure goals set by the Plan, but supplementary budgets which have since been approved may result in their being exceeded. Capital formation in

Kenya since 1964 has been expanded by an average of 16% a year. About 90% of gross investment has been financed by domestic savings, although the economy's resource gap is projected to widen as the development effort builds up.

32. A significant development of the past year has been a cautious move by the Government to acquire control of certain key sectors of the economy. The acquisition of majority shareholdings in the EAP&L Company has been noted in paragraph 15 above. The Government has also acquired a substantial share in the oil refinery at Mombasa and is seeking to acquire substantial shares in a number of other companies, notably the major commercial banks. A feature of this development is that shares have so far been acquired either through purchases on the open market or with the willing agreement of the private owners; this has had a reassuring effect on the private investor.

33. Kenya has in the past received a large amount of external assistance, generally on favorable terms. On the basis of its generally sound policies and plans for the future, Kenya will continue to require and merit substantial external assistance for a long time. At the end of 1969, Kenya's total external debt (including its nominal one-third share of the East African Community's debt) stood at $441 million, and the annual cost of servicing this debt was $26 million. Debt service payments in 1969 absorbed 6.8% of foreign exchange earnings during the year. In view of its low per capita income and the limited prospects for its major export commodities, it is desirable that Kenya should obtain the major proportion of external assistance on concessional terms. However, since its debt service ratio is still low, Kenya can undertake a moderate amount of borrowing on conventional terms.

34. A basic data sheet is attached as Annex 3.

PART VIII - COMPLIANCE WITH ARTICLES OF AGREEMENT

35. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank.

PART IX - RECOMMENDATION

36. I recommend that the Executive Directors approve the proposed loan.

Robert S. McNamara
President

Attachments

by J. Burke Knapp

Washington D.C.
May 19, 1971

SUMMARY STATEMENT OF BANK LOANS AND IDA CREDITS TO KENYA AS AT APRIL 30, 1971

No.	Year	Purpose	Amount (US$ million) Bank	IDA	Undisbursed
256 KE	1960	Agriculture and Roads	5.6 /1	-	-
303 KE	1961	Land Settlement	3.0 /1	-	-
64 KE	1964	Tea Development	-	2.8	0.6
70 KE	1964	Highways I	-	4.5	-
77 KE	1965	Tea Roads	-	3.0	-
93 KE	1966	Education	-	7.0	-
104 KE	1967	Agricultural Roads	-	5.3	0.6
105 KE	1967	Agricultural Credit	-	3.6	2.0
119 KE	1968	Tea Development	-	2.1	2.1
120 KE	1968	Highways II	-	10.7	1.3
129 KE	1968	Livestock Development	-	3.6	3.3
639 KE	1969	Highways III	23.5	-	19.1
641 KE	1969	Forest Plantations	2.6	-	2.4
185 KE	1970	Second Education	-	6.1	6.1
714 KE	1970	Nairobi Water Supply	8.3	-	8.3
224 KE	1970	Highway Maintenance	-	12.6	12.6
	Total (less cancellations)		43.0	61.3	
	of which has been repaid to Bank and others		6.2	-	
	Total now outstanding		36.8	61.3	
	Amount sold:	4.4			
	of which has been repaid	4.3	0.1		
	Total now held by Bank and IDA		36.7	61.3	
	Total undisbursed:		29.8	28.6	58.4

/1 Guaranteed by the United Kingdom

SUMMARY STATEMENT OF BANK LOANS FOR COMMON SERVICES GUARANTEED BY KENYA, TANZANIA AND UGANDA AS AT APRIL 30, 1971

No.	Year	Borrower		Amount (US$ million) Bank	Undisbursed
110 EA	1955	East African Railways Corporation /1		24.0	-
428 EA	1966	East African Railways Corporation /2		32.4	0.2
	1966	East African Harbours Corporation /2		5.6	0.1
483 EA	1967	East African Posts and Telecommunications Corporation /2		13.0	2.4
638 EA	1969	East African Harbours Corporation		35.0	31.1
674 EA	1970	East African Railways Corporation		42.4	42.3
675 EA	1970	East African Posts and Telecommunications Corporation		10.4	10.4
	Total			162.8	
	of which has been repaid to the Bank and others			17.4	
	Total now outstanding			145.4	
	Amount sold:		24.4		
	of which has been repaid		17.3	7.1	
	Total now held by Bank			138.3	
	Total undisbursed			86.5	86.5

/1 Loan made originally to East African High Commission
/2 Loan made originally to East African Common Services Authority

BASIC DATA

Area: Total - 225,000 sq. miles = 582,750 square kilometers
Land area - 219,800 sq. miles = 569,282 square kilometers

Population:

1969 Census:	10.9 million
Rate of growth:	3.3 percent
Population density:	19 per sq. kilometer

Political Status: Republic since Independence on December 12, 1963
Member of the British Commonwealth and East African Community
Associate Member of the European Economic Community

National Accounts:

	1964 £	1969* £	Growth Rate %
GDP at factor cost - current prices	331 m	476 m	7.6
GDP at factor cost - constant prices	331 m	449 m	6.3
GNP per capita - current prices	38 ($107)	47 ($132)	4.3

Distribution of Production:

	Percent of GDP at constant prices 1964	1969
Non-monetary production	27	24
Commercial agriculture, forestry and fishing	17	15
Manufacturing and construction	12	14
Transport and communications	8	9
Commerce and banking	13	13
Services	17	20
Other sectors	6	5

Investment & Savings:

	K£ million 1969*
Gross fixed capital formation	95.5
Change in stocks	-3.0
Gross capital formation	92.5

Gross capital formation as percentage of GDP at factor cost 19.4%
Gross national saving percentage of GNP at market prices 16.3%

Central Government Budget:

	K£ million 1968/69 Actual	1970/71 Estimated
Current revenue	84.9	103.8
Current expenditure	75.2	92.7
Current surplus	9.7	11.1
Capital revenue	0.6	-
Balance	10.3	11.1
Capital expenditure	24.5	46.0
Overall deficit	-14.2	-34.9
Financed by: Domestic borrowing	8.1	21.7
External grants & loans	8.1	12.0
Changes in cash balance	+2.0	-1.2

* Provisional

Balance of Payments:	US$ million 1964	1969*
Exports	216.4	249.5
Imports	-242.7	-338.2
Net trade balance	-26.3	-88.8
Net travel	7.3	25.5
Other net current items	68.0	41.7
Balance on current account	49.0	-21.6
Net long-term capital movements:		
private	-42.0	44.8
public	-1.7	24.1
Net short-term and monetary movements	8.7	-65.0
Balancing item	-14.0	17.7

External Debt (31 December 1969):	US$ million Disbursed	Including Undisbursed
Total debt outstanding		
Kenya:	265.8	368.8
Notional 1/3 share of East African Community debt:	57.1	72.1
Total	322.9	440.9
Total debt service - 1969		
Kenya:	19.0	
Notional 1/3 share of East African Community debt:	5.4	
Total debt service	24.4	

Debt service ratio (1969)*: 6.4%

Foreign Exchange Position:

Foreign exchange reserves at June 30, 1970: K£ 72.4 million ($203 million)
(Equivalent to over 7 months' imports at the 1969 rate)
Exchange rate: K£ 1 = Sh 20 = US$2.8

IMF Position:		US$ million 1964	March 31, 1971
Quota		25.0	48.0
Drawings		-	-
S.D.R.s:	Allocations	-	10.5
	Holdings	-	12.0

May 11, 1971

* Provisional