Document of
The World Bank

FOR OFFICIAL USE ONLY

Report No. P-3205-KE

REPORT AND RECOMMENDATION

OF THE

PRESIDENT

TO THE

EXECUTIVE DIRECTORS

ON A

PROPOSED DEVELOPMENT CREDIT AND LOAN

TO

KENYA

FOR A

THIRD FORESTRY PROJECT

February 9, 1982

CURRENCY EQUIVALENTS

Currency units	=	Kenya Shilling (K. Sh)
K Sh 1.00	=	US$0.10 1/
US$1.00	=	KSh 10.00
US$1.00	=	SDR 0.85128

WEIGHTS AND MEASURES

1 hectare (ha)	=	2.47 acres
1 kilometer (km)	=	0.62 mile
1 meter (m)	=	3.28 feet

ABBREVIATIONS AND ACRONYMS

ACCF	-	Assistant Chief Conservator of Forests
CCF	-	Chief Conservator of Forests
FAO	-	Food and Agriculture Organization of the United Nations
FD	-	Forest Department
MENR	-	Ministry of Environment and Natural Resources
MIS	-	Management Information System
RAES	-	Rural Afforestation Extension Service
SDR	-	Special Drawing Rights
tpa	-	tons per annum

FISCAL YEAR

Government, including the Forest Department July 1 to June 30

1/ Since September 1981, the Kenya Shilling has been pegged to the SDR at a rate of SDR = KSh 11.95. The rate vis-a-vis the dollar has fluctuated since that time. A rate of US$1.00 = KSh 10.00 has been used in evaluating this Project.

REPUBLIC OF KENYA

THIRD FORESTRY PROJECT

LOAN/CREDIT AND PROJECT SUMMARY

BORROWER: Government of Kenya

AMOUNT:
Credit: SDR 13.6 million (US$16 million equivalent)
Loan: US$21.5 million

TERMS:
Credit: Standard
Loan: Repayable in 20 years, including five years of grace, with interest at 11.6% per annum

PROJECT DESCRIPTION: The project would improve the Forest Department's operations through more efficient planting activities and better cost recovery. It would support new plantings of 6400 ha per annum, maintenance of about 160,000 ha of existing plantations and expansion of rural afforestation activities, particularly nurseries. The project would also support the improvement of forest roads, the construction of forest stations, the replacement, operation and maintenance of vehicles and the provision of specialist staff.

Benefits: The project would increase wood production and reduce pressure on Kenya's fast depleting indigenous forests. It would also lead to public savings in national afforestation programs and prevent disruption of water flow and soils in densely populated areas.

Risks: The principal risk of the project is that management reforms at the Forest Department would be slower than intended and that unit costs of plantation activities would not decline to target levels. The project is designed to minimize this risk through the introduction of annual work plans and a management information system.

ESTIMATED COST:

	Local	Foreign	Total
	US$ million		
New Plantation Establishment	9.4	0.7	10.1
Plantation Maintenance	8.9	0.7	9.6
Rural Afforestation	4.7	1.9	6.6
Other Forest Department			
Technical Assistance	0.2	1.0	1.2
Roads	2.4	4.0	6.4
Buildings	4.6	1.5	6.1
Vehicles	1.1	4.0	5.1
Vehicle Operating Costs	2.9	5.4	8.3
Surveys, Study Tours	0.4	0.2	0.6
Total Base Costs	34.6	19.4	54.0
Contingencies			
Physical	3.5	1.9	5.4
Price	10.7	4.0	14.7
Total	14.2	5.9	20.1
Total Project Costs (including US$5.9 million of taxes and duties)	48.8	25.3	74.1

FINANCING PLAN:

	Local	Foreign	Total
	US$ million		
IBRD/IDA	22.8	14.7	37.5
Government of Italy	1.2	7.8	9.0
Government of Switzerland	4.8	2.8	7.6
Government of Kenya	20.0	-	20.0
Total Project Cost	48.8	25.3	74.1

ESTIMATED DISBURSEMENT:

Bank Group Fiscal Year	1983	1984	1985	1986	1987
	US$ million equivalent				
Annual	3.7	7.7	10.1	10.3	5.7
Cumulative	3.7	11.4	21.5	31.8	37.5

RATE OF RETURN: The economic rate of return of the new plantation component is 19% and that of the rural afforestation component is 22%.

STAFF APPRAISAL REPORT: Report No. 3614-KE, dated January 15, 1982.

MAPS: IBRD No. 15900
IBRD No. 15901

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

REPORT AND RECOMMENDATION OF THE PRESIDENT TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN AND CREDIT TO THE REPUBLIC OF KENYA FOR A THIRD FORESTRY PROJECT

1. I submit the following report and recommendation on a proposed Development Credit to the Republic of Kenya of SDR 13.6 million (US$16 million equivalent) on standard terms, and a loan for the equivalent of US$21.5 million to assist in the financing of a Third Forestry Project. The interest on the loan would be 11.6% per annum. The loan would be repayable in 20 years, including five years of grace.

PART I - THE ECONOMY 1/

2. A report entitled "Kenya - Country Economic Memorandum and Annex on Agricultural Issues" (Report No. 3456-KE), dated June 1981, has been distributed to the Executive Directors. A summary of social and economic data is in Annex I. A Basic Economic Report on Kenya is now nearing completion.

Long-Term Economic Growth and Structural Problems

3. Kenya became an independent nation in 1963. Since then the country has experienced remarkable continuity in both political leadership and development strategy. That strategy has been to promote rapid economic growth by means of public investment, encouragement of both smallholder and large-scale farming, and promotion of accelerated industrialization, by providing incentives for private, including foreign, investment in modern industry. The Kenyan development model can be characterized as "mixed", in the sense that it incorporates a diversity of organizational forms and incentives and combines private enterprise with a significant amount of Government participation and guidance. It is clear that the country has made a smooth transition to new leadership following President Kenyatta's death in 1978, and that the future will see continuity in both the political and economic spheres. Peaceful elections in 1979 provided additional confirmation of this.

4. Kenya's first decade as an independent nation was one of remarkable growth and structural transformation. Total GDP grew at an annual average rate of 6.6% during 1964-73. Both agriculture and manufacturing grew rapidly, at 4.7% and 8.4% per annum respectively. The expansion of agriculture was stimulated by redistribution of large estates to smallholders, rapid diffusion of hybrid maize, and growth of smallholder output. Growth of manufacturing was very largely made possible by the expansion of domestic demand due to rising agricultural incomes, while investment for domestic production was being encouraged by high levels of protection, a liberal attitude towards foreign investment, and active Government promotion of and participation in manufacturing ventures.

1/ This section is essentially the same as that of the President's Report for the Petroleum Exploration Promotion Project, dated November 17, 1981.

5. Despite this rapid growth, Kenya remains a poor country, still heavily rural and dependent upon agriculture. Growth of per capita income has declined substantially since 1974 and average GNP per capita in 1980 was US$420. Agriculture accounted for more than a third of GDP and about two thirds of exports (other than refined petroleum products) in 1978-80. Since the growth of the industrial sector has been largely confined to the major urban areas, agriculture remains the principal source of income in the rural areas where over 80% of the population live and work. About one-fourth of the population have incomes which place them below the absolute poverty line.

6. The most fundamental problem Kenya faces is posed by the rapid growth rate of population, currently estimated by the Government to be 3.9% per year, which is among the highest in the world. This is, ironically, the result of Kenya's past success in raising living standards, which has resulted in a steady decline in mortality and has probably resulted in an increase in the country's already high fertility rate.

7. With rapidly increasing population, pressure is beginning to mount on Kenya's limited arable land. Of Kenya's total land area of about 583,000 sq km, about 520,000 sq km are categorized as potentially agricultural; however, on the basis of annual rainfall and fertility, only 13% can be regarded as high potential land, with 6% medium and 81% low potential arid- and semi-arid areas. Thus, less than 20% of the land area has good arable potential, and much of it is now densely settled. Because of traditional ethnic landholding patterns, some higher potential land is not fully utilized. Mounting pressure on land is resulting in increasing subdivision and landlessness in high potential areas, and in settlement in semi-arid areas ill-suited to farming. The latter also poses a serious threat of environmental degradation.

8. Rapid population growth has created other problems as well. First, there is the strong likelihood that, unless growth slows dramatically or ways are found to increase the rate at which income earning opportunities in agriculture expand, excess rural labor will be pushed into urban areas. Even if the non-agricultural formal wage sector (which employs less than 15% of the total labor force) grows very rapidly, it will probably be unable to absorb all the new urban labor force entrants, resulting in rising urban unemployment and underemployment. Second, considerable budgetary pressure has already been created by the growing demand for social services, especially education. Finally, efforts to improve the distribution of income will be impeded by the relative lack of access to land and education for the children of the poorest section of the population.

9. A second problem area has developed in the manufacturing sector. The rapid growth of industry in the past has been largely based upon investments in simple import-substitution industries by multinational companies. To a lesser extent manufacturing production has also catered to the export market in neighboring countries, particularly in the protected East African

Community (EAC) market. However the scope for further industrialization along these lines is limited as most of the easy import-substitution possibilities have been exhausted and the EAC preference for Kenyan goods has been abolished. The past pattern of industrialization has left the sector increasingly dependent on imported raw materials, components and spare parts and therefore vulnerable in case of a shortage of foreign exchange. To maintain growth it will be necessary to reorient industry toward increased use of domestic inputs and increased production for export.

10. A third major problem has been the slow growth in agricultural output, which has averaged only about 2.7% per year over 1972-79. This reflects generally less favorable climatic conditions, a weakening of the structural factors fueling earlier growth and problems of policy and institutional support. The latter, which has been one of the most serious impediments to sectoral performance, includes inconsistencies in pricing policy and inadequacies in marketing. In addition, the concentration of land holdings and insecure land tenure are inhibiting agricultural growth. Measures to deal with these problems are essential to revitalize the agricultural sector.

11. A further problem is the slow growth and lack of diversification of exports which have consistently grown at a slower pace than GDP. From 1964-74 the volume of exports expanded at an average annual rate of 4.6%. However, over the past five years, export volume has grown slowly. In 1979, export volume was 4% below the 1975 level. To some extent this is a reflection of production problems in agriculture and industry, but it is also an indicator of the need to direct more resources toward export-oriented activities.

Economic Performance 1974-1980

12. Kenya's growth performance since 1974 has been especially vulnerable to swings in the country's international terms of trade. Thus, the GDP growth rate fell sharply during 1974-75 when the dramatic increase in petroleum and other import prices required restrictive economic policies, accelerated rapidly in 1976-77 as the impact of the "coffee boom" following frost damage in Brazil worked its way through the economy, but began to decelerate in mid 1977 with the rapid decline in coffee prices.

13. During 1978-80, Kenya again experienced strong external shocks as a result of the latest round of petroleum price increases and declining coffee prices. The balance-of-payments and incomes effects of this were compounded by poor weather affecting coffee and maize production. As a result, GDP growth slowed to 4.2% in 1979 and an estimated 2.4% in 1980. The trade deficit rose sharply in 1978, and foreign exchange reserves were rapidly depleted. The balance on current account deteriorated from an exceptional surplus of US$58 million in 1977 to a deficit of over US$656 million in 1978, while reserves fell by US$200 million. In order to prevent further depletion of the country's foreign exchange reserves, the Government introduced a program of import restrictions in late 1978, effecting a sharp decline in imports and reductions in Kenya's revenue gap and current account deficit in 1979. This, together with increased external borrowing, resulted in a

recuperation of about US$179 million in gross reserves in the same year. The improvement in the balance of payments proved to be short-lived. The increase in petroleum prices combined with the need for additional food imports resulted in a 25% rise in the value of imports in 1980. While exports rose by 16%, this was not sufficient to prevent a rise in the current account deficit to almost US$900 million and, despite increased external borrowing, a decline of US$195 million in foreign exchange reserves.

Fourth Five-Year Development Plan, 1979-83

14. The emphasis of the Fourth Five-Year Development Plan is on restoring growth to the levels that prevailed before 1974, while alleviating poverty through creation of income earning opportunities and provision of social services to meet the basic needs of the population. The Plan correctly identifies the key problems that Kenya faces and sets forth a development strategy appropriate to their solution. It is sharply focussed, explicit in its recommendations, and shows a sound awareness of constraints on development.

15. The Fourth Plan recognizes the strong link between agricultural growth and poverty alleviation. One of the most significant changes proposed in the Plan is increased access to land through legalizing subdivision of high-potential large farms. In addition, the Plan proposes that a National Land Commission be established to review ways of encouraging land use intensification and labor absorption. The Plan also proposes that marketing and pricing policies pay closer attention to the structure of domestic and international prices and the marketing system be made more competitive and efficient to improve prices to farmers. Research and extension services are to be more closely linked to the needs of small farmers. Finally, in addition to projects to increase larger scale commercial and smallholder production, a series of integrated rural development projects in semi-arid areas is proposed to redress the neglect of these areas.

16. The major thrust of industrial policy will be to effect a transition from import substitution to a strategy emphasizing industrial efficiency and export diversification. This will involve further rationalization of tariffs and elimination of quantitative restrictions on imports over a five-year period. This policy will be very difficult to carry forward over the next few years when, because of balance of payments problems, there is likely to be considerable pressure to increase, rather than reduce, protection. The Plan proposes no fundamental change in Kenya's traditionally liberal policy on foreign investment with the important exception that review and approval of projects for which special concessions or Government participation are being sought will rely more on economic criteria and will be centralized in the Ministry of Finance. On the whole, the Plan calls for a more limited role for Government in terms of direct participation and intervention. However, efforts will be made to restructure industrial investment incentives to encourage employment and decentralization. Finally, while there are doubts in Kenya about how dynamic a role the informal sector can play in the development process, the Plan is more specific in its recommendations for aid to small firms (provision of financial and technical support and ending of unnecessary licensing and other restrictions) than the previous Plan.

17. The Fourth Plan acknowledges the heavy burden rapid population growth places on the economy and places high priority on the promotion of family planning. The target for new acceptors during 1979-83 is 700,000, compared to 280,000 recruited during 1974-78. In order to achieve this, the number of field educators will be more than tripled (from 430 to over 1,300) and the number of fixed delivery points doubled (from 315 to 630). Although Kenya is doing more to promote family planning than most other African countries, the rate of population growth is projected to remain extremely high because of strong cultural and traditional factors, and even greater efforts will be required to bring about a significant decline in fertility.

18. Due to Kenya's worsening financial and budgetary constraints, which had not been anticipated when the Plan was written, implementation of the Fourth Plan has been very slow so far. As a result, the Government had to reassess the Plan targets and has already introduced a revised shortrun economic program incorporated in Sessional Paper (SP) No. 4 of 1980, while maintaining the overall development strategy set out in the original Plan document. The SP identifies and deals with Kenya's short- and medium-term problems in a frank and consistent manner. It offers, among other things, a revised set of policy initiatives designed to overcome the country's urgent financial problems resulting from continuing budgetary and balance of payments pressures.

Structural Adjustment and Economic Prospects

19. If Kenya is to attain positive growth of real per capita income and establish a more equitable pattern of growth in the 1980's, it should revitalize the agricultural sector, restructure the industrial sector to make it more internationally competitive, design government expenditure plans which are consistent with resource availabilities, support growth of the productive sectors and contribute to meeting basic needs, and reduce the rate of growth of population. The country's Fourth Development Plan provides the appropriate development strategy and policy framework for meeting this challenge.

20. The Government is determined to carry out the strategy outlined in the Plan despite adverse international and domestic circumstances and administrative adjustments. In order to do so it has devised and is executing a program of structural adjustment. The Government's first program involves: (a) revising the Government's investment program to make it more consistent with the country's new economic circumstances; (b) ensuring the country's creditworthiness by improving external debt management and introducing better planning and control of external borrowing; (c) beginning the process of rationalization of the trade regime; (d) improving the incentives for exports and ensuring they are competitive; and (e) reviewing and revising interest rate policy to ensure that it is consistent with development objectives. The program has, on the whole, been carried out satisfactorily. However, actions have been slower than anticipated in some areas and more rapid in others. While the general thrust of the program has been maintained, attempts to execute the policy measures have revealed some weakneses in planning and administration that need to be remedied.

21. A second structural adjustment phase is under discussion which, in addition to supporting continuation of the process of rationalization of the system of industrial protection and improvement of incentives for export, will include measures aimed at revitalization of the agricultural sector, at conserving energy and reducing the country's reliance on imported petroleum, and policy initiatives in population.

22. While the structural adjustment program will have a favorable impact on the balance of payments over the longer term, the first years of the 1980's are going to be difficult ones for Kenyan policymakers and for the Kenyan economy. The temporary respite provided by the coffee boom is over and the prospect is for an unfavorable world environment in which the country's international terms of trade are likely to continue to deteriorate. In addition, debt service obligations will be high because of high borrowing associated with the large current account deficits of the past three years. At the same time, the Government's fiscal operations are likely to be subjected to extreme pressure because of slower growing revenues and demands for increased expenditures. It is within this context that critical policy decisions must be made involving a fundamental restructuring of the pattern of development. Kenya's easy options have been exhausted and the Government must now come to grips with the country's basic structural problems. The strong probability of a highly constrained situation with respect to both internal and external resource availability is going to make it difficult to carry out the required policy changes.

23. Given the adverse external circumstances, it is unlikely that positive growth of GDP per capita can be maintained during 1981-83. However, growth prospects appear somewhat better from about 1983 onward provided the Government's structural adjustment program is continued and there is adequate external assistance to enable its successful implementation. The country's terms of trade should also stabilize, the growth of external debt should decelerate and current account deficits should remain stable over the next few years. It should, therefore, be possible to follow gradually more expansionary policies and a growth rate of GDP around 5% per year should be attainable during the second half of the decade. A feasible growth scenario would then be one in which GDP increases at a pace below that of population in the early years (1981-83) then gradually accelerates, averaging about 4.0% per year during the first half of the decade and about 5.3% per year during the second half.

External Debt

24. The recent expansion of government and government-guaranteed commercial borrowing has adversely affected the debt service ratio, which has risen from 5% in 1977 to about 12% in 1980. This includes service payments on a notional 50% share of the debt of EAC corporations. The debt service ratio is expected to increase to about 19% in the mid-1980s, and decline gradually thereafter. Debt service payments to the Bank in 1980 accounted for 14.5% of total debt service payments; the IDA share was 0.7%. The Bank's share of total debt service payments is expected to rise to about 15% by 1985 while IDA's share would rise to 1%. The Bank is presently holding 18.5% of Kenya's total outstanding and disbursed external debt, and IDA 11%. The Bank's share is expected to rise to 22% and IDA's to about 15% by 1985.

The expected rise in Bank exposure is due largely to anticipated repayments of loans with short maturities. An additional factor, however, is the gradual switch by other donors from loans to straight grants (including conversion of some loans to grants). Because of the long-term balance of payments constraint, Kenya's development program will require substantial financing in excess of public savings and available non-Bank Group external capital combined, and we therefore expect to continue our practice of financing a substantial portion of total project costs, including some local costs when necessary.

East African Community (EAC)

25. The developments affecting the EAC were outlined in a report to the Executive Directors dated December 29, 1977 (R77-312) and more recent developments were reported in a statement to the Executive Directors during their meeting on May 6, 1980. Dr. Victor Umbricht, the independent mediator appointed by the Partner States in January 1978, has visited East Africa on numerous occasions and prepared reports on the results of his fact-finding work on the EAC Corporations and the General Fund Services, and the methodology adopted in appraising the assets and liabilities. In March 1980, the mediator presented to the three Governments his proposals for the allocation of these assets and liabilities and in December 1980, he submitted a supplemental report in response to the Governments' reactions. In August 1981, the three Governments agreed that the next step would be the start of negotiations based on the mediator's proposals; these negotiations began in December 1981. According to his terms of reference, the mediator would be available to assist in arriving at a definitive settlement. The mediator's report and recommendations on the future structure of the East African Development Bank have been accepted by the Partner States. The revised Charter, along with the Treaty to enact the new Charter, have been ratified by the three Governments.

PART II - BANK GROUP OPERATIONS IN KENYA

26. To date, Kenya has received 37 Bank loans, including three on Third Window terms, and 33 IDA credits amounting to US$1,303.7 million, which support 63 operations. In addition, Kenya has been one of the beneficiaries of 10 loans totalling US$244.8 million which have been extended for the development of common services (railways, ports, telecommunications, and finance for industry), operated regionally for the three partner states of the EAC. Annex II contains summary statements of Bank loans and IDA credits to Kenya and to the EAC corporations, and notes on the execution of ongoing projects as of October 31, 1981.

27. The Bank Group has begun to reorient its lending program to assist the Government in its efforts to restructure the economy. This has meant the inclusion in the program of non-project assistance, and a first credit in support of the Government's structural adjustment program was approved in 1980. A second program is at present under discussion with the Government.

Recent economic and sector work has also focused on the structural problems in the various sectors, and the Basic Economic Report, now nearing completion, is expected to address comprehensively the issues of income distribution, population growth and appropriate long-term agricultural and industrial policies.

28. Support of the structural adjustment efforts is, however, not limited to non-project assistance. The selection of projects for financing and their design has been influenced by the need to complement policy actions under the structural adjustment program. Continuing priority has thus been given to the agricultural sector, but increasing emphasis has also been placed on sectors such as population and energy. Projects approved since January 1981 include a Fifth Education Project, a Railways project and a fourth line of credit to the Agricultural Finance Company. Projects that have been appraised include the second structural adjustment program, a second population project, a cotton processing and marketing project, and an urban transport project. Projects under preparation include a fourth power project, a grain storage and marketing project and an urban (small cities) project.

29. Project implementation has deteriorated in recent years, in contrast to the successful implementation performance in the past. Factors accounting for implementation delays have varied widely but some of the more pervasive factors have been institutional/management constraints (Third and Fourth Education projects), procurement problems (Nairobi Water Supply Project) and budgetary constraints leading to a lack of local financing (Highway Sector Loan and Smallholder Coffee Improvement Project). An in-depth review of the causes of the poor project implementation performance and, consequently, poor disbursements is to be undertaken shortly, and the problems and possible solutions will be discussed with the Government.

International Finance Corporation (IFC)

30. IFC has committed a total of US$54.3 million for seven operations in Kenya. These include loans for four companies: Pan African Paper Mills, Ltd.; Kenya Hotel Properties, Ltd.,; Tourism Promotion Services (Kenya) Ltd.; and Rift Valley Textiles (Ltd.). Also included are a US$2.0 million credit line to the Commercial Bank of Kenya, a US$5.0 million credit line to the Commercial Finance Company of Kenya and US$1.4 million in equity to the Development Finance Company of Kenya. As of October 31, 1981, IFC held for its own account US$39.7 million comprising US$30.4 million of loans and US$9.3 million of equity. A Summary of IFC Investments in Kenya is included in Annex II.

PART III - AGRICULTURE AND THE FORESTRY SUB-SECTOR

31. Kenya has a total area of 583,000 km^2 and is a country of striking topographical and climatic variety. Agriculture is the most important sector of the economy and provides a livelihood for about 90% of the population.

A broad distinction can be made between the large farming sector, including Government farms, and the approximately 1.5 million smallholdings in Kenya, most of which are farmed by their owners. Maize is the staple crop, but a range of other crops are grown by smallholders, most of whom also have a few head of livestock.

32. During the period 1976-80, agriculture grew at an average annual rate of 2.9% in real terms. This was much lower than the average annual growth rate of 4.7% achieved from 1964-73. Agricultural output also grew more slowly than the economy and the industrial sector, which grew at about (5%) and (8%) respectively during 1976-80. The share of agriculture in total GDP has averaged about a third in the 1970's. Adverse weather conditions in some years, inappropriate policy decisions and a growing constraint on land have contributed to poor performance. Forestry contributed about 5% to GDP in 1979, with charcoal production accounting for the major part of this share. Forest products valued at about US$8.8 million represented less than 0.6% of total exports in 1979. Kenya however remains an importer of forest based products (mainly paper and paper-board products) the total value of which was about US$23.0 million in 1979.

Forest Resources

33. Some 4% of Kenya's land area is under forests; they play a vital role in water conservation, the regulation of water flow and the prevention of floods and erosion. A high proportion of the nation's forests occupy high potential, high rainfall areas and over the last 60 years, natural forests have been exploited not only to supply timber, fuel and polewood, but also to clear good land for other agriculture and settlement. Some 80% of the nation's population and 80% of its forests occupy the same 20% of the land area. Since much of the forest reserve is gently sloped, fertile and well-watered, there is constant pressure to convert forest to farm land. Many of the indigenous forests are not well protected at present. Those managed by the Forest Department (FD) are being steadily replaced by softwood plantations and those outside its jurisdiction are giving way to shifting cultivation at a very fast rate.

34. Production and Consumption. Most wood in Kenya is consumed as fuelwood, mainly for cooking, at an annual rate of at least 13 million m^3 per year. These needs are met either directly through wood gathering or, particularly in the towns, by small-scale charcoal producers. Domestic industries, however, consume about 900,000 m^3 per year. These requirements are met through large-scale harvesting from existing plantations and indigenous forests, which have potential annual yields of 2.6 million m^3 per year. Indigenous forests in fact produce very little wood - probably no more than 130,000 m^3. The exotic plantations, on the other hand, could produce approximately 1.2 million m^3 of sawlogs and an equal amount of pulpwood or smallwood on a sustained annual basis, with proper management.

35. Exotic softwood crops provide an increasing proportion of the annual cut. In 1980, the proportion was about 70%, and it should reach about 85% during the 1980-2010 period. There is expected to be an industrial roundwood surplus until about the year 2,000. The surplus wood is partly exported.

Forest Industries

36. Sawmilling. Sawmilling is the principal forest industry in Kenya. There are approximately 350 licensed sawmills and an unknown number of small unlicensed mills which operate without any guaranteed supply. Mills range from large integrated undertakings to the tiny, moveable, bench-type variety. The majority are poorly organized and maintained, with products of indifferent quality. Most are periodically short of logs and operating at half of their capacity or less, as a result of inadequate log extraction and transport equipment. The selling prices of sawn lumber vary considerably, from around KSh 700 to 1,000/m^3. Though reliable statistics do not exist, consumption of sawn lumber appears to be divided between the building trade (55-60%), wood-working industries (20-25%) and agriculture and packaging (15-25%). Wood-working industries are increasing rapidly as larger sawmillers begin to diversify into wood-based industries other than sawmilling. The export of sawn timber which had reached a level of 15-20,000 m^3 per annum during the seventies has decreased over the last two to three years.

37. Pulp and Paper. There is one pulp and paper mill in Kenya belonging to Panafrican Paper Mills (E.A.) Ltd. (PPM) and situated at Webuye some 400 km from Nairobi and 900 km from Mombasa. PPM is owned jointly by Government, the Birla group of India, IFC and several Kenyan development banks. It is an integrated pulp and paper mill which started operating in 1975 and produces just over 50,000 tons per annum (tpa) of various paper and paper products. About 25% of the production is currently exported. Felling and extraction are done by PPM and transport is handled by contractors. Expansion of production to 71,200 tpa by 1986 through the addition of a mechanical pulp mill has been approved. A new pulpmill of 100,000 tpa capacity is planned by PPM, but Government has not yet approved this project.

Institutions in the Subsector

38. The Forest Department. The management of Kenya's forests is the responsibility of the Forest Department (FD) of the Ministry of Environment and Natural Resources. FD operates 120 forest stations and substations all over Kenya and is headed by a Chief Conservator of Forests. Total FD staff was about 12,700 at the end of 1981. Despite impressive progress, FD is still short of senior staff, particularly those trained in management, administration, and accounting. Kenyan nationals fill virtually all FD positions. Forestry graduates are trained at the Department of Forestry, Faculty of Agriculture, of the University of Nairobi. FD, like other employers, has been instructed by Government to increase its work force by 10% to alleviate unemployment and now has over 10,000 laborers (paragraph 60). These unskilled staff have been

given civil servant status and receive a monthly salary. Their ensured employment and the failure to set and enforce strict productivity standards have had a damaging effect on labor output and the unit cost of forestry operations.

39. The Rural Afforestation Extension Service (RAES). This service was created in 1971 as part of FD, and is headed by a Conservator. The Extension Foresters are controlled by the RAES Conservator through FD's eight regular Field Conservators. In Kenya, "rural afforestation" means all activities related to afforestation outside the gazetted forest area. Although RAES's activities have a variety of objectives, the main ones are production of fuelwood for the rural population and environmental protection. At the end of 1981, RAES had nurseries in 108 of Kenya's 175 divisions. The Government would like to extend RAES activities to all of them. The establishment of 37 additional nurseries is envisaged for 1981/82. Approximately 20 existing nurseries receive or will receive technical and financial assistance from external aid agencies. In 1979, out of a total of 9.2 million seedlings produced 6.8 million were sold and the balance given out free. Once a year, on National Tree-Planting Day, seedlings are distributed without charge, up to a maximum of three per person. Because of shortage of staff, there can be little follow-up with growers, and the estimated tree survival rate is less than 20% as compared with 75% in the FD plantations.

40. Other Organizations. Numerous organizations are involved in rural afforestation activities: the Ministry of Agriculture has a large extension service, runs nurseries and encourages tree-planting; the Ministry of Energy promotes the development of alternative sources of energy; the National Christian Council of Kenya and the National Council of Women of Kenya distribute free seeds, establish tree nurseries and plant "green belts" around villages. In addition, numerous foreign assisted rural development projects include rural afforestation activities.

Potential, Objectives and Constraints

41. Kenya's softwood plantations currently meet the country's demand for sawn timber and paper, and generate modest exports, but their maintenance and the continuing establishment of new plantations by the Forest Department is currently inefficient, leading to high costs. Cost recovery is low as a result of high costs, low timber prices and a considerable degree of evasion of even these low rates. Moreover, Kenya's forests are failing to keep pace with the demand for wood for its predominant use -- fuel. Kenya's shortage of fuelwood (as measured by prices and by distances walked to gather wood) is not yet acute by African standards, but consumption is far outstripping growth.

42. Kenya currently exports about one-quarter of its pulp and paper production (about 14,500 t in 1980) and small, variable quantities of lumber. Expansion of the Kenyan market is expected gradually to eliminate exports from the existing mill and from its agreed expansion, but if the proposed 100,000 tpa pulp mill is built, its entire production will be exported for many years to come. Kenya has a strong locational advantage for lumber

exports to neighboring, land-locked countries. It would seem also to have a competitive position in softwood lumber in the Indian Ocean and rapidly-growing Middle East market but has failed to expand exports to these areas. The future of lumber exports depends on better organization of the sawmill industry, on the development of grades and quality standards in the local market, and possibly on improvements in Mombasa port.

43. Development Objectives and Constraints. Kenya's 1979-83 Development Plan aims at ensuring a sustained and growing supply of timber for traditional needs and to satisfy the expanding demand for forest products. The Government supports rural afforestation schemes both on private farm land and on land owned by county councils. The plantation schemes are designed to produce pine and cypress sawlogs and smallwood, mainly for pulp, and to date, FD has planted 157,000 ha. Population pressure on forest land and plantation management and cost recovery are the principal constraints facing the program. In recent years, large areas of natural forests have been taken over for smallholder settlement and substantial spontaneous illegal settlement has also occurred. In several instances, the removal of the forest cover, followed by uncontrolled grazing and cropping, has already caused erosion and a deterioration in water supplies. If this trend continues, an already serious problem will become critical.

44. Plantation Management and Cost Recovery. Forest plantation management has deteriorated during the last five years. Numerous new laborers have been paid, but have not been organized to accomplish even simple tasks effectively. The breakdown in management discipline has resulted in planting to fulfill hectarage targets, rather than to ensure tree survival. Lax management is reflected most clearly in escalating unit production costs, and in declining cost recovery. Timber prices (or "stumpage rates") were increased by 10% per year in real terms from 1976 to 1981 as required under the Second Forestry Project. However, due to the escalation of costs, these rates still cover only part of the replacement cost of plantation softwood (see paragraph 65).

World Bank Projects in the Forestry Sub-sector

45. A first Forestry Project (Loan 641-KE) was approved in November 1969 and involved a Bank loan of US$2.6 million to finance the planting of about 20,000 ha of sawwood and about 9,000 ha of pulpwood; the maintenance of the new plantings and of 3,000 ha of existing pulpwood; the carrying out of a marketing survey of Kenya timber and pulpwood; and the introduction of an improved accounting system. The project was carried out by FD and closed fully disbursed in June 1975. The Project Completion Report was issued in July 1976 and the project performance audit report, in March 1977. Both reports concluded that the project achieved satisfactory results and had significant institution-building effects. However, it was noted that some of basic issues, e.g. competition for land between forestry and agriculture, were not resolved. The expected economic rate of return was estimated at 10-18% at completion. The first project achieved about 80% of appraisal objectives in physical terms.

46. In June, 1975, a Credit of US$10.0 million (Credit 565-KE) and a Loan of US$10.0 million (Loan 1132-KE) were approved for the Second Forestry Project. Total project cost was estimated at US$55.5 million, of which 23% was expected to be in foreign exchange. The project supported a six-year planting program and involved considerable expansion from the first project. This project resulted in the planting of 30,000 ha of trees out of 46,000 ha planned, and the institutional development of FD through expansion of its technical and regular staff. FD was not able to produce reliable production cost figures for the various components of the plantation programs partly as a result of failure to recruit and retain a forest economist as originally agreed. Unit costs increased tremendously as a result of wage increases and of the change in numbers and status, from casual to permanent, of much of the labor employed. Experience with these first two projects has been taken into account in designing the proposed project.

Other Projects

47. Almost all other external assistance for forestry is aimed at rural afforestation, either as part of rural development projects or working through the Ministry of Energy. Finnish assistance concentrates on the logging and sawmilling subsector, providing training, repair assistance, and help in arranging credit. In addition, UNDP has a small forest-fire-management project being implemented by FAO, and the UN Industrial Development Organization has provided experts to develop new timber products.

IV. THE PROJECT

48. The proposed Project was prepared under the FAO/IBRD Cooperative Program in June/July 1980 and was appraised in November/December 1980. Post-appraisal discussions were held with the Government in March and April 1981. The proposed Project would follow on from two previous Bank Group supported projects in the forestry subsector and would support the Government's strategy for the development of forestry activities. A Staff Appraisal Report entitled "Kenya: Third Forestry Project" No. 3614-KE has been circulated to the Executive Directors separately. Negotiations were held in Washington from December 2 to December 8, 1981; the Kenyan delegation was led by Mr. J. N. Kiio, Deputy Secretary at the Ministry of Environment and Natural Resources.

Project Description and Objectives

49. The Project would be implemented over a period of four years by the Forest Department (FD) of the Ministry of Environment and Natural Resources. It would aim to improve FD's management performance through more efficient

softwood plantation operations and increased cost recovery. Financial support for new plantings and maintenance of existing plantations would be continued. The operations of FD's nurseries, producing tree seedlings for distribution, would be expected to improve and a forest extension service would be established. These objectives are consistent with the Government's development strategy for the sector. The Project is included in the current Development Plan and is provided for in the 1981/82 Forward Budget.

Detailed Features

50. Plantation Establishment and Maintenance. Funds would be made available for FD to plant 6,400 ha per year for four years. Most of the areas to be planted would be areas of gazetted forests that would be clearfelled during the Project, or which were clearfelled but not replanted during the Second Forestry Project; virtually no indigenous forest reserves would be converted to plantations. Of the total, 1,800 ha/year (28%) would be managed on a short rotation basis (18-20 years) to provide pulp to the PPM Webuye mill. These plantations would consist mainly of pine, with some cypress and eucalyptus. The rest of the new plantations would comprise cypress, pine and some slow-growing hardwoods (e.g. Meru oak) for sawlogs, with smallwood from thinnings and final fellings increasingly supplying pulp, particle-board mills or firewood as the practice of integrated harvesting spread. Provision would also be made for study tours for senior FD staff to observe superior nursery and silvicultural techniques practiced in other African countries. Carrying out of prescribed silvicultural practices should bring substantial improvements: current pruning and thinning are very uneven as a result of poor management and defective agreements with loggers and millers. Moreover, cost projections presume a major reduction in unit costs, as a result of improved management (see paragraph 60). Plantation costs consist 90% of unskilled labor and 10% of tools and materials. As under the First and Second Projects, the continuing development costs of maintaining existing plantations would also be supported. Such investments would include labor, firecontrol equipment and the services of entomologists and pathologists to diagnose problems affecting plantations.

51. Rural Afforestation. The project would enable RAES to embark on its own forestry extension effort and follow up on its seedling distribution through staff recruitment, training, technical assistance and provision of vehicles. RAES would increase the size and efficiency of the 125 existing nurseries not covered by other external aid programs, as well as construct and operate new nurseries in the 30 districts where none now exist. Research grants would assist nurseries in growing and distributing tree species that are appropriate for the conditions of their areas. The component would be expected to increase annual production of seedlings for distribution from 13.0 million in 1981 to 52.5 million in 1986, and increase the survival rate from an estimated 20% to 40%, through improved follow-up with growers.

52. Other Forestry Department Activities. Forest road construction, up-grading, and maintenance would be financed under the Project, using the two existing roads units, which are well-equipped but poorly utilized. FD would also contract for the building or rebuilding of 12 of the 120 forest stations, including over 2,200 housing units (mainly laborers' houses), as well as offices, stores, and water-supply systems. Project activities would include replacement or improvement of water-supply systems at some existing forest stations. Funds would be provided for the purchase, replacement, operation and maintenance of vehicles. There would be technical assistance to overcome FD's senior management problems, including: (a) a Finance and Management Analyst to design and implement a Management Information System (MIS); (b) a Forest Economist (already in post) to assist in setting appropriate wood prices; (c) a Roads Programming and Control Expert to program, manage and control road construction, upgrading and maintenance; (d) a Rural Afforestation Adviser to assist with nursery management, the establishment of a forestry extension service, and coordination between FD and other agencies; and (e) short-term consultants to help with specific forestry problems. Other FD activities to be supported include annual aerial surveys of part of the forest area, study tours for senior FD staff and mission travel allowances to keep senior management in close contact with field operations.

Project Costs and Financing

53. Total Project costs during the four-year investment period, inclusive of taxes and duties, are estimated at US$74.1 million with a foreign-exchange component of US$25.3 million. The project cost net of taxes is estimated at US$68.2 million. Cost estimates are based on prices prevailing at the end of 1981 and include adequate physical and price contingencies. Full costs of technical assistance (including salary, subsistence and international travel) are estimated at US$8,100 per man-month; 15 man-years would be required. Full costs of short-term consultants are estimated at US$8,800 per man-month, including salaries, subsistence and international travel; 19 man-months would be required.

54. Financing of Project costs would be shared by the Government of Kenya, the Governments of Switzerland and Italy and the Bank Group in the proportions of, 21%, 11%, 13%, and 55% respectively. The proposed IBRD Loan of US$21.5 million equivalent would be made to the Government of Kenya for twenty years, including five years of grace, at an interest rate of 11.6% per annum, and the proposed IDA Credit of SDR 13.6 million (US$16 million equivalent) would be on standard IDA terms. Together, the Loan and Credit would finance 58% of foreign exchange costs and US$18.3 million equivalent of local expenditures net of taxes and duties. A grant from the Government of Switzerland for Swiss Francs 15.0 million (about US$7.6 million equivalent) would finance 83% of the costs of the rural afforestation component on a parallel basis and a loan from the Italian Government of US$9.0 million equivalent would finance mainly vehicles, equipment and materials, also on a parallel basis. The Italian loan would be for a period of 13 years, including two years of grace, at an interest rate of 2.25% per annum. The conditions precedent to effectiveness of the Swiss grant and Italian loan would have

to be met before Bank Group financing became effective (Section 7.01(a) of the draft Development Credit Agreement and Section 6.01(a) of the draft Loan Agreement). The proceeds of the Loan and Credit and the Government's contribution would be made available to the Forest Department as budgetary allocations. While the further development costs of maintaining existing plantations would be financed, following standard practice in the forestry field, the Government would continue to finance certain FD recurrent expenditures not included in Project costs (e.g. senior staff salaries, housing, forest guards etc.).

Procurement and Disbursement

55. Contracts for purchase of vehicles, equipment and materials of US$250,000 or more, totalling about US$2.6 million equivalent, would be awarded through international competitive bidding, in accordance with Bank Group guidelines. To the maximum extent possible, purchases would be grouped for the purposes of bidding. Qualified domestic manufacturers would be allowed a preference of 15% of the c.i.f. price or the level of applicable import duty, whichever is the lower, when comparing domestic with foreign bids under international competitive bidding. Contracts for goods valued between US$100,000 and US$250,000, which would total about US$1.5 million equivalent, would be awarded after local competitive bidding in accordance with standard Government procedures which were examined during appraisal and are satisfactory. Orders of up to US$100,000 equivalent for other goods would be procured by negotiated purchase, normally on the basis of at least three suppliers' quotations, up to an aggregate limit of US$500,000 equivalent. Civil works contracts for construction of buildings and water supply facilities for FD (US$8.0 million) and forest roads (US$5.5 million) would be individually too small and dispersed to attract international contractors not already established in Kenya, and would be awarded on the basis of local competitive bidding procedures, acceptable to the Bank. The largest single contract of this kind is unlikely to exceed US$300,000. Locally based contractors exist in sufficient numbers and are capable of carrying out the required works. Forest roads and tracks to be built by FD would total about US$2.7 million. Technical assistance and consulting services (estimated to cost about US$1.4 million) would be engaged in accordance with Bank guidelines on the use of consultants (Schedule 3 of the draft Development Credit and Schedule 4 of the draft Loan Agreement). Aerial surveys (US$320,000) would be undertaken by specialized firms represented locally or in neighboring countries in accordance with the above-mentioned guidelines.

56. The proceeds of the IDA Credit and of the Bank Loan would be disbursed over four and a half years against: (a) 75% of unskilled labor costs of plantation establishment by FD; (b) 75% of unskilled labor costs of plantation maintenance by FD; (c) 70% of civil works expenditures for FD buildings, water supply facilities and forest roads; (d) 100% of foreign expenditures and 80% of local expenditures for vehicles; (e) 70% of incremental operating expenditures (operation and maintenance of vehicles, upkeep of buildings and staff travel allowances); (f) 100% of foreign expenditures and 80% of local expenditures for technical assistance, consultant services,

surveys and training; and (g) US$5.6 million unallocated. All disbursements would be fully documented except local expenditures under (a), (b) and (e) and force account expenditures under (c) which would be made against statements of expenditure, with the supporting documentation retained by FD and made available for inspection by Bank supervision missions. Disbursements for (a) would be made only for those plantings which had been certified by FD's Chief Conservator of Forests to have been satisfactorily established. Project plantings would be considered established approximately three months after planting. Amounts to be claimed for disbursement under (a) and (b) would be established by applying reference maximum unit values per activity as well as the disbursement percentages to the work performed by FD (Schedule 1, paragraph 3 of the draft Development Credit and Loan Agreements.) The reference maximum unit values represent the highest reasonable costs for the various operations and they were used as the basis for estimating Project costs.

Accounts and Audits

57. FD would keep Project accounts and records consistent with sound accounting practice, adequate to reflect FD's operational and financial situation and to permit adequate monitoring of the Project (Section 5.01(a) of the draft Development Credit Agreement and Section 4.02(a) of the draft Loan Agreement). The responsibility for auditing FD's accounts rests with the Auditor General. FD's accounting capability would be strengthened under the Project through provisions for implementation of a management information system (paragraph 60). FD would also make arrangements, satisfactory to the Bank Group, for the independent audit of those disbursements under the Project made on the basis of statements of expenditure. Such expenditures would cover FD's incremental operating costs and road and track improvements undertaken by the Department (Section 5.01(b) and (c) of the draft Development Credit Agreement and Section 4.02(b) and (c) of the draft Loan Agreement).

Environmental Significance

58. The proposed Project would bring significant benefits in preserving and protecting Kenya's forest resources. In the first instance, it would strengthen the Forest Department's capacity to protect existing resources against illegal settlement and exploitation. Legislation currently before the Kenyan Parliament would also extend the Forest Department's jurisdiction over the third of the country's forests now controlled inadequately by county councils. The project would promote rural afforestation with a view to improving fuelwood supplies, reducing the wastage of smallwood and thereby easing pressure on existing forests. Most, if not all, of the Project-supported plantings would be on land where exotic softwoods had previously been cut and which would otherwise be converted to potentially damaging uses, such as livestock grazing. The project would involve no land use study of the forest areas, mainly because forests compete with other uses, such as agriculture and livestock, in several parts of the country, with the result that the Forest Department is not perceived as a sufficiently objective locus of land use analysis. However, outside the forestry sector, evolving land use is being

studied by the Kenyan Rangeland Ecological Monitoring Unit (KREMU) which is being financed under the Bank's Second Livestock Project. The Government is preparing a Land Use Policy Paper and is expected to begin a comprehensive national study of the question during 1982. The subject of land use planning has also been prominently addressed during discussions of a second Structural Adjustment Loan for Kenya.

Project Implementation

59. Organization and Management. All Project activities would be implemented under the authority and direct supervision of FD. Its parent ministry (MENR) would monitor Project progress through the Senior Assistant Secretary responsible for forestry. FD's management structure is considered adequate for Project implementation. However, the Project would support a number of proposals aimed at eliminating the operational constraints met during the implementation of the Second Forestry Project and at improving FD's managerial performance at all levels.

60. Improved management as well as technical and financial control would be key elements for the successful implementation of the proposed Project. To carry out these operations a Management Information System (MIS) would be implemented by FD in two phases helped by a Finance and Management Analyst to be appointed under the Project for a period of four years. Within four months of the beginning of the Analyst's assignment, FD would submit a report through MENR to the Bank Group for its approval; the report would contain a proposed basic structure for the MIS and a schedule for more detailed design and implementation (Schedule 2, Part II, Section 4 of the draft Development Credit and Loan Agreements). Approval by the Bank Group of the proposed MIS design and implementation schedule would be a condition of disbursement for plantation establishment and maintenance (Schedule 1, paragraph 5 (ii) of the draft Development Credit and Loan Agreements). The second phase would comprise the implementation of the MIS designed in the first phase and approved by the Bank Group. To assist in improving its management and financial controls, FD has employed a Forest Economist to advise on all aspects of the Department's costs and revenues. The Government appreciates the seriousness of the overmanning problem at the Forest Department (paragraph 38). In addition to enforcing the freeze on public employment which was announced in October 1981, the Government expects FD to justify its proposed staffing plans in detail in its draft Annual Work Programs and Budgets under the project. Even the proposed transfer into FD of unskilled labor from other departments or agencies on a temporary basis would be evaluated in the light of the Department's productivity and financial situation at the time. FD would also explore ways and means of transferring existing staff to more productive activities and of hiring labor on a temporary rather than permanent basis. Specific proposals along these lines would be reviewed by the Bank Group following the receipt of FD's draft Annual Plans (Section 5.02 of the draft Development Credit Agreement and Section 4.03 of the draft Loan Agreement).

61. Plantation establishment and maintenance would be implemented under the responsibility and control of the eight Field Conservators of Forests, who are properly qualified and experienced. Rural afforestation activities would be carried out under the responsibility and control of the Conservator of

Forests (RAES). About 80 Extension Forest Assistants and personnel for the 30 new nurseries to be established under the Project would be transferred from other assignments at FD. The Conservator (RAES) would be assisted by a Rural Afforestation Adviser who would be selected by the Government of Switzerland and appointed with the concurrence of FD and the Bank Group (Schedule 2, Part II, Section 2 of the draft Development Credit and Loan Agreements). Planning and control of road works would be the responsibility of the Conservator for Forest Industrial Development (FID), based in Nairobi. Laborers would be transferred to the road units from other parts of FD. To strengthen the programming, implementation and control of the FD's Road Program, a Roads Programming and Control Expert would be recruited for a four-year period. He would have line management responsibilities and report to the Conservator, FID. By December 31, 1982, FD, through MENR, would submit to the Bank for approval a detailed program including the equipment and staffing of the four Road units as well as the implementation schedule for the construction, upgrading and maintenance of forest roads. For those forest roads that would be constructed or upgraded by local contractors, the FD would provide the Ministry of Transport and Communications with appropriate information (Schedule 2, Part II, Section 3 of the draft Development Credit and Loan Agreements).

62. Staffing. Technical assistance staff would provide on-the-job training to local personnel, and also ensure that senior local staff were given a thorough grounding in essential management matters, such as work planning and supervision, budgeting and financial control. These responsibilities would be clearly defined in the terms of reference of technical assistance staff. Proposals for the use of the consultants' services would be included in the Project Annual Work Programs and Budgets. All technical assistance staff and consultants would have qualifications and experience and would be employed under terms and conditions satisfactory to the Bank. It would be a condition of Credit and Loan effectiveness that the Finance and Management Analyst and Forest Economist had been employed (Section 7.01(b) of the draft Development Credit Agreement and Section 6.01(b) of the draft Loan Agreement). It would be a condition of disbursement for the roads component that the Roads Programming and Control Expert had been appointed and taken up his position (Schedule 1, paragraph 5(iii) of the draft Development Credit and Loan Agreements).

63. Annual Work Programs and Budgets. Basic documents for Project implementation would be annual work programs and budgets. These would be prepared by FD and submitted through MENR to the Bank for review and approval not later than March 30 of each year, using a format agreed upon between the Borrower and the Bank (Schedule 2, Part II, Section 5 of the draft Development Credit and Loan Agreements).

Reporting, Monitoring and Evaluation

64. FD would obtain detailed information for monitoring and evaluating project implementation through the MIS. This information would be incorporated into semi-annual reports, summarizing project progress and performance,

which would be submitted to the Bank for review. The format and contents of these reports would be discussed in detail during the first Bank supervision mission. FD would also prepare a completion report summarizing Project performance and evaluating its impact. The report would be submitted to the Bank not later than six months after the closing date (Section 4.03(d) of the draft Development Credit Agreement and Section 3.03(d) of the draft Loan Agreement).

Cost Recovery

65. An economic study would be carried out to determine appropriate timber prices under terms of reference acceptable to the Bank. The results of the study would be submitted to the Bank for review and comment by December 31, 1982. By the same date FD would prepare and submit to the Bank a plan for improving collection of sawlog rates. The plan would specifically consider public auctioning or tendering of cutting rights to forest compartments. Until agreement was reached on a formula for determining timber prices, the Government would increase such prices annually, beginning in FY1983, by an average rate of 12.5% in real terms (Section 5.03 of the draft Development Credit Agreement and Section 4.04 of the draft Loan Agreement). Beginning in the second year of the project, the Forest Department would also include in the draft Annual Plans specific proposals for increasing the recovery of the recurrent production costs of seedlings produced and distributed by RAES. Such proposals would demonstrate their impact on reducing the annual financial deficit on RAES' operations (Section 5.04 of the draft Development Credit Agreement and Section 4.05 of the draft Loan Agreement).

Project Benefits and Risks

66. The most direct benefit of the Project would be increased production of wood from the establishment of new plantations and the rural afforestation program. Wood from existing plantations would be sold as high value pruned timber rather than as lower value unpruned logs. The Project would bring a dramatic reduction in the rate at which Kenya's forest cover is being lost or allocated to other uses. Pressure would be reduced on the remaining indigenous forests. Both of these factors are vital to the regulation of water flow and protection of soils. By supporting the Forest Department, the Project would be expected to lead to greater efficiency in this organization and greater productivity from its labor force; these in turn, would entail major public savings.

67. Of the expected benefits, only sawlog and pulpwood production is readily quantifiable. In making the economic analysis, the accounting values of unskilled labor and foreign exchange were taken into account. Standing sawlogs have been valued at border price equivalents, those to be harvested before the year 2000 at export parity and those thereafter at import parity. Parities were calculated at Nairobi and on the basis of an expected 2.5% per year real increase in the world market price for lumber until the year 2000 and 3.0% per year thereafter. Estimating the value of pulpwood is more difficult but it was calculated as a function of the export value of pulp until the year 1990 and of the import value after that date. Incremental production of fuelwood was valued on the assumption that it would replace

kerosene imports, allowing for the economic value of foreign exchange and the costs of gathering, transporting and selling the wood. On these assumptions, and assigning no benefit to smallwood not converted to pulp, the economic rate of return of the new plantations component was calculated at 19%; that of the rural afforestation component was determined at 22%.

68. The principal economic risk of the Project is that management reforms will be slower than intended and unit costs will not decline to target levels. The project has been designed to minimize this risk by introducing operational improvements, such as Annual Plans, which will build on the existing organizational strengths of the Forest Department. Disappointing results in improved revenue collections could also pose a financial risk. However, the financial burden of maintaining plantations established under the project would diminish with the age of the plantations and could be met, if necessary, by reducing the rate of new plantings after 1986. A long-term enterprise like forestry always runs agronomic and catastrophic risks. The Project's provisions for fire and game protection, and for diagnostic and referral capabilities for diseases are designed to allay these to a considerable degree. There is some risk that Kenya will fail to exploit the full annual harvestable growth of its softwood plantations. While the domestic market is likely to be satisfied, progress on exports requires better organization and a better product. Finnish Government assistance to the logging and sawmilling sector is designed to address these problems and to turn the substantial over-capacity in the sawmilling sector to economic advantage. The risk that land-use conversions will continue to take place in an unplanned manner with adverse ecological consesuences is too broad and deeply rooted to be dealt with in the context of the forestry subsector alone. It is being addressed in the context of sectoral and structural adjustment dialogues between the Government and the Bank.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

69. The draft Development Credit and Loan Agreements between the Republic of Kenya and the Association and the Bank, the Recommendation of the Committee provided for in Article V, Section 1(d) of the Articles of Agreement of the Association and the Report of the Committee provided for in Article III, Section 4(iii) of the Articles of Agreement of the Bank are being distributed to the Executive Directors separately.

70. Conditions of effectiveness include the execution of the Swiss Grant Agreement and Italian Loan Agreement (Sections 7.01(a) of the draft Development Credit Agreement and 6.01(a) of the draft Loan Agreement), the recruitment of a Finance and Management Analyst and a Forest Economist (Sections 7.01(b) of the draft Development Credit Agreement and 6.01(b) of the draft Loan Agreement), and provision of evidence of the due authorization or ratification, and

satisfaction of all conditions precedent to the effectiveness, of the Swiss Grant Agreement and Italian Loan Agreement (Sections 7.02 of the draft Development Credit Agreement and 6.02 of the draft Loan Agreement). Conditions of disbursement include: (a) the approval of a basic design and implementation schedule for FD's MIS and (b) the appointment of a Roads Programming and Control Expert (Schedule 1, paragraph 5(ii) and (iii) of the draft Development Credit and Loan Agreements). Special features of the draft Development Credit and Loan Agreements are referred to in Annex III of this report.

71. I am satisfied that the proposed Credit and Loan would comply with the Articles of Agreement of the Association and the Bank.

PART VI - RECOMMENDATIONS

72. I recommend that the Executive Directors approve the proposed loan and credit.

A. W. Clausen
President

Attachments
Washington, D.C.
February 9, 1982

TABLE 3A
KENYA - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOUSAND SQ. KM.)	KENYA			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE)/a	
TOTAL 582.6			MOST RECENT	MIDDLE INCOME	MIDDLE INCOME
AGRICULTURAL 60.4	1960 /b	1970 /b	ESTIMATE /b	AFRICA SOUTH OF SAHARA	LATIN AMERICA & CARIBBEAN
GNP PER CAPITA (US$)	100.0	170.0	380.0	794.2	1616.2
ENERGY CONSUMPTION PER CAPITA (KILOGRAMS OF COAL EQUIVALENT)	150.4	122.1	180.1	707.5	1324.1
POPULATION AND VITAL STATISTICS					
POPULATION, MID-YEAR (THOUSANDS)	8189.0	11253.0	15274.0	.	.
URBAN POPULATION (PERCENT OF TOTAL)	7.4	10.2	13.8	27.7	64.2
POPULATION PROJECTIONS					
POPULATION IN YEAR 2000 (MILLIONS)			34.1	.	.
STATIONARY POPULATION (MILLIONS)			109.0	.	.
YEAR STATIONARY POPULATION IS REACHED			2095	.	.
POPULATION DENSITY					
PER SQ. KM.	14.1	19.3	26.2	55.0	34.3
PER SQ. KM. AGRICULTURAL LAND	145.2	191.4	244.4	130.7	94.5
POPULATION AGE STRUCTURE (PERCENT)					
0-14 YRS.	47.6	48.9	50.0	46.0	40.7
15-64 YRS.	49.8	48.6	47.6	51.2	55.3
65 YRS. AND ABOVE	2.6	2.5	2.4	2.8	4.0
POPULATION GROWTH RATE (PERCENT)					
TOTAL	2.4	3.2	3.4	2.8	2.4
URBAN	5.2	6.4	6.8	5.1	3.7
CRUDE BIRTH RATE (PER THOUSAND)	52.0	52.7	51.3	46.9	31.4
CRUDE DEATH RATE (PER THOUSAND)	24.0	17.5	13.4	15.8	8.4
GROSS REPRODUCTION RATE	3.6	3.8	3.8	3.2	2.3
FAMILY PLANNING					
ACCEPTORS, ANNUAL (THOUSANDS)	..	30.9	61.0	.	.
USERS (PERCENT OF MARRIED WOMEN)	..	1.0	..	..	..
FOOD AND NUTRITION					
INDEX OF FOOD PRODUCTION PER CAPITA (1969-71=100)	99.0	100.0	86.0	89.9	108.3
PER CAPITA SUPPLY OF					
CALORIES (PERCENT OF REQUIREMENTS)	99.0	99.0	88.0	92.3	107.6
PROTEINS (GRAMS PER DAY)	70.0	68.0	52.0	52.8	65.8
OF WHICH ANIMAL AND PULSE	29.0	28.0	20.0	16.1	34.0
CHILD (AGES 1-4) MORTALITY RATE	34.0	22.5	15.2	20.2	7.6
HEALTH					
LIFE EXPECTANCY AT BIRTH (YEARS)	41.3	49.1	54.7	50.8	64.1
INFANT MORTALITY RATE (PER THOUSAND)	126.0/c	119.0	91.0	..	70.9
ACCESS TO SAFE WATER (PERCENT OF POPULATION)					
TOTAL	..	15.0	17.0	27.4	65.7
URBAN	..	100.0	100.0	74.3	79.7
RURAL	..	2.0	4.0	12.6	43.9
ACCESS TO EXCRETA DISPOSAL (PERCENT OF POPULATION)					
TOTAL	..	50.0	55.0	..	59.9
URBAN	..	85.0	98.0	..	75.7
RURAL	..	45.0	48.0	..	30.4
POPULATION PER PHYSICIAN	10690.6	7830.9/d	11625.2/d	13844.1	1728.2
POPULATION PER NURSING PERSON	2230.0/c,d	1474.1/d	1085.7/d	2898.6	1288.2
POPULATION PER HOSPITAL BED					
TOTAL	807.0/c	774.1	770.8	1028.4	471.2
URBAN	..	..	602.1	423.0	558.0
RURAL	..	..	802.8	3543.2	..
ADMISSIONS PER HOSPITAL BED	..	..	..	..	..
HOUSING					
AVERAGE SIZE OF HOUSEHOLD					
TOTAL	..	4.7	..	..	..
URBAN	..	4.7	..	..	..
RURAL	..	4.7	..	..	..
AVERAGE NUMBER OF PERSONS PER ROOM					
TOTAL	..	..	..	..	..
URBAN	2.5/c	..	..	..	..
RURAL	..	..	..	..	..
ACCESS TO ELECTRICITY (PERCENT OF DWELLINGS)					
TOTAL	..	..	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..

TABLE 3A
KENYA - SOCIAL INDICATORS DATA SHEET

	KENYA			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE)/a	
	1960 /b	1970 /b	MOST RECENT ESTIMATE /b	MIDDLE INCOME AFRICA SOUTH OF SAHARA	MIDDLE INCOME LATIN AMERICA & CARIBBEAN
EDUCATION					
ADJUSTED ENROLLMENT RATIOS					
PRIMARY: TOTAL	47.0	60.0	99.0	73.7	101.7
MALE	64.0	70.0	105.0	96.8	103.0
FEMALE	30.0	49.0	94.0	79.0	101.5
SECONDARY: TOTAL	2.0	8.0	18.0	16.2	35.3
MALE	3.0	12.0	22.0	25.3	34.9
FEMALE	2.0	5.0	14.0	14.8	35.6
VOCATIONAL ENROL. (% OF SECONDARY)	..	2.0	2.0	5.3	30.1
PUPIL-TEACHER RATIO					
PRIMARY	42.0	34.0	33.0	36.2	29.6
SECONDARY	15.0	21.0	25.0	23.6	15.7
ADULT LITERACY RATE (PERCENT)	20.0/c	30.0	45.0	..	80.0
CONSUMPTION					
PASSENGER CARS PER THOUSAND POPULATION	8.0	8.5	8.0	32.3	42.6
RADIO RECEIVERS PER THOUSAND POPULATION	7.0	44.4	36.8	69.0	215.0
TV RECEIVERS PER THOUSAND POPULATION	0.3	1.4	4.2	8.0	89.0
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION	13.0	13.8	11.2	20.2	62.8
CINEMA ANNUAL ATTENDANCE PER CAPITA	1.0	..	0.4	0.7	3.2
LABOR FORCE					
TOTAL LABOR FORCE (THOUSANDS)	3299.8	4319.7	5530.0	.	.
FEMALE (PERCENT)	34.5	34.3	33.5	36.7	22.6
AGRICULTURE (PERCENT)	86.0	82.0	78.4	56.6	35.0
INDUSTRY (PERCENT)	5.0	7.0	9.6	17.5	23.2
PARTICIPATION RATE (PERCENT)					
TOTAL	40.3	38.4	36.2	37.2	31.8
MALE	53.3	50.9	48.5	47.1	49.0
FEMALE	27.5	26.1	24.1	27.5	14.6
ECONOMIC DEPENDENCY RATIO	1.2	1.3	1.4	1.3	1.4
INCOME DISTRIBUTION					
PERCENT OF PRIVATE INCOME RECEIVED BY					
HIGHEST 5 PERCENT OF HOUSEHOLDS	..	20.2/e	..	..	..
HIGHEST 20 PERCENT OF HOUSEHOLDS	..	52.6/e	..	..	..
LOWEST 20 PERCENT OF HOUSEHOLDS	..	3.9/e	..	..	..
LOWEST 40 PERCENT OF HOUSEHOLDS	..	11.7/e	..	..	..
POVERTY TARGET GROUPS					
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US$ PER CAPITA)					
URBAN	..	..	150.0	381.2	..
RURAL	..	..	112.0	156.2	187.6
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US$ PER CAPITA)					
URBAN	..	..	179.0	334.3	513.6
RURAL	..	..	106.0	137.6	362.2
ESTIMATED POPULATION BELOW ABSOLUTE POVERTY INCOME LEVEL (PERCENT)					
URBAN	..	..	10.0	..	..
RURAL	..	..	55.0	..	..

.. 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; for 1970, between 1969 and 1971; and for Most Recent Estimate, between 1976 and 1979.

/c 1962; /d Registered, not all practicing in the country; /e Urban only.

May, 1981

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 "Capital Surplus 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.

LAND AREA (thousand sq.km.)
- Total - Total surface area comprising land area and inland waters.
- Agricultural - Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to lie fallow; 1970 data.

GNP PER CAPITA (US$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1977-79 basis); 1960, 1970, and 1979 data.

ENERGY CONSUMPTION PER CAPITA - Annual consumption of commercial energy (coal and lignite, petroleum, natural gas and hydro-, nuclear and geothermal electricity) in kilograms of coal equivalent per capita; 1960, 1970, and 1979 data.

POPULATION AND VITAL STATISTICS
- Total Population, Mid-Year (thousands) - As of July 1; 1960, 1970, and 1979 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 1979 data.
- Population Projections
  - Population in year 2000 - Current population projections are based on 1980 total population by age and sex and their mortality and fertility rates. Projection parameters for mortality rates comprise of three levels assuming life expectancy at birth increasing with country's per capita income level, and female life expectancy stabilizing at 77.5 years. The parameters for fertility rate also have three levels assuming decline in fertility according to income level and past family planning performance. Each country is then assigned one of these nine combinations of mortality and fertility trends for projection purposes.
  - Stationary population - In a stationary population there is no growth since the birth rate is equal to the death rate, and also the age structure remains constant. This is achieved only after fertility rates decline to the replacement level of unit net reproduction rate, when each generation of women replaces itself exactly. 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.
  - Year stationary population is reached - The year when stationary population size has been reached.
- Population Density
  - Per sq. km. - Mid-year population per square kilometer (100 hectares) of total area; 1960, 1970 and 1979 data.
  - Per sq. km. agricultural land - Computed as above for agricultural land only; 1960, 1970 and 1978 data.
- Population Age Structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population; 1960, 1970, and 1979 data.
- Population Growth Rate (percent) - total - Annual growth rates of total mid-year populations for 1950-60, 1960-70, and 1970-79.
- Population Growth Rate (percent) - urban - Annual growth rates of urban populations for 1950-60, 1960-70, and 1970-79.
- Crude Birth Rate (per thousand) - Annual live births per thousand of mid-year population; 1960, 1970, and 1979 data.
- Crude Death Rate (per thousand) - Annual deaths per thousands of mid-year population; 1960, 1970, and 1979 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 1979.
- 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) - Percentage of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

FOOD AND NUTRITION
- Index of Food Production per Capita (1969-71=100) - Index of per capita annual production of all food commodities. Production excludes seed and feed and is on calendar year basis. Commodities cover primary goods (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded). Aggregate production of each country is based on national average producer price weights; 1961-65, 1970, and 1979 data.
- Per capita supply of calories (percent of requirements) - Computed from energy 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, 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; 1961-65, 1970, and 1977 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 allowance 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 Survey; 1961-65, 1970 and 1977 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) Mortality Rate (per thousand) - Annual deaths per thousand in age group 1-4 years, to children in this age group; for most developing countries data derived from life tables; 1960, 1970 and 1979 data.

HEALTH
- Life Expectancy at Birth (years) - Average number of years of life remaining at birth; 1960, 1970 and 1979 data.
- Infant Mortality Rate (per thousand) - Annual deaths of infants under one year of age per thousand live births.
- 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 practicing physicians qualified from a medical school at university level.
- Population per Nursing Person - Population divided by number of practicing male and female graduate nurses, practical nurses, and assistant nurses.
- Population per Hospital Bed - total, urban, and rural - Population (total, urban, and rural) divided by thier respective number of hospital beds available in public and private general and specialized hospital 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. For statistical purposes urban hospitals include WHOs principal/general hospitals, and rural hospitals, local or rural hospitals and medical and maternity centers. Specialized hospitals are included only under total.
- 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 quaters 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.
- Access to Electricity (percent of dwellings) - 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; normally includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education enrollment may exceed 100 percent since some pupils are below or above the official 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.
- Adult literacy rate (percent) - Literate adults (able to read and write) as a percentage of total adult population aged 15 years and over.

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 unlicensed 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 1979 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 1979 data.
- Industry (percent) - Labor force in mining, construction, manufacturing and electricity, water and gas as percentage of total labor force; 1960, 1970 and 1979 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 1979 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 total labor force.

INCOME DISTRIBUTION
- Percentage of Private Income (both in cash and kind) - Received by richest 5 percent, richest 20 percent, poorest 20 percent, and poorest 40 percent of households.

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".

Economic and Social Data Division
Economic Analysis and Projections Department
May 1981

KENYA

Economic Development Data Sheet

	Actual 1976	Actual 1977	Actual 1978	Preliminary 1979	Projected 1980	Projected 1981	Projected 1985	Projected 1990	Average Annual Rate of Growth 1972-76	1976-81	1981-85	1985-90	1978 Share of GDP
A. National Accounts (Million US $ at 1976 prices)													
1. GDP	3474.1	3767.0	4077.8	4176.0	4282.6	4405.5	5218.6	6759.4	3.2	4.9	4.3	5.3	100.0
2. Gains from TT	-	+344.5	+26.3	-17.6	-62.1	-106.1	-159.0	-191.2	.	.	-	.	0.6
3. GDY	3474.1	4111.5	4104.1	4158.6	4220.5	4229.5	5059.6	6568.2	1.9	4.4	4.2	5.4	100.6
4. Imports	1103.2	1300.3	1621.4	1344.1	1413.0	1358.5	1467.5	1782.8	-3.2	4.3	2.0	4.0	39.8
5. Exports - Volume	1127.4	1094.4	1104.2	1045.4	1083.5	1151.1	1449.6	1949.1	5.8	0.4	5.9	6.1	27.2
6. Exports - TT adjusted	1127.4	1438.9	1130.5	1027.8	1021.3	1045.1	1290.6	1757.9	-0.8	-1.5	5.4	6.4	27.7
7. Resource Gap - TT adjusted	-24.2	-138.6	490.9	316.3	391.7	313.4	176.8	25.0	.	.	.	.	12.0
8. Total Consumption	2746.7	3021.1	3426.8	3610.1	3742.9	3718.5	4164.9	5198.0	1.2	6.2	2.9	4.5	84.0
9. Investment	703.3	951.8	1168.2	864.6	869.3	894.4	1071.5	1395.1	-3.2	4.9	4.6	5.4	28.6
10. National Savings	604.6	906.8	665.1	528.0	466.3	557.1	848.0	1334.1	-0.4	-1.5	11.1	9.5	16.3
11. Domestic Savings	727.4	1090.4	677.3	548.3	477.6	581.0	894.7	1370.2	4.6	-4.4	11.4	8.9	16.6
12. GDP at current US $	3474.1	4493.5	5324.1	6037.3	6912.4	7821.9	12030.6	19887.8	13.8	17.6	11.4	10.6	.
B. Sector Output (Share of GDP at 1976 prices)													
1. Manufacturing Industry	16.2	17.0	17.9	18.7	18.6	18.7	19.0	20.3	2.4	5.0	4.8	6.8	
2. Agriculture	37.9	38.3	37.3	36.0	35.3	35.2	34.2	32.2	2.3	3.4	3.6	4.0	
3. Other	45.9	44.6	44.8	45.3	46.0	46.1	46.8	47.5	3.3	6.1	4.7	5.6	
C. Prices													
1. Export Price Index	100.0	143.5	132.6	145.5	162.7	172.2	236.7	337.2	17.1	11.5	8.3	7.3	
2. Import Price Index	100.0	109.2	127.9	149.3	178.1	199.9	284.1	397.1	23.0	14.9	9.2	6.9	
3. Terms of Trade	100.0	131.4	103.7	97.5	91.3	86.1	83.3	84.9	.	.	.	.	
4. GDP Deflator (US $)	100.0	119.3	130.6	144.6	161.4	177.5	230.5	294.2	13.9	12.2	6.8	5.0	
5. Average Exchange Rate (US $/Ksh)	2.390	2.416	2.588	2.675	2.667								

	1972-76	1976-80	1981-85	1986-90
D. Selected Indicators				
1. ICOR	9.2	6.1	5.0	3.9
2. Import Elasticity	-1.4	-0.3	0.1	0.7
3. Average Domestic Savings Rate	20.0	17.7	15.9	19.8
4. Average National Savings Rate	17.8	15.9	15.1	19.0
5. Marginal National Savings Rate	2.41	-0.05	0.64	0.33
6. Imports/GDP	37.9	34.2	29.1	27.0
7. Investment/GDY	23.9	22.6	21.0	21.4
8. Resource Gap/GDY	3.21	5.0	5.1	1.6

	1975	1976	1977	1978	1979
E. Employment					
1. Labor Force Total	6,400,000	..	..	..	..
2. Wage Employment	819,100	857,500	902,900	911,600	972,300

	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	Provisional 1979/80
F. Public Finance (K£ million)								
1. Recurrent Revenue	149.0	190.4	226.3	269.2	314.1	471.4	490.1	590.5
2. Recurrent Expenditure	139.6	162.7	207.4	246.8	285.1	400.1	467.3	522.0
3. Recurrent Surplus	+9.4	+27.7	+18.9	+22.4	+29.0	+71.3	+22.8	+68.5
4. Development Project Earnings and Other Miscellaneous Receipts	0.6	0.3	-	-	6.4	0.8	0.5	0.3
5. Foreign Grants	0.5	3.2	8.2	7.0	10.5	9.0	13.3	18.1
6. Surplus Available for Financing Development Expenditure	10.5	31.5	27.4	29.4	45.9	81.1	36.6	86.9
7. Development Expenditure	61.8	67.4	94.2	126.3	124.7	190.2	220.3	236.9
8. Overall Deficit	-51.3	-35.9	-66.8	-96.9	-78.7	-109.1	-183.7	-150.0
9. *Financing of the Deficit:*								
External Loans	24.7	14.5	20.1	43.7	29.8	43.2	81.8	96.6
Domestic:								
Long-term borrowing	21.3	18.8	15.5	32.8	25.0	66.9	88.6	36.6
Short-term borrowing	6.8	2.9	12.7	32.5	29.7	-29.3	68.5	16.8
Grants	0.02	-	-	-	-	-	-	-
Changes in Cash Balance (Increase = -)	+1.5	+5.6	-18.4	+32.0	+5.8	-28.3	55.3	-

EAN CPIA
June 8, 1981

KENYA

Balance of Payments and External Assistance
(US$ Million)

	Actual			Preliminary	Projection						
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1990
A. Summary of Balance of Payments											
1. Exports (incl. NFS)	1131.7	1572.1	1475.5	1567.6	1821.0	2069.1	2364.7	2720.2	3115.3	3559.0	6667.8
2. Imports (incl. NFS)	1132.9	1441.4	2085.7	2020.7	2517.6	2707.3	2955.2	3301.2	3691.2	4124.3	6952.1
3. Resource Balance	-1.2	130.7	-610.2	-453.1	-696.6	-638.2	-590.5	-581.0	-576.9	-565.3	-284.2
4. Net Factor Service Income	-137.4	-143.8	-142.4	-142.3	-178.5	-221.9	-269.2	-308.0	-347.3	-395.6	-602.0
4.1 Net Interest Payments of which:	-34.7	-12.1	-15.9	-55.5	-88.2	-122.2	-144.4	-168.8	-192.0	-222.9	-307.8
(Interest on Public M & LT Loans)	(-12.7)	(-21.3)	(-5.2)	(-27.4)	(-106.8)	(-129.2)	(-154.8)	(-183.4)	(-210.7)	(-246.5)	(-364.7)
4.2 Direct Investment Income (Net)	-113.8	-143.8	-176.5	-142.5	-149.6	-157.1	-165.0	-181.5	-199.6	-219.6	-353.6
4.3 Workers' Remittance (Net))	34.7	12.1	50.0	55.7	59.3	51.4	40.2	42.3	44.3	46.9	59.4
4.4 Other Factor Service Income (Net))	14.6	71.3	103.1	105.6	160.6	180.3	202.4	227.3	255.2	286.6	491.6
5. Current Transfers (Net)	-124.0	58.2	-649.5	-489.8	-714.5	-679.9	-657.3	-661.8	-669.0	-674.4	-394.7
6. Balance on Current Account	22.9	17.9	67.7	87.0	95.8	122.4	134.6	148.2	163.0	179.3	288.8
7. Private Direct Investment											
Public M & LT Loans											
8. Disbursements	87.2	80.7	181.0	193.9	351.1	512.0	440.6	584.0	490.0	515.0	707.8
9. Amortization	-19.4	-1.7	-21.0	-26.3	-31.7	-47.2	-59.6	-86.3	-94.8	-121.6	-228.6
10. Net Disbursements	67.8	79.0	159.9	167.5	319.4	464.9	381.0	497.7	395.1	393.4	479.2
Private M & LT Loans											
11. Disbursements 1/	127.9	115.2	208.9	295.4	168.2	144.4	310.2	289.0	427.6	517.0	424.4
12. Amortization 1/	-1.9	-1.5	-48.3	-47.7	-109.6	-148.3	-173.6	-213.1	-243.8	-333.9	-643.1
13. Net Disbursements 1/	126.0	113.7	160.6	247.8	58.6	-3.9	136.6	75.9	183.7	183.1	-218.7
14. Use of IMF Resources	19.8	-54.8	8.0	-10.0	73.3	146.5	65.1	-	-	-	-30.0
15. Short-term Capital Transactions	-5.0	7.7	35.0	187.0	-	-	-	-	-	-	-
16. Capital Transactions, n.e.i.	-2.6	-4.3	25.1	0.0	-	-	-	-	-	-	-
17. Change in Reserves (- = increase)	-104.9	-217.4	193.2	-189.5	167.4	-50.0	-60.0	-60.0	-72.9	-81.5	-124.7
B. Grants and Loan Commitments											
1. Official Grants	40.3	40.0	40.0	40.0	40.0	44.0	48.4	53.2	58.6	64.4	82.2
2. Public M & LT Loans	210.6	356.7	537.1	566.2	562.4	532.5	839.6	864.1	1036.7	1105.1	1242.1
2.1 IBRD	31.0	84.0	156.0	110.0	92.5	111.5	167.5	215.0	207.5	165.0	204.1
2.2 IDA	14.0	36.0	61.0	27.0	184.8	110.0	120.0	107.5	115.0	107.5	176.9
2.3 Other Multilateral	10.7	67.1	44.3	57.0	50.0	27.3	29.7	32.4	35.3	38.5	59.2
2.4 Governments	35.5	69.0	173.9	136.7	125.0	189.6	205.7	223.3	242.4	263.1	397.7
of which, centrally planned economies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5 Suppliers Credits	56.5	19.4	0.0	0.0	30.0	30.0	50.0	52.5	55.1	57.9	0.0
2.6 Financial Institutions 2/	62.9	81.2	102.0	235.5	80.1	64.2	266.7	233.4	381.5	473.1	404.2
2.7 Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Other M & LT Loans (where available)	7.5	0.0	0.0	0.0	0.0	.	.	.	.	.	.
C. Memorandum Items											
1. Grant Element of Total Commitments	23.0	36.5	34.9	35.0	45.9	46.5	28.3	33.6	25.8	23.2	38.6
2. Average Interest (Percent)	6.4	5.2	8.5	8.5	4.1	4.9	6.4	6.0	6.6	6.9	5.3
3. Average Maturity (Years)	17.5	25.6	31.0	30.0	30.2	28.8	19.9	21.9	18.4	16.3	24.9

1/ Includes financing of projected balance of payments deficit (1980-1990) on commercial terms.

2/ Includes commitments on gapfill.

EAN CPIA
June 8, 1981

KENYA

Debt[1] and Creditworthiness

		Actual				Projected						
		1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1990
A.	Medium and Long-term Debt (Disbursed Only) (US $ million)											
1.	Total Debt Outstanding (DOD: End of Period)	100.5	917.1	1290.7	1616.7	2189.2	2655.8	3179.8	3769.5	4358.1	4941.7	7219.6
2.	Including Undisbursed	1331.2	1700.4	2343.7	2841.9	3470.9	3808.0	4414.4	4979.1	5677.2	6326.7	9095.6
3.	Public Debt Service	-49.4	-57.3	-121.9	-118.2	-248.1	-324.5	-387.9	-482.8	-549.4	-702.0	-1236.4
3.1	Interest	-23.9	-32.4	-52.6	-68.2	-106.8	-129.1	-154.8	-183.4	-210.8	-246.5	-364.7
4.	Other M & LT Debt Service	..	..	..	..	..	..	..	..	..	..	..
B.	Debt Burden											
1.	Debt Service Ratio	4.4	3.6	7.8	8.4	12.9	15.1	15.9	17.3	17.2	19.2	18.2
2.	Debt Service/GDP	1.4	1.3	2.3	2.0	3.6	4.1	4.4	4.9	5.1	5.8	6.2
3.	Public Debt Service/Government Revenue	6.6	6.1	10.5	8.4	14.9	17.2	18.4	20.5	21.1	24.2	25.8
C.	Terms											
1.	Interest on Total DOD/Total DOD	3.4	3.5	4.1	4.2	4.9	4.9	4.9	4.9	4.8	5.0	5.1
2.	Total Debt Service/Total DOD	7.1	6.2	9.4	7.3	11.3	12.2	12.2	12.8	12.6	14.2	17.1
D.	Dependency Ratios for M & LT Debt											
1.	Gross Disbursements/Imports (incl. NFS)	15.9	16.1	17.5	23.3	20.6	24.2	25.4	26.4	24.9	25.0	16.3
2.	Net Transfer/Imports (incl. NFS)	11.6	12.1	14.2	19.6	15.0	17.0	17.5	17.4	15.7	14.0	3.7
3.	Net Transfer/Gross Disbursements	72.6	75.2	81.0	84.3	72.8	70.2	68.9	65.7	63.1	55.9	23.0
E.	Exposure											
1.	IBRD Disbursements/Gross Total Disbursements	37.0	44.5	14.6	10.7	9.9	22.1	16.9	25.4	16.6	15.4	15.2
2.	Bank Group Disbursements/Gross Total Disbursements	15.0	22.6	20.1	16.4	27.9	41.8	25.8	38.7	25.7	23.9	27.3
3.	IBRD DOD/Total DOD	24.2	37.7	25.2	22.2	18.4	20.3	20.5	22.7	22.6	22.4	21.3
4.	Bank Group DOD/Total DOD	22.0	34.2	35.1	31.4	29.4	34.2	34.2	37.3	37.1	36.9	39.0
5.	IBRD Debt Service/Total Debt Service	29.7	31.3	21.0	28.6	13.5	12.0	13.6	13.6	15.8	16.0	18.1
6.	Bank Group Debt Service/Total Debt Service	31.5	33.2	22.1	29.9	14.1	12.9	14.6	14.6	16.8	17.0	19.4

1/ Includes Kenya's share of a notional 50 percent of EAC debt.

EAN CPIA
June 8, 1981

THE STATUS OF BANK GROUP OPERATIONS IN KENYA

A. Statement of Bank Loans and IDA Credits as of October 31, 1981

Loan or Credit #	Year	Borrower	Purpose	US$ Million Amount (Less Cancellations) Bank[1]	TW	IDA[1]	Undisbursed
Sixteen (16) Loans and Seventeen (17) Credits Fully Disbursed				266.68		179.72	
477	1974	Kenya	Livestock			17.50	9.51
537	1975	Kenya	Group Farm Rehabilitation			7.50	3.67
1105	1975	Kenya	Sites and Services	8.00			3.60
1167	1976	Kenya	Mombasa & Coastal Water Supply	35.00			2.41
1184	1976	Kenya	Third Education	10.00			8.45
(650	(1977	(Kenya	(Integrated Agric. Development			10.00	(3.80
(1303-T	(1977	(Kenya	(Integrated Agric. Development		10.00		(10.00
1304-T	1977	Kenya	Wildlife and Tourism		17.00		9.68
(651	(1977	(Kenya	(Rural Access Roads			4.00	(.10
(1305	(1977	(Kenya	(Rural Access Roads	4.00			(4.00
1389	1977	Kenya	South Nyanza Sugar	25.00			5.81
(692	(1977	(Kenya	(Third Agriculture			20.00	(1.35
(1390-T	(1977	(Kenya	(Third Agriculture		5.00		(5.00
1438	1977	IDB	Third Industrial Dev. Bank	20.00			7.48
(722	(1977	(Kenya	(Bura Irrigation Settlement			6.00	(.92
(1449	(1977	(Kenya	(Bura Irrigation Settlement	34.00			(34.00
750	1978	Kenya	Small Scale Industry			10.00	8.80
1520	1978	NCC	Second Urban Water Supply	30.00			22.50
(791	(1978	(Kenya	(Second Urban			25.00	(22.22
(1550	(1978	(Kenya	(Second Urban	25.00			(25.00
797	1978	Kenya	Fourth Education			23.00	20.30
1636	1979	Kenya	Sugar Rehabilitation	72.00			67.92
1637	1979	Kenya	Rural Water Supply	20.00			19.89
858	1979	Kenya	Narok Agricultural Development			13.00	12.41
1680	1979	Kenya	Telecommunications	20.00			15.55
1684	1979	Kenya	Highway Sector	90.00			87.79
914	1979	Kenya	Smallholder Coffee Improvement			27.00	26.19
959	1980	Kenya	Second Integrated Agric. Dev.			46.00	45.66
962	1980	Kenya	Baringo Pilot			6.50	6.06
1799	1980	Kenya	Third Power (Olkaria Geothermal)	40.00[2]			16.93
1817	1980	IDB	Fourth Industrial Dev. Bank	30.00			29.07
1045	1980	Kenya	Export Promotion Technical Asst.			4.50	4.50
1051	1980	Kenya	Fisheries			10.00	10.00
1107	1981	Kenya	Fifth Education[4]			35.90	35.90
1976	1981	Kenya	Railway	58.00			58.00
(1143	(1981	(Kenya	(Fourth Agriculture[3] [4]			9.40	9.40
(1995	(1981	(Kenya	(Fourth Agriculture[3]	25.00			25.00
			Total	812.68	32.00	455.02	678.87
			of which has been repaid	44.80	-	2.57	
			Total now outstanding	767.88	32.00	452.45	
			Amount sold	11.81			
			of which has been repaid	11.81 .00			
		TOTAL now held by Bank and IDA		767.88	32.00	452.45	
		TOTAL undisbursed		433.39	24.68	220.80	678.87

1/ Prior to exchange adjustment.
2/ Includes Loan S-12 ($9.0 million).
4/ IDA-6 Credit amounts expressed in dollar equivalents of SDR's.
3/ Not yet effective.

B. Summary Statement of Bank Loans for Common Services Involving Kenya, Tanzania and Uganda as of October 31, 1981

Loan No.	Year	Borrower	Purpose		Amount (less cancellations) Bank[1]	Undisbursed
					-----US$ million-----	
Six loans fully disbursed					135.80	
638-EA	1969	EAHC	Second Harbours		35.00	0.52
865-EA	1972	EAHC	Third Harbours		26.50	0.35
914-EA	1972	EAPTC	Third Telecom.		32.50	0.28
1204-EA	1976	EADB	Second Dev. Finance		15.00	3.27
Total					244.80	4.42
of which has been repaid					68.89	
Total now outstanding					175.91	
Amount sold				24.36		
of which has been repaid				24.36	0.00	
Total now held by Bank[1]					175.91	
Total undisbursed					4.42	4.42

1/ Net of exchange adjustments.

C. Status of Projects in Execution[1]
(As of October 31, 1981)

There are currently 31 projects under execution in Kenya.

AGRICULTURAL SECTOR

Credit No. 477-KE - Second Livestock Project: US$17.5[2] million Credit of April 5, 1974; Effective Date: December 2, 1974; Closing Date: December 31, 1982[3]

The implementation of this project has been hampered by a number of policy and institutional issues. Consequently, disbursements have been exceedingly slow and the outstanding balance as of December 31, 1980, the closing date, was US$14.3 million. Agreement was reached with the Government that the credit would be extended for a period of two years to December 31, 1982, if a number of conditions necessary to resolve the above issues were implemented by November 1980. These conditions implied a more realistic and modified project with decreased project costs. Agreement was also reached between the Government and the Agricultural Finance Corporation (AFC) with the Association that since the total amount of the credit could not be utilized even with the proposed new closing date, the Government would request a cancellation of US$4.0 million and a reallocation between categories in Schedule 1 of the Credit Agreement, once the conditions were met. Although the cancellation is now effective, the other amendments have not come into effect, since the countersigned letter of amendment from AFC has not yet been received.

Credit No. 537-KE[4] - Group Farm Rehabilitation Project: US$7.5 million Credit of March 26, 1975; Effective Date: September 30, 1975; Closing Date: December 31, 1981

1/ These notes are designed to inform the Executive Directors regarding the progress on projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

2/ Net of cancellations, an amount of US$4.0 million was cancelled on December 30, 1980, since the total amount of the credit could not be utilized.

3/ The new closing date will be effective once the countersigned letter from AFC is received.

4/ Loan No. 1093-KE, US$7.5 million, was cancelled on May 11, 1981, retroactive to November 30, 1980, at Government request.

The Project faces major problems. The progress of rehabilitation of existing project farms is encountering a variety of legal, social, political and financial problems. Despite project efforts to recruit qualified farm managers, most of the farms continue to suffer from inadequate financial and operational management. The majority of project farm group owners would like to subdivide, but are constrained by large debts for common assets and by the absence of a clear Government policy and guidelines on legal subdivision of group farms. Although rehabilitation of a few farms, particularly coffee estates, seems to be proceeding satisfactorily, the Bank and the Government are jointly reviewing the project objectives in light of difficulties encountered, and the Government has undertaken a study of the financial impact of various alternative solutions to the financial problems of group farms and will review the implications of sub-division for the regions concerned. In the interim, recruitment of additional farms has stopped, and the cancellation of the total loan amount of US$7.5 million, at Government's request, has been effected.

Loan No. 1132-KE/Credit No. 565-KE - Second Forestry Plantation Project: US$9.9 million[5] Loan and US$10.0 million Credit of June 27, 1975; Effective Date: September 25, 1975; Closing Date: December 31, 1981

The Project is a continuation of the first Kenya Forestry Plantation Project (Loan 641-KE), to complete the Government's long-term afforestation program target of 130,000 ha. of sawlog and 24,000 ha. of pulpwood plantations by 1980. The credit and the loan are now fully disbursed. A Completion Report is under preparation. At completion, the planting program was 35% below target due to a variety of reasons, including bad weather conditions as well as poor and deteriorating management. The building and labor housing programs were considerably behind schedule.

Loan No. 1303-T-KE/Credit No. 650-KE - Integrated Agricultural Development Project: US$10.0 million Loan and US$10.0 million Credit of July 9, 1976; Effective Date: March 15, 1977; Closing Date: December 31, 1981

The reorientation of the project towards assisting large numbers of subsistence farmers rather than progressive smallholder farmers has led to a number of difficulties. Late release of credit funds has led to delayed application of farm inputs, and expected yield increases were therefore not achieved. Measures are now being taken to ensure availability of credit funds at the appropriate time. The overall balance between numbers of borrowers and infrastructural support--staff, storage and transport--at cooperative union level has been improving, and greater efforts have been made to improve the input supply and marketing systems.

Loan No. 1389-KE - South Nyanza Sugar Project: US$25.0 million Loan of April 15, 1977; Effective Date: November 3, 1977; Closing Date: March 31, 1983

5/ Net of cancellations, an amount of US$0.1 million was cancelled on July 20, 1979 since items which were to have been financed under the loan were not procured in accordance with Bank guidelines.

The sugar factory is in operation, agricultural development has advanced well and nucleus estate development is complete including drainage. Yields from outgrowers' cane have been projected somewhat higher as compared with 1980 yields; however, actual 1981 production may well fall short of management expectations if the amount of rain and distribution of rainfall is not favorable. All civil works are virtually completed, work on minor roads is improving and major road works are proceeding satisfactorily. Certain weaknesses in project management, particularly cane handling and transport, have become apparent, and consultants are being employed to rectify this problem. Although statutory sugar prices were changed in April 1981 by about 10%, SONY (the Project entity) is experiencing serious financial difficulties. KSA and SONY will review the situation to ascertain what financial assistance will be required from Government and if the Bank's legal requirements have been satisfied.

Loan No. 1390-T-KE/Credit No. 692-KE - Third Agricultural Credit Project: US$5.0 million Loan and US$5.0 million Credit of April 15, 1977; Effective Date: September 14, 1977; Closing Date: December 31, 1981

The closing date of the Project has been postponed one year to compensate for initial disbursement problems related to budgetary cutbacks and cumbersome administration of reimbursement requests and to reallocate underutilized credit funds for medium-scale farmers and livestock holders to the small-scale farmer category, where AFC commitments have exceeded appraisal estimates. The balance of funds for onlending, about $3.2 million, is expected to be fully drawn down by AFC by end 1981. The new, computerized accounts system is now operational, and is being programmed to provide improved arrears reporting, budgeting and financial control.

Loan No. 1449-KE/Credit No. 722-KE - Bura Irrigation Settlement Project: US$34.0 million Loan and US$6.0 million Credit of June 22, 1978; Effective Date: June 27, 1978; Closing Date: June 30, 1984

Despite a slow start-up, project implementation is proceeding satisfactorily. However, a detailed review of cost estimates indicates that the Project will experience serious cost overruns; the revised estimate is about twice the appraisal figure, and there seems to be little scope for reduction. The Government has indicated that it will proceed with the Project despite the significant burden on its finances, and is currently reviewing its budget and seeking additional external assistance. No supplementary IDA financing is proposed.

Loan No. 1636-KE - Sugar Rehabilitation Project: U$72.0 million Loan of December 20, 1978; Effective Date: September 20, 1979; Closing Date: March 31, 1985

Implementation of this Project is facing a serious problem. The Government has indicated reluctance to sign the Subsidiary Financing Agreements for two of the three factories to be rehabilitated under the Project, and has now confirmed its intention formally to the Bank. Developments in these project areas are in suspense since the companies have

not given evidence that they have a viable financing plan and since the Government has not provided detailed plans for the complementary field and infrastructural development. Rehabilitation of the third factory has been held up by delays in the recruitment of consultants; serious cost over-runs are expected. Cane supply is expected to drop unless cane prices are significantly increased. In spite of the economic difficulties facing the sugar production sector, investments in new factories are being projected. A study to review sugar marketing prospects is due to start soon, and appropriate changes in project design will be discussed immediately thereafter.

Credit No. 858-KE - Narok Agricultural Development Project: US$13.0 million Credit of December 20, 1978; Effective Date: June 28, 1979; Closing Date: December 31, 1983

Implementation is proceeding slowly due to difficulties in developing effective credit programs adapted to the special circumstances of the traditional Masai farmers of the district. Land adjudication, initially an obstacle to medium-term lending by AFC, is proceeding relatively well, the construction of a central Farmers' Training Center is finished, and project staffing is nearly complete; however, project coordination and supervision of extension services has been weak due to a change in the District Agricultural Office (DAO) and the continued lack of an Assistant DAO. Disbursements for seasonal and medium-term loans are likely to proceed more slowly than expected, because of the need for intensive extension work and resolution of disputes on land issues and credit terms. The Government has requested the reallocation of some credit funds to other areas, including improvement of critical access roads, and this proposal is under review.

Credit No. 914-KE - Smallholder Coffee Improvement Project: US$27.0 million Credit of June 11, 1979; Effective Date: April 3, 1980; Closing Date: March 31, 1984

Principal project activities started slowly due to the lower than estimated 1980/81 Government budgetary allocations, the first since the Credit Agreement was signed, to finance SCIP lending operations for coffee factory rehabilitation/construction and farm improvements. However, most project personnel are in post and it is expected that the Project will be fully staffed shortly. Training has made good progress, but training programs need to be expanded and accelerated. Financial difficulties are expected to continue to prevail in the near future, and whether Project infrastructure, equipment and personnel will be utilized in an optimal fashion will depend on future Government funding of the Project.

Credit No. 962-KE - Baringo Semi-Arid Areas Project: US$6.5 million Credit of March 12, 1980; Effective Date: June 10, 1980; Closing Date: October 31, 1984

Project activities are proceeding well given the remoteness of the project area and the pilot nature of the project. The internationally-recruited technical staff and the local agricultural and livestock extension staff are all in place. Due to the 1980/81 Government budget constraints,

allocations for the project were only a third of the amount requested and approved in project Work Plans. This shortfall has had a particular impact on construction of project housing, which is sorely inadequate, and the budget for project field services, which consequently remain limited. Despite these problems, the project team has launched a number of experiments in dry-land and irrigated farming, soil conservation and water harvesting, and range management. Project demonstrations have attracted local interest, and participation of area residents in project activities is increasing.

Credit 959-KE - Second Integrated Agricultural Development Project: US$46.0 million Credit of April 23, 1980; Effective Date: July 2, 1980; Closing Date: April 30, 1986

IADP II faces many of the same problems as IADP I, mainly high drop out rates of project recruited farmers and low credit repayment rates. These problems are partly related to the inefficiencies of the farm input delivery system, the financial and managerial weaknesses of cooperative intermediaries, and inadequate marketing arrangements for smallholder production. Supervision of the project has emphasized streamlining of the credit and agricultural input delivery system and greater technical assistance to cooperatives and the strengthening of the Ministry of Cooperative Development's extension and audit services. IADP II provides significantly more support than IADP I for infrastructure, including rural access roads, rural water supplies, small-scale irrigation, and resource/soil conservation. Most infrastructure components are in the planning stage with construction to start in 1981/82. General delays in project implementation are expected due to severe Government budgetary constraints, which have resulted in cuts in the Annual Work Plan programs.

Credit No. 1051-KE - Fisheries Development Project: US$10.0 million Credit of July 14, 1980; Effective Date: October 9, 1980; Closing Date: September 30, 1987

Project start-up activities are proceeding satisfactorily. The Project Manager and key Area Managers have been appointed. An early problem regarding a potential project overlap with a proposed Kenyan/Nordic cooperative fisheries project was resolved in May 1981 by the Nordics withdrawing from the project. A subsidiary financing agreement between the Government and the Cooperative Bank of Kenya for the cooperative credit program is being finalized. Recruitment of technical asistance for the fish farming center and boat building components is scheduled to be completed by December 1981.

EDUCATION SECTOR

Loan No. 1184-KE - Third Education Project: US$10.0 million Loan of December 31, 1975; Effective Date: March 17, 1976; Closing Date: June 30, 1982

Physical implementation of the project is about 3-1/2 years behind schedule. Government is taking measures to counter cost overruns and difficulties in making available their financial contributions by, inter

alia, phasing activities in the project implementation period. The rate of progress towards achievement of educational objectives is linked to the rate of progress of physical implementation of the project. Minimal progress in preparation of a new and appropriate curriculum has been made by the Kenya Institute of Education, who has a leading role in improvement of primary education. Provisions under the Fifth Education Project for strengthening the Project Unit will likely benefit achievements by a more efficient management of implementation activities.

Credit No. 797-KE - Fourth Education Project: U$23.0 million Credit of June 7, 1978; Effective Date: August 25, 1978; Closing Date: December 31, 1982

Physical implementaton of the project is about 22 months behind schedule (about 17% of completion). Revised total project cost increased to about KShs 329 million representing approximatley 28% cost overrun in civil works in terms of local currency. The Technical Assistance program as well as the pursuance of educational objectives under the Credit are proceeding satisfactorily.

Credit No. 1107-KE - Fifth Education Project: US$40.0[6] million Credit of May 7, 1981; Effective Date: July 30, 1981; Closing Date: June 30, 1986

This Credit became effective on July 30, 1981.

WATER SUPPLY SECTOR

Loan No. 1167-KE - Mombasa and Coastal Water Supply Project: US$35.0 million Loan of October 5, 1975; Effective Date: January 13, 1976; Closing Date: June 30, 1982

Full scale operational capacity is now at least 30 months behind schedule. Although there is a substantial cost overrun, this is not seen as a major problem since Government is fully committed to earliest project completion and is providing the additional funds, 80% local currency, as needed. Regarding key personnel vancancies requiring the Ministry of Water Development's (MWD) attention, MWD is fully aware of this situation and, while progress is slow, remedial action is being taken. The Water Engineering Department of the MWD was able to start small scale operations, by means of temporary arrangements, in December 1980 and helped estimate substantially Mombasa's water shortage during the 1980 year end dry season, and the project was formally commissioned in April 1981. The Closing Date has been postponed by two years to June 30, 1982.

Loan No. 1520-KE - Second Nairobi Water Supply Project: US$30.0 million Loan of March 27, 1978; Effective Date: December 20, 1978; Closing Date: December 31, 1982

6/ IDA Credit US$40 Million equivalent to SDR 31.4 million at the time of negotiations.

Implementation started on schedule but completion is now forecast about 21 months behind schedule due to difficulties with tender evaluations and delays by the Borrower in contract administration and in concluding satisfactory arrangements for construction supervision. Most supply contracts financed by other donors and the construction contracts being financed by the Bank now have been awarded. Good progress is being made on detailed design and tendering for the remaining contracts. Bid prices to date have been favorable, but due largely to the delays there is an estimated increase of 35% in local currency costs and 5% in total costs. Water supply and sewerage operations are in sound financial condition. However, the Borrower has been slow in fulfilling financial covenants pertaining to external audits.

Loan No. 1637-KE - Rural Water Supply Project: US$20.0 million Loan of December 20, 1978; Effective Date: January 24, 1980; Closing Date: July 1, 1985

The original project included 33 schemes but since two schemes are proposed to be joined together and three schemes are being constructed under other programs, only 29 schemes remain. The implementation is about 18 months behind schedule due to late effectiveness and slow start by the Ministry of Water Development (MWD) in preparing studies for the schemes. The training program is progressing satisfactorily; bids for MWD vehicles and construction equipment are being evaluated; MWD's reorganization has been generally implemented although some improvements are still to be completed. Water tariffs were changed in April 1981, on Presidential order and MWD will submit to the Bank computations showing the impact on revenues and the covering of O&M costs.

TRANSPORT SECTOR

Loan No. 1305-KE/Credit No. 651-KE - Rural Access Roads Projects: US$4.0 million Loan and US$4.0 million Credit of July 9, 1976; Effective Date: October 7, 1976; Closing Date: June 30, 1983

Progress on the Rural Access Roads Program (RARP) was reviewed in depth by all donors and discussed with Government during the Annual Review Meeting held in October 1980. The project is about two years behind schedule due to administration and procurement problems which delayed establishment of construction units. All eight Bank-financed construciton units are fully equipped, and are now operational, and satisfactorily staffed since these problems were resolved in the beginning of 1978. By September 15, 1980, 646 km of access roads had been constructed, of which only 135 km were gravelled due to the above-mentioned delays and later to the labor shortage. The decline of annual output and productivity of construction units, also due to a shortage of labor, was increased from 30 km per annum to 33 km per annum primarily because the Government granted a daily minimum wage increase that was proposed by MOTC. The labor supply has been adequate since June 1980, following the May wage increase.

Loan No. 1684-KE - Highway Sector Project: US$90.0 million Loan of April 30, 1979; Effective Date: June 18, 1979; Closing Date: June 30, 1985

Implementation of the Government's Highway Sector Plan has been delayed by about one year because a critical shortage of funds has caused a reduction in the highway work program. While this has not yet affected the project appreciably, the continuation of this trend in FY82 could touch projects included in the Sector Loan. The two contracts for construction of Uplands-Limmuru (11 km) and Nairasha-Nakuru (56 km) were recently signed and mobilization is satisfactory. The contracts for strengthening the Mau Summit-Kismu road (136 km) is being retendered while the Nakuru-Timboroa road (81 km) tender documents are completed. The remaining two subprojects, the Nairobi-Thika and Longonot-Uplands roads, are under design. The regravelling of gravel roads projections were achieved during the past two years (1979-80). Resealing of paved roads is behind schedule with only 18% of the appraisal target accomplished due to shortage of bitumen and poor organization. Bitumen is now being imported and four resealing units out of the six planned are operational. The resealing operation is now progressing. The funds allocated for road maintenance are about 15% below appraisal estimates but with better organization and utilization of existing resources, the targets could be achieved.

Loan 1976-KE - Railways Project: US$58.0 million Loan of May 7, 1981; Effective Date: September 3, 1981; Closing Date: December 31, 1985

This Loan became effective on September 3, 1981, following the receipt of the Subsidiary Loan Agreement between the Government and Kenya Railway.

POWER SECTOR

Loan No. 1799-KE - Olkaria Geothermal Power Project: US$40.0 million Loan of April 25, 1980; Effective Date: November 18, 1980; Closing Date: June 30, 1983

This Loan includes the US$9.0 million for the Engineering Loan (S-12-KE), refinanced under this project. Progress under the loan has been satisfactory. Drilling is proceeding on schedule; fabrication of the new drill rig and accessories has ben completed, and erection of the rig at the site is expected to be completed by the end of the year. Miscellaneous supplies and equipment have been purchased under International Shopping procedures. The project is expected to be completed ahead of schedule and within the estimated cost.

INDUSTRIAL SECTOR

Loan No. 1438-KE - Third Industrial Development Bank Project: US$20.0 million Loan of June 22, 1977; Effective Date: November 10, 1977; Closing Date: July 1, 1982

Seventeen sub-projects have been approved under this Loan. As at February 28, 1981, US$20.0 million has been fully committed and as at September 30, US$13.5 million had been disbursed.

Credit No. 750-KE - Small Scale Industry Project: US$10.0 million Credit of November 28, 1977; Effective Date: June 26, 1978; Closing Date: December 31, 1982

Kenya Industrial Estates (KIE) is making efforts to improve its slow implementation rate and high arrears of clients. The Association is seeking Government assistance in correcting two problems, noted previously, caused by the transfer in March 1980 of a loan portfolio from another DFC (ICDC): (i) that KIE complete the reconciliation of the individual subloan amounts stated in the transfer agreement with available documentation and receive compensation for the doubtful debts in the portfolio; and (ii) a proposal to increase KIE's paid-in share capital to maintain the debt/equity ratio below 3, the ceilig (3:1) of the IDA Project Agreement. As of September 30, 1981, US$3.9 million was committed for 73 subloans and some technical assistance, to 57 subprojects, but only US$1.2 million had been disbursed. About half of the commitments were for eight subprojects with the remainder allocated to smaller free-limit subprojects.

Loan No. 1817-KE - Fourth Industrial Development Bank Project: US$30.0 million Loan of June 16, 1980; Effective Date: August 21, 1980; Closing Date: December 31, 1985

Ten subprojects have been approved under the Loan to date. As at September 30, 1980, US$14.9 million had been committed and US$ 930,000 had been disbursed.

TECHNICAL ASSISTANCE

Credit No. 1045-KE - Export Promotion Technical Assistance Project: US$4.5 million Credit of July 14, 1980; Effective Date: October 15, 1980; Closing Date: June 30, 1985

This Credit became effective on October 15, 1980.

TELECOMMUNICATIONS SECTOR

Loan No. 1680-KE - First Telecommunications Project: US$20.0 million Loan of April 11, 1979; Effective Date: August 16, 1979; Closing Date: June 30, 1983

The Project is now progressing satisfactorily. Bid awards for all Bank-financed goods have been completed and contracts signed. Initial delays in procurement of goods are likely to cause about a year's delay in project completion. Kenya Posts and Telecommunications Corporation (KPTC) has completed the installation of a total of 960 lines of extension equipment in eight manual exchanges using its own funds. The balance of a total of 570 lines in four exchanges is expected to be in service in 1981. KPTC has now completed design of cable networks and buildings.

URBAN SECTOR

Loan No. 1105-KE/Credit No. 543-KE - Sites and Services Project: US$8.0 million Loan and US$8.0 million Credit of May 6, 1975; Effective Date: September 25, 1975; Closing Date: June 30, 1982

Overall project execution continues to be satisfactory but there are mounting delays in implementation causing a slippage of two years due primarily to construction delays. Infrastructure has been completed for the first 1,000 plots and most beneficiaries have constructed satisfactory housing. Infrastructure for an additional 2,700 plots is about 30% complete and construction of infrastructure for the remaining 2,300 plots is expected to begin soon. Cost recovery continues to be good. One primary school is now operational, but designs for the remaining schools are behind schedule. One health center is under construction; however, the Bank does not plan to disburse against its costs as its design was too expensive and was not approved by the Bank. The design of the other health center should be submitted for approval soon. Tenders have been invited for all other community facilities. Technical assistance components are completed or scheduled for completion in conjunction with the project. Project costs for the first phase remain close to appraisal estimates but are expected to exceed original estimates for the remaining components because of delays incurred. The credit is fully disbursed and disbursements under the loan have started. Although loan disbursements are expected to increase rapidly now that the construction activities are progressing satisfactorily, the Closing Date has been postponed one year.

Loan No. 1550-KE/Credit No. 791-KE - Second Urban Project: US$25.0 million Loan and US$25.0 million Credit of May 75, 1978; Effective Date: October 3, 1978; Closing Date: December 31, 1983

Progress in implementation of physical components of the project is generally satisfactory. Consultants for detailed design and engineering of Phase I sites in all three cities (Nairobi, Mombasa and Kisumu) are making good progress. Appointment of consultants for Phase II sites has now been completed and design work is underway. The Housing Development Departments are operational in all three cities with most key posts filled. Recruitment of other staff is underway. Progress on studies included in the project is slower than expected. Municipal finance reforms have been delayed pending Cabinet approval of a paper on the subject.

WILDLIFE AND TOURISM SECTOR

Loan No. 1304-T-KE - Wildlife and Tourism Project: US$17.0 million Loan of July 9, 1976; Effective Date: November 10, 1976; Closing Date: June 30,1982

After initial delays, project implementation is accelerating. Officers for the Project Management Unit have been appointed, and six key Wildlife Planning Unit positions have been filled. The Ministry of Transport and Communications has appointed various consultants for the design and construction of all physical project components. The Tourism Pricing Study and the Very Large Herbivores Study have been completed, and recommendations contained in these two studies are under review by the Government. The anti-poaching units are fully staffed and deployed, and initial effectiveness of the units appears satisfactory. Draft amendments to the Wildlife (Conservation and Management) Act of 1976 to fulfill the requirements of the

supplementary letter giving detailed proposals for anti-poaching operations have been approved by the Ministry of Environment and Natural Resources and are now in the final stages of processing.

EAST AFRICAN COMMUNITY

There are currently four projects in execution in the East African Community.[7]

Loan No. 638-EA - Second Harbours Project: US$35.0 million Loan of August 25, 1969; Date of Effectiveness: December 26, 1969; Closing Date: December 31, 1977

The Second Harbours project included financing for five general cargo berths and a single buoy tanker terminal for the Port of Dar-es-Salaam; two general cargo berths and a bulk cement wharf for Mombasa; tugs, lighters, cargo handling equipment, offices, housing and general improvements for both ports. Construction of all major project elements has been completed and a joint project completion report was issued in January 1979 for the Second and Third Harbours projects. General cargo throughput has increased above appraisal forecasts for Dar-es-Salaam, and cargo handling productivity has generally improved with increasing throughput; however, port labor productivity has stagnated in Mombasa where general cargo throughput has declined considerably. Legislation to establish a Tanzania Harbours Authority and a Kenya Ports Authority has been enacted. Management of ports in both countries is competent. Some US$34.5 million of Loan 638-EA has already been disbursed.

Loan No. 914-EA - Third Telecommunications Project: US$32.5 million Loan of June 22, 1973; Date of Effectiveness: September 19, 1973; Closing Date: December 31, 1979

The project included provision for procurement of local telephone exchange equipment, cables and subscriber apparatus, microwave and UHF/VHF systems and multiplex equipment, interurban cables and wires, automatic switching and signalling equipment, telegraph, telex and data equipment, and training. The slippage in the project's completion was due to initial delays in procurement caused by staffing and other problems associated with the relocation of headquarters. About US$32.2 million of the loan has now been disbursed.

7/ Since October 1, 1977, the East African Community loans (excluding the East African Development Bank) have been disbursed on the basis of separate national guarantees. The agreed allocation of undisbursed balances for each loan, as proposed in a report to the Executive Directors dated December 29, 1977 (R77-312) and approved on January 12, 1978, is given in this Annex. The Closing Dates for Loans 638-EA, 865-EA and 914-EA have passed. However, since the amount allocated to and guaranteed by each Partner State is clearly identified under the terms of the agreement signed on January 25, 1978, as proposed in the above report (R77-312), we are continuing disbursements.

Loan No. 1204-EA - East African Development Bank: US$15.0 million Loan of March 1, 1976; Date of Effectiveness: June 7, 1976; Closing Date: June 30, 1982

The Loan is fully committed and disbursements are expected to be completed by the Closing Date of June 30, 1982. The economic difficulties of the three countries in which EADB operates has had a negative impact on EADB's portfolio. Helping clients to service their debts, therefore, continues to be EADB's priority.

ANNEX II

D. Statement of IFC Investment in Kenya as at October 31, 1981

Fiscal Year	Obligor	Type of Business	Amount in US$ Million		
			Loan	Equity	Total
1967, 1968, and 1973	Kenya Hotel Properties	Hotels	5.2	0.7	5.9
1970, 1974, 1977 and 1979	Pan African Paper Mills	Pulp and Paper	22.2	6.3	28.5
1972	Tourism Promotion Services	Hotels	2.4	-	2.4
1976	Rift Valley Textiles Ltd.	Textiles	6.3	2.8	9.1
1977	Kenya Commercial Bank Ltd.	Capital Market	2.0	-	2.0
1980	Development Finance Company of Kenya Ltd.	Development Finance	-	1.3	1.3
1981	Kenya Commercial Finance	Money & Capital Market	5.0	-	5.0
	Total Gross Commitments		43.1	11.1	54.2
	less cancellations, terminations, repayments and sales		12.7	1.8	14.5
	Total Commitments now held by IFC		30.4	9.3	39.7
	Total Undisbursed		10.1	-	10.1

KENYA

TANZANIA - THIRD FORESTRY PROJECT

Supplementary Project Data Sheet

I. Timetable of Key Events

(a)	Time taken to prepare:	Eighteen months
(b)	Date of first presentation to Bank Group:	January 1979
(c)	Preparation Report Completed:	October 1980
(d)	Appraisal Mission:	November-December 1980
(e)	Negotiations:	December 1981
(f)	Planned Date of Effectiveness:	June 1982

II. Special Bank Group Implementation Actions

None

III. Special Conditions

(a) The basic design and implementation schedule for the management information system at the Forest Department would be submitted to the Bank Group for its approval as a condition of disbursement for plantation establishment and maintenance (para. 60).

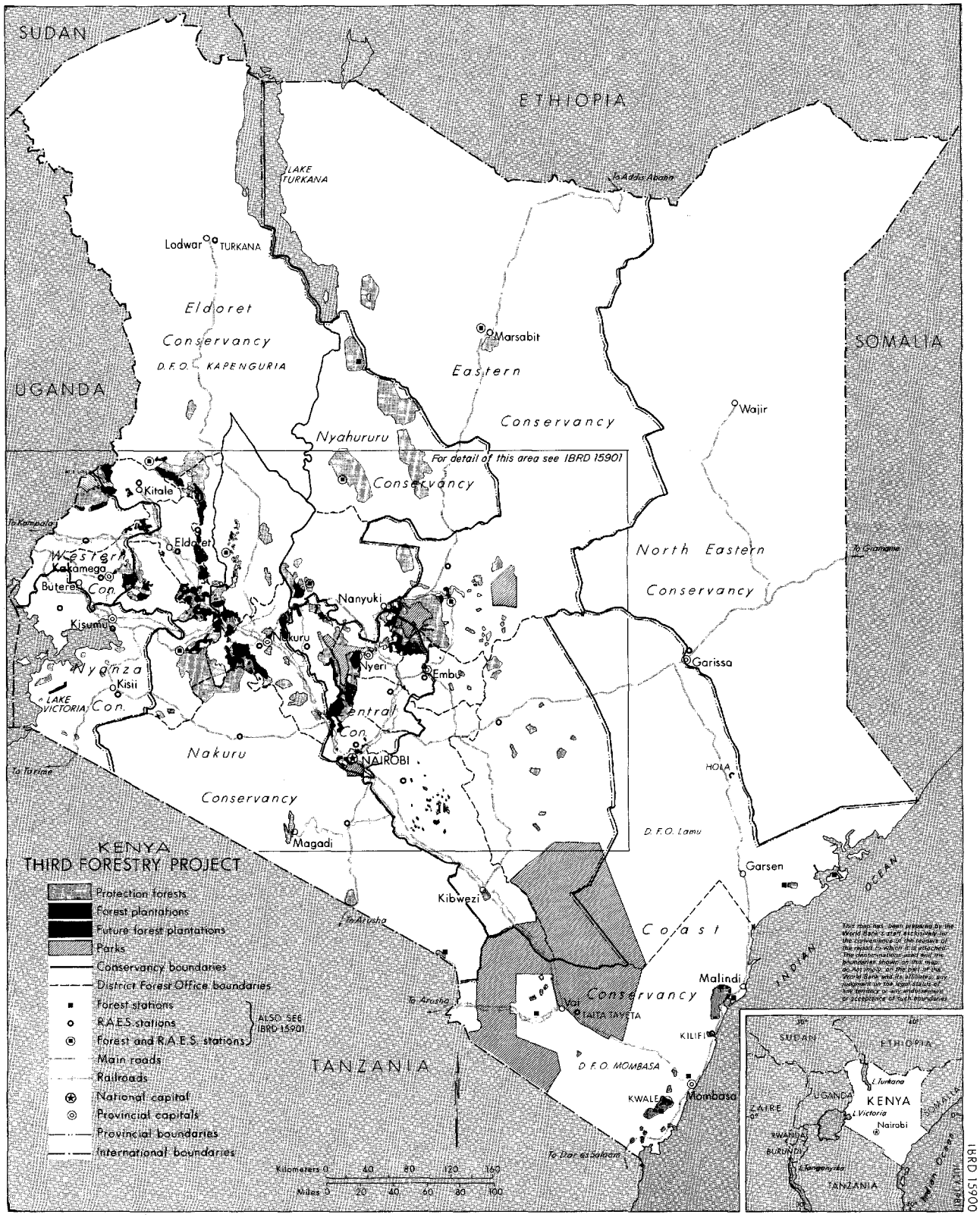
(b) Proposals for recruitment, transfer or replacement of fulltime unskilled staff at the Forest Department would be included in the draft Annual Plans to be submitted to the Bank Group; the Department would also study the possibilities of transferring such staff to more productive areas or hiring such staff on a temporary basis (para. 60).

(c) The Borrower would employ a rural afforestation specialist with qualifications, experience and terms of reference satisfactory to the Bank Group (para. 61).

(d) The Borrower would employ a Roads Programming and Control Expert and submit to the Bank Group by December 31, 1982 a detailed program for the construction, upgrading and maintenance of forest roads (para. 61).

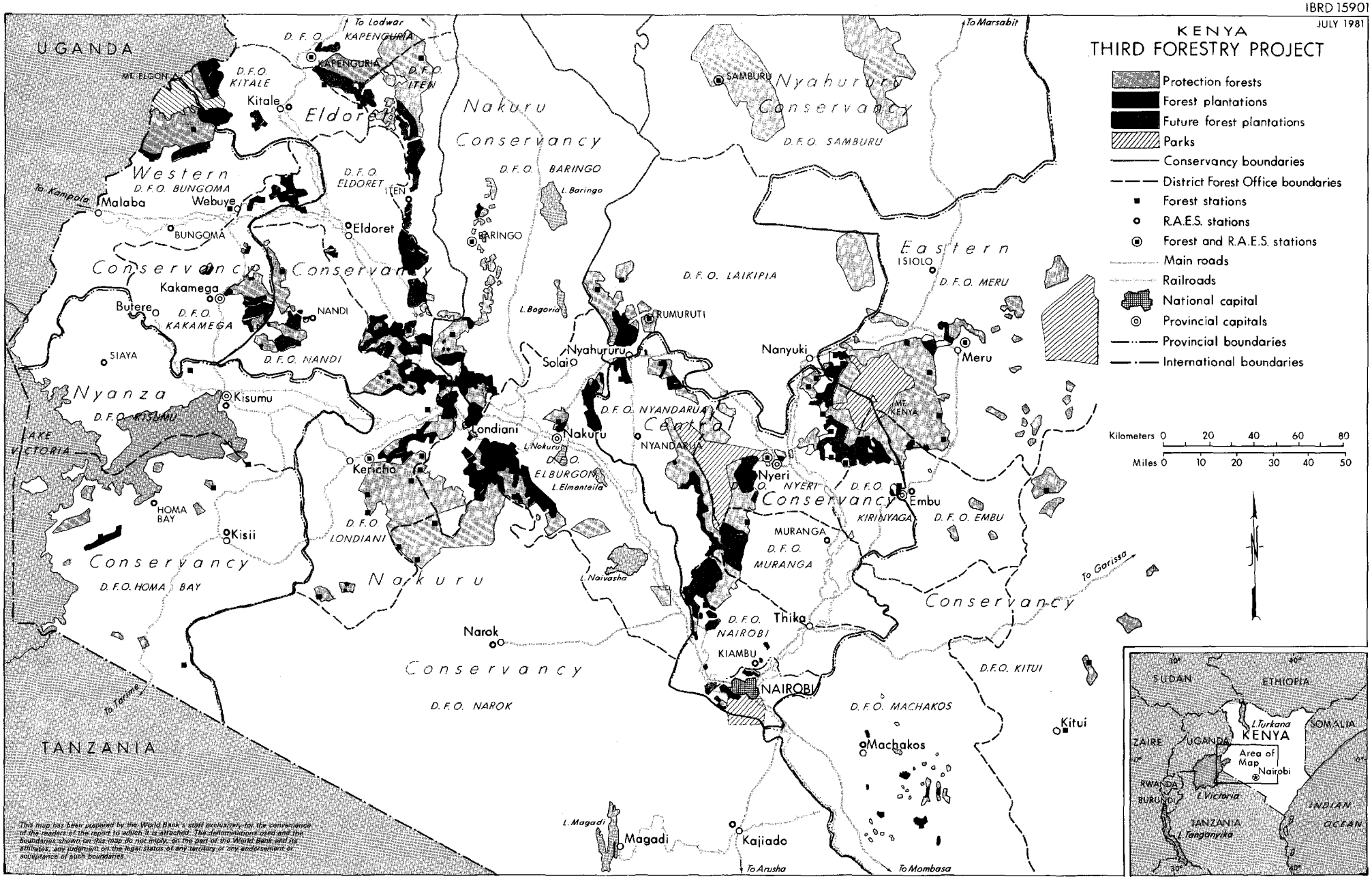
(e) The Forest Department would employ a Finance and Management Analyst and Forest Economist as a condition of project effectiveness, while the employment of the roads specialist referred to in (d) above would be a condition of disbursement for the roads component of the project (para. 62).

(f) The Borrower would undertake, and submit to the Bank Group for its review and comment by December 31, 1982, a study of appropriate timber prices, as well as a plan for improving the collection of revenues for sawlogs (para. 65).


SUDAN
ETHIOPIA
SOMALIA
UGANDA
TANZANIA
LAKE TURKANA
To Addis Ababa
Lodwar
TURKANA
Eldoret Conservancy
D.F.O. KAPENGURIA
Marsabit
Eastern Conservancy
Wajir
Nyahururu Conservancy
For detail of this area see IBRD 15901
Kitale
To Kampala
Eldoret
Western Con.
Kakamega
Butere
Kisumu
Nanyuki
Nakuru
Nyeri
Embu
Nyanza Con.
Kisii
LAKE VICTORIA
Central Con.
NAIROBI
Nakuru Conservancy
To Tororo
Magadi
North Eastern Conservancy
To Garissa
Garissa
HOLA
D.F.O. Lamu
Garsen
INDIAN OCEAN
Kibwezi
To Arusha
Coast Conservancy
Malindi
Voi
TAITA TAVETA
To Arusha
KILIFI
D.F.O. MOMBASA
KWALE
Mombasa
To Dar es Salaam
KENYA
THIRD FORESTRY PROJECT
Protection forests
Forest plantations
Future forest plantations
Parks
Conservancy boundaries
District Forest Office boundaries
Forest stations
R.A.E.S. stations
Forest and R.A.E.S. stations
ALSO SEE IBRD 15901
Main roads
Railroads
National capital
Provincial capitals
Provincial boundaries
International boundaries
Kilometers 0 40 80 120 160
Miles 0 20 40 60 80 100
SUDAN
ETHIOPIA
UGANDA
KENYA
L. Turkana
L. Victoria
Nairobi
ZAIRE
RWANDA
BURUNDI
L. Tanganyika
TANZANIA
SOMALIA
INDIAN OCEAN
IBRD 15900

IBRD 15901
JULY 1981

KENYA
THIRD FORESTRY PROJECT



This map has been prepared by the World Bank's staff exclusively for the convenience of the readers of the report to which it is attached. The denominations used and the boundaries shown on this map do not imply, on the part of the World Bank and its affiliates, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.