



IFAD
INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT
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REPORT AND RECOMMENDATION OF THE PRESIDENT

TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE

REPUBLIC OF KENYA

FOR THE

**MOUNT KENYA EAST PILOT PROJECT FOR NATURAL RESOURCE
MANAGEMENT**



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CURRENCY EQUIVALENTS

Currency Unit	=	Kenyan Shillings (KES)
USD 1.00	=	KES 78
KES 100	=	USD 1.28

WEIGHTS AND MEASURES

1 kilogram (kg)	=	2.204 pounds (lb)
1 000 kg	=	1 metric tonne (t)
1 kilometre (km)	=	0.62 miles (mi)
1 metre (m)	=	1.09 yards (yd)
1 square metre (m ²)	=	10.76 square feet (ft ²)
1 acre (ac)	=	0.405 ha
1 hectare (ha)	=	2.47 acres

ABBREVIATIONS AND ACRONYMS

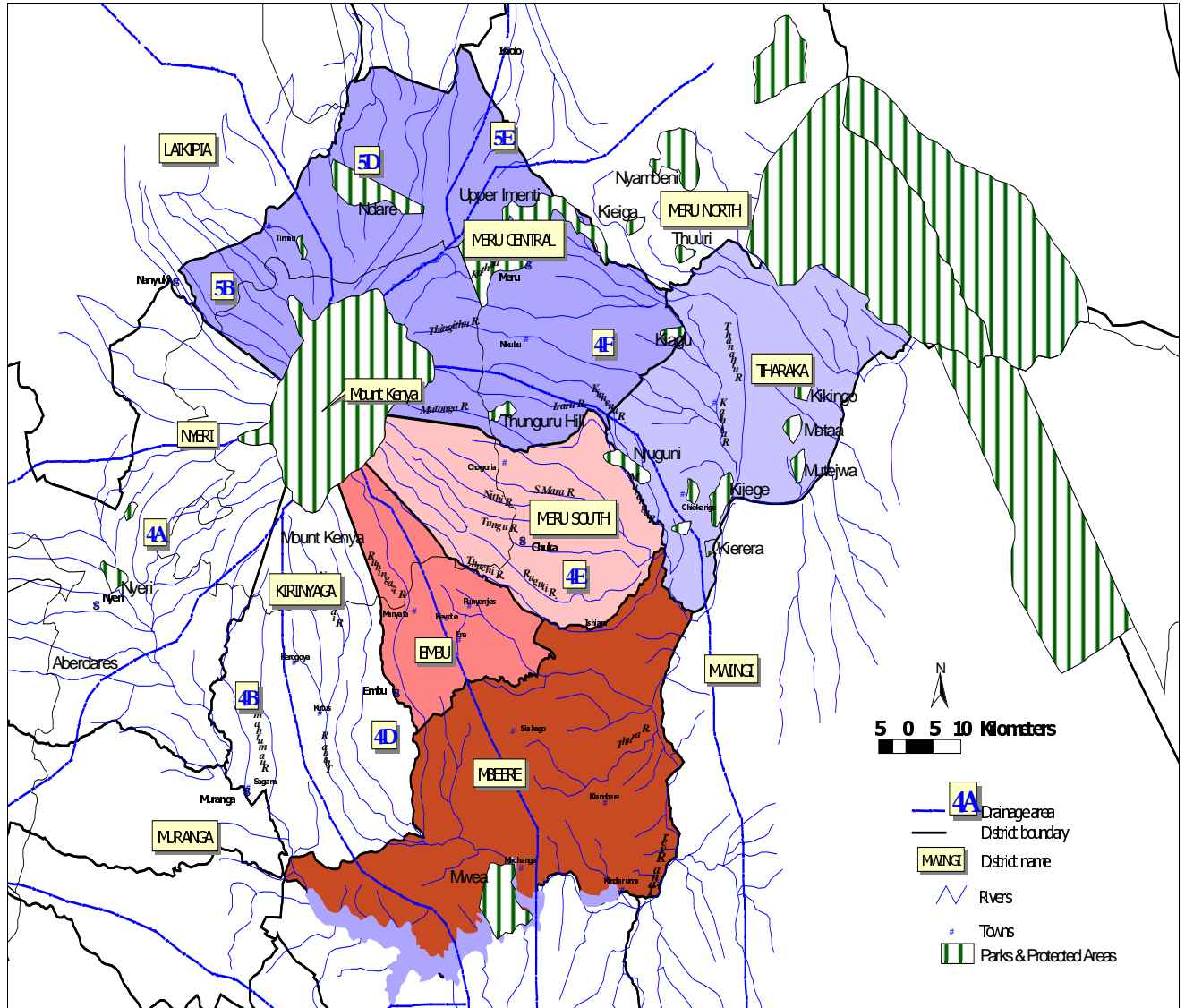
CBO	Community-based organization
GDP	Gross Domestic Product
GEF	Global Environmental Facility
MENR	Ministry of Environment and Natural Resources
NEMA	National Environmental Management Authority
NRM	Natural Resource Management
PMU	Project Management Unit
PRSP	Poverty Reduction Strategy Paper
RUA	River Users' Association
WRMA	Water Resource Management Authority

GOVERNMENT OF THE REPUBLIC OF KENYA

Fiscal Year

1 July - 30 June

MAP OF THE PROJECT AREA



Source: IFAD

The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof



REPUBLIC OF KENYA

**MOUNT KENYA EAST PILOT PROJECT FOR NATURAL RESOURCE
MANAGEMENT**

LOAN SUMMARY

INITIATING INSTITUTION:	IFAD
BORROWER:	Republic of Kenya
EXECUTING AGENCY:	IFAD
TOTAL PROJECT COST:	USD 25.7 million
AMOUNT OF IFAD LOAN:	SDR 12.7 million (equivalent to approximately USD 16.7 million)
TERMS OF IFAD LOAN:	40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum
COFINANCIERS:	Global Environment Facility (GEF)
AMOUNT OF COFINANCING:	USD 4.9 million
TERMS OF COFINANCING:	Grant
CONTRIBUTION OF BORROWER:	USD 1.8 million
CONTRIBUTION OF BENEFICIARIES:	USD 2.3 million
APPRAISING INSTITUTION:	IFAD
COOPERATING INSTITUTION:	United Nations Office for Project Services (UNOPS)



PROJECT BRIEF

Who are the beneficiaries? About 750 000 people live in the geographic area to be covered by the project: 350 000 in the river sub-basin areas and 400 000 in agricultural areas. Of these, approximately 580 000 people are considered poor or at risk of falling into poverty. It is expected that the project will effectively reach some 60 000 households, or 360 000 people, living in five districts on the eastern slopes of Mount Kenya.

Why are they poor? Poverty and environmental degradation are linked in a vicious spiral in the project area. Soil erosion resulting from deforestation and inappropriate agricultural practices on fragile soils and sloping lands reduces agricultural productivity by 2% per year. Current crop husbandry practices are further causes of erosion loss of top soil and declining soil fertility. Poverty in the project area has increased dramatically over the past 5-7 years with the drop in global coffee prices. Neglect of coffee plots is contributing to environment degradation. Drought and flooding, combined with uncoordinated and excessive abstraction of water from the rivers, are major causes of increased food insecurity and poverty, especially in the marginal areas. Poverty is further aggravated by high population pressure on agricultural land together with small farm holdings and low productivity due to limited knowledge of sustainable agricultural methods and practices.

What will the project do for them? Improved river basin management will result in increased water flow, improved water quality and reduced water wastage. It will directly benefit populations in the downstream arid and semi-arid land areas, who desperately need water to improve their livelihoods. Improved access to water will raise the productive capacity of households with limited access to drinking water or water for irrigation. The principal benefits of the project will be a reversal of the land degradation process, through a combination of measures to promote better natural resource management (NRM) by private individuals and on public lands, and the reduction of the silt load in the rivers. Local authorities will work with beneficiary groups to formulate investments and regulations for the sustainable management of land and water resources. The project will provide training and awareness building to local community groups and will assist them in the preparation of NRM plans focusing on trust lands and river sub-basins. In addition, it will support income-generating activities for food processing or non-agricultural purposes and promote better market linkages. The project will also aim to strengthen the technical capacity of district-level staff in NRM, project cycle management and participatory techniques in order to promote better field-level collaboration with communities and better local governance.

How will the beneficiaries participate in the project? The project will sensitize communities and train them to identify and prioritize their needs, find ways to meet these needs and to be a part of the implementation process. It will work with community-based groups where these are available and will facilitate group formation where no appropriate established groups exist. The project will build on the existing demonstrated capacity of local organizations, such as river users' associations, to take initiatives and provide labour and material to cover a major share of infrastructure investment costs. By fully involving these organizations in the project process, the project will strengthen and empower them not only to sustain project interventions but also to take the lead in further development activities.

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TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE
REPUBLIC OF KENYA
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MOUNT KENYA EAST PILOT PROJECT FOR NATURAL RESOURCE
MANAGEMENT**

I submit the following Report and Recommendation on a proposed loan to the Republic of Kenya for SDR 12.7 million (equivalent to approximately USD 16.7 million) on highly concessional terms to help finance the Mount Kenya East Pilot Project for Natural Resource Management. The loan will have a term of 40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum. It will be administered by the United Nations Office for Project Services (UNOPS) as IFAD's cooperating institution.

PART I – THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY¹

A. The Economy

1. Kenya is considered to be the most prosperous of the East African economies and is seen as playing a key role in maintaining stability in the Horn of Africa. It is relatively peaceful, not having experienced the major ethnic and civil conflicts that have wreaked havoc in neighbouring countries, although politically instigated ethnic clashes did seriously affect tourism in the 1990s.

2. Kenya enjoyed strong economic growth from independence until the 1970s. However, the country's economic performance has deteriorated appreciably in the last two decades, as the impact of a series of external factors has been compounded by failure to sustain prudent economic policies, the slow pace of structural reforms, and problems of weak governance. The average annual gross domestic product (GDP) growth rate declined from 6.5% in the 1960s-1970s to about 1.3% in 1996-2000, which is below the average population growth rate of 2.2%. In 2000, Kenya's GDP stood at USD 10.4 billion with a negative annual growth rate (- 1.7%) and a per capita gross national income of USD 360.

3. **Public expenditure.** In September 2000, loans for budgetary support were approved by the International Monetary Fund and the World Bank, and the first tranche was disbursed. Two months later, disbursements were suspended, and it is still uncertain when such support will be resumed. While budgetary support from the Bretton Woods institutions is symbolically important, the magnitude of such support is small relative to the overall government budget, and the Government will probably be able to cover its financing needs on the internal domestic capital market. The Government's revenue-raising capacity is notable compared with that of other countries in the region, and revenue raised is equivalent to 25% of GDP. Moreover, donor funding accounts for a minor share of public expenditure – about 13% in 2001, compared with 52% in neighbouring Uganda.

4. **External debt.** At end 2000, Kenya's total external debt remained at USD 6.75 billion, representing 61% of GDP, while debt service stood at about 20% of foreign exchange receipts. Kenya's low level of debt service can in part be attributed to the country's large proportion of

¹ See Appendix I for additional information.



concessional debt and in part to difficulties in absorbing international assistance funds. Despite its poverty, Kenya is unlikely to benefit from the Debt Initiative for Heavily Indebted Poor Countries, even under its enhanced framework, because its debt burden barely reaches a level to fulfil the required eligibility conditions.

B. Poverty Situation and Eradication Strategy

5. **Population and poverty.** In 1997 over half the population of Kenya was classified as living in poverty, with three quarters of the poor being found in the rural areas.² Rural poverty in Kenya has increased over the last decade and with it has come a decline in standards of education and health care. Population density is correlated with agricultural potential, with higher population densities in the more favourable agro-ecological zones. While the absolute poorest inhabit the marginal (mostly arid) lands found mainly in the north, most of the poor live in the high- and medium-potential areas. The country has an estimated population of 30.7 million (February 2001), with a population growth rate of 2.3%, compared with 4.1% ten years ago. The decline in the growth rate is the result of family planning campaigns and the increasing toll from HIV/AIDS, now the major cause of death among young and middle-aged Kenyans.

6. **Poverty reduction strategy.** The Government's poverty reduction strategy paper (PRSP), released in June 2001, has set an objective of halving the proportion of people living in extreme poverty by 2015. The paper concludes that the agricultural sector will be the crucial determinant in reaching this goal. It also emphasizes: (i) progress in the area of governance and reduction of corruption; (ii) the need to address the population's health and education priorities; (iii) continued structural reform of the economy; (iv) equitable distribution of natural resources; and (v) promotion of the private sector. Following the publication of the PRSP, each district prepared its own PRSP, thus giving all stakeholders the opportunity to present their ideas and perceptions on the main constraints to economic development and on strategies for reducing poverty.

C. The Agricultural Sector and Policy Framework

7. Kenya's renewable natural resources constitute its main economic asset. The country has a varied geography and climate, which provide the underlying framework for its agricultural production and tourism. The economy relies on exploitation of renewable natural resources, with agriculture contributing about 23% to GDP, and tourism (based on wildlife viewing and coastal beaches) contributing a further 20%. Over three quarters of the population depend on agriculture for their survival and livelihoods, while 11% of the labour force is employed in the tourism sector. In contrast with the situation in many countries in southern and western Africa, the current performance of the agricultural sector (principally the tea and horticultural sub-sectors) confirms that Kenya's comparative advantage continues to be with agriculture, together with other rural economic activities associated with the use of natural resources. However, because of population pressure and poverty in areas with high agricultural potential, people are moving into drier areas where agricultural production and intensification require supplementary water.

8. **Environment.** Over the past two decades, Kenya has experienced accelerating deforestation, soil erosion, and domestic and industrial pollution. Soil erosion, resulting from deforestation and inappropriate agricultural practices on fragile soils and sloping lands, is affecting agricultural productivity and contributing to the siltation of dams. Unless the issues of environmental conservation and protection are appropriately balanced with economic development initiatives, the country's capacity for generating sustainable growth from its main economic sectors for poverty reduction will be undermined. If environmental conservation activities are to be successful, they must become development priorities.

² The absolute poverty lines were estimated at KES 41.3 and KES 88.3, (USD 0.53 and USD 1.12) per person per day for rural and urban areas respectively.



9. **Water resources.** A water-short country compared with its East African neighbours, Kenya is facing a number of serious challenges related to water resource management. One major problem is the degradation of river basins, which is undermining Kenya's already limited sustainable water resource base. River basin degradation results in increased run-off, flash-flooding, erosion and siltation, reduced infiltration and lower flow during dry periods. The main causes of river basin degradation are poor farming methods, population pressures and deforestation. Pollution is another growing problem, particularly for surface water sources in areas of high population density. Increasing water demand has intensified competition and conflicts among users. At the root of these conflicts are also the lack of an adequate mechanism for water allocation and poor administration and enforcement of the water-permit system. Illegal withdrawals of water (called water abstractions) have proliferated and include abstraction without permits, non-compliance with permit conditions and use of expired permits.

10. **Structural reform process.** Since the 1990s, the Government has been engaged in revising the legislative framework for both the agriculture and natural resource sectors. Legislative reform is seen as a necessary underpinning for the process of economic reform and the move towards increased private-sector participation in the economy. Reforms have focused on specific sub-sectors and on the appropriate role for government in regulating the use of natural resources and in supporting economic activities. A number of key pieces of legislation have been passed, while others are nearing completion. With regard to the proposed project, the Environmental Management and Coordination Act of 1999 is the most relevant legislation, covering issues relating to environmental protection and quality standards; it is supported by the Water Bill (April 2002) and the draft forest bill.

11. Recently the Government established the National Environment Management Authority (NEMA) under the Environmental Management and Coordination Act (1999) to exercise general supervision and coordination over all matters relating to the environment and to be the principal implementer of all environmental policies. NEMA is responsible for: (i) environmental planning; (ii) protection and conservation of the environment; (iii) environmental impact assessment; (iv) environmental audit and monitoring; and (v) environmental quality standards.

12. In line with the Water Bill, the Government's strategy calls for the establishment of an autonomous water resource management authority (WRMA) responsible for providing water resource management services on a decentralized basis at catchment/sub-catchment levels. Catchment and sub-catchment boards will be established and strengthened to perform various water management functions such as water allocation, pollution control and catchment management. The WRMA will coordinate some functions with NEMA and relevant government agencies. The Ministry of Environment and Natural Resources (MENR) will be responsible for policy formulation to ensure a smooth transition and will be phased out once the WRMA is established.

13. To meet the costs of water resource management, the strategy provides for the mobilization of local resources, complemented by aid from development partners. An appropriate levy and fee structure will be developed that ensures cost recovery to enable sustainable management of water resources. Financial management systems will be rationalized to increase efficiency, transparency and accountability. Ultimately it is planned that the WRMA will achieve financial autonomy.

D. Lessons Learned from Previous IFAD Experience

14. **Overall IFAD experience.** Over the past 20 years, Kenya has benefited from about USD 122 million in loan and grant funding.³ Since 1995, because of the low level of disbursement, IFAD's portfolio in Kenya has undergone restructuring. IFAD, working in collaboration with the Government, has closed non-performing projects and contributed to the development of new

³ See Appendix II for a summary of IFAD's operations in Kenya.



procedures to address the complexity of government budgeting processes. Currently IFAD only has two ongoing projects in Kenya, down from nine in the mid-1990s.

15. **Lessons learned.** A review of IFAD's experience in Kenya identified the following key lessons: (i) project design should be simple and involve a minimum number of different ministries, with a clearly designated lead ministry assuming a supervisory and regulatory role in project implementation; (ii) funding arrangements should be fully developed and agreed upon at appraisal; (iii) project management arrangements should allow the integration of activities to respond to community priorities identified during implementation; (iv) productive activities have included agricultural intensification, but little attention has been paid to environmental constraints and implications, and to the link between environmental degradation and poverty; (v) local communities and self-help groups have a tradition of taking initiatives and are willing to make substantial financial and labour contributions to development activities; and (vi) women's groups are extremely receptive both to receiving home-economics advice and training, and to taking initiatives in productive activities.

E. IFAD's Strategy for Collaboration with Kenya

16. **IFAD's strategic approach in Kenya.** The PRSP has identified growth of the agricultural sector as the critical determinant for poverty reduction in Kenya, and IFAD has developed the Country Strategic Opportunities Paper (COSOP) for Kenya on this basis.⁴ Maintaining and rehabilitating natural resources must be central to IFAD's approach for poverty reduction. Agricultural growth will by necessity be linked to intensification, and, in Kenya, *water* is the crucial resource for sustainable agricultural intensification and diversification, while *soil erosion*, associated with inappropriate agricultural practices, is undermining both agricultural production and water catchment capacity.

17. IFAD will support its target groups and the Government in implementing new policies and legislation relative to natural resource management (NRM) and agricultural activities. Decentralized community involvement in land use and NRM will be the corner-stone of this approach, with the objective of balancing competing demands and needs with viable and sustainable solutions to meet the needs of the poorest groups. IFAD will support knowledge development at the household, farm and community levels by bringing together a variety of different operators to develop solutions and build knowledge. Its future portfolios will support improving the access of the rural poor to sustainable financial and marketing services.

18. Within this overall framework, IFAD will support the Government in implementing the stated process objectives of the PRSP through strengthened participation and inclusion of all Kenyans, especially the poor, in a transparent and open manner to promote the equitable distribution of national resources and development initiatives. IFAD-funded activities in Kenya will focus on the broad goals of rural poverty reduction and the promotion of food security. These goals will be achieved by undertaking interventions that support community-identified and -prioritized economic and social development activities.

PART II – THE PROJECT

A. Project Area and Target Group

19. **Project area.** The project will be implemented in selected sub-catchments of the Tana River, on the eastern slopes of Mount Kenya in the five administrative districts of Embu, Meru Central, Meru South, Mbeere and Tharaka (see map). The project area includes sites of outstanding national

⁴ IFAD's COSOP for Kenya was reviewed by the Executive Board in September 2002.



and global importance. Mount Kenya itself not only has unique ecological features, but over the centuries has also been of great religious and cultural importance to the people living around it. The upper catchment area comprises the Afro-alpine zone, – a protected area of Mount Kenya National Park and the National Forest Reserve (highland forest) – which is more or less uninhabited, but home to biodiversity of national and global significance. The middle catchment of the project area includes high-potential agricultural land, consisting of tea, coffee and cotton/tobacco zones. This land has been cleared of its natural vegetation and is now covered by cultivation, human settlements and farmlands. In some areas, however, remnants of natural vegetation still grow along the riverine corridors, and some indigenous trees are also found in the farmlands. In this zone, agroforestry and farm forestry are widely practised.

20. Mount Kenya is the watershed for the Tana River, which provides water for a significant portion of the population of Kenya. The flow of the river during the dry season has been declining rapidly in recent years, principally due to increased abstraction of water in the high-potential agricultural areas surrounding the national park and forest reserve. Furthermore, inappropriate agricultural practices have led to accelerating soil erosion, resulting in an extraordinary silt load of the tributaries leading off the mountain and feeding into the Tana River. The combination of these factors (in addition to the deforestation of Mount Kenya itself) are the principal causes of environmental degradation in the watershed and are undermining both the productive potential of the area and its capacity to provide the ecosystem service of water catchment.

21. **Target group.** The total population of the five districts was about 1.2 million in 1998. The population of the geographical area to be covered by the project is about 750 000 people, of whom 350 000 live in the river sub-basin areas and 400 000 in agricultural areas. Of these, areas covered, about 580 000 people are considered poor or at risk of falling into poverty. However, the distinction between the poor and the slightly better off is very tenuous, and people in the project area are at risk of sliding into poverty because of the breakdown of the coffee sector, accelerating land degradation, and plot fragmentation.

B. Objectives and Scope

22. **Project approach.** This project supports the overall goal of Kenya's PRSP in promoting environmental conservation as a means of ensuring sustainable livelihoods for the rural poor. The project has been designed in light of the evolving policy framework (see paragraphs 10-13), which foresees an oversight policy-making role for the central government while devolving regulatory and management responsibilities to the district and local levels. The project will aim at improving local governance by strengthening the capacity of community-based organizations (CBOs) and other stakeholders operating in the proposed project area, including the relevant line ministry staff. Training will be central to project activities in order to promote a culture of transparency both among government technical services and between these services and local communities.

23. The overall goal of the proposed project will be to contribute to poverty reduction by promoting a more effective use of natural resources and improved agricultural practices. An intermediate objective will be to enhance the equitable use of these resources with particular focus on environmental conservation. Specific objectives will be to: (i) introduce on- and off-farm environmental conservation and rehabilitation practices in the areas adjacent to rivers and trust lands, focusing on soil erosion control; (ii) bring about improvements in river water management in order to increase dry-season base flow and reduce sediment loads and pollution in these rivers; (iii) raise household income through improved marketing of agricultural and natural resource-based products; and (iv) strengthen governance at the local level for better land use and water management.⁵

⁵ See Appendix III for the project's logical framework.



C. Components

24. The proposed project will finance a series of interventions under five main components: (i) water resource management; (ii) environmental conservation; (iii) rural livelihoods; (iv) community empowerment; and (v) project management.

25. **Water resource management.** The project will support community-based water resource management and will strengthen the capacities of water departments to conserve water and manage the demand for water. It will undertake an assessment of the current situation with regard to water together with a comprehensive assessment of the baseline situation with regard to the number of pipes placed both legally and illegally to withdraw water, water quality and water flows. Building on the existing river users' associations (RUAs) and other local initiatives, the project will support the formation of RUAs to work in partnership with the district water departments to resolve water conflicts and address specific river basin management challenges such as water apportionment and catchment degradation. The project will support the preparation of sub-basin catchment management plans. It will also provide support for the improvement of river intakes and installations of control structures to control water abstractions from the rivers more effectively. In addition, the project's investments in the rehabilitation of faulty and inefficient water supply and irrigation systems will improve water-use efficiency and increase the availability of water for agriculture. Monitoring relative to the baseline situation together with users in order to build knowledge and awareness of the natural processes and human causes affecting water quantity and quality will be a central activity.

26. **Environmental conservation.** Project interventions will focus on trust lands and other publicly owned lands, both within and outside the sub-basin catchment areas. The project will support the preparation of local community NRM plans, tree-planting and other activities to reduce erosion. It will also take steps to control roadside erosion, responsible for about 10-20% of the silt load in the rivers. Negotiations are currently under way with the Global Environment Facility (GEF) for the financing of an integrated ecosystem management and rehabilitation sub-component to be carried out by the Kenya Wildlife Service in the upper catchment areas of the National Forest Reserve. This sub-component will aim at (i) creating and strengthening participatory joint management schemes; (ii) undertaking biodiversity assessment involving local communities; (iii) building capacity for practices relevant to the protection of indigenous flora and fauna, while maintaining traditional knowledge, and monitoring status and trends; (iv) introducing new incentives or removing disincentives for biodiversity conservation and sustainable land use and land conservation; (v) enhancing environmental governance and local-level participation in determining priorities for NRM; and (vi) making investments to mitigate human-wildlife conflict.

27. **Rural livelihoods.** The project will support on-farm integrated soil and water conservation measures for agricultural and livestock activities and the promotion of income-generating activities. It will also support improvements in access to local markets enabling farmers to obtain fair prices for their goods by (i) mobilizing farmers to form marketing groups; (ii) facilitating links between marketing groups and credit institutions; (iii) disseminating market information to target groups; and (iv) rehabilitating rural infrastructure, including selected access roads.

28. **Community empowerment.** This will include two activities: (i) community development, which will cover strengthening of sub-basin operating organizations (such as water users' associations), community afforestation of trust lands and support for the implementation of innovative community initiatives in agriculture, and marketing and microprocessing of natural resource products and by-products; and (ii) strengthening of district technical capacity through training of district-level staff in project cycle management, preparation of annual workplans and participatory techniques, including those for monitoring and evaluation and for field-level physical audits of community support activities.

29. **Project management.** The project will be implemented under the overall responsibility of the MENR. Relevant district technical staff will work with the project in supervising and implementing activities. A small, autonomous project management unit (PMU) will be established by the MENR at Embu to work with district technical staff in the implementation of project activities.

D. Costs and Financing

30. The total investment and incremental recurrent project costs including physical and price contingencies have been estimated at USD 25.7 million. The foreign exchange component is estimated at USD 12.4 million, or 48% of total project costs. All costs are based on September 2002 prices. Project costs by component are summarized in Table 1.

TABLE 1: SUMMARY OF PROJECT COSTS
(USD million)

Components	Project Costs	% of Foreign Exchange	% of Base Costs
Water Resource Management	8.34	50	37
Environmental Conservation	6.23	54	28
Rural Livelihoods	3.83	49	17
Community Empowerment	1.54	60	7
Project Management	2.37	31	11
Total base costs	22.31	49	100
Physical contingencies	0.95	56	4
Price contingencies	2.43	34	11
Total project costs	25.69	48	115

31. **Financing.** The proposed project will be financed by a loan of USD 16.7 million on highly concessional terms from IFAD; USD 1.8 million from the Government; and an in-kind contribution from beneficiaries equivalent to USD 2.3 million. A GEF grant of about USD 4.9 million is being sought⁶ to finance the ecosystem rehabilitation and management sub-component, which will be implemented in the buffer areas and the forest reserve in parallel with other project interventions. The proposed financing plan is summarized in Table 2.

TABLE 2: SUMMARY FINANCING PLAN
(USD million)

	Government		IFAD		GEF		Beneficiaries		Total		For. Exch.	Local (Excl. Taxes)	Duties and Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
Water Resource Management	0.47	4.9	8.05	83.1	-	-	1.17	12.0	9.69	37.7	4.68	4.54	0.47
Environmental Conservation	0.54	7.7	1.66	23.4	4.87	68.7	0.01	0.2	7.08	27.6	3.75	2.78	0.54
Rural Livelihoods	0.25	5.6	3.13	70.1	-	-	1.08	24.3	4.47	17.4	2.15	2.12	0.19
Community Empowerment	0.08	4.7	1.64	93.0	-	-	0.04	2.3	1.76	6.9	1.03	0.65	0.08
Project Management	0.43	15.8	2.27	84.2	-	-	-	-	2.70	10.5	0.80	1.47	0.43
Total	1.78	6.9	16.74	65.2	4.87	18.9	2.31	9.0	25.70	100.0	12.42	11.56	1.72

⁶ A Block B project development facility grant request for financing the preparation of the GEF sub-component has been approved by the Kenya GEF focal point and is scheduled for review by the GEF Secretariat in November 2002.



E. Procurement, Disbursement, Accounts and Audit

32. **Procurement.** Goods and services to be financed from the proposed IFAD loan will be procured in accordance with IFAD procurement guidelines. Contracts for the supply of goods and civil works estimated to cost USD 200 000 equivalent or more will be awarded following international competitive bidding procedures. Contracts for the supply of goods and civil works estimated to cost less than USD 200 000 but more than USD 20 000 equivalent will be awarded on the basis of local competitive bidding, in accordance with procedures satisfactory to IFAD. Goods costing USD 20 000 or less will be purchased through local shopping and awarded on the basis of evaluating and comparing bids invited from at least three eligible suppliers in accordance with procedures acceptable to IFAD. Short-term national and international technical assistance will be procured in accordance with the guidelines of the cooperating institution.

33. **Disbursement.** The proposed loan of USD 16.7 million equivalent will be disbursed over seven years for eligible expenditure contained in approved annual workplans and budgets (AWP/Bs). To ensure the timely availability of loan funds and to facilitate implementation of the project, the Government will operate a Special Account in United States dollars in an offshore commercial bank acceptable to IFAD. The authorized allocation to the Special Account will be about USD 1.2 million, equivalent to the expected half-yearly loan disbursement by the project less the expected direct disbursements.⁷ The initial disbursement will be an advance of the authorized allocation to the Special Account. Further disbursements will be made on the basis of statements of expenditure (SOEs) for any payment under contracts of USD 20 000 or less.

34. **Accounts and audit.** All participating implementing agencies responsible for executing the project components or activities will keep account of expenditures under their respective project component. Independent project accounts will be kept apart from other (non-project) activities. All project accounts, including the Special Accounts, all local accounts and SOEs for each fiscal year will be consolidated and audited in accordance with appropriate auditing principles and practices consistently applied by the office of the Auditor General.

F. Organization and Management⁸

35. MENR will be responsible for overall project implementation. The Ministry of Agriculture and Rural Development will provide the required extension and research services for the rural livelihoods component, while the Department of Social Services will provide services for community empowerment. MENR will establish a PMU at Embu to work with district technical staff in supervising and implementing project activities. The PMU will consist of eight senior officers: a project manager, project accountant, water resources expert, agricultural officer, NRM officer, management information systems officer, community development officer and project liaison officer.

36. At the national level, a high-ranking project steering committee will be set up to make overall policy decisions, approve AWP/Bs and ensure that activities undertaken are in accord with national policies and procedures. The steering committee, chaired by the permanent secretary, MENR, will be composed of representatives from the implementing agencies and concerned MENR departments. The project manager will be an ex officio member of the committee and serve as its secretary. At the provincial level, the technical officers from relevant provincial departments will provide support and backstopping to the relevant district implementing officers. At the district level, coordination will be ensured through the establishment of a district project coordination committee (DPCC). The district commissioner or his appointed officer will chair the DPCC.

⁷ See Appendix IV for flow of funds diagram.

⁸ See Appendix V for a brief description of the role and responsibilities of each implementing agency and the project organization chart.



G. Economic Justification

37. **Benefits.** Without the project, land degradation would accelerate and crop yields would continue to decline as a result of soil erosion and soil fertility loss. The project's principal benefit will be a reversal of the land degradation process, through a combination of measures to promote better NRM by private individuals and on public lands, and to reduce the silt load in the rivers. Substantial benefits to agriculture should accrue as a result of addressing the causes of soil erosion and soil fertility loss, thus ensuring the sustainability of the principal productive activity of the rural poor. It is expected that the project will effectively reach some 60 000 households, equivalent to about 360 000 individual beneficiaries, taking into account the possible overlaps among the different beneficiary groups. Ecosystem rehabilitation and management in the national park and forest reserve will contribute to the conservation of a unique montane system and ensure its continued key role in providing water. It will also generate indirect national benefits in terms of protection of biodiversity and addressing land degradation.

38. **Economic analysis.** For the purpose of the economic analysis, benefits were calculated for a 30-year period to reflect the project's environmental nature and the slow yet steady rate of resource degradation. The analysis shows that the project will make a viable contribution to the national economy, generating an economic rate of return of 9.7% over a 30-year period. This does not take into account the considerable non-quantified benefits, especially overall increased availability of water in the rivers due to improved management and reduced dam sedimentation.

39. **Sustainability.** The project will help local communities to take a more important and participatory role in their own development, and to finance an increasing share of the costs previously financed by the Government. To support and accelerate this trend, the project emphasizes strengthening rural organizations and local-level government. It will build knowledge among the rural poor and their organizations so that they can understand more fully the long-term consequences of land degradation and promote sustainable agricultural practices.

H. Risks

40. There are no risks associated with the technical practices and innovations to be promoted and supported by the project. The technologies have been tested widely under field conditions in Kenya and elsewhere. They do not include sophisticated techniques, nor do they require advanced management skills beyond the capabilities of the farmers. Furthermore, adoption of the recommended measures in river basin management, water harvesting, and soil and water conservation will reduce the farmers' risks of devastating crop failures. While participatory projects involve certain risks (such as a slow start, a prolonged implementation period and the slow adoption of improved farming practices), the project has been designed to minimize these risks through staff and beneficiary training programmes, strengthening of CBOs, district and extension services, and careful financial management.

I. Environmental Impact

41. The project will have direct positive impact on the environment. It will improve the quantity and quality of water flowing in the rivers, reduce soil erosion and thereby raise agricultural productivity, and increase forest and tree cover both on farmland and on communal or government land (national reserve and trust land). The current situation of water resource management is one of uncontrolled and unregulated abstraction of water in all river basins. Because of upstream abstraction and waste, river flows are low during the dry season, and downstream users cannot access water. The project will aim to improve water-use efficiency to reduce wastage, while also promoting RUA's to work with the Government and for self-policing in order to promote a more rationale use of water resources. No large-scale irrigation schemes are planned. The proposed rehabilitation of the traditional small-scale schemes is expected to increase water-use efficiency, prevent waterlogging and



address concerns related to major environmental issues, quantity of water abstracted and water use. The supplementary project intervention in mini earth dams will have minimal environmental side-effects, particularly on downstream water users. In line with Kenyan regulations, environmental assessment will be carried out at the design stage of each mini earth dam.

42. Community-based NRM on public lands and roadsides will make a substantial contribution to addressing the ongoing process of land degradation in heavily populated areas by promoting a better understanding of the natural processes involved and the kind of simple protective measures that can be implemented locally and perhaps even provide some returns to communities. Roadside embankment works should significantly reduce erosion and associated silt run-off into rivers. Ecosystem rehabilitation and management for the national park and forest reserve will contribute to the conservation of a unique montane system and ensure its continued key role in providing water. Without conservation activities in the proposed project area, it is certain that the ongoing process of degradation and poverty will continue; while through the conservation of existing natural resources there will be an increase in the area's economic activity and a decrease in poverty.

J. Innovative Features

43. The project will introduce an innovative participatory approach to river basin management based on empowerment and involvement of water users in decision-making and equitable distribution of river flows in partnership with the Government to ensure sustainability. The proposed participatory approach is designed on the basis of recent experiences of water users' initiatives in the project area in organizing themselves for equitable distribution of water in a drought-stricken river basin. Moreover, the new Water Bill gives a legal base and major role to CBOs in water management at the river basin level. The experiences gained from this pilot project will be unique, and the lessons learned beneficial to other countries in Africa and elsewhere that are interested in relying on the private sector to play a role, in partnership with government, in apportionment, enforcement and conflict resolution, and thus improve management and reduce public expenditures.

PART III – LEGAL INSTRUMENTS AND AUTHORITY

44. A loan agreement between the Republic of Kenya and IFAD constitutes the legal instrument for extending the proposed loan to the Borrower. A summary of the important supplementary assurances included in the negotiated loan agreement is attached as an annex.

45. The Republic of Kenya is empowered under its laws to borrow from IFAD.

46. I am satisfied that the proposed loan will comply with the Agreement Establishing IFAD.

PART IV – RECOMMENDATION

47. I recommend that the Executive Board approve the proposed loan in terms of the following resolution:

RESOLVED: that the Fund shall make a loan to the Republic of Kenya in various currencies in an amount equivalent to twelve million seven hundred thousand Special Drawing Rights (SDR 12 700 000) to mature on and prior to 1 December 2042 and to bear a service charge of three fourths of one per cent (0.75%) per annum, and to be upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented to the Executive Board in this Report and Recommendation of the President.

Lennart Båge
President



**SUMMARY OF IMPORTANT SUPPLEMENTARY ASSURANCES
INCLUDED IN THE NEGOTIATED LOAN AGREEMENT**

(Loan negotiations concluded on 26 November 2002)

1. The Government of the Republic of Kenya (the Government) will ensure that the Ministry of Environment and Natural Resources (MENR) (the lead project agency), within 90 days of loan effectiveness, opens and thereafter maintains in a commercial bank agreed by the Government and IFAD, an account denominated in KES for project operations (the project account). The project account must be protected against set-off, seizure or attachment on terms and conditions proposed by the Government and accepted by IFAD. The PMU will be fully authorized to operate the project account, and the project manager, the project accountant and the water resources expert of the PMU will be designated as its authorized signatories. At least two of the aforementioned authorized signatures, of which one must be the signature of the project manager, will be required for any transaction relating to the project account.
2. The Government will ensure that the district treasury of each project district opens and thereafter maintains in the local branch of the same bank selected for the project account, an account in KES for district project operations (the district project account(s)). The PMU will transfer funds from the project account to the district project accounts as required in accordance with the approved annual workplans and budgets (AWP/Bs). The district accountant, the district water officer, the district forest officer and the district development officer of each project district will be designated as authorized signatories of the respective district project accounts. At least two of any of the aforementioned authorized signatures will be required for any transaction relating to the respective district project account.
3. The Government will make available to the lead project agency counterpart funds from its own resources in an aggregate amount of approximately USD 1 780 000 equivalent, in accordance with its customary national procedures for development assistance. The counterpart funds will cover: (a) all taxes incurred under the project; for such purpose the Government will exempt from taxes the importation, procurement and supply of all goods, civil works and services financed by the loan; and (b) from the third project year, the maintenance costs for access roads rehabilitated under the rural livelihoods component of the project; for such purpose the Government will make budgetary allocations for each fiscal year equal to the counterpart funds called for in the approved AWP/B for the relevant project year and make such allocations available to the PMU semi-annually in advance on the project account.
4. The Government will ensure that the lead project agency, in accordance with its procedures and the provisions of the national laws on land acquisition, will make budgetary allocations to acquire land for project water investments, as needed.
5. The Government will ensure that the Memorandum of Collaboration between the Forestry Department, the Kenya Wildlife Service and the National Museum of Kenya, dated 19 March 1996, regarding the management of the Mount Kenya National Park and Forest Reserve, will be executed in the Mount Kenya forest, starting prior to the implementation of the Mount Kenya ecosystem management and the rehabilitation of national park and forest reserve sub-components of the environmental conservation component of the project.
6. The Government will ensure that the information systems officer of the PMU establishes a participatory monitoring and evaluation (PM&E) system and a management information system (MIS) no later than twelve (12) months after loan effectiveness, and that refinements are introduced by the PMU in the light of experience during the first project year. All the PMU technical officers will be responsible for monitoring the implementation of project activities within the components under their

ANNEX

mandate and ensuring that data are fed into the MIS. At the district level, all the district implementing officers will be responsible for monitoring the implementation of project activities and reporting to the PMU. The PM&E system will be based on the findings of baseline surveys undertaken during project start-up. It will be designed to capture the rate of implementation against planned targets and objectives, as set out generally in the project implementation manual and specifically in the AWP/Bs. It will also capture the environmental and socio-economic impacts and sustainability of the project interventions. The PM&E system will provide essential information for the MIS. The MIS will monitor: (a) the financial information of the project; (b) the regular and systematic recording and reporting of progress against planned project targets; and (c) the assessment of the impact of project activities on the target group.

7. In addition to the financial audit of the project, the Government will ensure that its auditor-general, or external independent auditors satisfactory to IFAD, will undertake internal physical audits to ensure conformity with the contracts for the procurement of equipment and materials. The auditors' reports will be submitted to the PMU no later than six (6) months after the end of the audited period.

8. The Government will ensure that women are represented in the organization and management of the project. The Government will also ensure that gender equity considerations are integrated into all project activities during the project implementation period and that each project party aims at reaching targets established in the MIS in order to achieve gender balance among project beneficiaries.

9. The following are specified as conditions for disbursement of funds from the loan:

- (a) the Government has opened the Special Account; and
- (b) the financial part of the project implementation manual has been completed and approved by IFAD in draft.

10. The following are specified as conditions precedent to the effectiveness of the loan agreement:

- (a) a project manager has been appointed by the lead project agency and approved by IFAD;
- (b) the PMU has been established in offices in Embu, and at least the project accountant and the management information systems officer have been appointed;
- (c) the policy steering committee has been established;
- (d) the loan agreement has been signed, and the signature and performance thereof by the Government has been duly authorized and ratified by all necessary administrative and governmental action; and
- (e) a favourable legal opinion, issued by the Government's attorney-general or other legal counsel approved by IFAD, in form and substance acceptable to IFAD, has been delivered by the Government to IFAD.

APPENDIX I

COUNTRY DATA

KENYA

Land area (km² thousand) 2000 1/	569	GNI per capita (USD) 2000 1/	360
Total population (million) 2000 1/	30.1	GNP per capita growth (annual %) 2000 1/	-1.7
Population density (people per km²) 2000 1/	53	Inflation, consumer prices (annual %) 2000 1/	5.9
Local currency	Kenyan Shilling (KES)	Exchange rate: USD 1 =	KES 78
Social Indicators		Economic Indicators	
Population (average annual population growth rate) 1980-99 2/	3.0	GDP (USD million) 2000 1/	10 410
Crude birth rate (per thousand people) 2000 1/	35 a/	Average annual rate of growth of GDP 2/ 1980-90	4.2
Crude death rate (per thousand people) 2000 1/	13 a/	1990-99	2.2
Infant mortality rate (per thousand live births) 2000 1/	76 a/	Sectoral distribution of GDP 2000 1/	
Life expectancy at birth (years) 2000 1/	48 a/	% agriculture	23
Number of rural poor (million) (approximate) 1/	9.3	% industry	16
Poor as % of total rural population 2/	46	% manufacturing	11
Total labour force (million) 2000 1/	15.5	% services	60
Female labour force as % of total 2000 1/	46	Consumption 2000 1/	
Education		General government final consumption expenditure (as % of GDP)	16
School enrolment, primary (% gross) 2000 1/	n.a.	Household final consumption expenditure, etc. (as % of GDP)	81
Adult illiteracy rate (% age 15 and above) 2000 1/	18	Gross domestic savings (as % of GDP)	3
Nutrition		Balance of Payments (USD million)	
Daily calorie supply per capita, 1997 3/	1 976	Merchandise exports 2000 1/	1 650
Malnutrition prevalence, height for age (% of children under 5) 2000 1/	33 a/	Merchandise imports 2000 1/	3 200
Malnutrition prevalence, weight for age (% of children under 5) 2000 1/	22 a/	Balance of merchandise trade	-1 550
Health		Current account balances (USD million)	
Health expenditure, total (as % of GDP) 2000 1/	7.8	before official transfers 1999 1/	-663
Physicians (per thousand people) 1999 1/	0.04	after official transfers 1999 1/	11
Population using improved water sources (%) 1999 4/	49	Foreign direct investment, net 1999 1/	14
Population with access to essential drugs (%) 1999 4/	36	Government Finance	
Population using adequate sanitation facilities (%) 1999 4/	86	Overall budget deficit (including grants) (as % of GDP) 1999 1/	0.6 a/
Agriculture and Food		Total expenditure (% of GDP) 1999 1/	25.9 a/
Food imports (% of merchandise imports) 1999 1/	12	Total external debt (USD million) 1999 1/	6 562
Fertilizer consumption (hundreds of grams per ha of arable land) 1998 1/	319	Present value of debt (as % of GNI) 1999 1/	49
Food production index (1989-91=100) 2000 1/	103.9	Total debt service (% of exports of goods and services) 1999 1/	26.7
Cereal yield (kg per ha) 2000 1/	1 279	Lending interest rate (%) 2000 1/	22.3
Land Use		Deposit interest rate (%) 2000 1/	8.1
Arable land as % of land area 1998 1/	7.0		
Forest area (km ² thousand) 2000 2/	171		
Forest area as % of total land area 2000 2/	30.0		
Irrigated land as % of cropland 1998 1/	1.5		

A/ Data are for years or periods other than those specified.

- 1/ World Bank, *World Development Indicators* database
 2/ World Bank, *World Development Indicators*, 2001
 3/ UNDP, *Human Development Report*, 2000
 4/ UNDP, *Human Development Report*, 2001

COUNTRY PORTFOLIO OF IFAD LOANS AND BSF GRANTS

Project Name	Project Type	Initiating Institution	Cooperating Institution	Approval	Loan Effectiveness	Current Closing Date	Loan/Grant Acronym	Approved Amount (USD)	Dis-bursed 4/10/02
National Programmes cofinanced with the World Bank									
Second Integrated Agricultural Development Project	Agricultural	WB/ IDA	WB/ IDA	18-Dec-79	19-Jun-80	30-Jun-90	L-I-25-KE	17 000 000	15%
National Extension Project	Research/Ext	WB/ IDA	WB/ IDA	13-Sep-83	22-Dec-83	30-Jun-91	L-I-132-KE	6 000 000	83%
Animal Health Services Rehabilitation Programme	Livestock	IFAD	WB/ IDA	30-Apr-86	02-Dec-87	31-Dec-93	L-I-188-KE	8 000 000	84%
Second National Agricultural Extension Project	Research/Ext	WB/ IDA	WB/ IDA	11-Sep-96	29-Nov-96	31-Mar-98	L-I-422-KE	9 370 000	8%
Area-Based Programmes									
Central Province									
Central Kenya Dry Area Smallholder and Com. Services Development Project	Agric. Dev.	IFAD/BSF	UNOPS	29-May-91	18-Oct-91	31-Dec-01	BSF - 6 KE	3 500 000	67%
Central Kenya Dry Area Smallholder and Com. Services Dev. Project	Agric. Dev.	IFAD	UNOPS	07-Dec-00	30-Aug-01	31-Dec-06	L-I-547-KE	10 920 000	8%
Central Kenya Dry Area Smallholder and Com. Services Dev. Project	Agric. Dev.	IFAD/BSF	UNOPS	30-Oct-00			BSF-33-KE	4 100 000	
Coast									
Kwale and Kilifi District Development Project	Agric Dev	IFAD	WB/ IDA	25-Apr-89	13-Mar-90	30-Jun-96	L-I-238-KE	8 000 000	45%
Coast Arid and Semi-Arid Lands Development Project	Agric. Dev.	IFAD	UNOPS	12-Dec-90	09-Jul-92	30-Jun-00	L-S-27-KE	15 700 000	54%
Kwale and Kilifi District Development Project	Agric. Dev.	IFAD/BSF		07-Sep-93	07-Sep-93	31-Dec-98	BSF-2-KE	215 000	92%
Eastern Province									
Eastern Province Horticulture and Traditional Food Crops Project	Agric.Dev.	AfDB	UNOPS	02-Dec-93	14-Jul-94	31-Dec-02	L-S-39-KE	10 970 000	16%
Western Province									
Farmers' Group and Com. Support Project (Siaya) - Pilot	Rural Dev.	IFAD/BSF	UNOPS	04-Jan-85	04-Jan-85	14-Jan-92	BSF-1-KE	1 860 000	100%
Farmers' Groups and Community Support Project	Rural Dev.	IFAD	UNOPS	11 Dec 90	18-Oct-91	31-Dec-96	L-I-271-KE	6 500 000	22%
Farmers' Group and Community Support Project	Rural Dev.	IFAD/BSF		11-Dec-90	18-Oct-91	31-Dec-96	BSF-7-KE	6 500 000	89%
Western Kenya District-Based Agricultural Dev. Project	Research/Ext	IFAD	UNOPS	05 Dec 94	27-Jun-95	31-Dec-00	L-I-366-KE	11 650 000	15%
Kenyan Women's Finance Trust (KWFT)									
Kenya Women Finance Trust - Phase I	Credit	IFAD/BSF		07-Sep-93	07-Sep-93	31-Dec-96	BSF-6-Sup-02	210 000	100%
Kenya Women Finance Trust - Phase II	Credit	IFAD/BSF	IFAD	26-May-97	26-May-97	30-Sep-02	BSF-6/KWFT	750 000	74%

WB World Bank
IDA International Development Association



LOGICAL FRAMEWORK

Narrative Summary	Objectively Verifiable Indicators (OVIs)	Means of Verification (MOV)	Assumptions
<p>Goal/Overall objective</p> <p>To contribute to poverty reduction through more productive, equitable and sustainable use of natural resources including agriculture</p>	<ul style="list-style-type: none"> ● Food security ● Household income 	<ul style="list-style-type: none"> ● Survey reports ● Welfare monitoring reports (done every three years) ● Economic survey (annual) ● Survey reports from stakeholders e.g. non-governmental organizations (NGOs) 	<ul style="list-style-type: none"> ● Intentions of the PRSP with regard to NRM use realized ● Relevant legislation framework enacted and enforced
<p>Purpose/Intermediate objective</p> <p>Visible accelerating land degradation processes are reduced, and equitable and sustainable use of natural resources is enhanced</p>	<ol style="list-style-type: none"> 1. Ensured base water flow downstream during dry season 2. Reduced soil erosion and sediment load in rivers 3. Increased household production 	<ul style="list-style-type: none"> ● Monitoring and evaluation (M&E) reports ● Annual reports from the Government and PMU ● Gauging stations on rivers ● Hydrologist reports 	<ul style="list-style-type: none"> ● Continued policy support ● District implementing services submit monitoring reports ● Funding directed towards NRM
<p>Outputs/Specific objectives</p> <ol style="list-style-type: none"> 1. Improved local-level governance capacity, through the establishment/strengthening of CBOs NGOs, county councils, and government technical services and the private sector. 2. Water-use efficiency enhanced 3. Natural resource management improved 4. Incoming-generating activities (IGAs) promoted (agriculture and natural resources based) 5. Marketing of agriculture and natural resource-based products improved. 	<ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> a) River basin associations and RUAs formed are functional; b) Improved service delivery c) Supported CBOs function efficiently. 2. <ol style="list-style-type: none"> a) Functioning and regularly updated water resources database b) Water resource management plans implemented c) Improved water harvesting in upper catchments leads to increased flow downstream d) Controlled water abstractions 3. <ol style="list-style-type: none"> a) Crop yields b) Soil nutrients c) Soil conservation measures in place d) Economic tree planting e) Rehabilitated wetlands f) Reduced conflicts 4. Number of new IGA initiatives Reduced livestock mortality 5. Producer prices and income 	<ul style="list-style-type: none"> ● Reports of district social development officers (DSDOs) and district development officers (DDOs) ● Reports of district water officers (DWOs) ● PMU, M&E reports (independent survey) ● DWO (hydrology) reports ● Water resources plan ● River gauging records ● Reports of Kenyan Agricultural Research Institute (KARI) and district agriculture and livestock officers (DALEOs) ● DWO (hydrology) reports ● Reports of Kenya Wildlife Services (KWS) ● Reports of district environment coordination officers (DECOs) and district forest officers (DFOs) ● DALEO reports ● Surveys (DSDO, PMU) ● DALEO reports ● PMU reports 	<ul style="list-style-type: none"> ● Water users/farmers motivated to form WUAs and assume organization and management (O&M) responsibility ● Data analysed, interpreted and published ● Technology extension delivery mechanisms available ● Government has the commitment to address river pollution ● Trend analysis can discount aberrant annual rainfall



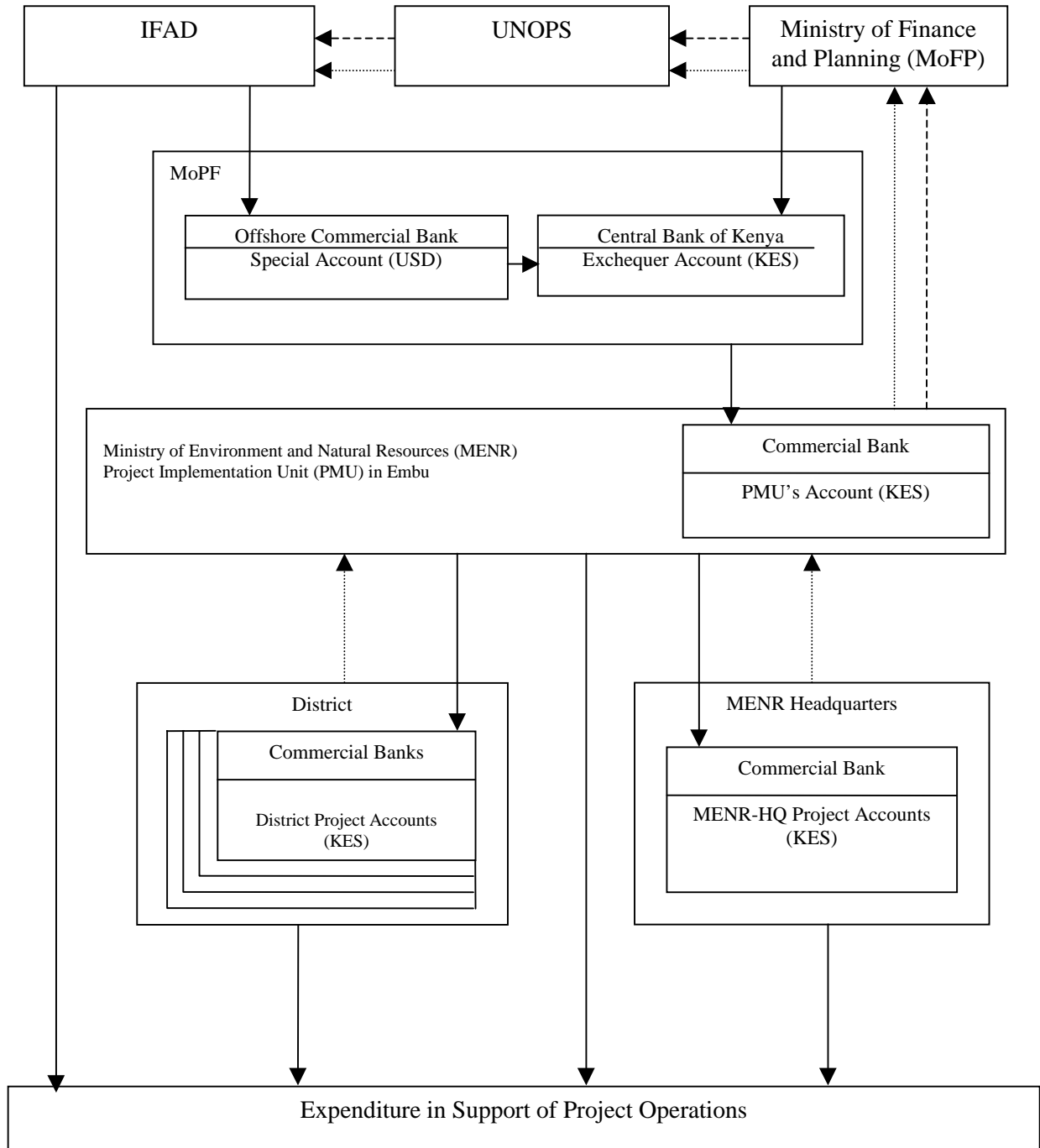


Narrative Summary	Objectively Verifiable Indicators (OVIs)	Means of Verification (MOV)	Assumptions
ACTIVITIES			
Output 1			
1.1 Conduct a socio-economic baseline survey 1.2 Mobilize communities 1.3 Support formation of functional WUAs 1.4 Support adherence to water use and agricultural regulations 1.5 Support formation of functional marketing groups 1.6 Train front-line staff on gender, water management, etc.	1.1 Baseline surveys for seven sub-basins 1.2 No. of community meetings and attendance 1.3 No. of WUAs formed 1.4 a) No. of illegal abstractions b) area (m ²) of river bank under cultivation 1.5 No. of market groups formed 1.6 a) No. of training sessions b) No. of front-line staff trained	1.1 Survey reports 1.2 a) Minutes b) Progress report 1.3 a) Constitution b) Registration certificates c) Returns/renewals 1.4 a) Training reports b) Water pollution reports 1.5 a) Water bailiffs reports b) M&E reports 1.6 a) Constitution b) Registration certificates c) Returns/renewals 1.7 Training reports	<ul style="list-style-type: none"> • Flow of funds will be timely • Communities will be cooperative • WUAs will be registered to legal status
Output 2			
2.1 Strengthen capacity of DWOs, DECOs and other relevant staff 2.2 Support water resources data management activities 2.3 Develop sub-basin water management plans 2.4 Support community-based water efficient systems (domestic/irrigation)	2.1 a) No. of trainings 2.2 b) No. of staff trained c) Equipment supplied 2.3 No. of river gauging stations (RGSs) established; no. of field water-testing kits; no. of office/field equipment 2.4 Sub-basin management plans 2.5 No. of community-based water-efficient systems	2.1 a) Training reports b) Inventory 2.2 a) No. of RGS b) No. of water meters c) Field visits 2.3 Documents 2.4 a) Progress reports b) Field visits/measurements	<ul style="list-style-type: none"> • Flow of funds will be timely • Communities will be responsive
Output 3			
3.1 Support enhancement of soil and water management 3.2 Promote on-farm agroforestry, off-farm and trust land reforestation/stabilization 3.3 Enhance agricultural technology dissemination and scaling up 3.4 Support protection of natural wetlands and assess feasibility of constructed wetlands 3.5 Support mitigation of human wildlife conflict	3.1 No., types and length of soil and water conservation (S&WC) structures; no. of farmer field schools 3.2 a) No. of farmers b) No. and types of tree species c) No. of surviving trees d) Area reforested 3.3 a) No. of farmers adopting/adapting technologies b) Increase in acreage and yields c) Change in cropping pattern 3.4 No. and acreage of wetlands protected. 3.5 Kilometres (km) of barriers/fences and no. of proposals for fencing	3.1 a) DALEO, PMU reports b) Field visits 3.2 a) DALEO, PMU progress/annual reports b) Field visits c) Aerial surveys 3.3 a) DALEO, KARI, PMU reports b) Field visits 3.4 a) PMU, DALEO, DECO progress reports b) land survey 3.5 a) KWS reports b) field visits	<ul style="list-style-type: none"> • Flow of funds will be timely
Output 4			
4.1 Support honey production and processing 4.2 Support processing of natural resources and agricultural products (vegetables, milk, etc.) 4.3 Support promotion of small stock (dairy goats, poultry, sheep, rabbits, etc.) 4.4 Promote preventive and curative measures for livestock and livestock breed improvement	4.1 a) No. of farmers/groups b) Kg. of honey produced 4.2 No. of women/youth groups involved in processing 4.3 a) No. of farmers b) No. of bucks bought and distributed 4.4 a) No. of community animal health workers	4.1 a) Records b) Field visits c) DALEO reports 4.2 a) DSDO reports b) Field visits c) DWO reports 4.3 DALEO reports 4.4 DALEO, district livestock production officer	<ul style="list-style-type: none"> • Flow of funds will be timely

Narrative Summary	Objectively Verifiable Indicators (OVIs)	Means of Verification (MOV)	Assumptions
	trained b) No. of community artificial insemination assistants trained and number of animals inseminated	(DLPO), district veterinary officer (DVO) reports	
Output 5 5.1. Enhance access to marketing information by target groups 5.2 Carry out spot rehabilitation of selected access roads in target area	5.1 a) No. and types of materials b) No. of groups reached 5.2 Length of road (km)	5.1 a) Project reports b) DALEO reports c) Field visits 5.2 a) Field visit b) Reports	<ul style="list-style-type: none"> • Flow of funds will be timely



FLOW OF FUNDS



- Payments
- - - → Withdrawal Applications
- ⋯ → Certificates of Expenditures

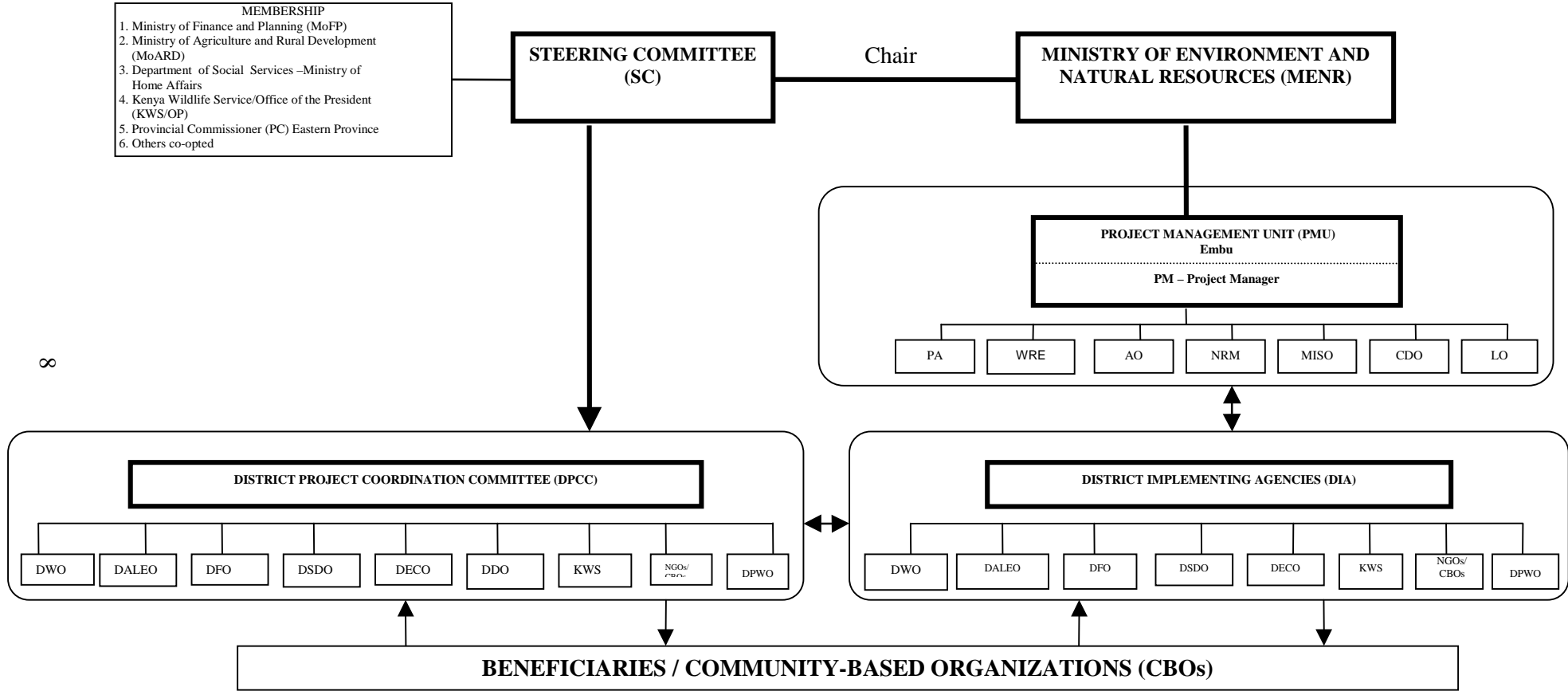
**ORGANIZATION AND MANAGEMENT****Project Organization and Management Responsibilities**

The roles and responsibility of each implementing agency with respect to the implementation of project activities is presented below, while the project organization chart is on the following page.

Implementation Responsibilities

Implementing Agency	Responsibilities under the Project
Ministry of Environment and Natural Resources (MENR)	Overall implementation responsibility; convening of the steering committee (SC) and project direction; establishment and funding of the PMU; coordination with other ministries and programmes; river-level and pollution monitoring; water management planning and community sensitization to environmental issues; environmental monitoring (through NEMA); arrangements for supervisory and other donor missions. At the district level, the DFO/DECO will be responsible for preparation of AWP/Bs for the community NRM sub-component while the DWO will be responsible for the river basin management and community water management sub-components.
Project Management Unit (PMU)	Day-to-day organization and management of the project. Identification of participating communities; arrangements for community strengthening and the preparation of community action plans (CAPs); implementation of project activities through contractual arrangements with local agencies including NGOs, beneficiary organizations and the private sector; supervision of contractual arrangements, coordination of activities with supporting organizations, including the Government and other development agencies working in the project area; project monitoring, evaluation and reporting; arrangements for workshops, etc; preparation of AWP/Bs.
Ministry of Finance and Planning (MoFP)	Representative to IFAD of Government. Policy issues on planning, budgeting and financing; overall donor portfolio monitoring; member of the steering committee; forwarding withdrawal applications to IFAD. The DDOs will be responsible for financial and procedural training activities under the sub-component for strengthening district technical capacity.
Ministry of Home Affairs-Department of Social Services (DSS)	Assistance with group mobilization, registration and training; monitoring group activities. At district level, the DSDO will be responsible for preparation of AWP/Bs for activities under the sub-component for community development
Ministry of Agriculture and Rural Development (MoARD)	Member of the steering committee; support for technology dissemination for community planning and assistance with specific scheme planning; strengthening of farm technology dissemination. At the district level, the DALEOs will be responsible for the preparation of AWP/Bs for activities (farmer and staff training; supervision of contracts; monitoring of agricultural field activities) for the sub-components on-farm soil and water management and income-generation activities and marketing.
NGOs/Private Sector	Undertaking the baseline survey; contractual aspects of community mobilization and development planning including group strengthening and undertaking participatory rural appraisals; implementation of project interventions on contract basis.
CBOs	Assist formation of water-user groups/self-help groups/RUAs, Community Development Committees/village development committees; preparation of CAPs in conjunction with NGOs and technical inputs provided; contributions to selected development activities; participatory monitoring and evaluation; continuing operation and maintenance of developed schemes.
KWS	Implementation of project interventions inside the Mount Kenya National Reserve (ecosystem rehabilitation and management plan and National Reserve Reafforestation). Preparation of the respective AWP/Bs.

PROJECT ORGANIZATION CHART



8

AO - Agricultural Officer
 CBOs - Community Based Organizations
 CDO - Community Development Officer
 DALEO - District Agriculture and Livestock Officer

DDO - District Development Officer
 DECO - District Environment Coordination Officer
 DFO - District Forest Officer
 DPWO - District Public Works Officer

DSDO - District Social Development Officer
 DWO - District Water Officer
 LO - Liaison Officer
 MISO - Management Information Systems Officer

NRM - Natural Resource Management Officer
 PA - Project Accountant
 WRE - Water Resource Expert

