PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 46.0 MILLION
(US$68.5 MILLION EQUIVALENT)

TO THE

GOVERNMENT OF KENYA

FOR A

NATURAL RESOURCE MANAGEMENT PROJECT

February 26, 2007
CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2006)

Currency Unit = Kenya Shillings (Kshs)
Kshs70.45 = US$1
US$1.48945 = SDR 1

FISCAL YEAR
July 1 – June 30

ABBREVIATIONS AND ACRONYMS

ALRMP  Arid Lands Resource Management Project
ASAL  Arid and Semi Arid Land
AfDB  African Development Bank
CAS  Country Assistance Strategy
CAAC  Catchment Area Advisory Committee
CBA  Cost-Benefit Analysis
CBO  Community Based Organization
CBS  Central Bureau of Statistics
CDD  Community Driven Development
CFAs  Community Forest Associations
CMS  Catchment Management Strategy
CPPR  Country Portfolio Performance Review
CQ  Consultants Qualifications
DANIDA  Danish International Development Assistance
DIR  Detailed Implementation Review
DSG  District Steering Group
ECA  Economic Crimes Act
EMP  Environmental Management Plan
ERs  Emission Reductions
ESMF  Environmental and Social Management Framework
FAO  United Nations Food and Agriculture Organization
FD  Forest Department
FMR  Financial Monitoring Report
FNPP  FAO/Netherlands Partnership Program
FRA  Forest Resource Assessment
GAC  Governance and Anticorruption
GAP  Governance Strategy and Action Plan
GBM  Green Belt Movement
GDP  Gross Domestic Product
GEF  Global Environment Fund
GIS  Geographical Information System
GJLOS  Governance Justice Law, Order and Security
GTZ  Deutsche Gesellschaft fur Technische Zusammenarbeit
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ha</td>
<td>Hectares</td>
</tr>
<tr>
<td>ICB</td>
<td>International Competitive Bidding</td>
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<td>ICIPE</td>
<td>International Center for Insect Physiology and Ecology</td>
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<td>ICR</td>
<td>Implementation Completion Report</td>
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<td>IDA</td>
<td>International Development Association</td>
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<td>IFMIS</td>
<td>Integrated Financial Management and Information System</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>IP</td>
<td>Indigenous Peoples</td>
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<tr>
<td>IP-ERS</td>
<td>Investment Program for the Economic Recovery Strategy for Wealth and Employment Creation</td>
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<tr>
<td>IPP</td>
<td>Indigenous Peoples Plan</td>
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<td>IPPF</td>
<td>Indigenous Peoples Planning Framework</td>
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<td>IPSAS</td>
<td>International Public Sector Accounting Standards</td>
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<td>IRR</td>
<td>Internal Rate of Return</td>
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<td>JICA</td>
<td>Japan International Cooperation Agency</td>
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<td>KACC</td>
<td>Kenya Anti-Corruption Commission</td>
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<td>KAPP</td>
<td>Kenya Agricultural Productivity Program</td>
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<tr>
<td>KAPSLM</td>
<td>Kenya Agricultural Productivity and Sustainable Land Management</td>
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<td>KARI</td>
<td>Kenya Agricultural Research Institute</td>
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<td>KEEP</td>
<td>Kakamega Environmental Education Program</td>
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<td>KEMSA</td>
<td>Kenya Medical Supplies Agency</td>
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<td>KenGen</td>
<td>Kenya Electricity Generating Company</td>
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<td>KFS</td>
<td>Kenya Forest Service</td>
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<td>KNAO</td>
<td>Kenya National Audit Office</td>
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<td>KSS</td>
<td>Kenya Soil Survey</td>
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<td>KTDA</td>
<td>Kenya Tea Development Agency</td>
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<td>KWS</td>
<td>Kenya Wildlife Service</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>MENR</td>
<td>Ministry of Environment and Natural Resources</td>
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<td>MIS</td>
<td>Management Information System</td>
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<td>MOF</td>
<td>Ministry of Finance</td>
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<td>MOU</td>
<td>Memorandum of Understanding</td>
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<td>MoWI</td>
<td>Ministry of Water and Irrigation</td>
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<td>MTEF</td>
<td>Medium Term Expenditure Framework</td>
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<td>NCB</td>
<td>National Competitive Bidding</td>
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<td>NEMA</td>
<td>National Environment Management Authority</td>
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<td>NEPAD</td>
<td>New Partnership for Africa’s Development</td>
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<td>NGOs</td>
<td>Non-governmental Organizations</td>
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<td>NIB</td>
<td>National Irrigation Board</td>
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<tr>
<td>NPV</td>
<td>Net Present Value</td>
</tr>
<tr>
<td>NRM</td>
<td>Natural Resource Management</td>
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<td>NSSF</td>
<td>National Social Security Fund</td>
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<td>NWCPG</td>
<td>National Water Conservation and Pipeline Corporation</td>
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<td>NWFP</td>
<td>Non-Wood Forests Product</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Operation and Maintenance</td>
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</table>
OP  Office of the President
PCO  Project Coordination Office
PDO  Project Development Objective
PES  Payment for Environmental Services
PFM  Public Financial Management
PFMP  Participatory Forest Management Plan
PHRD  Policy and Human Resources development Grant
PIP  Project Implementation Plan
PPF  Project Preparation Facility
PPOA  Public Procurement Oversight Authority
PSC  Project Steering Committee
QCBS  Quality and Cost Based Selection
RPF  Resettlement Policy Framework
RAP  Resettlement Actions Plan
RBM  Results-Based Management
RFP  Request for Proposals
RPF  Resettlement Policy Framework
SBD  Standard Bidding Documents
SEA  Strategic Environmental Assessment
Sida  Swedish International Development Co-operation Agency
SLM  Sustainable Land Management
SLO  State Law Office
SOE  Statement of Expenditure
SWApS  Sector Wide Approaches
USAID  The United States Agency for International Development
UNDP  United Nations Development Programme
WKCDD/FM  Western Kenya Community Driven Development and Flood Mitigation
WKEEMP  Western Kenya Integrated Ecosystem Management Project
WRM  Water Resource Management
WRMA  Water Resources Management Authority
WRUA  Water Resources Users Association
WSR  Water Sector Reforms
WSS  Water Supply and Sanitation

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<thead>
<tr>
<th>Acting Vice President:</th>
<th>Hartwig Schafer</th>
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<tr>
<td>Country Director:</td>
<td>Colin Bruce</td>
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<td>Sector Manager:</td>
<td>Karen Brooks</td>
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<tr>
<td>Task Team Leader:</td>
<td>Christine Cornelius</td>
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# KENYA
Natural Resource Management Project

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Kenya

Kenya - Natural Resource Management Project

Project Appraisal Document

Africa

AFTS2

Date: February 26, 2007
Country Director: Colin Bruce
Sector Manager: Karen Brooks

Team Leader: Christine E. Cornelius
Sectors: Forestry (50%); Flood protection (30%); Irrigation and drainage (20%)
Themes: Environmental policies and institutions (P); Water resource management (S); Participation and civic engagement (S); Other social protection and risk management (S)
Environmental screening category: Partial Assessment

Project ID: P095050

Lending Instrument: Specific Investment Loan

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<th>Source</th>
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<th>Foreign</th>
<th>Total</th>
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<td>Borrower/Recipient</td>
<td>7.40</td>
<td>0.00</td>
<td>7.40</td>
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<tr>
<td>International Development Association (IDA)</td>
<td>51.80</td>
<td>16.70</td>
<td>68.50</td>
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<td>Local Communities</td>
<td>2.10</td>
<td>0.00</td>
<td>2.10</td>
</tr>
<tr>
<td>Total:</td>
<td>61.30</td>
<td>16.70</td>
<td>78.00</td>
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Borrower:
Ministry of Finance, The Treasury, Nairobi, Kenya

Responsible Agencies:
Ministry of Water and Irrigation, Maji House, Nairobi, Kenya
Ministry of Environment and Natural Resources, NHIF Building, Nairobi, Kenya
The objectives of the project are to enhance the institutional capacity to manage water and forest resources, reduce the incidence and severity of water shocks in river catchments, and improve the livelihoods of communities participating in the co-management of water and forests. Achievements under the project will be measured by indicators tracking changes in organizations and their performance, in the health of the natural resource base, and in welfare of participating communities.

**Project description [one-sentence summary of each component] Ref. PAD B.3.a, Technical Annex 5**

The proposed NRM Project has four components: Water Resource Management and Irrigation, Management of Forest Resources, Livelihood Investments in the Upper Tana Catchment, and Management and Monitoring and Evaluation. The first two components support the legal and institutional reforms contained in recent legislation, as well as investments in catchment areas. The third component provides assistance to communities participating in management of the resources. The fourth provides managerial oversight and monitoring and evaluation for the project.

**Which safeguard policies are triggered, if any? Ref. PAD D.6, Technical Annex 12**

In accordance with the Bank guidelines, the NRM Project has been classified as category B. The following safeguards are triggered: Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Forests (OP 4.36), Physical Cultural Resources (OP 4.11), Indigenous Peoples (OP 4.10), Involuntary Resettlement (OP 4.12) and Projects on International Waterways (OP 7.50).

While the project is conceived and designed to have significant positive environment and social impacts, the sub-projects will have potential risks of site-specific adverse environmental and
social impacts. In compliance with Bank requirements, an ESMF, RFP and IPPF have been prepared and disclosed, in country and in the Info shop.

<table>
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<th>Significant, non-standard conditions, if any, for:</th>
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<td><strong>Ref. PAD C.6</strong></td>
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<td>Board presentation: None</td>
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Loan/credit effectiveness:
- Appointment of key project implementation coordinators and financial management and procurement staff.

Covenants applicable to project implementation:
- Forest Component – rapid assessment of forest resources, forest boundary demarcation in project areas, guidelines for community forest associations by July 31, 2009.
A. STRATEGIC CONTEXT AND RATIONALE

1. Country and Sector Issues

1. Economic growth has been varied and unequal. Kenya has experienced varied and unequal growth since independence in 1963. In its early years of independence, Kenya was the most prosperous country in East Africa, its GDP per capita rising by 38 percent between 1960 and 1980. The following two decades to 2000, however, recorded a zero increase in per capita GDP, while per capita income in 2003, at US$360, was lower than in 1990. Poverty in Kenya is widespread with more than half (52 percent) of the country’s population living below the poverty line. Kenya’s social indicators have declined in tandem with the economy; infant mortality rose from 64 (per 1,000 births) in 1990 to 79 in 2004. Life expectancy declined from 58 in 1990 to 48 years in 2004, in part due to the HIV/AIDS epidemic. The persisting hunger of children is evidenced in the 20 percent of under-fives who are underweight, and almost one in three (31 percent) who are wasting (World Development Indicators, 2006). These are averages, but Kenya is a highly unequal society, with exclusion reflecting stratification by class, gender, and region. Kenya’s Gini coefficient for household income, at 0.43, is much higher than that of its neighbors, Ethiopia and Tanzania, whose coefficients stand at 0.30 and 0.35 respectively. This ranks Kenya as one of the more unequal countries in the world and in Sub-Saharan Africa.

2. Based on the development and implementation of new growth strategies, Kenya is going through an impressive economic transition period. Kenya’s 2003 Investment Program for the Economic Recovery Strategy for Wealth and Employment Creation (IP-ERS, its Poverty Strategy Paper) is centered on three interlinked pillars: boosting economic growth, enhancing equity and reducing poverty, and improving governance. Evidence suggests that good macroeconomic management and reforms implemented under the IP-ERS have contributed to the strongest economic growth in Kenya since the 1980s. GDP growth is expected to exceed 5 percent in 2006, compared to 5.8 percent in 2005 and 4.9 percent in 2004. Growth has resulted primarily from strong increases in agriculture, tourism, building and construction, electricity, telecommunications, and transportation. Manufacturing also contributed to growth, with output up by 5.5 percent in 2005, surpassing the contribution of traditional exports of tea and coffee combined. Assuming normal rainfall, steady improvements in investment levels and performance, and an absence of significant external shocks, growth is expected to remain above 5 percent for the medium term. Analysis shows that total factor productivity and physical capital per capita have been growing at an annual average of 0.8 percent during 2001-05.

3. The natural resource base, critical for the well-being of all Kenyans, is under threat. Kenya’s endowment of water, forests, and minerals serves as the foundation for much of the country’s economic activity, but is vulnerable to natural shocks, mismanagement, and depletion. For example, water shocks resulted in an estimated decline of 11 percent, 16 percent, and 16 percent of GDP respectively during

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the three consecutive years of floods (1997–98) and droughts (1998–2000). In partial response to the perceived problem, the country promulgated the Water Act of 2002 (No. 8 of 2002) that provides for the establishment of a new institutional framework for the management and development of water resources, chiefly through the national Water Resources Management Authority (WRMA). A similar recognition of acute problems in forestry led the Government of Kenya (the Government) to prepare a new Forest Policy and a new Forest Act, which received parliamentary approval in 2005. The Government has requested Bank support in implementation of the new policy, which includes institutional reforms to create incentives for the private sector and local communities to invest in forests and improve management of biologically diverse indigenous forests. The Government’s Letter of Sectoral Policy is attached as Annex 13.

4. **A new Land Policy proposes to address tenure and resettlement to facilitate sustainable and equitable distribution and use of land.** Kenya has not had a clearly defined or codified National Land Policy since independence. From 2004, the Government has embarked on the formulation of a National Land Policy through a widely consultative process, with the aim of producing a policy the vision of which is to guide the country towards sustainable and equitable use of land. The first draft of the policy was published in October 2006, and a process that will finalize the policy is ongoing. The policy designates all land in Kenya as public, community, or private. The policy recognizes and protects customary rights to land. Land issues requiring special intervention, such as historical injustices, land rights of minority communities such as hunter-gatherers, forest dwellers and pastoralists, and vulnerable groups will be addressed. Measures will be initiated to identify such groups and ensure their access to land and participation in decision making over land. In addition, the land policy intends to establish clear criteria and guidelines on resettlement to ensure that it is carried out in a transparent and accountable manner. Mechanisms for extinction of land rights in the interest of sustainable management of land-based natural resources and also for prompt and adequate compensation to communities and/or private entities whose land rights are extinguished will be put in place. The Natural Resource Management (NRM) Project will assist the Government in designing the needed legislative and institutional framework for implementing the policy with regard to forests and water catchments.

5. **The ongoing depletion of natural resources must be reversed to sustain and develop Kenya’s economy.** Kenya constitutes one of the most degraded areas in the region with about 70 percent of the population living in the 12 percent of total land area (581,679 km²) that is classified as being of medium to high potential for agriculture and livestock production. The growing population and the resulting increase in demand for land, energy and water is putting tremendous pressure on the natural resource base. Natural resources play two basic roles in development; firstly, that of supporting subsistence, and secondly, as a source of development finance. Commercial management of natural resources can provide important sources of profit and foreign exchange. Evidence suggests a two-way causal relationship between natural resource degradation and poverty, whereby the majority of poor people depend directly on natural resource for their livelihoods and are most directly affected by degradation in that capital base. A recent World Bank study ("Where is the Wealth of Nations?, Measuring Capital for the 21st Century", World Bank, 2005) showed that in low income countries such as Kenya,
natural resources make up a significant share of total wealth and is substantially larger than the share of produced capital. Therefore, sound management of these natural resources can support and sustain the welfare and growth of poor countries, and contribute directly to poverty alleviation among the poorest communities in these countries.

**Water Resource Management**

6. **As a water scarce country Kenya needs to protect its water sources better.** There are four principal characteristics of Kenya’s water resources that make the management of these key natural resources a particular challenge in Kenya. The country has a limited endowment of just 650 m³ per capita per year of freshwater. This puts it in the “water-scarce” category (the bottom 8 percent of countries globally), and means that Kenya has significantly less water per capita than its neighbors. The annual rainfall is highly variable in space and time and varies annually by up to 30 percent above or below the long-term average, partly because Kenya experiences El Niño- and La Niña-type climate variations. The major rivers of Kenya all originate from only five specific mountainous areas. The management of these few “water towers” has consequences throughout Kenya. Finally, over half of Kenya’s water resources are shared with its neighbors, and is therefore international water. These resources need to be managed cooperatively within agreed frameworks in order to avoid tensions and ensure that the benefits of the nation’s water are available to all. Total consumption as a percentage of total internal renewable water resources is estimated at 7.8 percent, but this hides significant geographic and seasonal variation. When taking into consideration that not all water can be safely harvested, the estimate of consumed water as a proportion of total available figure increases to 20.2 percent.

7. **Improved governance of Kenya’s Water Resources will guarantee water supply in the long-term.** The key watershed management issues include:

   (a) *watershed degradation.* Deforestation, poor land use practices, steep slope and river bank cultivation as a result of increasing population pressure and poor catchment management all lead to erosion and the loss of valuable soil cover. These in turn result in very high sediment loads in streams and rivers. The sediment is carried downstream and deposited in reservoirs, lakes, wetlands, and coastal areas. This reduces the economic life of reservoirs, reduces the hydraulic capacity of water conveyance facilities, disrupts water supply operations, and affects the ecological functioning of natural areas;

   (b) *lack of storage capacity.* Kenya has not invested adequately in water storage, and existing storage capacity has not been adequately maintained. The pressures of increasing demand due to population growth, lack of investments in water storage and poor maintenance of existing capacity have combined to decrease Kenya’s per capita total water storage for all uses, which is now extremely low compared to countries that are subjected to variable climates; and
(c) **poor management frameworks.** Inadequate and highly centralized management of water resources in the past permitted these trends to develop and increase in time. The recent reforms of policy, legislation and institutional arrangements in the sector, however, which include community responsibility and accountability for watershed management through Water Resources Users Associations (WRUAs) have begun to redress some of these trends.

8. **The Water Act of 2002 provides a sound basis for implementing water sector reforms (WSR).** It supported the integrated water resource management (WRM) framework for addressing multiple water demands, domestic, agriculture, industry, and livestock, and clarified the roles of the Government. The recently established WRMA is the key institution and the three most important sector issues are institutional coordination, decentralization and local accountability, and the sustainable financing of WRM.

9. **Kenya’s irrigation potential is untapped.** Kenya’s economy remains vulnerable to climatic shocks that typically affect the poor differentially. With only 90,000 hectares (ha) benefiting from irrigation (which represents 1.2 percent of total cropped land), and with close to 26 million ha of agricultural land depending on highly unpredictable rainfall, climate variability has a significant impact on the vulnerability of both smallholder farmers and the national economy. Climate variability and the inability of Kenya to deal effectively with its impacts jeopardize stable economic growth and provide a volatile environment for successful implementation of macroeconomic reforms and better governance of public resources. Kenya has an irrigation potential of 539,000 ha (Draft Government Irrigation Policy Paper 2005).

10. **Public irrigation assets are managed by the National Irrigation Board (NIB).** Out of the 90,000 ha under irrigation in Kenya, about 13 percent is gazetted as public irrigation. The NIB is a semi-autonomous body, established under the Irrigation Act of 1966, and is responsible for planning, construction, settling and managing national irrigation schemes. At present, NIB operates six schemes: Mwea (6,000 ha), Ahero (900 ha), West Kano (900 ha), Bunyala (300 ha), Perkerra (500 ha), and Hola (850 ha). Many of these schemes are irrigated through pumps, which raises concerns about their sustainability in view of farmer-led management due to high operating costs.

11. **Better management of existing rice irrigation schemes will improve people’s livelihoods.** The Mwea Rice Irrigation Scheme is by far the largest. Until recently, the NIB regulated all aspects of rice cultivation, including planting, harvesting, milling, and marketing. The NIB also provided agricultural inputs, which the farmers paid for with market earnings. The farmers and the NIB jointly own rice mills. In the late 1990s, clashes erupted between farmers and the NIB over the scheme’s management. The farmers subsequently formed Mwea Rice Growers Multipurpose Society to take over many of the NIB’s management functions, with limited success. Systematic maintenance is no longer done, and the infrastructure is in a poor state of repair. Equitable allocation of water has also suffered, with unscheduled 4,000 ha development in the upper parts of the scheme, including illegal abstraction by top-end farmers, as a result of which water no longer reaches the tail-end parts. As a result of the current situation, irrigation
efficiencies are low and water wastage high. The situation in Mwea is typical for the other public schemes and major opportunities therefore exist to reduce wastage and improve efficiency, with a subsequent significant impact on the management of water resources in many of Kenya’s water-stressed river basins. Better water management is also expected to contribute to increased economic growth, reduced poverty and improved food security based on agricultural intensification.

12. **Institutional reform targeting the irrigation sector improves management and accountability.** Following the events in Mwea, the NIB has embarked on an ambitious reform program that aims to professionalize management and make it more transparent and accountable to water users. The Board has transformed itself from a conventional irrigation development and management organization, responsible for the entire irrigated production process from input supply to marketing, to a modern irrigation service provider responsible for the provision of water, and operation and maintenance (O&M) services. As part of this process, the NIB has significantly reduced staff numbers (from 700 a few years ago to around 80 permanent staff members at present), has established WRUAs who have started paying significant O&M charges (including full O&M costs but at present excluding salaries), has established participatory scheme management committees, and have pulled out of production support (input supply, marketing, etc). A draft Irrigation Policy has been prepared.

13. **Completing the reforms will yield potentially high benefits.** Despite these significant achievements, much still needs to be done to complete the reforms. Specifically, full recovery of O&M costs (including salaries) should be targeted and, consequently, ultimately full accountability of the Board to those who foot the O&M bill, vis-à-vis the water users. Also, the role of the NIB in irrigation development and the institutional environment should be further clarified. Specifically, NIB would explicitly explore the option to transform itself into an irrigation services provider to both WRUAs for O&M of private infrastructure that has been transferred to the WRUAs, and to the Government for O&M of public infrastructure (e.g., pumping stations). WRUAs could thus take advantage of economies of scale in terms of equipment and machinery, especially in view of their replacement costs. In addition, such an organization could play an active role in the further development of Kenya’s irrigation assets.

14. **There is need for a redefinition of the role of Government in the irrigation sector.** While the NIB should ultimately become accountable to those who cover the costs of its services, the Government will need to continue to play a critical role in irrigated agriculture. In the first place, the Government will remain the owner of the irrigation assets and has, as such, an interest in adequate O&M. The Government will therefore need to adopt a supervisory role and ensure that proper maintenance according to adequate quality standards is being done by the farmers. Secondly, some of the irrigation assets are too large for a WRUA to maintain and operate, and O&M responsibility can therefore not be transferred. Thirdly, the Government will continue to play a role in initiating and, at least partly, financing irrigation development at the national level. This will include providing a favorable environment for private investments in labor-intensive irrigation development, as well as incentives at the scheme level for expansion of existing irrigation. It is expected that the National Irrigation Policy
will provide specific guidance on the role of stakeholders, including the Government, NIB, farmers and private sector, in irrigation management and development with a view to streamlining the institutional framework and avoid duplication and overlap.

**Forest Resource Management**

15. **Forests are important for the economic, environmental and social welfare.** While even in pre-colonial times Kenya’s forest cover most likely never exceeded 10 percent, depletion and unsustainable use has reduced forests to an area of estimated 1.7 percent² of its land area (or 1.24 million ha) today. Forest ecosystems are reservoirs of biological diversity, comprising four categories including state indigenous forests, state plantation forests, farm forests, and forest and woodlands on local authority land, including dryland forests. Forests provide a wide range of economic, environmental and social goods and services such as raw materials for the wood based industries, employment, soil stabilization, carbon sinks and water catchments that protect the rate of flow and quality of water discharged by the rivers draining these catchments. The indigenous forests have endemic and threatened species. Dryland forests and farm trees provide important livelihood strategies for many of Kenya’s poor people including wood fuel, charcoal burning for income and use of wood products for building. It is estimated that in Kenya, forests provide wood and wood products to over 80 percent of all households.

16. **Forest land is becoming scant as population pressures mount.** The plantation forest estate was established to help create a viable, dynamic and diversified forest industry with attendant impacts on income and employment, while at the same time reducing dependence on indigenous forests for raw material supplies. Recognizing that indigenous forests play a critical role in Kenya’s society and culture, they were managed to conserve water supplies, to reduce soil erosion and (to a lesser extent) to produce timber raw material. However, weak capacity in forest institutions combined with political interference, inadequate business environment, tight budgetary allocations and corrupt practices have resulted in poor plantation management, abuse in the disposal of forest land and produce as well as preferential licensing which contributed to decline in supply of timber and other products. In addition, the steady growth of Kenya’s rural population continues to place ever greater strains on forest land, which is often considered the only remaining “land reserve” in the country.

17. **The Government is committed to halt the continuous degradation and depletion of forest resources.** With the experience of the past, the Government has acknowledged the need to introduce changes to the legal and policy frameworks which until recently have determined use and management of forest resources. As part of this reform process, the introduction of options to engage more actively with communities in forest management is expected to improve forest governance, but also to increase benefits from forests to the communities. Nevertheless, there is a need of ensuring that the

² This estimation does not include dryland forests in which individual trees are scattered over wide areas of grassland or farm forests in which small groups of trees are planted on farms and other cultivated lands. In 1995, the extent of savanna woodland was estimated at 61.4 percent of the land area in Kenya (Wass, 1995).
participation of communities in forest management is based on a set of well defined roles for all partners including the Government, communities and private sector.

18. **The forest sector is at a critical turning point in Kenya.** The 2005 Forest Act has the potential to unlock opportunities for forest resources to contribute to economic development and poverty alleviation. It embraces participatory forest management whereby community forest associations (CFAs) will be recognized as partners in management. It promotes private sector participation to enhance the competitiveness of the sector. The Act constitutes a new Kenya Forest Service and the dissolution of the Forest Department (FD). The main goals for the reform of the sector are to raise efficiency, ensure protection and sustainable forest use, and promote poverty reduction. Strengthening forest governance is critical for the success of these efforts. See Annex 2 for further details on sector context.

2. **Rationale for Bank Involvement**

19. **The proposed NRM operation supports the Bank’s Country Assistance Strategy (CAS) and more recently, the CAS Progress Report (March 2007).** In June 2004, the World Bank’s Board endorsed the current CAS for Kenya, a strategy of reengagement closely linked with the Government’s IP-ERS. The CAS Progress Report, which the Board is expected to consider in March 2007, continues the Bank Group’s strategic emphasis on growth and poverty reduction but gives enhanced attention to equity and governance. The proposed project, with its focus on enhancing the capacity of Kenyans to manage the natural resource base and resources available to poor and vulnerable communities, is consistent with the proposed CAS Progress Report. The Bank’s CAS proposes to help Kenya achieve its development objectives through four basic areas of support, reflecting the Bank Group’s comparative advantage in its partnership with the Government and other donors. These pillars are:

(a) strengthening public sector management and accountability, parastatal reform and privatization, and monitoring and evaluation (M&E) capacity;

(b) reducing the cost of doing business and improving the investment climate, including support for restructuring the financial sector, promoting private sector development, improving infrastructure, and reducing barriers to trade;

(c) reducing vulnerability and strengthening communities, including support for increased agricultural productivity and competitiveness, improved environmental management, strengthened local governments, and reducing poverty in the poorest rural areas and urban slums; and,

(d) investing in people, including support for the education and health sectors and the fight against HIV/AIDS.

20. **The recent record on governance and anticorruption is mixed.** Poor governance and endemic corruption have been major obstacles to poverty alleviation and development in Kenya in the 1980s and 1990s. However, since coming to power in 2003, the current Government has instituted a number of bold measures and initiatives in
fulfillment of its campaign pledge to put a halt to corruption. While it is difficult to assess and agree on the results that these measures have generated so far, empirical evidence indicates that corruption fell in 2003-04 but has stagnated since then. Against the high expectations of Kenyans, there is considerable room for these measures to produce tangible and measurable results that would greatly contribute to greater equity and poverty reduction for millions of poor and vulnerable Kenyans. Annex 1 of this report highlights Kenya’s efforts since 2003 to address this problem, including steps taken and setbacks experienced, and further actions that are planned by the Government.

21. **The World Bank’s strategy in Kenya seeks to assist the Government to accelerate generalized growth, and to assure that the growth is environmentally sustainable and inclusive of the poor.** In support of this effort, the Bank has in the past financed projects targeted toward localities or activities with differential impact on the poor, such as the Arid Lands Resource Management Project (ALRMP) Phases I and II, and the Decentralized Reproductive Health Project, Free Primary Education, the Small and Micro Enterprise program, and the Global Environment Fund (GEF) funded Western Kenya Integrated Ecosystem Management Project (WIKIEMP). The proposed NRM Project is another such project, and is closely linked to the Western Kenya Community Driven Development and Flood Mitigation (WKCDD/FM) Project.

22. **The NRM Project will assist the Government better to manage water resources and forests.** This will be done through strengthening of the information base, enhancing the legal and regulatory framework, financing investments in capital works, and, most importantly, engaging communities who must be partners in co-management of water and forest resources. The project will be focus on two critical watersheds of the Tana and the Nzoia Rivers (see map). Project investments will concentrate on the upper catchment of the Tana River\(^3\) and two key watersheds of the Nzoia river catchment, the Kakamega Forest and Mt. Elgon. The project will work in close collaboration with the proposed WKCDD/FM Project in the Nzoia river catchment, and will strengthen implementation capacity of the WRMA and forest institutions nationwide.

3. **Higher level objectives to which the project contributes**

23. **The Government has recognized the importance of mainstreaming environment into the economic growth agenda.** In line with the Government’s IP-ERS and World Bank CAS goals, the NRM Project would assist the Government to mainstream environment and NRM issues in the economic growth, development and poverty reduction processes by strengthening public sector governance and management in the management of Kenya’s forest resource through transformation of the FD to a semi-autonomous institution, and by deepening WSR through assisting in the implementation of existing laws and regulations related to WRM. Since there is a strong link between natural resources and poverty in Kenya, the project will contribute to broad-based poverty alleviation through support to community-based sustainable use and

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\(^3\) The Upper Tana catchment project area will include the area west of the major hydroelectric dams, including the districts of Kirinyaga, Muranga, Maragwa, Thika, and Nyeri.
management of environment and natural resources. This will mainly be done through support to community participation in forest resource utilization and conservation as described in the Forest Act 2005, and the empowerment of WRUAs in catchment management as described in the Water Act 2002.

B. PROJECT DESCRIPTION

1. Lending instrument

24. **Through a Specific Investment Loan, the Bank will support the implementation of new legal and institutional frameworks for water resource management and forestry.** The use of a specific investment loan which combines two of Kenya’s most important sectors for sustainable growth will create the synergy needed to improve the management and protection regime in some of Kenya’s most vulnerable watersheds.

2. Project development objective and key indicators

25. **The objective of the project is to enhance the institutional capacity to manage water and forest resources in a sustainable and participatory way.** This will be measured by three indicators which will assess the implementing entities success in achieving their institutional mandates: (a) sediment load in rivers in project intervention areas; (b) forest areas under approved forest management plans; and (c) number of community level interventions rated satisfactory or higher by the participants. Overall, the project will help to reduce the incidence and severity of water shocks in river catchments, and improve the livelihoods of communities participating in the co-management of water and forests.

3. Project components

26. The proposed NRM Project has four components: Water Resource Management and Irrigation, Management of Forest Resources, Livelihood Investments in the Upper Tana Catchment, and Management and Monitoring and Evaluation. The first two components support the legal and institutional reforms contained in recent legislation, as well as investments in catchment areas. The third component provides assistance to communities participating in management of the resources. The fourth provides managerial oversight and monitoring and evaluation for the project.

Component One: Water Resource Management and Irrigation (US$44.5 million, including US$38.1 million International Development Association [IDA])

27. **Subcomponent 1.1 - Strengthening the Capacity of the WRMA, with Direct Investments in the Upper Tana Catchment (US$15.5 million, including US$14.3 million IDA).** This subcomponent will strengthen the Government’s capacity to implement the existing laws, policies, and regulations related to WRM, following promulgation of the Water Act 2002.
28. The project will strengthen the WRMA nationally, in its seven Regional Offices, and in its twenty five sub-regional offices. The support will enable the WRMA, established in July 2005, to equip its offices and undertake its core business, river and groundwater monitoring, which in turn will enable it to administer and control the use of water by users and begin to reverse the widespread degradation of catchments. Funds for consultation and institutional strengthening are also provided, specifically to ensure the effective functioning of the Authority. In addition, an economic study will be supported to assist in identifying key strategic investments in water resources infrastructure required to underpin the growth of Kenya’s economy which will include the identification of water related vulnerability in sectors such as energy, urban and industrial development, agriculture, and fisheries. In particular the question of increasing water storage in strategic locations to reduce the vulnerability of the economy will be reviewed in addition to protecting the country’s water towers from the impacts of increasing catchment degradation.

29. The project will invest in scaling up activities to achieve more effective catchment management. The degradation of catchments and watersheds is a common phenomenon throughout Kenya. Degradation has been caused by encroachment into forests, cultivation on steep hillsides and river banks and the use of poor farming methods as people look for arable land for food production to feed the increasing population. Because of the widespread nature of the problem it is necessary to target initial strategic catchments in the upper Tana, through WRUAs, both to reduce the consequences of degradation and to use these activities as pilots to determine the most effective methodologies for achieving integrated sustainable catchment management. A similar approach is planned in the related WKCDD/FM Project for the conservation of the upper Nzoia catchment. The primary institutional mechanism for these activities will be the WRMA, the Tana River Regional Office, and its sub-regional offices. At the local level, implementation will be undertaken by the WRUAs, in accordance with the Water Act 2002.

30. The Tana catchment is of great strategic importance to the economy of Kenya. It provides Nairobi’s water which is the heart of the country’s economy and it provides hydro-power for Kenya Electricity Generating Company (KenGen) without which the economy could not be sustained. The Seven Forks hydro-power stations situated in the lower Tana have an installed capacity of 543.2 MW, which is nearly 58% of the total national electric power generation. This target area provides 90 percent of Nairobi water supply and 65 percent of all water which flows into the Tana River. The catchment area the Upper Tana River basin, particularly the Aberdares, have undergone intensive environmental degradation resulting in the siltation of rivers, reservoirs and irrigation canals, which in turn exacerbates flooding in the lower parts of the basin. Thus, proper management and conservation of the catchment areas is a key strategic requirement for Kenya’s economic growth.

31. In order to reverse the trend, an integrated approach to NRM is necessary. One of the major components of catchment management is to promote sustainable agriculture and land management practices. Catchment management programs need to integrate conservation activities with the requirements of local farmers and communities
to undertake sustainable economic activity. In order for farmers of all types (subsistence, small-scale commercial and large-scale commercial) to be active participants in conservation activities they need to have clear incentives where conservation and improved production coincide.

32. **The focus will be on integrative management of catchments of the Upper Tana River west of the hydroelectric dams.** Activities will include strengthening of the information base, improving decision making to include water users, training and sensitization of farmers to improve land-use and water conservation methods. The WRMA will target micro-catchment ‘hotspots’ through the above mentioned process, and plan to invest about US$1 million per year in catchment protection activities such as erosion control and terracing, changing land use patterns on steep slopes and degraded areas, improvement of on-farm agronomic practices and improved water management including small to medium water storage infrastructure and the rehabilitation of existing structures. The formation of WRUAs and the criteria for approval of catchment management plans are elaborated in the Water Act 2002. The regional WRMA will work closely with the Kenya Forest Service (KFS) to ensure synergies with their work in the gazetted forest and with neighboring communities.

33. **Sustainable catchment management led by communities will allow the poorest members of the communities to realize benefits from their efforts in conserving these catchments.** Exposure and dialogue with communities to arrive at appropriate community interventions will depend on encouraging peer to peer technology transfer from experienced groups who have been exposed to technical training to be provided under the project. Technical support to communities for catchment management will be coordinated and supervised by the WRMA with technical support from relevant Government agencies and non-government entities. These support teams will work with communities in individual micro-catchments to design and implement micro-catchment management plans.

34. **Subcomponent 1.2 – Consolidation of Irrigation Reforms and Investments (US$29.0 million, including US$23.8 million IDA).** The objective of this component is to contribute to sustainable irrigation development through the consolidation of reforms of NIB and development of irrigation in the downstream part of Nzoia basin. Achieving these objectives will involve further restructuring of the NIB along the lines that have been identified and in accordance with the Irrigation Policy, and strengthening the role of farmers in scheme management. Upon adoption of the Irrigation Policy, the project will also support preparation of an Irrigation Strategy and Business Plan, and an Irrigation Act.

35. **Once the reforms are agreed and approved, the project will support the necessary institutional realignment of the key institutions in the sector.** This could include transforming NIB into an irrigation services provider. It is expected that the role of farmer organizations in the management of irrigation in Kenya will be enhanced, as will the role of private sector. Resources have been allocated to support the transformation of both public sector as well as farmers’ institutions and for capacity strengthening. In support of this, the project will finance targeted investments in the modernization of public irrigation schemes.
36. **Investments in hardware under the project will be conditioned by progress made in terms of agreed institutional reforms.** These will include: (a) finalization of the policy and institutional framework; (b) completion of a capacity assessment and preparation of a training plan and operations manual of NIB; and (c) Irrigation Management Transfer of selected irrigation infrastructure and successful transformation of NIB into an irrigation services provider. The timetable for commencement of civil works has been harmonized with the reform program.

37. **Investments in irrigation infrastructure will target five existing schemes.** Achievement of the institutional reform agenda would trigger investments in irrigation infrastructure. Five schemes have been proposed for rehabilitation. Mwea, the largest public irrigation scheme in Kenya, will benefit from scheme improvement to accommodate the unplanned 4,000 ha top-end expansion of the scheme shortly after the events of 1998 (i.e., illegal abstraction by top-end farmers), as a result of which tail-end areas now suffer from water shortages. Options are currently being identified to improve overall scheme management and achieve equitable allocation of water. This could include development of water storage facilities that will stabilize irrigation water supply at the tail ends of Wamumu section, reducing conflicts and sustaining production during critical water scarce periods. Rehabilitation of Mwea will also be conditioned by agreement with Mwea Rice Growers Multipurpose Society on rules, roles, responsibilities and credible enforcement mechanisms to improve governance of the scheme. Other schemes include Ahero, Bunyala, West Kano and Perkerra. In addition, one new scheme (Bunyalal/Budalangi, 3,500 ha) will be developed.

38. **The capacity of WRUAs will be strengthened and feasibility assessments carried out for the proposed schemes.** In advance of the physical works, and in parallel to the institutional reform agenda identified above, the project will commence a program of strengthening the capacities of WRUAs and begin rapid feasibility assessments of the proposed schemes. This work has begun under the project preparation facility.

**Component Two: Management of Forest Resources (US$22.4 million, including US$21.1 million IDA).**

39. **With the recent passage of the Forest Act, Kenya is advocating a major shift away from exclusive Government conservation and management of forest resources.** The Act emphasizes joint management by local communities and private sector for the protection and sustainable use of forests, requiring improved forest governance and participation and investment by stakeholders. This is consistent with the wider and ongoing reforms in related sectors such as water resources. To operationalize the Act, the Ministry of Environment and Natural Resources (MENR) and the newly established KFS will require assistance in creating a transparent and accountable regulatory and institutional framework and targeted support to implement the Act. Investments are expected to complement activities already undertaken in the sector and critical watersheds both by the Bank, the United Nations Food and Agriculture Organization of (FAO), the African Development Bank (AfDB), the United States Agency for International Development (USAID) and the Government of Finland. Project activities in the forest sector are divided into three subcomponents.
40. **Subcomponent 2.1 – Forest Sector Institutional Reforms. (US$10.1 million, including US$9.4 million IDA)**: Activities planned under this sub-component will assist the Government with the reforms necessary to transform the FD to a semi-autonomous KFS at national level. Inputs will be targeted at activities enabling institutional arrangements to enhance forest governance and improve revenue capture not supported in the Government budget. The assistance will support formulation and implementation of a strategic plan for KFS for enabling socially and environmentally sound implementation of the Act and improving revenue capture while increasing transparency, accountability and integrity. Emphasis will be given to improving the information base for improved development and management of forest plantations and better protection and management of indigenous forests. To address the lack of reliable data on forest resources, it is envisaged that the project will conduct a phased Forest Resources Assessment (FRA) of all forest resources. This will include a rapid assessment of forests and a more detailed inventory of plantations, indigenous forests and farm forests. Necessary investments in training and sensitization, equipment and other infrastructure will be made at different levels with emphasis on the district level to facilitate technical and cultural change required for an effective and accountable KFS. In addition, the project will support the enhancement of personnel capacity in the forest sector through improving forestry education and training. Resources will also be used for technical assistance and training to offer options for private sector employment and entrepreneurship.

41. **Subcomponent 2.2 - Enabling Community Participation and Benefit Sharing (US$9.6 million, including cost US$9.3 million IDA)**: While the new Forest Act is innovative with respect to the promotion of stakeholder participation, it does not clearly articulate rights and responsibilities of concerned parties, process for developing and approving management plans, or benefit sharing arrangements. The subsidiary legislation of the Forests Act will be critical in guiding decision-making, management responsibilities and benefit-sharing. Assistance will be provided to identify and prioritize an array of partnership models to implement the legislative framework and improve benefit sharing. While not excluding upfront other areas, during project preparation it was agreed to initially focus on Kakamega, Mt. Elgon, the Aberdares and Upper Tana. Bank financing of this subcomponent will emphasize sustainable and participatory forest management.

42. **A framework to mitigate conflicts over land, customary rights and rights of indigenous people will be implemented.** Encroachment of certain forest areas and the process for reclaiming these areas has aggravated the already tense relationship between encroachers and the Government, and made enforcement challenging. To address this situation, financing will be provided to formulate and implement a coherent and transparent framework to mitigate current and future conflicts over land, customary rights and rights of indigenous people consistent with existing Kenyan laws and the new Land Policy now under consultation. In addition the project will provide financial resources for compensation and/or resettlement, conflict mitigation approaches and assisting such households with alternative livelihoods.
43. **Subcomponent 2.3 Community and Private Sector Investment in Commercial Forestry (US$2.7 million, including US$2.4 million IDA).** The Forest Act aims to revitalize Kenya's forest industries and ensure closer integration between forest products manufacturing, harvesting and forest management objectives as well as to generate increased rural incomes. Assistance will be provided to strengthen institutional support services for the creation of an enabling environment for community and private sector involvement in development and management of production forests. This will be achieved by supporting the establishment and operationalization of a KFS Information Center. Funding will be provided to ensure transparent systems for allocation of concessions, valuation and tendering are in place. In addition, Bank financing will assist developing capacity in KFS to motivate and manage private investment in sustainable forest management.

**Component Three: Livelihood Investments in the Upper Tana Catchment (US$6.2 million, including US$4.5 million IDA).**

44. **Investments in livelihood enhancing community projects.** As the roles and opportunities for communities in implementation of components one and two above are identified, a third, more demand driven window of funding for livelihood investments in the Upper Tana Catchment will be offered. Using a Community Driven Development (CDD) approach, proposals will be sought from communities in the treatment catchments and forest perimeters to invest in livelihood enhancing microprojects which support the natural resource base. For example, opportunities to establish afforestation schemes in the watersheds, development of private sector/community partnerships for timber, fuelwood and pulp production, production and sale of seedlings, introduction of productivity-enhancing techniques of agro-forestry or conservation farming, beekeeping, and other investments in farm agriculture development will be considered. The approach will bring different actors from different sectors under a steering committee to vet and prioritize proposals. One million dollars per year would be available for community microprojects, with additional funds for capacity building and training. A secretariat for the component will be established in the WRMA offices in Embu to manage the component. Once proposals are selected, targeted engagement with communities, employing capacity building techniques and technical training will be used to support the communities in implementation of their microprojects. Arrangements would maximize synergies for capacity building, building on existing Community Based Organizations (CBOs) to support community microprojects. This would provide an efficient, multisectoral delivery mechanism for community based interventions in the catchment.

45. **Indigenous peoples (IP) options assessments and Resettlement Action Plan (RAP) development and implementation will help in preparing a National Resettlement Policy.** While a progressive Land Policy has been developed and was available in draft format at appraisal, it has not been able to address the issue of resettlement fully, mainly due to the number of different stakeholders who need to be consulted. At the same time the project will support the Government implementing a set of transparent safeguard frameworks (IP and resettlement) developed to mitigate current and future conflicts over land, customary rights and rights of indigenous people. Financing will be provided to carry out IP options assessments and RAP development
and implementation. In addition and to ensure that these processes are mainstreamed into Government, investments will be made to consolidate them under a single policy framework through the preparation of a National Resettlement Policy.

Component Four: Management and Monitoring and Evaluation (US$4.9 million, of which US$4.8 million IDA).

46. **An integrated approach to management and measuring results.** This component will provide the resources necessary for effective management and monitoring of the project. Management of the tasks undertaken by the two line ministries, Ministry of Water and Irrigation (MoWI) and MENR, and their respective organizations, will be mainstreamed. The ministries will, however, be strengthened in the financial management and procurement functions in order to manage the requirements of IDA credit management, and a Project Coordination Office (PCO) will be established in the MoWI to provide a place for component coordinators, M&E and fiduciary staff to do their work. Funds will also be made available for the development and implementation of a communications strategy. In addition, an overarching framework for M&E will be necessary. To accomplish the management of M&E, each ministry will have a M&E expert assigned. Additional resources will be made from other sustainable development projects in Kenya, namely the WKCDPM Project, Kenya Agricultural Productivity Program (KAPP), Kenya Agricultural Productivity and Sustainable Land Management (KAPSLM) Project and WKIEMP, to establish an overarching Management Information System (MIS) and impact evaluation system. The projects will have, to the extent possible, a merged set of indicators for M&E, capturing both the changing status of the natural resources (water, forests and biodiversity) and the welfare of participating communities.

4. Lessons learned and reflected in the project design

47. **The project’s design is built on a long term vision of water resource management in Kenya.** Project activities are designed to address the need to improve management of water resources with a long-term vision to sustain the economy and decrease poverty levels. The World Bank undertook a detailed assessment of the water resources situation in Kenya which was published in May 2004 (Towards a Water Secure Kenya: Water Resources Sector Memorandum). The Memorandum clearly indicated the linkages between the management and development of water resources and the performance of the economy, including the incidence of poverty. The consequences of poor management of resources and long term under-investment in water related infrastructure has resulted in the country being critically vulnerable to water shocks of drought and flood. Recurrent droughts and floods have consequently directly resulted in identifiable impacts on the national economy - the largely unrecorded impacts on the poorest sections of the Kenyan population have been devastating and have contributed to sustained and deepening poverty in many regions in the country.

48. **Using the principle of subsidiarity has proven to achieve lasting results and ownership.** With regard to the micro-catchment approach, project design lessons from other successful Bank projects including the China Loess Plateau Watershed
Rehabilitation Project (Cr. 2616-CN) and the Brazil NRM and Poverty Reduction Project (Ln. 4660-BR), indicate that while river basins/watersheds may be selected as entry points, the design should use micro-catchments as the primary operational unit. Decentralizing to this level can lead to optimal community involvement, showing the interdependence of all farm units and contributing to an approach that treats all stakeholders/producers as complementary elements of the larger system. Thus the NRM Project activities will be focused at micro catchment levels.

49. **The design of the project is based on lessons drawn from evaluations of programs and projects in the irrigation sub-sector.** The conditions of success identified by these evaluations include the following:

(a) *an integrated approach* that contributes to increased productivity and incomes in irrigation schemes and surrounding watersheds, safeguards natural resources in watersheds, improves the provision of agricultural extension and inputs, and actively supports emergence of a private sector;

(b) *an unambiguous institutional framework* with clear responsibilities, accountability and transparency in accordance with policies such as decentralization and legislation (land, water and forestry codes) for farmers and their associations; communes, and districts; decentralized Government services; and agencies and private operators;

(c) an approach that emphasizes *capacity strengthening* of all stakeholders to help them play their respective roles and responsibilities;

(d) *a participatory approach, coordinated decisions and respect for commitments*, including stakeholders with established and acknowledged rights and obligations, adequate resources and capacities, who fully participate in decision-making; incentives and mechanisms in place to encourage appropriate behavior and respect for commitments made; and interfaces for cooperation and dialogue in accordance with decentralization policies; and

(e) *irrigation governance reform* based on accountability, transparency and full farmer responsibility of O&M, including cost sharing of investment costs and full cost recovery of running costs.

50. **Targeted analytical work combined with recent experiences in other countries provided guidance in activity design.** The project components and design were informed by findings from the Strategic Environmental Assessment (SEA) of the Implementation of the Kenya Forest Act of 2005 and Implementation Completion Report (ICR) for the last forest sector project in Kenya Forest Development Project (Cr. 2198-KE, Report No. 18805) In addition, the recent experience of forest sector reform in Tanzania supported through a World Bank Credit 3604-TZ, as well as other countries has offered a number of lessons, which are relevant for Kenya as well.

51. **Lessons from the Strategic Environmental Assessment.** The SEA identified three priority areas for successful implementation of the new Forest Act: (a) strategic
management and planning of KFS; (b) enabling community participation and benefit sharing, and (c) enabling investment in the forest sector. Strategic planning and management of the KFS embraces a number of subsidiary themes including: enabling proper governance, transparency and accountability of the service, ensuring proper strategic planning of the forest resources of Kenya; and achieving effective financial management and regulation of the forest sector. Community participation and benefit sharing combines numerous inter-linked themes, including: enabling equitable and fair partnerships and equitable sharing of costs and benefits among various stakeholders, ensuring that all forest communities, and communities adjacent to forest areas are properly involved in decision-making and implementation activities, and protecting indigenous and customary access and use of forest resources. Enhancing investment in the forest sector is about ensuring the right mix of public and private investment in order to ensure the sustainable management of the forest sector which contributes to the national goal of poverty reduction. This requires, amongst other things, improving transparency and accountability of investment activities.

52. **Lessons from the Forestry ICR.** The ICR for the last forestry project in Kenya (Fourth Forestry Development Project, Cr. 2198-KE, Report No. 18805) stated that Bank operations in Kenya must more effectively address issues with regard to governance, institutional sustainability, and expenditure management. It noted that there were problems of revenue collection and that it was important to have the Government take on the central issue of Governance. Taking this into account, the forest component of the project builds on the recently passed Forest Act, which is an indication of the Government’s first step to commit to the process of reforming the sector. It focuses on priority areas identified by the SEA and emphasizes transparency, accountability, improved revenue generation from the sector and capacity building of both the Government and communities to seize the potential of the Forest Act and translate it into practice.

53. **Lessons from Tanzania.** Experience with forest sector reform in Tanzania has shown that assistance is most effective when targeted to areas with strong Government ownership and coordinated support of development partners. While delays in project implementation of the Tanzania Forest Conservation and Management Project can in part be attributed to a lack of leadership from the side of the line ministry and Forest and Beekeeping Division, design of the forest component of the NRM Project has been led by the current FD working closely together with Government’s Forest Reform Committee and Secretariat (in charge of preparing the implementation of the new Forest Act and the transition from FD to KFS). With the objective of avoiding overlapping activities and achieving value for input, the project design also takes into account that forest sector projects that address a small number of clearly identified, understandable priority objectives have a greater probability of success than do projects attempting to address all sector issues.

5. **Alternatives considered and reasons for rejection**

54. **Stand alone projects.** A stand alone project on forestry or WRM was considered and rejected because both the water sector and forest sector reforms promote
adoption of new biophysical and institutional approaches to water and forest resource management respectively. Water sector reforms support an integrated WRM framework for addressing multiple water demands. It emphasizes catchment management which requires a multisectoral approach and has established a WRMA to implement the sector reforms. Similarly, the forest sector reforms reflect the recognition of the role of forests in multiple sectors. As part of the forest sector reform, forest management will adopt principles of ecosystem management and where relevant, enhance the role of forests in catchment management. These new approaches in the water and forest sector are partly motivated by improved understanding of the role of forests in the management of water resources in catchments, such as reducing the impact of annual flooding events and retarding soil erosion, hence reducing sediment loads in streams and rivers.

55. **Advantages of the catchment management approach.** Working at catchment level will enhance the inter-agency collaboration for holistic approaches to sustainable land management (SLM). Interaction through this project between WRMA and KFS with regards to catchment management (including forest management) in the sedimentation hotspot catchments will facilitate coordination among these two agencies and enhance the contribution of this project to the overall use of the landscape for productive purposes. Furthermore, as the Tana Catchment is of great strategic importance as it provides water to Nairobi and hydro-power for one of the larger power generation companies in Kenya, linking water resource and forest resource management activities in one project could create opportunities for payments for environmental services (PES) schemes. Another important reason for having forestry and WRM activities in the same project, particularly one following CDD principles, is that at community level the management and use of resources such as soil, water and forests are not seen as separate issues and activities by farmers and integrating them reinforces sound land use management practices.

56. **One large project combining WKCD/FM and NRM.** Combining the WKCD/FM intervention and the NRM Project was considered and rejected due to the increased the complexity this would bring, and the increased number of technical ministries involved where coordination and a culture of consultation is still lacking. The NRM Project was therefore left to address long term institutional reforms issues in FD and the WRMA while the WKCD/FM Project focuses on a decentralized response to community poverty related needs as well as design mechanisms for addressing flood issues. It was therefore decided that the projects be prepared as jointly and closely as possible to avoid overlap and derive the synergy from such collaboration, technically and administratively.

**C. IMPLEMENTATION**

1. **Partnership arrangements**

57. **Strong development partnerships exist in both the forestry and water sectors.** This project has been prepared in close consultation with other development partners and key stakeholders in both sectors. As part of the SEA, consultations were held with other donors, private sector and community. Development partners have also
been consulted during the donor coordination group meeting on the forest sub-sector, which includes AfDB, USAID, Embassy of Finland, FAO, Japan International Cooperation Agency (JICA) and United Nations Development Programme (UNDP). In the water sector, collaboration with Swedish International Development Co-operation Agency (Sida) and Danish International Development Assistance (DANIDA) has been ongoing for a number of years. Sida/DANIDA have provided strong support to the reform process which has led to new policy, legislation and institutional arrangements. Recently Sida/DANIDA and Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ) have provided material and technical support to the establishment of the WRMA at national level and in the establishment of the river basin offices of the Authority. It was agreed in 2004 that it would be appropriate for Sida and other bilateral donors such as GTZ to use grant finance to assist the establishment and capacity building of the Authority and for the Bank to provide credit finance for the Authority to be able to implement the physical aspects of its mandate to manage and protect the country’s water resources. The timing was also coordinated so that the basin offices of the Authority (particularly in the Tana and Lake Victoria North catchments) would be up to speed by the time the Bank project begins implementation.

2. Institutional and implementation arrangements

58. **The project will be implemented through the MoWI and the MENR.** A national Project Steering Committee (PSC) consisting of Permanent Secretaries of MoWI, MENR, Office of the President (OP) Special Programmes, Ministry of Agriculture, Lands and any other relevant institutions to be determined would meet twice a year to discuss project work program, progress and potential areas of synergy with other programs and projects. Full time component coordinators will be appointed by the two implementing ministries. WRMA and NIB will appoint full time subcomponent leaders. A PCO will be established in MoWI to facilitate staff from all implementing agencies to prepare the necessary fiduciary and monitoring reports, and for overall project coordination. See Annex 7 for detailed implementation arrangements, including an organization chart.

59. **The MoWI is the lead agency in the water sector and is responsible for sector strategy, policy and legislation.** The Ministry has been substantially down-sized through the reform process from an institution with several thousand employees to ultimately under 200 once the reform process is complete. The four main subsidiary institutions which fall under the authority of the MoWI and have responsibility for implementing water related activities are the newly established WRMA, the National Water Conservation and Pipeline Corporation (NWCPC), the Water Services Boards and the NIB.

60. **The WRMA will play a key role in the implementation of the project.** The authority is the lead agency in WRM and its overall development objective is to ensure a rational and effective framework to meet the water needs of national economic development, poverty alleviation, environmental protection and social well being of the people. WRMA is responsible for the regulation of the use of water resources with a view to ensuring the sustainable management of the nation’s water resources. The
mandate of WRMA includes responsibility for the conservation of water resources but does not however directly extend to responsibility for the construction implementation of water storage facilities such as dams. The WRMA at national level will manage the institutional strengthening subcomponent. The Tana River Regional Office will manage catchment management and livelihoods investments in the upper Tana catchment, with strong partnerships with the relevant line ministries and civil society organizations in the catchment formed through the establishment of a Regional Project Implementation Committee. The mandate of WRMA includes facilitating the establishment of WRUAs and assisting them in their development and operation. The establishment of the Catchment Area Advisory Committees (CAACs) and support to the operations of numerous WRUAs encompasses an important part of its present work load.

61. **MoWI headquarters and the NIB will manage the Irrigation Reform and Investment subcomponent.** The NIB is a semi-autonomous body, established under the Irrigation Act of 1966, and is responsible for planning, construction, settling and managing national irrigation schemes. Once the reforms are agreed and approved, the project will support the necessary institutional realignment of the key institutions in the sector. It is expected that the role of farmer organizations in the management of irrigation in Kenya will be enhanced, as will be the role of the private sector, and that NIB will progressively be transformed into an irrigation service provider.

62. **The MENR and the KFS will manage the Forest Resources Component.** KFS will designate a full time coordinator for the overall implementation oversight, s/he will be supported by financial management and procurement staff to guarantee that the activities are being implemented in accordance to agreed performance standards. In addition, FD/KFS will provide technical leadership through the appointment of component leaders, for the three sub-components. In the areas of interventions the FD/KFS headquarters team will work closely with forest staff at conservancy level. It is at this level where the different components of the project will be closely coordinated between KFS staff and WRMA/NIB counterparts. Taking into account the shift in the new Forest Act communities, civil society and private sector will become much closer involved in the management of Kenya’s forest resources. By forming bilateral and/or tripartite partnerships, transparency and accountability is expected to be improved in the forest sector. Planning and carrying out of activities at community level will be facilitated through CFAs, which are likely members in WRUAs in catchment areas. Interaction between water and forest institutions as well as user associations with regards to catchment management (including forest management) in the sedimentation hotspot catchments will facilitate coordination among these two sectors and enhance the contribution of this project to the overall use of the landscape for productive purposes.

63. **Livelihood investments will be undertaken in the Upper Tana Catchment.** The WRMA will coordinate the component which will be managed by a Secretariat seated in the WRMA offices in Embu. A project implementation committee consisting of water, forestry, environment, agriculture and other key ministry and civil society organizations involved in NRM will vet community microprojects for approval. Funding decisions and amounts disbursed will be publicly displayed and available in the project area, at regional and community levels. At local level, the implementation will be carried
out using district based delivery mechanisms. Technical assistance will be provided through WRMA and FD/KFS staff on the ground to ensure a coordinated approach towards the overall project objective as well as mid and long term sustainability of the microprojects.

64. **Microcatchments within the project areas would be selected based on predefined criteria.** These criteria include, amongst others: (a) community readiness (pre-existing and functional river basin committees); (b) significance of the micro-catchments’ contribution to downstream sedimentation; (c) environmentally sensitive or critical areas, particularly those which are highly vulnerable to degradation, presence of springs or other sources of surface or ground water critical to the maintenance of ecosystem services; (d) concentration of small producers; forest resources; (e) existing level of community organization; and (f) land use and soil management aspects. Local capacity would be enhanced through training and community field visits so that communities can implement their micro-catchment management activities. Funds would flow through WRMA Tana Catchment office for onward disbursement to the communities.

65. **Robust financial management arrangements will be put in place ahead of project effectiveness as part of country systems building.** These include: (a) deployment of financial management staff at the MoWI and MENR, WRMA, FD/KFS and NIB; (b) development and dissemination of operations manuals and simplified guidelines for financial accountability and reporting at all levels, taking account of simplified financial management arrangements for community based components as provided by IDA CDD guidelines. In addition, orientation and capacity development arrangements for existing MoWI and MENR financial management staff will be initiated. Details of these arrangements can be found in Annex 8, and are summarized in Para. 72.

66. **An effective institutional risk management functions will be established as part of project and country systems building.** The institutional arrangements of the project agreed with Government to establish an effective institutional risk management function, are included in the Government’s Letter on Transparency and Accountability (Annex 9). These include the following:

(a) **Fiduciary Oversight Committees** – two financial management sub-committees of the Project Steering Committee, with clear mandates, composition and functions:

An Audit Committee which has in its mandate, responsibility for: (i) development and operationalisation of a Risk Management Policy Framework; (ii) monitoring and ensuring timely effectiveness of audit and operational review recommendations of various fiduciary oversight responsibilities including, internal and external auditors, Government project monitoring agencies and periodic review and supervision missions; (iii) overseeing the effectiveness of accounting and internal control standards, policies and practices; (iv) ensuring compliance with legal covenants and terms of funding agreements; (v) overseeing the effectiveness of the internal audit function; (vi) monitoring the performance of key internal audit staff against approved performance contracts; and (vii) packaging and disclosing relevant findings, on a quarterly basis, in publicly accessible ways that facilitate timely and effective monitoring and accountability at the community, district and national levels.
A Finance Committee that will have as its mandate responsibility for: (i) comprehensive review of quarterly Financial Monitoring Reports (FMR); (ii) approval of periodic operational budgets and monitoring financial performance; (iii) reviewing and approving annual financial statements; (iv) monitoring the performance of key financial management staff against approved performance contracts; and (v) packaging and disclosing relevant findings, on a quarterly basis, in publicly accessible ways that facilitate timely and effective monitoring and accountability at the community, district and national levels.

The committees will be staffed with appropriately experienced persons and would meet regularly, at least once each quarter.

(b) Internal Audit function – As per the new Government regulations, an independent and effective internal audit arrangement in both parent ministries will be established, responsible for oversight of the activities of the project’s accounting and internal control functions at both national and district levels. An independent institutional risk management review will also be conducted on an ongoing basis, monitoring compliance with laid down policies and procedures, and reviewing and recommending enhancement of accounting and internal controls. For enhanced effectiveness, it is proposed that this function be carried out by the Government Internal Auditor General, an independent unit under the Ministry of Finance, and adopting the risk-based approach that is currently being rolled out with the support of the IDA funded Institutional Reform and Capacity Building Project (IRCBP). External support will mainly be in: (i) the oversight of periodic risk assessment and audit planning processes; and (ii) operational quality assurance. The Internal Audit function will report directly to the Audit Committee, presenting findings and recommendations in implementation progress reports on, at least, a quarterly basis. The audit findings will be disclosed in publicly accessible ways that facilitate timely and effective monitoring and accountability at the community, district and national levels.

3. Monitoring and evaluation of outcomes/results

67. **Means and ends will be monitored and evaluated.** The strategy adopted for M&E system will be based on the Results Framework outlined in Annex 4, which includes results indicators at the Project Development Objective (PDO) level and at the intermediate project outcome level. M&E will entail tracking progress in implementation as well as demonstrating the impact of the project on the target groups and the natural resource base. Annex 4 also covers a monitoring plan for the key performance indicators identified in the results framework. Each indicator will be evaluated at appropriate times to determine the impact of project investments.

68. **The M&E process will be participatory involving the target communities and other stakeholders.** This will enhance community participation and ownership and promote transparency in the overall project management. Monitoring procedures will be devised, principally, as a management tool but will also record the progress of the project activities at the component level. Integration of M&E in project management will
facilitate project implementation and identification of areas that require a continuous and participatory adjustment process during the life of the project.

69. **Special attention will be paid to community participation and community ownership of the project.** This will be done through the formation of a comprehensive public awareness and communication program that will ensure that information reaches all eligible participants, to enhance understanding of the criteria for participation. The project will equally support community groups through provision of technical support on NRM and institutionalization of participatory M&E in their sub-projects.

70. **A centralized MIS for M&E.** The project will take advantage of the fact that Government is implementing alongside the NRM Project four other projects (WKCDDEM Project, WKIEMP, KAPP and KAPSLM), which have a number of synergies regarding the focus on sustainable NRM, CDD and community empowerment and poverty reduction through improvement in agricultural production in small holder systems. In order to harness the synergies in these projects and avoid duplication of activities, a central MIS will be established that will have technical oversight responsibility for M&E for these projects. The central MIS will be based at the Kenya Soil Survey (KSS) Geographical Information System (GIS) laboratory at the Kenya Agricultural Research Institute (KARI) in Nairobi. The details of the operational structure and capacity are elaborated in Annex 4.

4. **Sustainability**

71. **Sustainability of project activities will depend on a large extent on how many benefits accrue to the communities and other stakeholders.** This would give the stakeholders the incentive to maintain and further develop the investments made under the project. Given the project’s six year time horizon, it is expected that early lessons will inform the implementers of what works and does not, as to improve the project’s chances of success.
5. Critical risks and possible controversial aspects

<table>
<thead>
<tr>
<th>Potential risks</th>
<th>Risk mitigation and minimization measures</th>
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<tbody>
<tr>
<td>Failure of MoWI to de-link the WRMA and ensure its independence.</td>
<td>The new institution is a separate legal entity in terms of the Water Act 2002. The de-linking has occurred, however, human resources allocations are still pending. Continued vigilance as regards independence will be required.</td>
</tr>
<tr>
<td>Slow start for the new WRMA.</td>
<td>Resources have been allocated by the Government and Sida/DANIDA, and the team will work to make these effective and focused on the capacities needed in the two catchments for this project.</td>
</tr>
<tr>
<td>Excessive ambition and complexity.</td>
<td>Project will be rolled out in a phased manner, taking into account capacity and pace of reform.</td>
</tr>
<tr>
<td>Establishment of the Forest Service delayed.</td>
<td>Support reform process and roadmap for formation of KFS as soon as is practicable. Initiate investments needed for watershed management under current legal framework and institutional environment.</td>
</tr>
<tr>
<td>Risk that project resources may not be used for intended purposes owing to weak governance and corruption safeguards.</td>
<td>(a) Establishment of MoWI and MENR institutional risk management policy frameworks comprising ongoing risk identification and response initiatives by management. (b) Establishment of fiduciary oversight functions at the PSC level. (c) Deployment of a risk based internal audit function. (d) Quarterly financial and project progress reporting to stakeholders.</td>
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6. Loan/credit conditions and covenants

72. Conditions of effectiveness:

(a) the Recipient and the Project Implementing Entities have executed Subsidiary Agreements satisfactory to the Association;

(b) the Recipient has adopted a Project Implementation Plan in form and substance satisfactory to the Association;

(c) the Recipient has adopted an Institutional Risk Management Policy Framework satisfactory to the Association. The framework sets out, *inter alia*, the following elements of a sound risk management system:

   ii) establishment of a National Project Steering Committee, Audit Committee and Finance Committee with clear terms of reference consistent with the Recipient’s Government’s financial management guidelines;

   iii) updated financial management manuals setting out operational policies, procedures and fiduciary oversight methods;
iii) complaint handling mechanisms; and

iiiv) an effective system of internal and external audits; and

(d) the Recipient has appointed a Project Coordinator-Forest Resources, a Project Coordinator-Water Resources and for both the Ministry of Environment and Natural Resources and the Ministry of Water and Irrigation, each a Procurement Specialist and Financial Management Specialist, all with qualifications and terms of reference satisfactory to the Association.

73. **Dated Covenants:**

(a) conduct a rapid assessment of forest resources by July 31, 2009, or any other date agreed with the Association;

(b) carry out forest boundary demarcation in the Project intervention areas by July 31, 2009, or any other date agreed with the Association;

(c) develop guidelines for the establishment and operations of CFAs in accordance with the Recipient's legal and regulatory requirements by July 31, 2009, or any other date agreed with the Association;

(d) no later than July 31, 2009 or any other date agreed with the Association carry out a review of all relevant land related policies and laws and identify areas in need of harmonization with respect to resettlement as part of the development of a National Resettlement Policy;

(e) (i) finalize the irrigation policy and institutional framework by December 31, 2007; (ii) complete a capacity assessment of NIB, develop a training plan and an operational manual satisfactory to the Association by December 31, 2008; (iii) transfer the management of agreed irrigation infrastructure to the communities by December 31, 2009; and (iv) transform NIB into an irrigation service provider satisfactory to the Association by December 31, 2009; and

(f) no later than September 30, 2010, carry out jointly with the Association, a Mid-Term Review of the progress made in carrying out the Project.

74. **Other Covenants:**

(a) in order to ensure that the rights of indigenous peoples and the displaced persons from land are safeguarded and the environment protected, the Recipient shall, (a) implement the Project in accordance with the Environmental Management and Social Framework, Resettlement Policy Framework, Indigenous People's Policy Framework and the relevant national legal and policy requirements; and (b) submit to the Association for its prior approval all civil works contracts of above $150,000 and significant land use changes; and
(b) for each approved Subproject, the Recipient, through the relevant implementing Entities shall conclude a Subproject Agreement with the corresponding Subproject Beneficiary, whereby the Recipient shall agree to provide to the Subproject Beneficiary, a Subproject Grant from the proceeds of the Credit, on terms and conditions satisfactory to the Association.

75. **Project implementation benchmarks**: It is imperative that sufficient benchmarks be set to monitor implementation progress in order that problems can be identified and appropriate corrective measures taken. At the end of the first two years of the project, a detailed project review will be undertaken. Different benchmark activities will be assessed in different components.

(a) **WRM**: the key indicator that will be monitored in this component is the sediment load in the rivers within the project areas. The establishment of the river gauging stations is critical for the measurement of this indicator and the gauges should be in place within the first year of the project.

(b) **Management of forest resources**: the rapid assessment of the forest resources at a coarse resolution (including forest boundary demarcation) in project intervention areas should be completed by the end of the second year. Guidelines for establishing and operationalizing CFAs as well as guidelines for elaboration of Participatory Forest Management Plans (PFMPs) should be developed by the end of the second year. Establishment of a Forest Information Center and formulation of an Investment Plan should be completed by end of the second year. Reviewing of relevant land related policies and laws should be completed within eighteen months of effectiveness.

D. **APPRAISAL SUMMARY**

1. **Economic and financial analyses**

76. **A comprehensive economic and financial analysis of the project was undertaken.** The ex-ante economic and financial analysis of the NRM Project includes: (a) an overview of the economic importance of natural resources and agricultural production in Kenya; (b) a brief summary of general issues for economic analysis of NRM Project; (c) estimation of the potential Internal Rate of Return (IRR) and Net Present Value (NPV) for the proposed project investment; and (d) conclusions and recommendations (see Annex 11 for details).

77. **Benefits to the Tana and Nzoia Catchments.** The evaluation of SLM activities, reforestation, irrigation, and CDD micro-projects in the Tana and Nzoia Catchments demonstrates the potential economic and financial benefits of investments in improving the condition of the natural resource base in Kenya. Off-site effects would increase the economic value of some of these interventions substantially. As part of the SLM analysis, the private Cost-Benefit Analysis (CBA) estimates the financial returns of SLM interventions selected by the KARI from farmers’ perspective over a period of 50 years using a discount rate of 10 percent. Long-term data from KARI Kabete and Embu
Research Stations were used to compute NPV and IRR with and without SLM practices based on regression analyses. In addition, the social CBA includes the impacts of SLM on reduced sedimentation and carbon sequestration. With a 10 percent adoption rate the private IRR would be 27 percent (NPV of US$148 per ha) and the social IRR 36 percent (NPV of US$230 per ha). If all costs for promotion of on-farm activities and overhead costs of the respective component are added the IRR would be 30 percent (NPV of US$218 per ha). These figures indicate that the selected SLM practices would meet the necessary condition of financial profitability from the farmers' perspective. It is important to note that the adoption of these SLM practices would imply high initial investment costs which could constitute a barrier for adoption.

78. **Benefits from reforestation are substantial:** Another component of the NRM Project focuses on reforestation of about 2,500 ha with indigenous trees, which is expected to generate both on-site and off-site effects. The former would include benefits from fuelwood collection and beekeeping. The latter would capture benefits from carbon sequestration in addition. The private CBA indicates that without opportunity costs for land the IRR would be 16 percent (NPV of US$450 per ha) and with opportunity costs for land the IRR would be 11 percent (NPV of US$53 per ha). The social IRR would be 23 percent without opportunity costs for land and 14 percent with opportunity costs for land. The quantitative analysis does not make an attempt to include other off-site benefits, such as benefits originating from biodiversity, ecotourism, or regulation of water flows into the calculation of the economic summary measures.

79. **The economic IRR for the irrigation activities has been calculated between 11 and 17 percent depending on the scheme.** The NRM Project plans to support: (a) the rehabilitation of the Mwea Irrigation Scheme and other existing schemes; and (b) the development of irrigation through a gravity scheme in the lower Nzoia Catchment. The CBA of the first intervention is based on comparison of rice budgets estimated under current scheme management with rice budgets estimated for the scenario of improved scheme management. The economic IRR (which would include the investment costs, resettlement costs, O&M costs, and overhead costs) would be 17 percent. The financial IRR from the farmers’ perspective would be much higher (115 percent) since they would only cover tertiary rehabilitation and O&M costs. In the lower Nzoia Catchment, where the development of the gravity scheme is planned, the current agricultural land use in the intervention area is dominated by cassava, maize, and rice. It is assumed that the planned investment would shift production to rice mainly. Hence, the benefit would occur through production of a higher value crop and increased yields for the area already under rice production. The economic IRR (including investment costs, O&M costs, and overheads) would be 11 percent. The financial IRR from the farmers’ perspective would be higher (49 percent) since – as in the case of scheme rehabilitation – they would only cover tertiary rehabilitation and O&M costs.

80. **IRRs have been calculated for CDD micro-projects and show a range of 10 to 37 percent.** The NRM Project would support the preparation and implementation of CDD micro-projects focusing on livelihood-enhancing interventions which simultaneously improve the condition of the natural resource base. Based on discussions with communities in the targeted areas, Government officials and project team members
the following activities have been identified as likely CDD interventions and have been evaluated: (i) woodlots; (ii) medicinal plants (including processing); (iii) SLM practices; and, (iv) beekeeping. As an example, woodlots could be established for example with pine for sawtimber. For the scenario with fuelwood benefits, the financial IRR was estimated to be 19 percent (NPV of US$818 per ha). Without fuelwood benefits, the financial IRR is estimated to be 10 percent (NPV of US$13 per ha). Intercropping of Ocimum (medicinal plant), Mundia (medicinal plant) and Sasbania (agroforestry) would be expected to result in an IRR of 101 percent from the perspective of the participating community, i.e. when costs for non-production purposes and overheads are not included. If both costs are taken into account, the IRR would be 37 percent.

The results of the analysis have some important implications for the design and implementation of the NRM Project. The analysis: (a) informs the selection of profitable SLM practices; (b) identifies barriers for adoption of NRM interventions; (c) stresses the importance of an enabling policy and socio-economic environment for a sustainable watershed approach; (d) points out the importance of local enforcement of NRM-related rules and regulations; and (e) suggests the introduction of innovative approaches to promote NRM intervention at the watershed level (see Annex 11 for details).

2. Technical

Water Resource Management

Technical advisory services to communities key. Technical Assistance for siting and design of check dams, erosion control and rehabilitation structures will be critical for the sustainability of those structures. A common cause of failure of small dams is that it is assumed that they can be easily and simply built, especially with regards to siting, founding conditions and spillway design - these elements need care even for very small structures to maintain safety and to safeguard the investment. The development of and adherence to standard designs will go some way to addressing these concerns but cannot take the place of professional oversight.

Capacity building of local contractors key. Skill assessment and the provision of capacity building are expected to improve the level of service provision. It is unknown what skills levels exist at local level and the extent and experience of local construction contractors. The project provides an opportunity for the development of a viable local competitive small contractor sector. Training and some form of accreditation may be necessary to both support the growth of a small contractor sector and ensure quality.

A multisectoral approach is key to enhancing livelihoods. An integrated, multi-faceted, livelihoods based catchment management exercise will require the coordination of a variety of inputs from different sectors, including water, agricultural extension, soil conservation and others. Capacity building and cooperation will be necessary to ensure that the skills exist to support the project at the local level and to ensure that all involved share the same understanding of the objectives of the project.
Community participation is key. Community contributions will need to be carefully structured and implemented in close collaboration with community representatives to be regarded as fair and workable. This in particular in regard to the construction of small dams, localized erosion control, improved soil moisture conservation methodologies and the ceasing of damaging activities such as steep slope or stream bank cultivation. If activities and factors such as community contributions in cash or kind are not viewed as immediately improving incomes and conditions by local people, implementation will be difficult and the sustainability of the results questionable.

Forest Resource Management

The main challenges for the forest sector in Kenya are improving forest governance and increasing investment in the sector. Furthermore, in the 2005 Forest Act the Government has embraced the concept of participatory forest management. This is a radical departure from the previous practice where the Government assumed full management responsibilities in gazetted forest reserves. With the gazettment of the Forest Act the FD is to transform into the KFS and evolve from being an enforcement agency to one that facilitates sustainable forest resource use and greater investment. Knowledge regarding the resource base is outdated and capacity within the existing department needs to be strengthened to facilitate monitoring of the resource base, community management of forests, and increased private and community investments and partnerships in the forest sector. Moreover, there is need for systems that enable greater transparency and accountability to minimize illegal forest resource use, improve efficient and sustainable forest resource use, and enhance the economic contribution of the resource base to communities and the national economy.

3. Fiduciary

Financial management risk is rated substantial given that a number of proposed institutional arrangements, notably the deployment of finance staff, are not yet in place. Institutional arrangements are expected to comprise: (a) the establishment of acceptable financial management systems; and (b) safeguards that respond to country level fiduciary risks of weak governance and corruption, including: (i) establishment of MoWI and MENR institutional risk management frameworks comprising ongoing risk identification and response mechanisms; (ii) establishment of fiduciary oversight functions of the PSC; (iii) adoption of risk-based internal audit; and (iv) arrangements for public disclosure of information on financial accountability and project progress at various levels. Once satisfactorily implemented, financial management risk rating is expected to improve to modest ahead of project effectiveness. See Annex 8 for more details.

Procurement capacity assessment rates the procurement risk as “high”. An in-depth procurement capacity assessment rates the procurement risk “high”, due to the fact that none of the proposed Project Implementing Agencies has implemented a Bank-funded project or program in the last five years, and that the current institutional arrangements for procurement oversight are weak. The implementation of the NRM will be carried out by the newly established KFS in the MENR, MoWI, the WRMA, and NIB.
Capacity building for procurement staff in all the implementing entities, including the deployment of additional staff, and the finalization of procurement manuals and plans as part of the Project Implementation Plan (PIP) are conditions of effectiveness of the credit.

89. **Procurement thresholds and guidelines have been agreed.** Approximately US$8.9 million of goods, US$29.4 million of works, and US$8.9 million of consultancy services will be procured under the project. The proposed credit will also support community development micro-projects to be proposed by communities in the project area. Procurement of goods, civil works and employment of consultants will be subject to the provisions of the “World Bank Procurement and Consultants Guidelines for the selection and employment of Consultants (May 2004)”. Bank’s Standard Bidding Documents (SBD) and procedures will be used for all International Competitive Bidding (ICB). Bank’s Standard RFP and procedures will be used for selecting consultants on the basis of Quality and Cost Based Selection (QCBS). Works and goods valued at the equivalent of US$150,000 per contract will are subject to prior review of the Bank. Consultancy contracts for consulting firms costing the equivalent of US$100,000 or more and for individual consultants contracts estimated to cost the equivalent of US$50,000 or more will be subject to Bank’s prior review. All single-source contracts, regardless of their value, shall be cleared with the Bank. All other contracts will be subject to post-review and procurement audit by the Bank. All implementing agencies will maintain accurate records of all procurement activities and documents related to the Program. The procurement files will be maintained for review by the Bank’s supervision missions and independent auditing, including consolidating procurement activities into Quarterly and Annual Progress Reports. Bank supervision missions will be carried out every four months for the first year and every six months thereafter. Two ex-post procurement review audits will be done during the first year and from thereon at least once a year. See Annex 10 for more details.

90. **Enhanced supervision of the Kenya Portfolio.** A field-based governance adviser will be recruited for the Nairobi office to guide the Bank’s work on governance, and recruitment of additional field-based procurement and financial management specialists is in process. A cross-sectoral Operations Risk Mitigation Team will be established, to be chaired by the governance adviser, with a mandate to oversee risk-mitigation actions, advise task teams in the design and preparation of projects, share and disseminate information on risks, advise the country management team on strategy for mitigating governance risks, and interface with INT as necessary. In addition, the rolling intensive Country Program Review (CPR) process will sharpen its focus on corruption issues. Mechanisms to assess the impact of social accountability and other governance measures in Bank-supported operations (e.g., by over-sampling areas receiving support under the arid lands and education SWApS in the forthcoming governance surveys) will also be enhanced. In addition, the Bank is mainstreaming mechanisms to support impact assessments that would measure what changes in poverty can be attributed specifically to a given project. The NRM project will be part of this work.
4. Social

91. **The project is anticipated to have substantial positive social impacts, including increased empowerment and the improvement of livelihoods.** These will be achieved through systematic improvements and formalization of the terms of participation for communities and other stakeholders in the management of natural resources, including water, irrigation, and forest resources, through the project's support to key reforms in those sectors. In addition, project investments in catchment management and irrigation will bring direct benefits to farming families and other natural resource users, especially those depending on degraded resources. Investments in the Upper Tana Catchment will adopt a demand-driven CDD model that will promote community capacity, choices appropriate to local needs and micro-environments, and the transparent and accountable use of resources. The remaining parts of this section focus on the social dimension of the key sub-sectoral reforms supported by the project.

92. **The legislative framework for the water sector is in place.** The Water Act 2002 provides a legislative framework for improved management, conservation, use and control of water resources and for the acquisition and regulation of rights to use water. A central element of this reform is the scope which it provides for promoting systematizing, and formalizing community participation in WRM through the legal recognition of WRUAs.

93. **WRMA is currently defining the roles and functions of community WRUAs and other water sector institutions.** Once finalized these regulation, quality control, governance and funding mechanisms will define WRMA mode of interacting with stakeholders. Since detailed arrangements are not laid out in the overarching national policy or the legislation, it is vitally important that these are established in a way that is equitable and avoids conflicts of interest which could in the long term undermine the viability of the policy. The project will support the process of elaborating these policies at the national level, and in the context of its support for particular catchments.

94. **For the Tana Catchment the WRMA is already well advanced in engaging with stakeholders and water users at all levels, supporting the establishment and operation of WRUAs.** In addition to funding the direct catchment management activities of the WRUAs, the project will support planning processes which will encourage the realignment of the WRMA and the empowerment of communities in the Tana River Basin. This will include the elaboration and implementation of Catchment Management Strategies (CMSs) at WRMA level, and Sub Catchment Management Plans at the community level. Access of communities to local funding sources will be facilitated.

95. **In contrast, in the irrigation sector, participation and decision making mechanisms are not defined.** The existing legislation governing irrigation in Kenya (the Irrigation Act Cap. 347 of 1966) neither includes clear provision for the management and coordination of irrigation activities, nor for the participation of beneficiaries (such as WRUAs), in the planning and implementation of irrigation projects. In most instances, irrigation management adopts a centralized, supply driven approach, with the inevitable
results of poor local ownership and unwillingness of the farmers to assume responsibility for operation, maintenance and management. Furthermore, sustainable irrigation development has been constrained by insecure land tenure arrangements, with land adjudication and registration either lacking or incomplete on many schemes. The MoWI is in the process of finalizing its draft National Irrigation and Drainage policy and preparing a corresponding legal and institutional framework which will address these constraints. The project will support this process of reforming the management, policy and legislative framework governing the irrigation sector. As part of this process, mechanisms will be developed, appropriate to the type of irrigation involved, to accord legal recognition to stakeholder groups, promote stakeholder involvement in the planning and development of irrigation systems, and generate demand for quality irrigation services.

96. **The new Forest Act entails a radical shift in policy towards the engagement of communities in forest management.** The Act gives considerable weight to the participation of communities constituted as CFAs. However, the roles and responsibilities of the CFAs, and their relationship to Conservancy Committees, still need to be elaborated. It will also be necessary to clarify cost and benefit sharing options, and the ways in which forest management plans will be developed in the context of joint decision making.

97. **A social and institutional analysis carried out during preparation, including comprehensive stakeholder analysis, concluded that the systems for shared decision-making are still insufficient.** Improvements would need to focus on: (a) establishing more equitable systems to distribute the benefits accruing from forestry among community, private sector and the Government; (b) providing incentives for communities to participate; (c) addressing and clarify land rights, including customary rights and rights of indigenous people; (d) developing new processes for actively engaging communities in management decisions and the day to day running of forest areas; (e) developing the skills and knowledge of local communities through a range of capacity building exercises; and (f) addressing intra-community issues to ensure equity and enhance the performance of the CFAs.

98. **In addition to suitable partnership models incorporating incentives for community management, mechanisms for addressing the thorny issues of encroachment, eviction and excision will need to be developed.** Encroachment is particularly problematic and politically sensitive as it regards to relations between the FD and communities. In some gazetted forest reserves, squatting is long established, usually under political patronage. In 2006, several such encroached areas have been cleared by evicting illegal squatters, who are now living in makeshift camps along the roadside. Along with the increasing population of communities adjacent to forest reserves, this situation adds to the environmental and demographic pressures on forest resources and heightens political tensions.

99. **The project will address the need of relocating families evicted from forest reserves.** This issue needs to be clearly distinguished, in both scale and intent, from the practice of the previous regime of excising areas of gazetted forest land for the purposes
of large scale population resettlement. Such excisions often resulted in conflict with communities that had been engaged in protecting forest areas, were concerned about the environmental ramifications, or were simply resentful that claims of other parties for land were taking precedence over their own needs, often allegedly for reasons of political or ethnic favoritism. As mentioned above, the Government has drafted a land policy which will establish national institutional and legal frameworks for IP and resettlement. It will be a major activity of the project to assist the Government in defining this framework.

5. Environment

100. **A suitable legal framework exists for the management of natural resources in Kenya.** The 2002 Water Act, the 2005 Forest Act, and the draft lands policy, coupled with the associated National Environment Management and Coordination Act of 1999, underpin the NRM Project and its twin project the WKCD/DM Project. These important policy reforms cover institutional, financial and technical aspects and arrangements that are all aimed at ensuring environmentally and socially sustainable NRM as well as sound socio economic development for the present and future populations of Kenya. It is however, recognized that the country's natural resource base is vulnerable to natural shocks, mismanagement, serious degradation and severe floods. There is a need to pay particular attention to environmental management in general and catchment, forest and ecosystem management in particular.

101. **The project will support the implementation of this framework.** Recognizing these important aspects, the project is designed to take all these important facts into consideration and to ensure that social and environmental matters are given the attention they deserve. The project will support the mainstreaming of environment in water resources planning, development and management. Specific and forward looking provisions will be supported under the projects at several levels including basin, catchment, sub catchment to specific ecosystem management like Flood Plains and gazetted forests. On the social front, the draft National Lands Policy which went through a widely consultative process is aimed at producing a vision to guide the country towards sustainable and equitable land use practices. More importantly, the Land Policy recognizes and protects customary rights to land. Land issues such as historical injustices, land rights of minority communities, forests dwellers, pastoralists, hunters and gathers and vulnerable groups have been appropriately addressed and shall be given particular attention. As also clearly articulated in the draft IPPF document prepared by the Government for these two projects, the rights of these people will be recognized and protected and measures will be taken to identify such groups and to ensure that their access to land and participation in decision making over land and land resources is secured. Also, the draft lands policy as well as the RPF document intends on setting criteria and guidelines on resettlement. The Government and the Bank has agreed to assist within the framework of the project in designing a National Resettlement Policy and in establishing the institutional framework for its implementation.

102. **Other aspects of the project that will support equitable management of the social and biophysical environment.** These include: (a) participatory catchment management; (b) improved governance of water resources both within and outside
irrigation schemes; (c) consolidation of irrigation reforms and investments; (d) building institutional and human resources capacity for environmental management at various levels including River Basin Authorities, the MoWI, the WRMA as well as KFS and CFAs; (e) developing solutions to important ecosystems that are degraded such as flood management and dry season flows; and (f) establishing environmental flow requirements.

103. **The project triggers seven out of ten safeguard policies.** The proposed project was reviewed and screened at concept note stage and designated as Category B which is appropriate and consistent with the provisions of the Bank's Safeguards Policy on Environmental Assessment OP/BP 4.01 as the projects involve the construction of small to medium size water storage structures and check dams in the Upper Catchment of the Tana River. The NRM project will also carry out rehabilitation of about 13,000 ha of public irrigation schemes, including Mwea and the development of a new 3,500 ha schemes in the lower catchment of River Nzoia. The outlined activities led to the projects triggering other safeguard policies including the Policies on Involuntary Resettlement OP/BP 4.12, the Natural Resources Policy OP/BP 4.04, the Forest Policy OP/BP 4.36, the IP Policy OP/BP 4.10 and the policy on International Waterways OP/BP 7.50.

104. **To be in compliance with the Bank’s safeguards the Government fulfilled all necessary requirements.** In order to address the safeguard policy issues triggered by the project, and to ensure that implementation of project activities will be carried out in an environmentally and socially sustainable manner, the Government prepared an ESMF, a RPF and an IPPF and to address the policy on International Waterways (OP/BP 7.50), a riparian Notification Document was prepared by the Government and sent to the Nile Basin Council of Ministers for their notification on January 11, 2007.

105. **ESMF, the RPF and the IPPF were disclosed.** The ESMF, RPF and the IPPF prepared for the NRM Project and the WKCDD/FM Project were reviewed, commented on and approved by both the Government and the World Bank. The three documents were disclosed to the public in-country and at the Bank’s Information Center in Washington D.C. on January 10, 2007.

106. **Capacity building and remedial measures required for the ESMF, the RPF and the IPPF will be funded through the project.** A total estimated budget of US$8.1 million has been set aside to cover all associated costs for resettlement planning, management and implementation as well as building the institutional and human resources capacities for managing the ESMF, IPPF and Resettlement Action Plans (RAPs). This includes the funds to be allocated for the preparation of annual environmental audits which is in accordance with the National Environmental Management and Coordination Act of Kenya as well as the World Bank Safeguard Policy on Environmental Assessment OP/BP 4.01. The training requirements for the implementation of the recommendations of the safeguard documents and for overall environmental management have been factored into the project cost. Consultations and training activities will be funded to ensure the inclusive approach to implementation concerning indigenous and vulnerable groups and to ensure ownership of the IP and RPF processes. As the implementation of RAPs, Indigenous Peoples Plans (IPPs) and
Environmental Management Plans (EMPs) are critical to ensuring sustainable management and smooth implementation of the project, clarity on the institutional responsibilities for specific actions as well as monitoring their outcomes is crucial. The project will work with the implementing agencies to ensure that the competent authorities are assigned the responsibility of carrying out such actions and most importantly ensuring ownership and the capacity to mainstream them as part of their core business.

6. Safeguard policies

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td><strong>Environmental Assessment (OP/BP 4.01)</strong></td>
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<td>Since the exact locations of proposed activities has not been identified at this stage and as the proposed approach for community investments is CDD, much like that of the WKCD/FM, the safeguard instrument used will be the ESMF.</td>
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<td><strong>Natural Habitats (OP/BP 4.04)</strong></td>
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<td>Since the project activities cover two catchments including the Aberdares and the Lake Victoria catchment areas, this policy is triggered. The ESMF will address issues pertaining to this policy.</td>
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<td><strong>Forests (OP/BP 4.36)</strong></td>
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<tr>
<td>Since the project activities cover two catchments including the Aberdares and the Lake Victoria catchment areas, this policy is triggered. The ESMF will address issues pertaining to this policy.</td>
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<td><strong>Pest Management (OP 4.09)</strong></td>
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<td>The ESMF will identify and address those issues, related to this policy, that arise.</td>
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<td><strong>Cultural Property (OPN 11.03)</strong></td>
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<td><strong>Indigenous Peoples (OP/BP 4.10)</strong></td>
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<td>An IPP has been prepared and disclosed.</td>
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<tr>
<td><strong>Involuntary Resettlement (OP/BP 4.12)</strong></td>
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<td>The project addresses two key sectors, water and forests, that is likely to have an impact on the pattern of use by the communities. A RPF has been developed in order to address any related issues.</td>
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<td><strong>Safety of Dams (OP/BP 4.37)</strong></td>
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<td>The preparation has identified the nature and scope of capital investments in irrigation and water infrastructure and has determined that this policy is not triggered.</td>
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<tr>
<td><strong>Projects on International Waterways (OP/BP 7.50)</strong></td>
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<tr>
<td>The preparation has identified project activities and impacts on international water agreements and international waterways and the White Nile riparian states have been notified</td>
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<td><strong>Projects in Disputed Areas (OP/BP 7.60)</strong></td>
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7. Policy Exceptions and Readiness

107. This Project complies with all applicable Bank policies. The preparation process has been supported through a Policy and Human Resources development Grant (PHRD) grant under the WKCDD/FM Project in the amount of $750,000 which has supported the
preparation of a joint ESMF, RPF, and IPPF. A Project Preparation Facility (PPF) in the amount of US$1 million, split between the two ministries, which is being used to support key studies and capacity building for the preparation of the project. The draft PIP and the Procurement Plans for Project Year 1 were prepared by the borrower and have been reviewed by the Bank.
Annex 1: Kenya’s Fight against Corruption: Progress, Setbacks and New Frontiers

KENYA: Natural Resource Management Project

I. Introduction

1. Some surveys of Kenyan households, firms and individuals suggest widespread concern about corruption in the public service. Some of these surveys also suggest that in specific areas like free primary education and health, the public is reporting improvements in service delivery, while in other areas, like procurement and the judiciary, the situation continues to cause public concern.

2. This Annex discusses highlights of Kenya’s efforts since 2003 to address the problem of corruption, including steps taken and setbacks experienced, and further actions that are planned by the Government. These actions build on lessons of experience and look at corruption through a broader governance lens. The Annex also updates the information on Kenya’s anti-corruption effort provided in the project paper for the Additional Financing Credit for Drought Emergency under the Arid Lands Resource Management Project Phase II, which the Board approved on August 3, 2006, the Education Sector SWAp which the Board approved on November 7, 2006, and the briefing provided to the Board on December 14, 2006. Another important source of input has been consultations held in January 2007 with a wide variety of stakeholders around the World Bank’s Board Paper on Governance and Anticorruption (GAC) as part of the global consultation exercise.

II. Selected Highlights

3. Historical Perspective. Historically in Kenya, power has operated through a web of informal networks based on personal ties, often with a strong ethnic and gender element, between leaders and supporters at all levels. The networks permeated public institutions, subverted formal rules and severely compromised systems of public accountability. As a result, key institutions decayed. The judiciary, for example, became largely ineffectual and corrupt, and presidential powers (and single-party democracy until 1992) supplanted other vital institutions such as Parliament. Theft of public resources, including procurement fraud, was documented by controllers and auditors general, but corrupt individuals used the court powers and other means to punish critics. Media freedoms suffered, and the police emerged in Kenya’s public opinion surveys as the most corrupt institution. When it came to power at the beginning of 2003, the new Government made a number of bold moves in fulfillment of its campaign pledge to put a halt to corruption. These actions are discussed below.

4. Legislative Actions. In 2003, Parliament passed the Public Officer Ethics Act, requiring civil servants to file annual declarations of income, assets and liabilities, and the Anti-Corruption and Economic Crimes Act, which set up the Kenya Anti-Corruption Commission (KACC). The Government also enacted key legislation aimed at improving governance and public service delivery which include the Government Financial...
Management Act (2004) and the Public Audit Office Act (2004). In fulfillment of the Anti-corruption Action Plan for April 2005-June 2006, a landmark Procurement Bill received Presidential assent in November 2005, establishing a semi-autonomous Public Procurement Oversight Authority responsible for the regulation of procurement in the public sector, including procurement of security related contracts—transactions which were shrouded in secrecy in the past and associated with high level graft. In addition, the Privatization Act received Presidential assent in October 2005 setting the stage for the privatization of public assets and operations including state corporations, as part of the privatization program under a new privatization commission. In late 2006, legislation was introduced to Parliament that would increase the number of judges, significantly reduce delays in corruption trials, fight money-laundering, and provide a framework for political party funding. Parliament recessed in December before completing this legislative agenda, but these items are expected to be reintroduced when Parliament reconvenes in March 2007. The Government is also at an advanced stage in developing a Freedom of Information Bill that will ensure public access to information. Meanwhile, implementation of the new procurement act and regulations began in January 2007.

5. **Capacity Building and Administrative Actions.** After 2003 there was a four-fold increase in the professional staff of the KACC, recruitment magistrates and other legal staff, and the launch of public education campaigns. The Attorney General's Office had 126 new state attorneys in January 2006, significantly increasing its capacity. To speed up trials, the Chief Justice changed the rules of the court in January 2006 to set rigorous time limits for disposing of Constitutional references which tend to add years to the disposal of cases. Responding to criticism that it relied too heavily on legislative measures, the Government began to take administrative steps more regularly. For example, in December 2005, the Government annulled the recruitment of 3,000 police officers and suspended senior officers involved in the recruitment exercise, pending further investigation. The Kenya Revenue Authority also announced that it was suspending several senior officers who work at the Port pending investigation into why they were not achieving performance targets for customs revenues. In addition, the Government fired the Managing Trustee of the National Social Security Fund (NSSF) following investigation by the KACC, although months later he was appointed to head another parastatal (Meanwhile, a Bank-sponsored study of the NSSF has shown it to be severely dysfunctional; for example, as a result of mismanagement and low return on fund investments, the typical Kenyan retired worker can expect to receive a total retirement package that would cover no more than 12 months of income). The Governor of the Central Bank was also suspended pending investigations of wrongdoing and is now being prosecuted. Such suspensions and firings have become somewhat more frequent. For example, the Government recently suspended senior staff in the Ministry of Lands and two senior executives at the Kenya Re-Insurance pending investigations into corrupt practices. Also on the administrative front, the judiciary has instituted a self-rejuvenating mechanism through a peer review on integrity and handling of complaints, which is expected to improve its systems and performance.

6. **Results-based Management and Performance Contracts.** Consistent with the focus on the effective and accountable use of public resources, the Government has
introduced a Results-Based Management (RBM) system as a tool for helping public sector institutions to focus their work, plan strategically and demonstrate the difference that each organization is making to development. This focus on “Practical Results for Kenyans” is based on international best practice in countries such as Canada, Sweden and the United Kingdom. The Government has also introduced performance contracts for all its senior officials including those in parastatals. The contracts are meant to create incentives for public sector managers and their staff to improve performance and accountability by undertaking to deliver specific outputs in line with their mandates. The availability of these contracts (at http://www.dpm.go.ke/pages/splans.html) is not widely known, and is therefore a missed opportunity for public monitoring, assessment and pressure for enforcement. There is also room to improve the focus of the contracts themselves on issues of corruption. Public sector management reform has also focused on introducing rapid results initiatives, service charters, codes of conduct, and citizen scorecards. One important milestone in this home-grown reform program occurred in December 2006, when the President officiated at a public event in which all Ministers, Assistant Ministers, and their permanent secretaries received their performance scores as assessed by expert stakeholders on the basis of the results-based management performance contracts their departments had signed.

7. Alleged Corruption Among Ministers. Following the constitutional referendum of November 2005, the President reshuffled his Cabinet, removing ministers alleged to have been involved in large scale corruption and appointing a new and respected minister of justice and constitutional affairs. During February 2006 two of the ministers named in the report prepared by the former Permanent Secretary for Governance and Anti-Corruption resigned from office to allow for investigations to proceed. KACC began to investigate these and all others mentioned as possibly involved in corrupt activities. A third minister, the Minister of Education who had been the Minister of Finance at the time of the Goldenberg affair occurred in the early 1990s, resigned following his implication in the Goldenberg Commission report which was also released at this time (in July 2006, however, Kenya’s High Court ruled that he had acted appropriately in his role as Minister for Finance, and that because Kenya’s Attorney General of a decade ago had cleared him of wrong-doing in a statement to Parliament at the time he could not be prosecuted – this High Court ruling is being appealed against by the Hon. Attorney General on behalf of the Government. This was followed by Government seizure of passports and firearms of several individuals associated with Goldenberg. Prosecutions in the Goldenberg scandals began in mid-June 2006 but prosecutions in the Anglo-leasing case are awaiting the completion of investigations by the KACC. The ongoing investigation and the status of legal action in the Anglo-leasing affair have been much in the news recently. In October 2006, the Attorney General sent the investigative files of 12 prominent individuals (including former Cabinet members), who had been recommended for prosecution, back to the KACC for lack of evidence that would sustain prosecution. In late November 2006, the President reappointed two Ministers who had earlier left Cabinet because of their alleged involvement in corruption scandals (both had undergone judicial processes that appear to have cleared them of criminal wrongdoing). On January 19, 2007, local journals reported that the Attorney-General had cleared all four Ministers implicated in the scandal of any wrongdoing, and this was received with a
large-scale public outcry against the decision. The Attorney-General has, however, issued a statement indicating that in fact investigations are ongoing and that there has not been a judicial clearance on substantive issues of corruption.

8. Other Measures. Separately, the President has required that members of the new cabinet sign a code of conduct, and that the KACC verify their declaration of assets. These declarations are now being vetted by the KACC. The Government has ended 'land grabbing' and state sponsored 'harambees' or fund-raising. It also set up the Ndungu Commission to look into the illegal allocation of public lands and after making public the report in February 2006, gave individuals and organizations implicated a three month period to return land that was obtained illegally (whether deliberately or not). That period has now expired and further action by the Government is awaited. As of January 2007, 133 title deeds for illegally or irregularly acquired public land had been surrendered to the Ministry of Lands. Measures were also taken to improve the governance of public finances. They included enhancing the capacity of the National Audit Office, which was then able to clear the long-standing backlog of public accounts audits. In October 2005, the Government established independent audit committees in all ministries, departments, state corporations and local authorities. This step is part of a new risk-based internal audit approach, supported by the World Bank and other donors, that involves identifying the potential for fraud in advance and building the necessary risk mitigation processes into the design of Government systems and processes. The prospects for reducing rent seeking were further enhanced in November 2005 through additional measures such as the liberalization of coffee marketing (after over a decade of policy debate about it). Under the ongoing licensing reform program, about 9 percent of licenses have been abolished, and another 50 percent are scheduled for harmonization, simplification, or elimination by December 2007 (including about 23 licenses that the private sector has identified as priorities).

III. Assessment

9. Despite the range of actions on legislative, administrative, political and other fronts discussed above, the Government has acknowledged that the fight against corruption is an uphill task. At a National Stakeholder Conference convened in late May 2006 by the Government to discuss future plans for fighting corruption, the Minister of Justice and Constitutional Affairs noted that efforts so far 'have only scratched the surface'. Meanwhile, the peer review by the New Partnership for Africa's Development (NEPAD) indicates that 60 percent of Kenyans feel that the Government has not gone far enough in the fight against corruption and over 90 percent believe that there is still corruption in Government.

10. Doubts about the Government's Commitment. In January 2006 the former Permanent Secretary for Governance and Anti-Corruption alleged that some Cabinet ministers and other senior civil servants in the new Government were involved in big graft. In March 2006, hooded men raided the headquarters of the Standard Media Group late at night, allegedly for national security reasons. In October 2006, the Attorney General sent the investigative files of 12 prominent individuals (including former Cabinet
members), who had been recommended for prosecution, back to the KACC. In late November 2006, the President reappointed two Ministers who had earlier left Cabinet because of their alleged involvement in corruption scandals (both had undergone judicial processes that appear to have cleared them of criminal wrongdoing, but public confidence in these processes is quite low). In January 2007 two other Minister were cleared by the KACC of interference with an investigation. Other allegations against them are being looked into. Overall, Kenyans continue to cite governance as the most pressing concern, and want more action on it, but some are concerned about the Government’s commitment to the fight.

11. **Measuring Results to Date.** While there is a broad domestic and international consensus on where Kenya is coming from on corruption (historically) and where it needs to go, there is much less agreement on the results that have been generated so far, and on the prospects for winning the fight. Transparency International’s Annual Corruption Perceptions Index has consistently placed Kenya towards the bottom of the list (in 2006 it ranked 142 of 163 countries, whereas in 2005 it had ranked 144 of 159 countries)). In June 2006, Transparency International (Kenya branch) reported that bribery increased in 2005 following declines in 2003 and 2004. Ranking public institutions for the occurrence of bribery include the police, state corporations, and local authorities. Roughly 55 percent of Kenyans felt that corruption was unchanged, the same number as in 2003. But while 13 percent felt in had worsened in 2003, the number jumped to 19 percent in 2006. A larger household survey released in early July 2006, conducted by the KACC and covering 21 districts in all provinces, found that public awareness of corruption has risen from about 75 percent in 2000 to 99 percent in 2005. The survey concurred that the police, the Ministries of Health and Lands, and local and district governments were perceived as the most corrupt. Roughly 41 percent of respondents believed that corruption has decreased from a year ago, 22 percent believed that there has been no change and 37 percent believe that it has worsened. About 60 percent felt that the Government was performing badly on corruption, a figure similar to the NEPAD assessment. Contrasting with these more negative findings, Kenya’s score of 3.0 (of a possible 6) on the question on “Transparency, Accountability and Corruption in the Public Sector” in the most recent Country Policy and Institutional Assessment (CPIA) conducted globally by the World Bank and released at end-May 2006 places Kenya at roughly the mid-point among the 79 low income developing countries covered in the exercise. Meanwhile, the 2006 Global Integrity Index, released in January 2007, gives Kenya a score of 71 out of 100, up from 61 in 2004, placing it the same cluster of “moderate” performers as Argentina, Uganda, and Brazil, well ahead of Mozambique, Russia, and Senegal, and far ahead of Tanzania, Egypt, and Vietnam.

12. **Synthesis.** Notwithstanding important legislative and institutional developments and the beginnings of political accountability, more efforts need to be done to assure the public of its commitment to fighting graft. This will ensure that the efforts already made and the ones that are planned, shall produce tangible and measurable results. This would require strong leadership at all levels, with an almost single-minded focus on reversing behaviors that have been entrenched, politically, socially and culturally for decades.
IV. Further Steps toward Better Governance

13. **Broad-based Stakeholders Participation.** There appears to be a growing realization among governance reformers in Kenya that the war against corruption requires the mobilization of a broad range of stakeholders, including civil society, the media, private sector, faith-based organizations and professional bodies. For example, as recent experience indicates, civil society and the media can have a powerful impact as sources of information on corruption and as advocates for change. There is some evidence that the reformers in Kenya might wish to reach out to these groups in a more systematic way. For example, the June 2006 Stakeholder Conference on the Draft National Anti-corruption Strategy, the largest of the three held since September 2005, brought together Kenyans from the executive, parliament, the judiciary, the private sector, the media, trade unions, faith-based organizations, professional bodies, and NGOs to consider the Government's national multi-year strategy for fighting corruption. The Draft Strategy itself arose from a process conducted years ago and updated recently that involved grass-roots inputs and consultations in all eight provinces. The other recent broad-based consultations have focused on the Strategic Plan of the Kenya Anti-corruption Commission. A particular challenge is to ensure that all the broad-based participation and consultations cohere around a focused set of workable initiatives oriented toward demonstrable results, while leaving participants the freedoms they need to serve as both advocates and critics.

14. **Formulation of the Government of Kenya’s updated Governance Strategy and Action Plan.** Concurrently with these stakeholder consultations, Bank sponsored audit work at the project level (the INT-led Detailed Implementation Review [DIR]) and at the level of national and sectoral policy (the WBI-led Initial Governance Assessment [IGA]) gave fresh insights into anti-corruption measures that the Government itself could take. These inputs all contributed to the formulation of the Government’s Governance Strategy and Action Plan (GSAP) through December 2007. The GSAP reviews progress in terms of legislation passed since 2003, administrative actions taken, public sector and financial management reforms, the role for the private sector, public education efforts, investigation/prosecution, and restitution of stolen assets. It sets forth a matrix of specific, time-bound actions accompanied by progress indicators in areas that include (a) strengthening the legislative platform for the fight against corruption (e.g., legislation for witness protection, anti-money laundering and greater disclosure of personal wealth declarations of Government officials); (b) facilitations transparency and public access to Government information; (c) deepening public financial management reforms; deepening procurement reforms; (d) scaling down the role of Government; and (e) strengthening capacity for investigation and prosecution of corruption.

15. **Transparency, Public Access to Information and Public Education.** The Government is at an advanced stage of assuring public access to information through the proposed Freedom of Information Bill, which seeks to empower members of the public to have free access to information held by Government. The right of the media to access and disseminate information will further enhance transparency and accountability. The Media Bill, at an advanced stage, will promote and protect a professional, self-regulating
free and independent media. The Media Bill seeks to establish a Media Council of Kenya and enshrine the "freedom to hold opinions without interference and to seek, receive and impart information and ideas through any Media regardless of frontiers." Both the above Bills will be submitted to Parliament when it reconvenes in March 2007. These legislative developments complement another initiative by Government to establish a National Bureau of Statistics, through the Statistics Bill of 2006. The Bureau, which will replace the Central Bureau of Statistics, will collect, compile, analyze, and publish statistical information, and will be guided by explicit provisions for public access and dissemination. A related aspect of these transparency initiatives is heavy investments in e-government, including e-procurement, and continued investment in public education and awareness-raising. To improve accountability in budget implementation, the Budget Monitoring Unit at Ministry of Finance will be revamped, initially paying particular attention to roads and water programs. The Unit will prepare comprehensive quarterly reports on budget implementation for dissemination to the public.

16. **Further Legislative Advances.** A number of bills were on the parliament’s list to be passed into law in late 2006. The Witness Protection Act was passed but Bills on anti-money laundering and political party financing were not acted upon by the time Parliament recessed in early December. It is expected that they will be considered when Parliament reconvenes in March 2007. The pending Statute Law (Miscellaneous Amendment) Bill proposes to amend the following laws, namely; the Judicature Act (Cap 8) to increase the number of judges of the High Court from fifty to seventy and those in the Court of Appeal from eleven to fourteen; the Constitutional Officers (Remuneration) Act, (Cap 423) to implement the new salary structure for constitutional office holders; and the Anti-Corruption and Economic Crimes Act (ECA), 2003, to disallow applications for stay of proceedings in cases involving economic crimes and corruption. The Miscellaneous Amendments Bill will also harmonize the penalties for offenses that can be prosecuted under both the ECA and the Penal Code and amend the Public Officer Ethics Act, 2003, to regulate the public officers’ declaration of wealth. The Witness Protection Bill, 2006, if passed will provide for the regulation and operation of a scheme for the protection of witnesses in criminal cases, commissions of inquiries and similar proceedings that are critical to the prosecution of corruption cases. The proposed scheme under this Bill will be established and coordinated by the Attorney General. Legislation on political party financing is also proposed.

17. **Capacity to Prosecute.** Despite improvements in the investigation of corruption cases, the current capacity to prosecute is still inadequate. This has affected efforts to effectively prosecute past and on-going cases on corruption. A number of training programs have been launched to strengthen the capacity of the State Law Office (SLO) and the Director of Public Prosecutions (DPP) in the Attorney General’s Office. The Government is in the process of recruiting additional lawyers, (130), including specialized and competent prosecutors with proven integrity. Of these, 65 will serve the State Law Office, 42 to the Department of Public Prosecutions to make a total of 104 and 23 to the Civil Litigation Department. Other initiatives include addressing legal challenges arising from corruption prosecutions (see paragraph 15) by, among others: publishing judgment and court statements; and establishing open hearings.
18. **Disposal of Cases.** In 2005, there were 503,948 new cases filed together with those pending at the beginning of that year, bringing the total number to 1,074,602 cases. Of these, the courts were only able to deal with 541,167 cases, rolling over 535,840 to 2006. As part of the effort to address this challenge, the following initiatives will be implemented. As indicated in the Miscellaneous Bill, the number of judges will be increased to 70 from 50. In addition to the absence of judicial officers, the Government's efforts to effectively dispose of cases (including corruption cases) have been hampered also by the lack of basic facilities such as court rooms, manual filling and retrieval of cases, lack of equipment such as computers, poor remuneration and terms of service for the judiciary especially for the magistrates. The World Bank-financed Financial Legal and Technical Assistance Project is currently supporting the training of judges and modernization of the court system through automation of the courts. It will also finance the recording of court proceedings, better case management methods and improvement of court administration. Meanwhile, the judiciary has proposed amendments to the Civil Procedure Rules to simplify the court processes and include alternative methods of dispute resolution to shorten the time taken to dispose of cases and reduce the backlog. The Chief Justice also issued a circular (January 2007) to address the problem of multiple suits on the same issue being filed in different courts.

19. **Implementation of Procurement Reform.** In order to enforce the Procurement Act, passed by Parliament and assented to by the President in November 2005, gazettment of the Public Procurement Regulations and establishment of an independent Public Procurement Oversight Authority received Parliamentary approval (December 2006). The main objective of the proposed procurement reforms is to strengthen the institutional capacity of the public procurement in order to enhance accountability and effectiveness by reducing rent-seeking opportunities and corruption. Among the initiatives proposed for implementation over the next one year are: (i) establishing and making fully operational (by March 2007) the Public Procurement Oversight Authority ensuring its independence and objectivity, and fully rolling out of the new procurement regulations and guidelines; (ii) posting on the ministries' websites all information on contracts, including names of contractors, decisions of Procurement Appeals Board, bidders and tender outcomes, and contractors’ performance; (iii) introducing a transparent Vetting System to pre-qualify companies interested in bidding for contracts to address conflict of interest and to enable exposure of fraudulent companies; and (iv) blacklisting companies found to have been involved in cases of corruption in accordance with the new procurement law, and make this information publicly available.

20. **Implementation of Privatization.** Further participation of the private sector in the economy will be enhanced over the next year through privatization, restructuring of the public sector and removal of administrative barriers to trade. Among the initiatives to be implemented over the next year to enhance efficiency in the economy and encourage private sector participation include: (a) establishment of a privatization commission by the end of March 2007. The privatization commission will pave the way for a transparent and accountable process of privatization, thereby making it difficult to disguise corruption in the privatization transactions; (b) restructuring/privatization of Telkom Kenya is moving forward with IFC technical assistance (e.g. retrenchment completed, Kshs 5.6 billion secured by Telkom from local banks, etc.). while the National Bank of
Kenya (NBK) will be restructured in tandem with privatization (GOK’s 06/07 budget includes Kshs 20 billion for the NBK restructuring approved by Cabinet); (c) sale of part of Government shares in Mumias Sugar Company was completed end-December 2006, and the action plan for further divestiture of the Kenya Reinsurance Company, and KenGen for March 2007 remains in force; (d) plans for increased private sector participation also remain in place for the ports; and (e) liberalization of the telecomm sector has already happened, including a recent CCK decision approving an application from Reliance Consortium for the second fixed line licence; (f) including in the finance bill for 2007/08 the elimination of business licenses found not to serve a useful purpose; (g) initiating a legal and institutional framework to operationalize public-private partnership, allowing the private sector to participate in the provision of water, energy, roads and transport services and limit the potential risks from contingent liabilities that may arise in such operations; (h) submission to Cabinet of a market-oriented financial sector reform strategy by March 2007; and (i) a diagnostic audit of National Social Security Fund (NSSF) will be undertaken to form the basis for restructuring and reforms of its governance.

21. **Public Financial Management.** Planned public financial management reforms (PFM) include:

- preparing and publishing external audit reports of the Controller and Auditor General in a timely fashion in accordance with *The Public Audit Act 2003*;

- adopting a risk based internal audit approach, including establishment of the ministerial audit committees expected to provide oversight. Empowering the Ministerial Audit Office and providing them a mandate for ensuring implementation of audit recommendations. And, develop audit’s post-implementation reviews by the National Audit Office, communicate the results to the Public Accounts Committee, and publish them;

- enhancing transparency and broader stakeholder participation, including members of parliament and public in the preparation of 2007/08 budget cycle;

- conducting expenditure-tracking surveys in at least one ministry to inform budget implementation and improve its effectiveness in achieving development goals;

- strengthening management and audit capacity for efficient and effective use of devolved funds under the Local Authority Transfer Fund and the Constituency Development Fund, Constituency Roads Fund and Bursary Fund, among others;

- accelerating the implementation of integrated financial management and information system (IFMIS) and make it operational in four spending ministries (including education, health) for the management of the 2007/08 budget; and
developing and enforcing objective criteria for granting tax exemptions and waivers to regulate the exercise of discretionary powers and improve transparency and accountability in the tax exemption regime. This will be complemented by publication of tax expenditure budgets from FY2007/08 onward.

Other measures being taken include preparing and publishing external audit reports in a timely fashion in accordance with the Public Audit Act 2003 and adopting a risk based internal audit approach, including establishment of the ministerial audit committees. These measures are expected to improve Parliamentary oversight on the executive’s use of public funds.

22. **Results Measurement and Performance Management.** Government is deepening the focus on results as an integral part of good governance, and is making progress in rolling out the RBM system in the public sector. Now that a Results office has been established within the Public Sector Reform and Development Secretariat, additional steps related to the RBM’s implementation include developing systems for performance management and integrated performance appraisal, performance audits and monitoring and evaluation. Other actions include introducing service charters and score cards for selected Government ministries and departments.

23. **Governance and Accountability Programs in Selected Key Ministries.** Several Ministries that are central to the achievement of ERS objectives are putting in place governance and anticorruption programs. Here are some examples:

- **Health.** The health sector faces substantial governance strengthening challenges. The management structure is not aligned to the implementation of the national health plan; accountability and transparency are weak; there is poor utilization of information for monitoring purposes; and tendering has been plagued by accusations of corruption, failure to follow procedures and delays. In recent months, however, there have been some important developments. These include the initiation of a SWAP approach, with teams appointed to work on key issues, including procurement, financial management, and monitoring and evaluation. The Ministry of Health has developed a risk management approach to internal audit, and initial steps have been taken to improve procurement procedures, including through support from the Millennium Challenge Corporation with the redrafting of procurement regulations for the Government as a whole (but with the Ministry of Health as a lead sector for the reforms). Service delivery will be addressed through the adoption of a risk-based management approach to internal audit; monitoring full implementation of the recommendations by KACC into the operations of the Kenya Medical Supplies Agency (KEMSA); and improved management of the Global Fund Program. Weaknesses in the area of procurement, financial management and governance identified by the World Bank’s Detailed Implementation Review will be addressed as follows:
(i) **Procurement:** finalization of the sector specific procurement manuals, independent procurement actions, scaling up the capacity and involvement of KEMSA in procurement and public notification of contract awards;

(ii) **DARE:** undertake a comprehensive update of progress on action plan from forensic audit; recruit auditors; and investigate and where necessary prosecute those found guilty;

(iii) **Financial management:** remittance of funds directly to health facilities using commercial banks, instituting effective internal and external audit functions using a risk-based framework, disclosure of information on financing and support to community monitoring over expenditure.

- **Education.** The Government has developed its policy for strengthened governance and accountability in the education sector around the following themes: (i) community involvement through decentralized financing and procurement; (ii) resource allocation; (iii) consultation and social accountability; (iv) teacher management; and (v) public expenditure and management. The plan shows commitments for the future towards a more transparent and accountable environment in the education sector, but it also shows important progress already made. An independent public expenditure tracking survey has already been completed, and it concluded that “Overall, the flow of funds has been efficient, with schools receiving funds allocated on time. Bottlenecks encountered in the flow are being addressed by the ministry. At school level, funds received have been correctly recorded and used for intended purposes. A large majority of the schools have put in place systems that ensure transparency and value for money.”

- **Water.** Since mid-2003, the Government through the Ministry of Water and Irrigation has embarked on far reaching reforms in the water sector based on the Water Act gazetted in late 2002. These reforms have involved comprehensive institutional reforms and increased investments in water supply and sanitation to remove the bottlenecks to achieving safe and sustainable services. The continuing reforms include: (i) separation of functions between each aspect of service delivery – policy making, regulation, and service delivery; (ii) clarifying the role and responsibilities of each new institution; and (iii) ensuring the new institutions are given the mandate and autonomy to perform, but at the same time are made accountable in meeting their responsibilities.

- **Road Sector.** Government plans to establish three autonomous road authorities to streamline ownership, management, accountability and financing of all road network activities in the country. This action will be implemented as soon as Parliament approves the legislative instruments. On-going actions to improve governance in the roads subsector include; (i) re-enforcement of procurement regulations – for example, GOK funded contracts are no longer “given out” but advertised; and award of all contracts is based on contractor capability, current workload and past performance to encourage competition and fairness); and (ii)
in-depth analysis of the cost of road construction in Kenya and other countries in the region to update market prices and improve project cost estimation. In addition, at least two actions agreed with Government in 2004 have already been effected. First, road sub sector staff who previously owned road construction companies removed themselves from such companies and kept their jobs, or left Government to manage them. Second, lengthy payment procedures requiring 23 approvals and signatures, which led to delays in payments and cost inflation, were reduced to 6 approval steps, and the oversight function was also strengthened.

24. **Measuring Progress in Governance and Anti-corruption.** The KACC household (2006) survey cited earlier will be done annually. In addition, the Government has resolved to carry out a nation-wide assessment to measure how corruption and other issues related to public sector performance in governance are perceived by the public. The assessment will examine public service delivery, functioning of Government staff, financial management and procurement. The activity is intended to support a unified vision and design for a statistical development strategy that will improve policy and decision making in the area of governance. It will facilitate monitoring the progress made in broad governance indicators, including targets specified in the IP-ERS and the Anti-corruption Action Plan. To ensure integrity and broad participation, the Government intends to establish a Steering Committee comprising of Permanent Secretaries and representatives of the private sector, civil society, media, Parliament and development partners. In addition, to ensure independence of the diagnostic process from the executive and credibility of the process, data collection and analysis will be undertaken by an independent firm. The time frame for this assessment is currently under discussion, but is expected to be carried out in August-September, 2006. The results are to be widely shared, including through workshops at local and national levels. Currently, the Bank and other development partners, through the Statistical Capacity Building Project, are supporting the collection and analysis of justice and crime statistics which would measure the impact of crime on the public and the working of the criminal and civil justice systems. In March 2006, the project provided computers, software and training for the police, prisons, the judiciary and the probation department to improve the quality and timeliness of statistics. Government plans to publish these statistics regularly and to place them in websites from mid-FY2006/07. These steps, and others, have been integrated by Government into the Governance Strategy for Building a Prosperous Kenya (GSPK).

V. World Bank Involvement in the Fight Against Corruption

25. **The Bank Group is Directly Supporting a Subset of Priority Actions in Kenya’s GAP.** Given the prominence of the corruption issue in Kenya, the Bank’s Country Assistance Strategy 2004-2007 (now extended through June 2008) has recently been updated to account for the findings of the numerous audits and analyses of governance at the general and the sector level. In supporting the GSPK and the GAP, the Bank will focus on transparency initiatives (including transparency in the judiciary, and capacity building in the prosecutorial and judicial services); broadening stakeholder involvement, including additional private participation in infrastructure services such as
the ports; accelerating public financial management reforms; and improving governance in high-priority sectors—education, HIV/AIDS, health, and roads. Analytic work in such areas as media development, parliamentary and judicial capacity, and police oversight mechanisms will help lay the foundation for the development and governance agenda beyond this GSPK/GAP and for the next CAS.

26. **Bank’s Comparative Advantage.** In identifying priorities for Bank support, we take account of the importance (drawing in part on empirical evidence in the IGA and the findings of the DIR) and potential impact of the actions; the Government’s leadership and readiness for implementation; the comparative advantage of the Bank Group; and what other partners are doing. It should be emphasized that while the GAP is a short-term strategy, focused on actions in the year 2007, the challenges of governance and corruption are large in scale and will require sustained efforts over an extended period of time. Our analytic work (including ongoing audits at the level of projects and Government systems) will focus on longer-term objectives and how policy and investments can reinforce them, while laying the groundwork for future operations. Operations—for example, the Institutional Reform and Capacity Building project, but also sectoral projects—will also continue to focus on the longer term by supporting the Government in building the capacity of its systems to control corruption.

27. **Transparency Initiatives are the First Governance Priority Area for Bank Support.** A major pillar of the updated GAP is the Government’s significant “transparency deficit.” A Transparency and Communications Infrastructure project, which is part of a regional ICT initiative, will support the implementation of “e-government,” which will both vastly increase public access to Government information and advance the eventual implementation of pending freedom-of-information legislation. The Bank is also providing additional support for transparency in specific areas of potential impact. For example, the Bank has provided technical support for the recently passed Statistics Act (2006) and is collaborating in strengthening national capacity to collect, compile, analyze, and publish statistical information. Its assistance in this area will be channeled through a Statistical Capacity Building Project (StatCap), which will also include support for in-depth governance surveys. Another example is a pilot program to record and disclose court proceedings, in collaboration with the National Council of Law Reporting (NCLR). The ongoing Financial and Legal Technical Assistance Project is supporting this pilot and other measures to improve performance along the judicial chain.

28. **Broadening Stakeholder Involvement is the Second Governance Priority Area for Bank Support.** Given Kenya’s history of patrimonial politics, a central challenge is to identify and support interventions that can “crowd in” more stakeholders to ensure that public resources are efficiently and effectively used for the purposes intended. A greater focus on stakeholder involvement will include the following kinds of initiatives:

- Those that involve informed communities and service users in the delivery and oversight of service provision at the front line, including oversight of
procurement—for example, parents in school committees in the education sectorwide approach (SWAp), or community-driven development in the Arid Lands Additional Financing project.

- Those that foster competitive arrangements for service provision—for example, by supporting private sector participation in the provision of water, energy, roads (including a toll-road concession for a stretch of 77km in and around Nairobi), and port services while limiting the potential risks from contingent liabilities that may arise in such public-private partnerships. In addition, IFC has extended a pilot program originally developed in Ghana to support private educational institutions in Kenya and has invested US$32 million investment in the Kenya-Uganda railways. MIGA is providing support for a 45 MW private geothermal power plant.

- Those that promote synergies between governance and equity—for example, by improving poor people’s access to justice, and increasing opportunities for participation in community-level development planning, monitoring, and evaluation.

- Those that further develop, deploy, and integrate practical tools for systematic citizen/stakeholder participation and monitoring.

- Those that create pilots aimed at testing new participatory approaches for service delivery with built-in social accountability.

29. **Selected Public Financial Management and Licensing Reforms are the Third Governance Priority Area for Bank Support.** Here Bank support will focus on (a) procurement reform, including related transparency initiatives; (b) accelerated implementation of an integrated financial management and information system (IFMIS); (c) support for risk-based auditing throughout the Government; and (d) licensing reforms under which about 9 percent of licenses have been eliminated, and another 50 percent are scheduled for harmonization, simplification, or elimination by December 2007 (including about 23 licenses that the private sector has identified as priorities). The financial management activities will be supported mainly through ongoing programs, principally the Institutional Reform and Capacity Building (IRCB) project. They will also involve scaled-up attention to standards in the accounting profession through a new partnership with the umbrella professional body, the Institute of Certified Public Accountants of Kenya. In addition, the Bank Group will scale up its advisory services on licensing reform.

30. **Governance reforms in high-priority sectors—education, HIV/AIDS, health, roads, and the judiciary—are the fourth area for Bank support.** For education, the governance agenda is being extended to the secondary and postsecondary levels and to the Teachers Service Commission under the Bank-supported education SWAp. In HIV/AIDS, the key issues involve remedial action for past misuse of funds administered by the National AIDS Control Council (NACC), and creating a new transparency regime and social accountability measures, including an independent complaint mechanism.
Because of the measurable progress being made, the World Bank plans to join with the UK’s Department for International Development (DfID) to provide a credit during the first half of 2007 based on the full rollout and careful monitoring of the new operational arrangements. In the health sector, the Bank is proceeding on three tracks: (a) through the existing IRCB project, it is providing assistance for the rollout of IFMIS in the Ministry; (b) as chair of the donor subgroup on health, it is heavily involved with others in developing a SWAp for health for which the centerpiece will be community-based management of health facilities, with strong fiduciary safeguards, to support piloting this approach; and (c) it will partner with others to scale up successful preventive efforts.

For roads, the key governance actions proposed include establishing three autonomous road authorities to streamlined ownership, management, accountability, and financing of all road network activities in the country. These activities (and physical investments) are being supported under the ongoing Northern Corridor Transport Improvement Project (NCTIP), and additional financing would be considered in line with progress in these reforms. Working with development partners in Governance Justice Law, Order and Security (GJLOS)—where the Bank heads the sub-committee on the judiciary—the Bank will provide support for improving the performance of Kenya’s judiciary (including clearing the 1.1 million case backlog) through such measures as improved case management, process re-engineering, initiatives such as piloting a judicial clerkship program for top Kenyan law students, and training in Alternative Dispute Resolution methods. It will also support the full automation of the recording of court proceedings, building on the pilot exercise.

31. **Vigorous Efforts will be Required During and Well Beyond the CAS Period.** Given the history and scale of Kenya’s governance problems, it will take vigorous actions on a broad front over the medium term to achieve sustained gains. The dynamics of the election year are also likely to make significant reforms difficult, although not impossible. The Government has enumerated priority actions—from a larger work program—that it believes it can achieve in the short run. In areas in which preparation for implementation is already well advanced—for example, procurement and other financial management reforms—such progress is very likely to occur. We are also working to help consolidate governance improvements in water and sanitation, which the Bank has been supporting since 2004 through a technical assistance project. Other areas that require Parliamentary approval, such as the increase in the number of judges, could be delayed. Meanwhile, analytic work in such areas as media development and parliamentary capacity, and police oversight mechanisms will help prepare the governance agenda beyond the timetable set out in the GAP.

32. **Safeguarding Bank-funded Operations:** Experience highlights the importance of attention not only to broad strategic aspirations, but also to practical issues of

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4 A staff-monitored program (without financing) is in place, with monthly reporting and verification of progress.

5 One example is the private sector/civil society’s Global Water Challenge, which involves multinationals, international NGOs, and UNICEF to deliver clean water, sanitation, and hygiene education and support.

6 GJLOS seeks to improve transparency and accountability, empower the poor, marginalized and the vulnerable inter alia by promoting equal access to justice, and police and penal reforms.
implementation, such as the risk of corruption during project execution, operational staffing and budgets, and partnerships.

33. **Additional Measures will Address Systemic Corruption Risks in Lending.** All Bank-funded projects benefit from a range of measures (e.g., results-based auditing) being rolled out across Government. In addition, recently approved operations contain a range of provisions that reflect the Bank’s selective engagement with ministries, agencies, and institutions that champion good governance, and make clear that funds must be used for their intended purpose. For example, the Education Sector Support Program and Arid Lands Additional Financing contain enhanced public disclosure provisions, mechanisms for community monitoring, and independent complaints mechanisms. We will use similar measures to ensure that both existing and new Bank-supported lending operations address issues of governance. In addition, beyond the regular project supervision that addresses policy and institutional issues, each year beginning in FY07 the Bank will undertake an integrated and in-depth technical, procurement, and financial management review of projects with high fiduciary risk. This review may include sampling contracts, visually inspecting the actual delivery of work, following up on audit findings and recommendations, and reviewing interim financial management reviews. The Bank will also agree with the Government on the release of certain documents that will help enhance the transparency and accountability of Bank-financed projects—for example, aide-memoire of implementation review missions, audit reports and the Government’s formal responses to them, procurement plans and schedules, bidding documents and requests for proposals, shortlists of consultants, and summaries of bid evaluations that do not reveal confidential commercial information provided by bidders.

34. **Work to Build Country Systems will Continue to be an Integral Part of Managing Project Corruption Risks.** With overall donor support accounting for only about 5 percent of Kenya’s development spending, measures aimed at protecting externally funded projects (including activities supported by the World Bank Group) are being carefully tailored to maximize impact by benefiting all Government spending. For example, after forensic audits of Bank operations in 2005 showed problems related to faulty accounting practices, lack of fraud risk management, weak oversight by senior Government officials, inconsistent application of the Bank’s Procurement Guidelines, and failure to share lessons learned and best practices, the Bank initiated a dialogue with the Government over systemic anticorruption measures (such as risk-based audit procedures) that the Government has since applied to Bank operations, and more broadly, to strengthen Kenya’s systems. In the same spirit of Kenyan system building, side letters are also being used in project agreements with the World Bank to reinforce implementing agency staff compliance with Kenyan anticorruption laws such as asset declaration, and to promote other transparency measures such as disclosure of financial statements and audit reports.

35. **Bank Staffing, Processes, and Internal Organization will Better Reflect Operational Priorities.** A field-based governance adviser will be recruited for the Nairobi office to guide the Bank’s work on governance, and recruitment of additional
field-based staff procurement and financial management specialists is in process. A cross-sectoral Operations Risk Mitigation Team will be established, to be chaired by the governance adviser, with a mandate to oversee risk-mitigation actions, advise task teams in the design and preparation of projects, share and disseminate information on risks, advise the country management team on strategy for mitigating governance risks, and interface with INT as necessary. In addition, the rolling intensive Country Program Review process will sharpen its focus on corruption issues.

36. **Development Partnerships will be Deepened.** As we intensify the equity and governance agenda in the Bank assistance program, it will be important to partnermeaningfully and transparently with other stakeholders in the spirit of mutual accountability. The Bank’s comparative advantage is ESW, grounded in qualitative and quantitative research and comparative analysis. But even here the Bank will seek partnerships with other development and research agencies. During the rest of the CAS period, we will also mobilize a small team of external reviewers comprising a representative from each of the following: (a) the donor subgroup on harmonization, alignment, and coordination; (b) the relevant donor sector working group; (c) the relevant professional association; and (d) the civil society/governance network. This team will review all projects proposed for Bank financing. The Bank has also committed to preparing the next Kenya CAS in the context of a Joint Country Assistance Strategy, and to identifying opportunities for greater selectivity and division of labor based on comparative advantage. A particularly important partnership has been that with the IMF: for example, in recent months there has been close collaboration and information sharing between staff of the two organizations on issues of governance, structural reforms, and the growth outlook during the preparation for and discussions on the second review under the IMF’s PRGF arrangement and the Article IV consultation. IMF staff also participated in a Bank-led governance mission in July 2006. This close partnership is expected to continue.

37. **Civil Society Partnerships will Receive Additional Support.** Within Kenyan society, we propose deepening our partnerships with the private sector, professional bodies, faith-based organizations, youth groups, foundations, and trade unions, and our engagement with parliamentarians and nongovernmental organizations. For example, through the World Bank’s Parliamentary Network, parliamentarians have engaged the Bank on such issues as the need for analytic work on the functioning of Parliament, collaboration in monitoring and evaluation at the community level, and technical support for key oversight committees. The Institute of Certified Public Accountants of Kenya has approached the Bank for institutional strengthening support to help ensure the quality of the professional accounting practice and adoption of best practice, including enforcing compliance with international standards. The Bank will seek trust-funded resources to finance a multiyear grants program to support such partnerships.
Annex 2: Sector/Program Background

KENYA: Natural Resource Management Project

I. Water Resources and their Management

1. **Kenya is classified as a chronically water-scarce country in absolute and relative terms (the bottom 8 percent of countries globally).** The natural endowment of renewable freshwater is currently about 650 m³ per capita per year. Increasing population growth adds pressure to this limited resource; by 2025, Kenya is projected to have a renewable freshwater supply of 235 m³ per capita per year. While the country is water scarce, it has yet not been able to optimally exploit its available water resources. There is high but considerably variable potential in water development as Kenya is abstracting well below safe abstraction levels (as much as six times that of current surface water and five times current groundwater abstraction). However there are marked regional, annual, and seasonal imbalances.

2. **Kenya experiences El Niño-La Niña-type climate variations:** Both spatially and temporally, Kenya experiences wide variations in climate and in average Annual rainfall. The latter can vary year-to-year by up to 30 percent above or below the long-term average. El Niño/La Niña events usually manifest as severe flooding followed by a period of drought. The spatial variability of rainfall is considerable, varying from 250 mm in the Arid and Semi Arid Lands (ASALs) to 2,000 mm in the high mountain ecosystems. About 66 percent of the country receives less than 500 mm of rainfall annually. The Lake Basin receives the largest rainfall over a small area while the Ewaso N’giro North basin which is much larger and receives the least rainfall. Rainfall is also highly variable over time, especially in the ASALs where it varies between + 35 percent and - 70 percent around the mean. The country experiences either a drought or a flood (greater than 20 percent deviation from the mean) about every third year. Major floods affecting much of the country were experienced in 1961 and 1997–98. The April 2003 floods illustrate the important linkage between management and impact. They were caused by only slightly above-average rainfall, but damage was extensive in the Lake region partly because of heavily degraded catchments and partly because of settlement in the floodplains. The high costs from disrupted water supply to Nairobi arose because of a lack of repairs and poor maintenance of the Sasumua Dam.

3. **Droughts are pervasive and have become endemic in some parts of Kenya.** Major drought periods have been recorded about every 10 years; the 1998–2000 drought was one of most severe in recent times. The ASAL areas, the poorest regions of the country, are the areas most affected by drought; for reasons explained later, traditional coping strategies are becoming ineffective. These areas also have to cope with influxes of refugees which can potentially increase environmental degradation and overexploitation of the scarce water resources of these regions.
4. **“Kenya’s Water Towers” are critical water source, supporting the major sectors of the economy.** The major rivers of Kenya all originate from only five specific mountainous areas—Mt. Kenya, Aberdares, Mau Complex, Mt. Elgon, and Cherangani. The management of these few “water towers” has consequences throughout Kenya. Among them, Mt. Kenya provides water supply to Nairobi and is the source of the Tana River, which because of the Seven Forks cascade generates about 70 percent of the country’s domestic electricity. It also supports agricultural development along the Tana Basin. The increasingly important horticultural and floricultural industries, which generated export revenue of Kshs 23.5 billion in 2002, depend on water from the Aberdare Ranges (Lake Naivasha area) and Mt. Kenya (Ewaso N’gíro North River area). Groundwater is widely available in Kenya, but the annual quantity of renewable groundwater is about 10 percent of the renewable surface water. Areas that receive low rainfall and runoff, such as the Ewaso N’gíro basin, are largely dependent on groundwater as a reliable source. Particularly in these ASAL areas, any contamination or over extraction of groundwater has very serious consequences for residents, who are typically some of Kenya’s poorest people. They are highly vulnerable to droughts, so degradation of groundwater in these areas contributes directly to poverty. Groundwater is also an important supplementary source in urban centers such as Nairobi, Mombasa, and Nakuru.

5. **About 54 percent of Kenya’s water resources are shared with other countries and are therefore ‘international’ waters.** Through the Lake Victoria Basin, Kenya provides about 45 percent of surface water inflows to Lake Victoria and hence to the upper Nile. Kenya also shares a large number of other important surface and groundwater resources with its neighbors Ethiopia, Sudan, Tanzania, and Uganda. This interdependence between Kenya, its immediate neighbors, and downstream and upstream Nile countries has considerable implications for the management of the country’s resources. These resources need to be managed cooperatively within agreed frameworks in order to avoid tensions and ensure that the benefits of the nation’s water are available to all. As an example, the Lake Victoria Basin is one of the water-surplus areas of Kenya, and an area which routinely suffers from regular flooding and extreme poverty. Actions that Kenya takes to tap that surplus—for example, through multipurpose investments such as hydropower development, expanded irrigation use, catchment conservation, and flood control—could bring benefits beyond Kenya. The Nile Equatorial Lakes Region as a whole could benefit from increased energy availability, food security and improved water quality. Foreign direct investments in such broad development efforts could be of interest to both domestic, regional, and international investors. This development scenario is possible only if trust and confidence are built amongst the riparian countries sharing water resources. Unilateral action outside a common framework could, on the other hand, create tensions among the riparian countries.

6. **Key issues:**

   (a) **Catchment Degradation** The degradation of catchment areas as a result of increasing population pressure is affecting the quantity and quality of water available for maintaining essential environmental services and for productive use.
Deforestation, poor land use practices, steep slope and river bank cultivation, all lead to erosion and the loss of valuable soil cover which in turn results in very high sediment loads in streams and rivers which is carried downstream and deposited in reservoirs, lakes, wetlands, and coastal areas. This reduces the economic life of reservoirs, reduces the hydraulic capacity of water conveyance facilities, disrupts water supply operations, and affects the ecological functioning of natural areas. An example of the impact is the strategically important hydroelectric Kamburu Dam on the Tana River which was threatened by excessive rates of sediment deposition before the construction of Masinga Dam in 1980. The latter dam was designed on the basis of a siltation rate of 3 million tons per year. However, by 1988, the siltation rate was estimated to have increased to 10 million tons per annum because of upstream catchment degradation.

(b) **Kenya has insufficient water Storage Capacity.** Kenya has not invested adequately in the water storage called for by the 1992 National Water Master Plan and the subsequent AfterCare Study Report of 1998. In fact, even the 1992 storage capacity has not been properly maintained in the face of siltation, general depreciation, and episodic damage from floods such as those that occurred in 1997–98 and more recently in 2003. The consequence is that, in the face of both population growth and the depreciating asset base, the maximum per capita storage of surface water (excluding energy uses) has declined from 11.4 m$^3$ in 1969 to only 4.3 m$^3$ by 1999. Kenya’s per capita total water storage for all uses is now extremely low by the standards of other countries that are subjected to variable climates.

(c) **Water resources have been managed poorly in the past.** Inadequate and highly centralized management of water resources in the past has permitted these trends to develop and increase in time. The recent reforms of policy, legislation and institutional arrangements in the sector have begun to redress some of these trends, however.

7. **The National Policy on WRM and Development of 1999 addresses both WRM and WSS service delivery issues.** Its objectives were to preserve, conserve, and protect available water resources and allocate those resources in a sustainable, rational, and economical way; supply water of good quality and in sufficient quantities to meet the various water needs, including poverty alleviation, while ensuring safe disposal of wastewater and environmental protection; establish an efficient and effective institutional framework to achieve a systematic development and management of the water sector; and develop a sustainable financing system for effective WRM, water supply, and sanitation development.

8. **The Water Act of 2002 provides an improved legislative framework.** It promotes more effective “management, conservation, use and control of water resources and for the acquisition and regulation of rights to use water; and provide for the regulation and management of water supply and sewerage services.” The act provides legislative backing for many of the principles of the policy, including:
(a) separating WRM from water services;

(b) creating administrative autonomy by establishing the WRMA as an arm’s length institution charged with the management of Kenya’s water resources;

(c) forming catchment area WRM strategies, establishing catchment-based regional offices of the WRM Authority, and appointing CAACs;

(d) preparing the National WRM Strategy and CMSs;

(e) providing for community involvement in WRM and conflict resolution through WRUAs;

(f) introducing a system of user fees to be levied on the abstraction and use of raw water to fund the costs for WRM;

(g) introducing polluter pays principles for enforcing pollution control; and

(h) introducing a “water reserve” to safeguard minimum water requirements for basic human needs and ecosystem protection and granting the “water reserve” a high priority in the water allocation decision making.

9. **While the water reform process has received strong support from the donor community, there is still a need to further harmonize and improve.** Support comes in particular the Sida/DANIDA Kenya WSS Programme which consists of support to 3 components: rural WSS; WRM; and support to WSR. GTZ has also strongly supported the sector. However, there remain a number of areas where harmonization of policy and legislation is required between the new WSR and the policy and legislation of other sectors such as environment and agriculture. This is being addresses through the project. The policy and legislation provide a sound basis for the reform of the sector in Kenya and significant progress has already been made in implementation, particularly with regards to the establishment of new institutions such as the WRMA.

10. **WRMA is in the process of clarifying its modus operandi.** The WRMA officially commenced it operations on July 1, 2005, with approximately 20 staff. Since then it has established its National Office, six Regional Offices in Valley Basin, Ewaso Nyiro North Basin, Lake Victoria North Basin, Lake Victoria South Basin, Tana River Basin and Athi River Basin, and begun the process of establishing 25 sub regional offices. In addition to establishing its institutional base throughout the country the WRMA is currently developing a strategy on how to engage with different water users, how it supports WRUAs, how it performs its regulatory functions, how funds are allocated and flow for different activities, etc. This is a critical phase of the country’s reform process because many of these practical details are not addressed in the overarching national policy or the legislation. It is vitally important that conflicts of interest are avoided which in the long term will undermine the abilities of the different agencies to fulfill their mandates. In addition, the de-linking of MoWI staff to WMRA has yet to take place as the human resources plan has yet to be implemented.
11. **WRUAs are set to becoming the key stakeholder players in catchment management and development.** One of the most important issues is for the WRMA to maintain its role of regulator of all water resource related activities—it cannot at the same time be both the regulator and the developer of water resources at any scale (community or large scale water resources development). However, it cannot remain a passive player and needs to actively promote good practice in water resources and catchment management or the current degradation of the country’s natural resources will continue and people’s rights to the proper use of resources (especially the poor) will not be met. The solution to this dilemma which the WRMA is in the process of setting up is to support the planning of WRUAs to undertake proper catchment management activities through the development of Catchment Management Plans, within the context of regional CMSs, and then provide a clearing function to ensure that plans meet required standards. The financing of the initial stages of WRUA establishment and planning will be financed through the WRMA to catalyze the process but the financing of the implementation of the plans will not be through the WRMA to avoid the inherent conflict of interest for being regulator and developer.

12. **The Tana Catchment** The Tana Catchment Regional Office of WRMA was established in late 2005 and has already engaged extensively with stakeholders and water users of all levels in the extensive catchment of the Tana River. It is currently in the process of developing its functions and activities as the reform process in the water sector proceeds, including the development of a CMS, and supporting the establishment and functioning of WRUAs in the Tana River Basin. WRUAs are made up of representative water users in sub-catchments. Members are drawn from all strata of Kenyan society and special efforts are made to include marginalized members of the community including specifically women and the very poor. Depending on the location of the sub-catchments, WRUAs may include private sector interests, small and large scale commercial farmers, etc.

13. **WRUAs are encouraged and supported in preparing Sub Catchment Management Plans (SCMPs).** In the process of developing the CMS the Regional Offices of WRMA have established clear transparent criteria for the selection of prioritized “hot spot” sub catchments. Tana WRMA is presently engaged in the support of WRUAs in the development of these SCMP targeting “hot spot” sub catchments. The project, in its support to the work of the Tana WRMA Regional Office, will be guided by the prioritization and ranking process used by the Tana WRMA.

14. **Catchment management activities involve a range of different types of intervention, and need to be livelihood based.** In case that they are water related, they will fall under the remit of the WRMA. There are also interventions, such as improved farming methods, afforestation and reforestation, alternative livelihoods such as beekeeping, etc. which are not directly water related. Catchment management activities need to be livelihoods based - if the users of land, who are largely poor subsistence farmers, are not convinced that activities will have a direct, discernable and short-term impact on their income and food security, they will either not engage in catchment management activities at all or they will not ensure that they are sustainable. Where practices are not sustainable such as steep slope cultivation and river bank cultivation,
alternative livelihoods need to be supported. Effective catchment management at the local level can only happen therefore with the full involvement of those who live and work in the catchment areas, taking responsibility for the conservation of their own resources upon which they depend. The methodology adopted in the Water Act of 2002 and implemented by WRMA through the establishment and supporting of WRUAs is therefore important for successful WRM and catchment protection.

15. Catchment management is very important to downstream water users. Ensuring equitable access to resources for all users (and not only those at the top of catchments) is a key water rights principle. Water quantity is only one aspect, however water is also needed of good quality with out excessive sediment or other pollutants. Catchment management is an important strategic undertaking to safeguard investments. The economic and social costs of degrading catchments is very high, primarily through high sediment loads, reduction in base flow (leading to more frequent dry season water shortages) and floods. Sedimentation increases the cost of water treatment; reduces the storage capacity of dams which in turn reduces the value of key national assets and risks water shortages; it blocks intakes and silts up canals; it threatens hydro power production through reducing storage and corroding and clogging machinery.

16. Funding of WRMA remains a major challenge. Currently the WRMA is financed from the central Government, donor sources and user charges. The funds received from the Treasury are insufficient for the institution to meet its costs and perform its functions. The WRMA is currently significantly exceeding its user charge collection targets and has instituted an aggressive scheme to identify the large users initially to form the base of their revenue. There has not been a culture of user charges in the past. The development of a culture of users paying for the use of water has to be accompanied with the delivery of services from the Authority and a general public acknowledgement that it is an effective and efficient institution which is doing good work in the interests of the users and the country as a whole. Support for the establishment of Authority at this stage of its development is justified both on the strength of its successful initial start up and to enable it to rapidly commence its functions of monitoring and protecting the resource, as well as administering water use.

II. Irrigation Potential and Development

17. Kenya's Irrigation Potential is untapped. Kenya's economy remains vulnerable to climatic shocks that typically impact more on the poor. With 90,000 ha (1.2 percent of total national cropland, and 17 percent of potential irrigated area) benefiting from irrigation, and with close to 26 million ha of agricultural land depending on highly unpredictable rainfall, climate variability has a significant impact on the vulnerability of both smallholder farmers and the national economy. Climate variability and the inability of Kenya to deal effectively with its impacts jeopardize stable economic growth and provide a volatile environment for successful implementation of macroeconomic reforms and better governance of public resources.

18. Kenya is among the top 10 percent most water-stressed countries in the world. Kenya’s natural endowment in terms of renewable fresh water is currently 650m³
per capita per year. Total consumption as a percentage of total internal renewable water resources is estimated at 7.8 percent, but this hides significant geographic and seasonal variation. When taking into consideration that not all water can be safely harvested, this figure increases to 20.2 percent. Kenya has an irrigation potential of 539,000 ha, distributed over the basins as follows: (a) 200,000 ha in the Lake Victoria (Nile) basin; (b) 64,000 ha in the Kerio Valley (Rift Valley) basin; (c) 205,000 ha in the Tana basin; (d) 40,000 ha in the Athi basin; and (e) 30,000 ha in the Ewaso Ngiro (Shebelle-Juba) basin. Total drainage potential amounts to 600,000 ha (FAO Aquastat).

19. **Public irrigation assets are managed by the NIB.** Out of the 90,000 ha under irrigation in Kenya, about 13 percent is gazetted as public irrigation. Public irrigation assets are managed by the NIB. The NIB is a semi-autonomous body, established under the Irrigation Act of 1966, and is responsible for planning, construction, settling and managing national irrigation schemes. At present, it operates six schemes: Mwea (6,000 ha), Ahero (900 ha), West Kano (900 ha), Bunyala (300 ha), Perkerra (500 ha), and Hola (850 ha). Many of these schemes are irrigated through pumps, which raises concerns about their sustainability in view of farmer-led management.

20. **Better management of existing rice irrigation schemes will improve people’s livelihoods.** The Mwea Rice Irrigation Scheme is by far the largest. Until recently, the NIB regulated all aspects of rice cultivation, including planting, harvesting, milling, and marketing. The NIB also provided agricultural inputs, which the farmers paid for with market earnings. The farmers and the NIB jointly own rice mills. In the late 1990s, clashes erupted between farmers and the NIB over the scheme’s management. The farmers subsequently formed Mwea Rice Growers Multipurpose Society to take over many of the NIB’s management functions, with limited success. Systematic maintenance is no longer done, and the infrastructure is in a poor state of repair. Equitable allocation of water has also suffered, with unscheduled 4,000 ha development in the upper parts of the scheme, illegal abstraction by top-end farmers, as a result of which water no longer reaches the tail-end parts. As a result of the current situation, irrigation efficiencies are low and water wastage high. The situation in Mwea is typical for the other public schemes and major opportunities therefore exist to reduce wastage and improve efficiency, with a subsequent significant impact on the management of water resources in many of Kenya’s water-stressed river basins. Better water management is also expected to contribute to increased economic growth, reduced poverty and improved food security based on agricultural intensification.

21. **Institutional reform targeting the irrigation sector improves management and accountability.** Following the events in Mwea, the NIB has embarked on an ambitious reform program that aims to professionalize management and make it more transparent and accountable to water users. The Board has transformed itself from a conventional irrigation development and management organization, responsible for the entire irrigated production process from input supply to marketing, to a modern irrigation service provider responsible for the provision of water, and operation and maintenance services. As part of this process, the NIB has significantly reduced staff numbers (from 700 a few years ago to around 80 permanent staff members at present), has established WRUAs who have started paying significant O&M charges (including full O&M costs
but at present excluding salaries), has established participatory scheme management committees, and have pulled out of production support (input supply, marketing, etc.). A draft Irrigation Policy has been prepared and has been finalized in the course of project preparation.

22. Despite these significant achievements, much still needs to be done to complete the reforms. Specifically, full recovery of O&M costs (including salaries) should be targeted and, consequently, ultimately full accountability of the Board to those who foot the O&M bill, viz. the water users. Also, the role of the NIB in irrigation development and the institutional environment should be further clarified. Specifically, NIB would explicitly explore the option to transform itself into an irrigation services provider (O&M) to both WRUAs for O&M of private infrastructure that has been transferred to the WRUAs, and to the

23. The Government for O&M of public infrastructure (e.g., pumping stations). WRUAs could thus take advantage of economies of scale in terms of equipment and machinery, and in view of their replacement costs. In addition, such organization could play an active role in the further development of Kenya’s irrigation assets. The project will help NIB prepare a long-term vision, accompany it in its implementation, and will help define and implement a sustainable financing mechanism, process, specific steps, targets, benchmarks and indicators than can realistically be accomplished in the course of implementation of the project. Subsequent to the adoption of the Irrigation Policy, the project will also assist in the preparation of a National Irrigation Strategy and Business/Master Plan.

24. The role of Government in the sector. While the NIB should ultimately become accountable to those who cover the costs of its services, the Government will need to continue to play a critical role in irrigated agriculture. In the first place, the Government will remain the owner of the irrigation assets and has, as such, an interest in adequate O&M. The Government will therefore need to adopt a supervisory role and ensure that proper maintenance according to adequate quality standards is being done by the farmers. Secondly, some of the irrigation assets are of too strategic importance or are too large for a WRUA to maintain and operate, and O&M responsibility can therefore not be transferred. Thirdly, the Government will continue to play a role in initiating and, at least partly, financing irrigation development at the national level. This will include providing a favorable environment for private investments in labor-intensive irrigation development, as well as incentives at the scheme level for expansion of existing irrigation. It is expected that the National Irrigation Policy will provide specific guidance on the role of stakeholders, including the Government, NIB, farmers and private sector, in irrigation management and development with a view to streamlining the institutional framework and avoid duplication and overlaps.

25. The project will consolidate the reform process. In addition, it will support further reforms by providing incentives through rehabilitation and development of new irrigation infrastructure. Specifically, investments in hardware would be conditional upon achieving agreed reform benchmarks.
III. Forest Resources and their Management

26. **Forests are important for the economic, environmental and social welfare.** Official statistics estimate that forests occupy about 1.7 percent of Kenya's land area. Kenya's forests are reservoirs of biological diversity (genes, species and ecosystems). Kenya's forests have been classified into four main categories: state indigenous forests, state plantation forests, farm forests and forest and woodlands on local authority land. State indigenous forests are gazetted reserves of naturally occurring indigenous forest on state land. Indigenous forests are natural forest found in areas of high potential and medium potential land facing high population pressure. State plantation forests are large-scale industrial plantations, usually of exotic monocultures, on state land. Plantation forests are located within the gazetted forests. Farm forestry is the practice of managing trees on farms whether singly, in rows, lines, boundaries, or in woodlots or private forests. Forests and woodlands on local authority land include dryland forests and other woodlands or scrublands on public land, usually under the control of the local authority.

27. **Forest Diversity** The indigenous and plantation forest resources of Kenya provide a wide range of economic, environmental and social goods and services. These include raw materials for the wood based industries creating jobs, soil stabilization, carbon sinks and water catchments. The dense 'montane' forests are often described as the 'water towers' of Kenya and protect the rate of flow and quality of water discharged by the rivers draining these catchments. Indigenous forests have endemic and threatened species. Dryland forests and farm trees provide important livelihood strategies for many of Kenya's poor people including wood fuel, charcoal burning for income and use of wood products for building. It is estimated that in Kenya, forests provide wood and wood products to over 80 percent of all households.

28. **A range of institutions and organizations are directly involved in forest management and conservation of forests in Kenya.** The majority of Kenya's forests are found on gazetted areas. The FD/KFS manages the gazetted Forest Reserves. Two other key institutions include the Kenya Wildlife Service (KWS) and National Museums of Kenya which manage forests gazetted as National Parks and National Reserves and forests gazetted as National Monuments under the Antiquities and Monuments Act respectively. A significant forest area is found in trust land and vested in the respective Local Authorities under the Ministry of Local Government. There are also indigenous forest areas under private ownership, either as units held individually or within Group Ranches. Many of these usually small holdings are important for catchment and

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7 This estimation does not include dryland forests in which individual trees are scattered over wide areas of grassland or farm forests in which small groups of trees are planted on farms and other cultivated lands. In 1995, the extent of savanna woodland was estimated at 61.4 percent of the land area in Kenya (Wass 1995).
8 These are man made commercial forests comprised mainly of cypress and pines for timber, paper and pulp, and Eucalyptus for transmission poles and fuel wood.
9 Gazetted areas are land that has been surveyed, demarcated and gazetted either as Forest Reserves, National Parks, National Reserves and National Monuments. The gazetted areas can either be from Trust land or unalienated government land.
10 These are forests of cultural and biodiversity significance.
streamline conservation purposes as well as providing subsistence and small-scale commercial produce.

29. **Forest reserves are managed by the FD/KFS.** It is responsible for: (a) formulation of policies for management and conservation of forests; (b) preparation and implementation of management plans; (c) management and protection of Kenya's natural forests; (d) establishment and management of forest plantations; (e) promotion of on-farm forestry; and (f) promotion of dryland forestry.

30. **Management of indigenous forests is carried out by the FD/KFS.** Here commercial exploitation is banned leaving their management for provision of environmental services and NWFP as the only options. Local communities are allowed to collect fuel wood for their use from dead and fallen tree in these forests for a fee. Although exploitation is banned, cases of illegal logging have been reported where local industries are supplied with hard woods. Due to the porous nature of forest boundaries, illegal poaching of wood has proved difficult to monitor and control.

31. **Forest plantations in forest reserves are managed by FD/KFS.** Objective is to ease pressure on indigenous forests for the provision of industrial wood whose demand has been increasing at a high rate. Instead, the area under State plantations has declined from 170,000 ha in 1994 to the current level of an estimated 120,000 ha. Of this area 90,000 ha (60 percent pine and 40 percent cypress) could be harvested today (though an estimated 36,000 ha is over mature).

32. **Insufficient political and financial support has constraint the ability to manage forests sustainably in the past.** From mid 1990s there has been a decline in the capacity of FD to sustainably manage the industrial plantation forests due to lack of political support, inadequate business environment within the Government administrative set up, tight budgetary allocations and staff attitude which is not conducive to business management. This resulted to progressive poor plantation management, abuse in the disposal of forest produce and preferential licensing which contributed to decline in supply of timber and other products culminating into the Government imposing a partial ban of all form of harvesting from the forest plantations albeit for a few large wood based industries.

33. **Forest land is becoming scant as population pressures mount.** The steady growth of Kenya’s rural population continues to place ever greater strains on forest land and this pressure is exacerbated by the fact that local communities see few if any of the benefits that are derived from timber production under existing management systems. Forest area communities distrust commercial forestry operations, especially where this involves only a few select companies engaged in pulp and saw log production.

34. **Since the early 1990s a number of the Government decisions have had a major impact on communities living within and adjacent to forest areas.** For example the banning of timber harvesting (except by a limited number of exempt private companies) has had severe impacts on the livelihoods of people formerly employed in saw milling and the processing of timber. Estimates of the numbers who have lost their
jobs exceed 150,000. When dependents are included over half a million people have lost their primary source of income. The ban on harvesting timber has also impacted access to forest areas for other non-timber products.

35. Population pressures on forest areas have resulted in illegal encroachment of settlements which the under-resourced FD has been unable to prevent and there has been a history of ‘legalization’ of such activities where the Minister of the day has used his powers to excise affected areas from the gazetted forest. In some cases, land has been excised to support private development.

36. The controversial Shamba system as an effective way of establishing forest plantations. The logging ban was preceded by the withdrawal of the Shamba system in 1986. This was due to perceived corruption and mismanagement. The Shamba system was reinstated as non-residential cultivation in 1994 but then banned again in 2003. Shamba was first introduced under colonial administration and permitted farmers to plant crops within newly established forest plantations provided they weeded the tree seedlings. Once the trees were fully established the farmers moved on to new plots. When well run, the system is regarded to be effective in re-establishing forest cover. Where the Shamba is poorly managed the system is easily abused because young trees are neglected or willfully damaged to allow farming to continue.

37. The forest sector is at a critical turning point in Kenya. A new Forest Bill was ratified in Parliament in 2005. The Forest Act is a long-term outcome of the Kenya Forest Master plan finalized in 1991. In the new Forest Act the Government has embraced the concept of participatory forest management. This is a radical departure from the previous practice where the Government assumed full management responsibilities in gazetted forest reserves. There is particular consideration for the formation of community forest associations, which will be recognized as partners in management. Commercial plantations will be open to lease arrangements by interested groups to supplement the Government efforts. This will improve the productivity of the plantations to increase availability of timber and other products/services to the country and for export. This Act has the potential to unlock opportunities for forest resources to contribute to economic development and poverty alleviation.

38. New institution opportunities for forest sector investments become available. The Forest Act requires dissolution of the existing FD and creation of a new Forest Service. It also aims to attract investment in the Forest Sector. The Act offers scope for the involvement of multiple stakeholders such as local communities, private sector, NGOs and CBOs to engage in tree cash crop farming. It allows for sustainable management of indigenous forests for multiple uses (including timber extraction), under agreed forest management plans, and for joint management agreements between the Board of the KFS and any other formal organization (the Government, private sector, community). The Forests Act recognizes and promotes forests and woodlands on local authority land areas as productive forest areas on which community and micro enterprise should be supported.
39. **The Forest Act promotes partnerships.** One of the key features of the new Forests Act 2005 is that it provides an enabling framework, including an array of incentives and systems for support, for the development of partnerships for sustainable forest management. Within the overall oversight of the emerging KFS, decision-making, management and benefits in forestry can be shared among different combinations of the Government, private sector and community organizations. Forestry partnerships under the auspices of the Forests Act 2005 offer a means to kick-start commercially viable forestry while ensuring returns to a wide cross-section of society—particularly small-scale farmers and local communities—and sustaining the multiple public goods and services demanded from forests.

40. **Forests provide an enormous potential to promote economic growths.** The forestry industry in Kenya has over 300 sawmills, of various sizes as well as plywood and composite board mills and a pulp and paper mill. It also has some large solid wood users. The forest sector of Kenya can produce a wide range of products ranging from sawmilling timber, including plywood to NWFP such as honey and medicinal plants. Recent studies estimated the economic value of major forest products to approximate KShs83 billion per annum. Studies estimate that between now and 2015, industrial wood requirements are likely to rise from their present level of about 2 million m$^3$ to something in the order of 2.5 million m$^3$ of which 70 percent will be needed for the manufacture of lumber, furniture, joinery and wood-based panel products and 30 percent for manufacture of paper and paperboard.

41. **As oil prices soar interest in wood fuel is growing.** In Kenya there also is growing demand for wood fuel from industry. For example, currently the largest tea company, the Kenya Tea Development Agency (KTDA), has at least one boiler in each of their 54 factories running on wood fuel. The company's long-term aim is to convert all boilers to wood fuel. This would require 615,000 m$^3$ of fuel wood per year, produced from 2,650 ha with an establishment cost of Kshs66 million. For sustainable supply KTDA needs a total of 18,480 ha (this could be land within private farms, state plantation forests or public land).

42. **Assuming implementation of the Forest Act, and some other basic assumptions it is estimated that the expected annual revenue for KFS will be approximately Kshs1.5 billion.** This annual revenue is derived by examining the various sources of revenue in the forest sector and using information on royalty rates, licenses, and so on. It is also estimated that the plantation area is 120,000 ha (Master plan forecast) of which 90,000 ha are saw wood and 25,000 pulp wood and 5,000 Eucalyptus for fuel wood and transmission poles. Working with an allowable cut based on rotations of 25 years for saw wood, 18 years for pulp wood and 8 years for Eucalyptus plantations, the estimated annual harvesting areas would be 3,000 ha for saw wood, 1,500 ha for pulp wood and 700 ha for Eucalyptus. The expected yield under current management and efficiency is 250 m$^3$ per ha for saw wood, 300 m$^3$ per ha for pulp wood and 100 m$^3$ per ha for transmission poles and 80 cu m for fuels wood. It should be noted that saw wood plantations also produce timber from thinnings which in 1998 was 25 percent of the clear fell volume per ha that is 95 m$^3$ per ha. Existing timber royalty rates are Ksh1,400 per m$^3$
for saw wood, Ksh1200 per m³ for pulp wood, Kshs340 per m³ for thinning and 400 per m³ for fuelwood (Forest Department, General Order of 2006).

43. **There is potential for revenue from indigenous forest areas and mangroves.** The latter occupies an area of 50,000 ha along the coast and provides poles for building. Other sources of revenue from indigenous forests will include concessions for services provisions like eco tourism, bee keeping, herbal medicines and other NWFPs. Initially this source of revenue is expected to be lowly priced at Ksh50 per ha to encourage investors at the same time the area under concessions will be small at first anticipated to be about a total 100,000 ha from both indigenous and plantations and increasing with time.

44. **Management will shift increasingly to longer term approaches.** Licenses and permits will also form a major revenue source although this could decrease as more areas are taken by concessions. Other NWFPs will constitute a significant source of revenue expected increase with time.

45. **Payment for environmental services schemes are expected to become more attractive.** Environmental services like water catchment fees could attract a minimal Kshs 30 per ha from electricity generating companies initially increasing to about Ksh40 in five years. This fee could be charged on the existing catchment areas of 900,000 ha.

46. **Carbon markets can provide additional income.** Due to improved biomass through reforestation of degraded areas with low vegetation, the forests could attract the carbon sinks funds at a conservative rate of US$1 per ton of CO₂ equivalent. To estimate revenues from carbon sinks it is assumed that indigenous forests capture 20 tons of CO₂ equivalent per ha and that at first 50,000 ha could easily be considered for carbon sinks increasing to 250,000 ha in the first five years.

47. **Weak governance has contributed to the decline of the sector.** Poor governance in the forest sector can deter forest sector investment and reduce Kenya’s access to environmentally sensitive timber markets. Forest related corruption can undermine rule of law, discourage legitimate investment and give the wealthy and powerful and unfair advantage over those less able to pay bribes. Weak forest governance in Kenya is evident from illegal logging, political interference in the use of forest land, and degradation in the forest resource base.

48. **The main goals for the Forest sector reforms are to raise efficiency, ensure protection and sustainable forest use, and promote poverty reduction.** To achieve these goals it is central to strengthen forest governance. Three main priorities include: (a) forest sector institutional reform; (b) enabling community participation and benefit sharing; and (c) enhancing community and private sector investment in the sector.

49. **KFS will undertake the role of administration and coordination of all players in the forest sector.** To effectively transform the FD into the KFS some of the main problems that need to be addressed are:
(a) low levels of working resources allocation which could not translate into meaningful outputs. The allocations stood at 0.5 percent of the Government expenditure which is relatively small;

(b) inadequate policy, legal and institutional framework;

(c) very low levels of community participation in NRM;

(d) low forestry investments and private sector participation;

(e) inadequate information on forest resources;

(f) disincentives like taxes on advanced forest technologies; and

(g) political interference.

50. To address these problems, it is important to increase transparency, accountability and integrity of KFS. A first step towards this will require KFS to clarify its objectives and how it will operate to ensure socially and environmentally sustainable implementation of the Act.

51. **A major shift in the new Forest Act is the engagement of communities in forest management.** The Act gives considerable weight to community participation in the form of CFAs. However, there is the need to elaborate on the relationship and responsibilities of the CFAs and the Conservancy Committees how the various entities would interact. In addition, there is need to further clarify benefit/cost sharing mechanisms and detail how these will be determined and will guide management.

52. Some of the points raised during the consultations associated with the Forest Sector Institution-Centered SEA for addressing some of the issues included:

(a) creating more equitable distribution of the benefits accruing from forestry among community, private sector and the Government;

(b) providing incentives for communities to participate;

(c) addressing issues surrounding land rights, customary rights and rights of indigenous people;

(d) developing new processes for actively engaging communities in management decisions and day to day running of forest areas;

(e) increasing skills and knowledge amongst local communities through a range of capacity building exercises; and

(f) addressing intra-community issues will need to be tackled to enhance the performance of the CFAs.
53. **Subsidiary legislation that is being formulated will assist in addressing some of these issues.** In addition, there is need for greater understanding of suitable partnership models, incentives for community management, and mechanisms for addressing issues of encroachment, eviction and excision.

54. **The World Bank BioCarbon Fund has expressed interest in purchasing Emission Reductions (ERs) from Green Belt Movement (GBM), resulting from a proposed “Kenya GBM BioCarbon Project”**. Subject to successful negotiation of an ERs Purchase Agreement between GBM and the BioCarbon Fund by December 2006, the BioCarbon Fund would purchase an agreed amount of ERs for carbon sequestered in compliance with the Kyoto Protocol. The BioCarbon Fund would pay upon ER delivery and verification. The BioCarbon Project is being developed and would be implemented jointly by the GBM and the FD considering the rules and regulations of the Clean Development Mechanism under the Kyoto Protocol.

55. **The project would focus on community based forest restoration and carbon sequestration with the aim to rehabilitate and conserve forests and to provide related environmental services like the reduction of greenhouse gas emissions.** The communities living adjacent to the project sites would be the major beneficiaries of this intervention. The project operates at 9 project sites covering an area of about 2,000 ha in the Aberdares and Mt. Kenya, two of Kenya’s five “water towers” providing water to millions of people in Nairobi. In 2007-08 GBM networks would reforest grassland areas within gazetted forests with indigenous tree species. The FD will provide CFAs registered under the Kenya Societies Act a forest license granting exclusive user rights for all NWFP in the respective project areas. Together with the FD they will manage the forest on a sustainable basis for forest conservation. The CFAs will assign the rights for the certified ERs to GBM in return they will receive support to reforest the project site and will benefit from financial incentives to plant and manage the trees and from other income generation opportunities.

56. **The project will use GBM’s existing infrastructure of networks, groups and nurseries to collect seeds, to raise seedlings and to plant and nurture the seedlings.** Forest management plans for each site will be developed in a participatory process by the management committee. These management committees would consist of GBM network members, district forest officers and the responsible GBM extension worker. GBM would hire an international consultant to develop its capacity to implement the project.

57. **Enhancing community and private sector investment will enhance the value of the forest resource base.** It is widely known that the forests of Kenya have high economic value. Capitalizing on this potential requires strong business-like management of the resource by KFS. The new Forest Act facilitates private and community investment in plantations and indigenous forests. Creating an enabling and transparent environment for community and private sector investment in plantation, indigenous forests, and farm forestry will be important to drive growth of the forest sector. According to the private sector some of the key areas for improvement include:
(a) transparent formulation of royalty arrangements, tax concessions and/or logging arrangements;

(b) security of plantation or concession allocation; and

(c) establishment of appropriate incentives.

Motivating investment also requires enhancing the capacity of the FD/KFS to attract investments and provide client services to private sector and communities.
Annex 3: Major Related Projects Financed by the Bank and/or other Agencies

KENYA: Natural Resource Management Project

I. World Bank Financed Projects

<table>
<thead>
<tr>
<th>Sector Issues</th>
<th>Projects</th>
<th>Latest Supervision (PSR) Ratings*</th>
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<tr>
<td></td>
<td></td>
<td>Implementation Progress (IP)</td>
<td>Development Objective (DO)</td>
</tr>
<tr>
<td>Environmental Research, Government Capacity Building, Civic Empowerment</td>
<td>Tana River Primate National Reserve Conservation Project (Closed)</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>Environment</td>
<td>Western Kenya Integrated Ecosystem Management Project (Ongoing)</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>Agricultural Policy and Institutional Reforms</td>
<td>Kenya Agricultural Productivity Project (Ongoing)</td>
<td>MS</td>
<td>MS</td>
</tr>
<tr>
<td>Flood Management and CDD</td>
<td>Western Kenya CDD and Flood Mitigation Project (Under preparation)</td>
<td></td>
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<tr>
<td>BioCarbon Fund</td>
<td>Kenya BioCarbon Fund Green Belt Movement Project (Ongoing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLM</td>
<td>Kenya Agricultural Productivity and Sustainable Land Management Project (Planned)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory) World Bank Analytical Work

1. Past Bank Projects in the Forestry Sector: The World Bank supported the forest sector from 1969 to 1998. The last forestry credit to Kenya was the Forest Development Project (P001322) was Credit 2198-KE in the amount of SDR13.9 million (US$19.9 million equivalent). This was approved on December 20, 1990, and made effective on October 30, 1992. It was closed on January 31, 1998. The objectives of this project were to: (a) to enhance conservation and protection of indigenous forest resources; (b) to alleviate the accelerating fuelwood deficiency; (c) to improve the efficiency of timber production; and (d) to establish a framework for the subsector's long-
term development. The project includes investments to: (a) promote tree farming through intensified extension services to smallholders and rural communities and support to NGOs; (b) improve indigenous forest conservation, protection and management in the gazetted and un-gazetted forest areas; (c) improve the physical and financial management of the existing industrial plantations; (d) strengthen the institutional capacity of the FD through physical investments, training, management support and technical assistance; (e) upgrade forest research and technical forestry education; and (f) prepare a comprehensive, long-term Forestry Master Plan, including prerequisite studies and surveys.

2. **The Forest Development Project touched on all the main components of the current project, with the exception that it was not working in the context of the new Forest Act.** One of the problems with the project, as appraised, was that there were only weak links between the project's objectives and the components and activities which were put in place to achieve them. While the project's objectives focused on bringing about general improvements in the industrial plantation forestry sub-sector, the project's components provided support only to the FD for more specific activities geared towards replanting, forest O&M, and strengthening the central functions of the FD without fully addressing this broader objective. The project, as appraised, seemed to have left the interests of the primary stakeholders in industrial plantation development—the timber industry—almost at the periphery.

3. **Broader sectoral performance notwithstanding, and despite many systemic problems, the project's physical objectives were partially achieved.** Many physical targets which had been set were met, particularly, with regard to replanting. Significant improvements in the FD's inventory capacity were good achievements, and large areas have been inventoried as a result. Fire management plans have also been prepared for all districts. Performance in other areas has been much poorer, particularly in the roads rehabilitation component, in reducing the backlog of areas targeted for silvicultural treatment which had been identified at appraisal (pruning, thinning, and coppice reduction), and in establishing newly planted areas. Despite considerable investments in improving plantation inventory information, revenues from the sale of timber have declined considerably, a problem fundamentally related to the collection of royalties and not to their assessment. The project never successfully introduced any technical changes in the FD's silvicultural practices, despite recommendations regarding the need to do so to improve productivity and efficiency.

4. **The FD's management skills were improved by the project, accomplished through very intensive training inputs, though the institutional framework remains entirely unsuited for putting these skills to use.** Indeed, among the most significant, albeit somewhat irrelevant, project achievements has been the strengthening of the FD's skills through massive training, both at headquarters and in the field, and through the provision of equipment and technical assistance. At project completion, all forest stations were regularly preparing individual Annual Work Programs, which are subsequently consolidated into district plans and later into a national work program. This system of work planning, apart from forcing people in the field to prepare realistic plans in line with
available resources, was an innovation and has proven useful for supervisors in monitoring performance and outcomes.

5. **Sustainability depends on Government commitment.** The sustainability of the plantations established by the project and of the enhanced institutional capacity of the FD will depend on the level of support that the Government provides to the FD to operate and manage its plantations efficiently. Sustainability will require: (a) that the Government provides adequate and continuing budgetary support for plantations operations and management; (b) that the FD must be enabled to manage the plantation resource responsibly, autonomously, and with accountability, and without external interference; and that (c) excisions of industrial plantations should be stopped if the economic viability of the industry is to be assured.

II. **Projects Financed by Other development agencies**

<table>
<thead>
<tr>
<th>Development Agencies</th>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTZ</td>
<td>MoWI/GTZ Water Sector Reform Program</td>
</tr>
<tr>
<td>Sida/DANIDA</td>
<td>Kenya Water and Sanitation Sector Programme</td>
</tr>
<tr>
<td>FAO/The Netherlands</td>
<td>FNPP Project</td>
</tr>
<tr>
<td>FAO</td>
<td>Nation Forest Program Facility</td>
</tr>
<tr>
<td>AfDB</td>
<td>Green Zones Development Support Project</td>
</tr>
<tr>
<td>Government of Finland</td>
<td>Support to Forest Sector Reform in Kenya</td>
</tr>
<tr>
<td>USAID</td>
<td>Forest Range Rehabilitation and Environmental Management Strengthening</td>
</tr>
<tr>
<td></td>
<td>Forest decentralization Reforms and Property Rights Project</td>
</tr>
<tr>
<td>JICA</td>
<td>Intensified Social Forestry Project</td>
</tr>
<tr>
<td>Finland</td>
<td>Forest Sector Reform Support</td>
</tr>
<tr>
<td>IFAD</td>
<td>Mt. Kenya East Pilot Project</td>
</tr>
<tr>
<td>IUCN</td>
<td>Mt. Elgon Regional Ecosystem Project</td>
</tr>
</tbody>
</table>

6. **Development Partners in the Water Sector:** The World Bank has been in discussions with other development partners in recent years as the Kenya WSR have been developed. In particular related to WRM, the World Bank has been supportive of the use of grant funds to support the establishment the WRMA and its Regional Offices and to build the capacity of these new institutions. Since 2004 discussions have been held regarding the support by the World Bank of catchment management investments through the WRMA and the WRUAs using credit finance. This strategy has worked well given to progress in the establishment of the WRMA and preparation of the current World Bank operations - the WKCDD/FM and the NRM Projects, both of which will depend upon the WRMA and its regional offices for the implementation of the catchment management components of the project. The implementation of these investments would have been considerably more difficult (if possible at all) in the absence of the WRMA.

7. **Sida and DANIDA:** The Water and Sanitation Sector Programme with Swedish and Danish support is a long-term commitment by the Donors, with the first program
document covering the period 2005-09. The primary objective of the programme is to support the WSR process and aims to pave the way for a SWAp. The current program has been preceded by support to the sector from Sida for many years. The Water and Sanitation Sector Programme comprises three components: (a) rural WSS; (b) WRM; and (c) support to WSR. The development objectives of the program are:

(a) a rational and efficient framework to sustainably meet the water needs for national economic development, poverty alleviation, environmental protection and social well being of the people through sustainable WRM;

(b) sustainable, affordable and safe rural WSS facilities managed by communities with a special focus on the poor, women and other disadvantaged groups; and

(c) an enabling environment for the water sector that ensures effective and equitable delivery of water services and integrated management of water resources.

8. The WRM component of the Water and Sanitation Sector Programme has been central to the support of the establishment of the WRMA including the regional offices and initial catchment based activities throughout the country, particularly in light of the under-funding of the new institution from the central Government. Through both direct funding and the provision of highly competent Technical Assistance, the program has been a key element in the successful implementation of sector reforms to date.

9. **German Technical Co-operation GTZ**: GTZ supports the Government in implementing the new water law, thereby promoting the poor population's access to quality-controlled drinking water and a regulated sanitation system. The introduction of WRM is intended to optimise available resources and their management and use. Support measures include:

(a) setting up of an independent regulatory body for water utilities;

(b) commercialization of water utilities;

(c) establishment of regional branch offices of the Water Authority, development of framework water management schedules; and

(d) development and introduction of schedules to communicate reform measures and their implications.

10. Regional priorities are West and Central Kenya. The program political executing body is the MoWI. The program is implemented in close coordination with KfW Entwicklungsbank (development bank), the German Development Service and a number of bilateral and multilateral development partners. Close cooperation with the World Bank has also been agreed. The program has already shown some initial success and most of the new institutions are being established. WSS has improved in the towns of Nyeri and Eldoret, where local funding was used to reduce water losses by around 40 percent over the last three years, introduce water meters throughout the towns, and extend the area served by the facilities.
Annex 4: Results Framework and Monitoring

KENYA: Natural Resource Management Project

I. Monitoring and Evaluation

1. **The NRM Project implementation will be through two key Government ministries, MoWI and MENR.** Under MoWI, a state corporation known as the WRMA has been established with a mandate to manage water resources throughout the country, which has been divided into regions. The current FD in the MENR will be transformed into KFS that will give it autonomy in the management of the forest resources in the country. Work in the irrigation sector will be carried out by NIB, with policy reforms being led by the Ministry.

2. **A collaborative approach to M&E.** The monitoring system for this project will involve multiple stakeholders - the implementing institutions, the CBS, the KSS, district/provincial representatives of other relevant Government ministries such as Ministry of Agriculture and NGOs/CBOs as well as community members and their organizations. There will be two main approaches in monitoring and evaluating the project. First, conventional quantitative data will be gathered through processes such as poverty mapping, which will be a prominent feature of the M&E process. Poverty maps, compiled by CBS, are updated regularly to show changing poverty trends in communities within the region. A household survey will be one of the mechanisms to be used to determine trends in poverty on an annual basis. There is scope for these data to be used more widely, for example to study trends and determinants of service delivery performance, particularly among the poor. The institutional mechanisms will be set up to update poverty data and share information with all stakeholders including policymakers on a regular basis.

3. **Community involvement crucial.** The other approach to project monitoring will be community based M&E, which will regularly track the performance of the project. This will be enhanced through integration of social accountability mechanisms such as the community score card and community report card systems, social audits, participatory budgeting and expenditure reviews, as well as conduct of participatory poverty assessments. These will provide a continuing source of qualitative information on the performance of services and enhance stakeholder engagement for a continuous review of progress as well as avail the opportunity to take action on non performing areas.

II. The Central MIS for M&E

4. **A central MIS for M&E and project implementation support will be established at the KSS, which is housed within KARI.** The NRM Project is one of five rural based World Bank projects being implemented by the Government in different parts of the country. The MIS for these projects will be established in the existing GIS facility at the KSS. All five projects have substantial components dealing with...
sustainable use and management of natural resources and improving incomes of rural communities through interventions that include agricultural production. A substantial amount of biophysical and environmental data will be collected in these projects. KSS has significant technical expertise and physical infrastructure to collect and analyze data on indicators such as land degradation/sedimentation, habitat loss and the impact of SLM on agricultural productivity. This system will be strengthened under the projects, and linked with the CBS which has substantial expertise in household surveys and data collection.

5. **The central MIS facility will enhance project management through the provision of spatially referenced data and information.** Impact evaluation of the community driven investments in the NRM will involve the collection of baseline data through household and community surveys. Collection of the baseline data will be spatially designed to take cognizance of the underlying biophysical and socioeconomic factors such as land degradation, land suitability, market access, access to social amenities like schools, hospitals and domestic watering points. Selection of target communities will also be based on these inherent characteristics. Through spatial statistical analysis, criteria will be determined for selecting communities that receive project support, in a way that incorporates their socio-economic characteristics and the prevailing biophysical attributes of the areas where they exist.

III. **Social Accountability Mechanisms**

6. **The project would promote and set up social accountability mechanisms and systems within and between stakeholders**—project management, central and local government institutions, civil society organizations, communities and service providers, and between the foundation and the communities. Among other instruments, score cards, report cards and social audits will be used to ensure accountability. The project would promote transparency by openly displaying all financial and physical information in accessible form. Social Audit Sub-committees will use input and expenditure tracking and report cards to develop a culture of accountability within communities. This information will be used for developing rating system for project components, and would be scaled up with local government and other participating institutions.

7. **The project will seek to develop and implement a social accountability strategy in the project area** with a view to building a culture of downward and horizontal accountability among stakeholders with the hope of ultimately influencing social accountability at the national level. There will therefore be the need for an assessment of current levels and practices of social accountability so that the strategy builds and strengthens current practice. Capacity building of stakeholders on social accountability will need to be undertaken at the early stage of implementation; a national or regional level institution will be charged with the implementation of the social accountability framework which will include, building capacity of communities, development of social audit mechanisms, and supervision of implementation.

8. **The results framework for the NRM project is found on the following Table 4-1:**
### Table 4-1: Results Framework

<table>
<thead>
<tr>
<th>PDO</th>
<th>Project Outcome Indicators</th>
<th>Use of Project Outcome Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>The objectives of the project are to enhance the institutional capacity to manage water and forest resources in a sustainable and participatory way.</td>
<td>1. Percent reduction in sediment load in rivers and water reservoirs in project intervention area. 2. Area of forests in the project intervention areas managed according to approved forest management plans. 3. Percent of microprojects that are rated as satisfactory or higher by the participants.</td>
<td>To examine the efficiency and effectiveness of the forest service in forest and WRM. Evaluate the community based catchment management practices.</td>
</tr>
</tbody>
</table>

### Intermediate Outcomes

<table>
<thead>
<tr>
<th>Sub-component 1.1</th>
<th>Sub-component 1.2</th>
<th>Sub-component 1.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthening the capacity of WRMA with direct investments in Upper Tana Catchment.</td>
<td>Year one identification of the synergies between the water and forest sectors for joint strategy for NRM.</td>
<td>Year one identification of the synergies between the water and forest sectors for joint strategy for NRM.</td>
</tr>
<tr>
<td>Component 1 WRM and Irrigation</td>
<td>Component 1 WRM and Irrigation</td>
<td>Component 1 WRM and Irrigation</td>
</tr>
<tr>
<td>Sub-component 1.1</td>
<td>Sub-component 1.2</td>
<td>Sub-component 1.2</td>
</tr>
<tr>
<td>1. Completion of harmonization of legislation that relates to the Water Act 2002. 2. Completion of study to identify priority strategic water investments. 3. Percent reduction in sediment loads in the rivers in target microcatchments. 4. Percent of households adopting recommended land use practices in targeted micro-catchments. 5. Number of microcatchment action plans developed by WRUAs and approved by WRMA.</td>
<td>1. Number of users benefiting from improved irrigation service delivery. 2. Area under irrigation in project intervention areas. 3. Percentage cost recovery for O&amp;M of the project’s irrigation investments.</td>
<td>1. Number of users benefiting from improved irrigation service delivery. 2. Area under irrigation in project intervention areas. 3. Percentage cost recovery for O&amp;M of the project’s irrigation investments.</td>
</tr>
</tbody>
</table>

### Component 2 Management of Forest Resources

<table>
<thead>
<tr>
<th>Sub-component 2.1</th>
<th>Sub-component 2.1</th>
<th>Sub-component 2.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reforms necessary to transform and operationalize the FD into a semi-autonomous service implemented.</td>
<td>1. Percent completion of the five year strategic plan for the KFS. 2. Percent completion of the production and public availability of new forest cover maps of Kenya. 3. Percentage of the forest plantation estate assessment completed.</td>
<td>The impact of the institutional transformation of the forest sector on sustainable management of the forest resource.</td>
</tr>
</tbody>
</table>
Table 4-1 Continued.

<table>
<thead>
<tr>
<th>Intermediate Outcomes</th>
<th>Intermediate Outcome Indicators</th>
<th>Use of Intermediate Outcome Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-component 2.2</td>
<td></td>
<td>Component 2 Management of Forest Resources</td>
</tr>
<tr>
<td></td>
<td>Sub-component 2.2</td>
<td>Sub-component 2.2</td>
</tr>
<tr>
<td></td>
<td>1. Acreage of land brought under forest cover in project intervention areas</td>
<td>Evaluate the impact of community involvement in management of forest resources</td>
</tr>
<tr>
<td></td>
<td>2. Number of PES Schemes operational</td>
<td>To evaluate the economic gains accruing to communities as a result of participation in forest resource management</td>
</tr>
<tr>
<td></td>
<td>3. Number of community groups engaged in joint forest management</td>
<td>To determine the effectiveness of the new management framework and community participation in conflict resolution</td>
</tr>
<tr>
<td></td>
<td>4. Percent of land and/or water resource conflicts in project intervention area addressed through the new land conflict mitigation framework</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. The number of KFS technical staff trained in participatory forest management</td>
<td></td>
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<tr>
<td>Sub-component 2.3</td>
<td></td>
<td>Sub-component 2.3</td>
</tr>
<tr>
<td>Community and Private Sector Investment in Commercial Forestry</td>
<td>1. Number of production forests whose management has been transferred to the private sector</td>
<td>The effectiveness of the involvement of private sector and communities in the management of the plantation forests</td>
</tr>
<tr>
<td></td>
<td>2. Number of new forest investment requests (both from community and private sector) as a result of the improved investment climate</td>
<td>Economic viability of the plantation forests</td>
</tr>
<tr>
<td>Sub-component 3</td>
<td>Sub-component 3</td>
<td>Sub-component 3</td>
</tr>
<tr>
<td>Opportunities for livelihood enhancement identified and promoted using CDD approach in the Upper Tana Catchment</td>
<td>1. Number of livelihood based micro-projects completed</td>
<td>To evaluate the impact of micro-catchments investments on the economic status of participating communities</td>
</tr>
<tr>
<td>Sub-component 4</td>
<td>Sub-component 4</td>
<td>Sub-component 4</td>
</tr>
<tr>
<td>Project Implementation Support</td>
<td>1. Percent of the project activities identified in the annual work plans completed by the end of each project year</td>
<td>To assess project implementation and where necessary make appropriate adjustments</td>
</tr>
<tr>
<td></td>
<td>2. Number of annual progress reports produced on time.</td>
<td>Provide basis for project implementation support</td>
</tr>
<tr>
<td></td>
<td>3. Percent of external impact evaluation that are rated satisfactory or above</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Percent of disbursements and procurements done according to costs and time schedules identified in the PIP</td>
<td></td>
</tr>
</tbody>
</table>
IV. M&E capacity within the implementing institutions

9. The project implementing agencies (WRMA, FD/KFS and NIB) have existing M&E committees whose main function is to collect and collate data on performance contracts of staff. This is as a result of the Government’s adoption of the performance monitoring and evaluation of all the public servants in Kenya. At the moment, some staff has been posted to these units who have mainly been collecting and collating the performance contracts and not necessarily conducting M&E of programmatic activities within these units. The project will invest in building the M&E units into fully fledged outfits with the requisite human resource capacity as well physical facilities like computers and vehicles to enable them function effectively. Although efforts will be made to identify appropriate training programs for the staff in the implementing institutions on M&E, it will be necessary to hire people with sufficient skills to oversee setting up and running of the M&E system at the headquarters. At the lower levels, existing staff will be identified and trained in M&E, particularly involving the local communities in participatory M&E.

V. Arrangements for results monitoring

10. The WRMA, NIB and FD/KFS will be responsible for collecting data on all project components during implementation. A central MIS system will be set up at KSS in KARI and will offer technical backstopping to this and other rural-based projects that the Government is implementing with support from the World Bank and other partners. This will enable the projects to exploit synergies between them and avoid duplication of effort. With appropriate support from the central MIS team, the implementing agencies will conduct regular monitoring as an integral part of project management decision during project implementation. This will where necessary help to adapt the project design to emerging realities in a timely manner. The central MIS team will work with the respective Government units implementing different components of the project to design appropriate data collection protocols, collect the data and carry out data analysis. Project impact evaluation will be carried out by a competent independent institution to ensure objective assessment of the impact of the project on the ground.

11. The capacity of the central MIS unit will be enhanced with regard to use of survey methods for collection of socio-economic data and how to incorporate biophysical characteristics such as land degradation into the analysis. The communities will also be involved in data collection to make the M&E a truly participatory process.

VI. Project implementation benchmarks

12. Sufficient benchmarks will be set to monitor implementation progress in order that problems can be identified and appropriate corrective measures taken. Taking cognizance of the fact that the project effectiveness coincides with an election year this is imperative. At the end of the first two years of the project, a detailed project review will be undertaken. Different benchmark activities will be assessed in different components.
(a) **Key indicator on WRM.** The key indicator that will be monitored in this component is the sediment load in the rivers within the project areas. The establishment of the river gauging stations is critical for the measurement of this indicator and this should be completed within the first year of the project.

(b) **Key indicators on management of forest resources.** The rapid assessment of the forest resources at a coarse resolution (including forest boundary demarcation) in project intervention areas should be completed by the end of the second year. Guidelines for establishing and operationalizing CFAs as well as guidelines for elaboration of PFMPs should be developed by the end of the second year. Establishment of Information Center and formulation of Investment Plan should be completed by end of the second year. Reviewing of relevant land related policies and laws should be completed within eighteen months from effectiveness.

(c) **Key indicators on project implementation support.** The establishment of project structure for project implementation within the implementing agencies will be completed within the first year of the project implementation. Hiring of additional staff, particularly for M&E should be completed by the first six months of the project.

13. The arrangements for monitoring the results of the NRM project, including baseline and target values are found in the Table 4-2.
Table 4-2: Arrangements for results monitoring NRM

<table>
<thead>
<tr>
<th>Project Outcome Indicators</th>
<th>Target Values</th>
<th>Data Collection and Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>YR2</td>
</tr>
<tr>
<td>Percent Reduction in sediment load in rivers and water reservoirs in project intervention area</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Area of forests in project intervention areas managed according to approved forest management plans</td>
<td>0 ha</td>
<td>142,000 ha</td>
</tr>
<tr>
<td>Percent of microprojects that are rated as satisfactory or higher by the participants</td>
<td>0</td>
<td>40</td>
</tr>
</tbody>
</table>

| Intermediate Outcome Indicators                                                                 | Target Values                                                                 | Data Collection and Reporting                                                                 |
|                                                                                          | Baseline | YR2 | YR4 | FY6 | Frequency and Reports | Data Collection Instruments | Responsibility for Data Collection |
| Completion of the harmonization of legislations related to WRM                            | 0        | 60  | 100 |     | Annually              | Records, Consultancy        | WRMA                           |
| Completion of study to identify priority strategic water investments                      | 0        | 40  | 100 |     | Annually              | Survey, Consultancy         | WRMA                           |
| Percent reduction in sediment load in the rivers in target micro-catchments               | 0        | 5   | 10  | 20  | Bi-Annually          | River Gauging Stations      | WRMA                           |
| Percent of households adopting recommended land use practices within the targeted micro-catchments | 0        | 20  | 50  | 80  | Annually              | Survey, Progress reports    | WRMA, KFS                      |
| Number of microcatchment action plans developed by WRUAs and approved by WRMA.           | 0        | 10  | 20  | 30  | Annually              | Records, Progress reports   | WRMA, KFS                      |

Component 1.2

|                                                                                          | Frequency and Reports | Data Collection Instruments | Responsibility for Data Collection |
| Number of users benefiting from improved irrigation service delivery                      | 1,700                | Annually                    | Survey, User score cards, Records | NIB                          |
| Area under irrigation in project intervention areas (ha)                                 | 270                  | Annually                    | Records Analysis, Progress report | NIB                          |
| Percentage cost recovery for O&M of the project’s irrigation investments                 | 85                   | Annually                    | Records Analysis                  | NIB                          |
Table 4-2 Continued.

<table>
<thead>
<tr>
<th>Intermediate Outcome Indicators</th>
<th>Target Values</th>
<th>Data Collection and Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>YR2</td>
</tr>
<tr>
<td><strong>Component 2.1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent completion of the five year strategic plan for the KFS</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Percent completion of the production and public availability of forest cover maps of Kenya</td>
<td>Old maps exist of 1970s</td>
<td>30</td>
</tr>
<tr>
<td>Percentage of the forest plantation estate assessment completed.</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Percent completion of the five year strategic plan for the KFS</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td><strong>Component 2.2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land brought under forest cover in project intervention areas (ha)</td>
<td>0</td>
<td>750</td>
</tr>
<tr>
<td>Number of PES Schemes</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Number of community groups engaged in joint forest management</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Percent of land and/or water resource conflicts in project intervention area addressed through the new land conflict mitigation framework</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>The number of KFS technical staff trained in participatory forest management</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td><strong>Component 2.3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of production forests whose management has been transferred to the private sector</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Number of new forest investment requests (both from community and private sector) as a result of improved investment climate</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Intermediate Outcome Indicators</td>
<td>Target Values</td>
<td>Data Collection and Reporting</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td></td>
<td>Baseline YR2</td>
<td>YR4 FY6 Frequency and Reports</td>
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<tr>
<td><strong>Component 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of livelihood based micro-projects completed</td>
<td>0 100 300 500</td>
<td>Annually Records analysis, survey</td>
</tr>
<tr>
<td><strong>Component 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of the project activities identified in the annual work plans completed by the end of each project year</td>
<td>0 70 80 95</td>
<td>Quarterly Records Analysis</td>
</tr>
<tr>
<td>Number of annual progress reports produced on time</td>
<td>0 2 4 6</td>
<td>Annually Records analysis</td>
</tr>
<tr>
<td>Percent of external impact evaluation that are rated satisfactory or above</td>
<td>0 80 90 90</td>
<td>Biannually Records and data analysis, Survey</td>
</tr>
<tr>
<td>Percent of disbursements and procurements done according to costs and time schedules identified in the PIP</td>
<td>0 80 90 90</td>
<td>TBD Records analysis</td>
</tr>
</tbody>
</table>
Annex 5: Detailed Project Description
KENYA: Natural Resource Management Project

Component One: WRM and Irrigation (US$44.5 million, including US$38.1 million IDA)

1. Water is one of Kenya's key natural resources upon which it depends for development and growth. Over the past several years the Government has undertaken a far-reaching program of reform in the water sector which has resulted in the promulgation of the Water Act 2002. This has substantially improved the country's potential to manage its water resources but the effectiveness of the reform program now depends on the ability to implement the principles of the new Act. The key areas of implementation which this project will support are the following:

2. Subcomponent 1.1 - Strengthening the Capacity of the WRMA, including direct investment in the Upper Tana Catchment (US$15.5 million, including US$14.3 million IDA). WRMA is responsible for the regulation of the use of water resources with a view to ensuring the sustainable management of the nation's water resources. The mandate of WRMA includes responsibility for the conservation of water resources but does not however directly extend to responsibility for the construction implementation of water storage facilities such as dams. The overarching objective of the WRMA is to establish sound WRM practices throughout Kenya. This requires the setting up of an entire complex system which broadly includes:

   (a) the regulation of water use by different users;

   (b) quantification and monitoring of surface and ground water resources;

   (c) protection of water resources through quality monitoring and reversing catchment degradation;

   (d) overseeing water resources development; and

   (e) developing a robust, financially sustainable institution.

3. Operational river gauging stations are instrumental for water resource development. After many years of neglect during which the monitoring of the resources virtually completely collapsed, a well planned system of river gauging stations, groundwater monitoring boreholes, weather stations, etc. is urgently required. Without such a system and the capacity to run it, it is very difficult to plan for water resources developments which are needed to underpin economic growth and reduce the vulnerability of the country (especially the poor) to water shocks—drought and flood.

4. WRMA at an early stage of development. Support for the establishment of Authority at this stage of its development is justified both on the strength of its successful initial start up and to enable it to rapidly commence its functions of monitoring and protecting the resource, as well as administering water use. Currently the WRMA is...
financed from the central Government, donor sources and user charges. The funds received from the Treasury are insufficient for the institution to meet its costs and perform its functions. The WRMA is currently significantly exceeding its user charge collection targets and has instituted an aggressive scheme to identify the large users initially to form the base of their revenue. There has not been a culture of user charges in the past. The development of a culture of users paying for the use of water has to be accompanied with the delivery of services from the Authority and a general public acknowledgement that it is an effective and efficient institution which is doing good work in the interests of the users and the country as a whole.

5. **Institutional Support to WRMA** The activities which will be undertaken to provide core support to the WRMA will include national level activities, support to the 7 regional offices and specific support to sub-regional offices in the Tana and Nzoia river catchments.

(a) **Establishment Support:** support to the establishment of 12 Sub-Regional Offices, at least 2 of which in Tana Upper Catchment and the rest in the Lake Victoria North Region including:

i) refurbishment of office accommodation;

ii) vehicles (1 per office);

iii)motorcycles (2 per office); and

iv) upgrading of equipment, computers and software for data management, modeling and IWRM

(b) **Water Resources Monitoring Support:** support will be provided for the establishment of catchment monitoring capacity as defined in the Catchment Management Strategy to be implemented in each of the river basins.

i) **Surface water.** This will include the construction and equipping of river gauging stations to establish a national surface water monitoring system and in the regions with special attention to the Upper Tana Catchment, including the establishment of special stations for activities such as flood early warning.

ii) **Groundwater.** The establishment of a dedicated groundwater monitoring boreholes including equipment (terremeter, dippers, divers, etc.) for each of 25 sub regional offices including support to Upper Tana Catchment.

iii) **Water quality monitoring.** Equipment will be provided through the project to establish water quality monitoring capabilities including the provision of water quality monitoring paqua labs, balances, ovens, etc. for each of 25 sub regional offices including support to Tana Upper Catchment.
iv) **Capacity building.** Support will include building institutional capacity for interpretation and analysis of monitoring data at National and Regional Office level.

(c) **Information dissemination and awareness creation:** information dissemination and awareness creation through the National WRMA and through the regional and sub-regional offices, including the costs of posters, pamphlets, brochures, radio, etc. will be undertaken to disseminate water related information and to create awareness related to the activities of the Authority and proper management and use of water.

(d) **Water sector economic infrastructure investment analysis:** an economic analytical investigation will be undertaken to identify key strategic investments in water resources infrastructure required to underpin the growth of Kenya’s economy which will include the identification of key investments, selected pre-feasibility studies, and the determination of financing options. The key element will be to review the economics of infrastructure investments from an integrated multi-sectoral perspective. Water infrastructure development is ‘lumpy’ in that it requires large investments and long planning, design, and construction lead times—the strategic question is therefore “where should the next best Kenya Shilling be spent in water infrastructure development?” This question cannot be answered with confidence at present.

6. **Challenges to WRM in Kenya.** Kenya faces significant WRM challenges relating to climatic variability, frequent droughts and floods, competing demands for water use and chronic under-investment in water infrastructure. Water resources-related problems have a significant impact on the country’s economy, the attainment of its development goals and poverty reduction. Through the sub-component the Government will be able to determine the constraints which under-development of water infrastructure will place on the present and future national growth and poverty reduction strategies, and where strategic investments are required to make most effective use of limited development finance. The overall objective of the proposed sub-component is to identify and prioritize investments in the water resources sector in view of the national development goals of economic growth and poverty reduction, sectoral development strategies and the constraining impact of underdevelopment of water resources on the country’s economic performance.

7. **The specific objectives of this sub-component are:**

   (a) to analyze the economic development objectives of the country and how water resources affect the country’s achievements in economic growth and poverty reduction;

   (b) to identify key water-related challenges for the country’s economic development in the medium and long-term;
(c) to set-up priorities for the water sector interventions in time and geographically; and

(d) to identify priority water resources sector investments.

8. **Proposed interventions will focus on priority needs and be realistic.** To determine interventions in the water sector which should receive priority support, it is necessary to take into account the relevance and consistency of selected interventions with the country’s development objectives and poverty reduction targets identified in the national development plans and strategies, and, specifically, in MDGS and the current national Poverty Reduction Strategy. It is also needed to focus on systemic and urgent challenges in the country’s water resources development and management and the relevance of selected interventions to these priorities. The proposed interventions should be realistic about the nature of the challenge they are addressing and the timeframe and resources necessary to implement them.

9. **WRM and poverty reduction.** The Table 5-1 illustrates a framework to analyze the expected impacts of the water sector interventions in terms of poverty reduction. An appropriate water sector investment strategy is a blend of all these types of interventions, operating on the resource and on water services, intervening in a broad, systemic manner as well as directly targeting the poor.

**Table 5-1: Water Interventions and Poverty Impacts**

<table>
<thead>
<tr>
<th>Nature of Intervention</th>
<th>Broad</th>
<th>Poverty-targeted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affecting water ...</td>
<td>Type 1: Broad region-wide water resource interventions</td>
<td>Type 2: Targeted water resources interventions</td>
</tr>
<tr>
<td>Resource development and management</td>
<td>Type 3: Broad impacts through water service delivery reforms</td>
<td>Type 4: Targeted improved water services</td>
</tr>
<tr>
<td>Service delivery</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: *World Bank Water Resources Strategy, 2003*

10. **Water Sector Investment Strategy.** The focus in defining responses to water-related challenges under the proposed Water Sector Investment Strategy should be primarily on water resources development and management issues. However, it should also analyze the connections between resource use and service management because the culture and principles of water use by major water using sectors have an important influence on WRM and the water security situation at the local and national scales. At the same time, inadequate water resources infrastructure and weak WRM imposes a risk on the reliability of water services and sustainability of investments in the water service sectors.

11. Additionally, the methodology for the development of the water resources investment strategy should take into account:
(a) regional perspectives and plans for economic development to address regional disparities in poverty and well-being that vary considerably among the districts, and between rural and urban areas;

(b) inter-sectoral perspectives in terms of economic value of water used in different economic sectors;

(c) the need to weight broader economic development targets against more immediate poverty reduction objectives; and

(d) the need to coordinate and sequence investments in water infrastructure and water management.

The resources will include support to wide consultation of the issues involved in the analysis and will include the holding of consultations and seminars.

12. **Direct Investment in the Upper Tana Catchment:** The degradation of catchments and watersheds is a common phenomenon throughout Kenya. Degradation has been caused by encroachment into forests, cultivation on steep hillsides and river banks and the use of poor farming methods as people look for arable land for food production to feed the increasing population. Addressing this issue is therefore a key NRM issue facing the country. Because of the widespread nature of the problem it is necessary to target initial strategic catchments both to reduce the consequences of degradation and to use these activities as pilots to determine the most effective methodologies for achieving integrated sustainable catchment management. A similar approach is planned in the related WKCD/DM Project for the conservation of the upper Nzoia catchment. The primary institutional mechanism for these activities will be the WRMA and their Tana River basin offices which were established through the Water Act 2002.

13. Geographically the Tana Catchment Area is bounded by latitudes 0° 30’ north and 2° 30’ south, longitudes 37° 00’ east and 41° 00’ east. It extends from the crests of Mt. Kenya, the Aberdares Ranges and the Nyambene Hills in the north extending southwards to the Indian Ocean. It is bounded by the Yatta Plateau to the west and the Kenya-Somali border to the east. The Catchment Area covers an area of 126,000 km², with an estimated population of five and half million people who include agriculturalist living on the upper parts of the region and the pastoralists living on the lower parts of the region.

14. **The Tana Catchment is of great strategic importance to the economy of Kenya**—it provides Nairobi’s water which is the heart of the country’s economy and it provides hydro-power for KenGen without which the economy could not be sustained. Mt Kenya and the Aberdares Ranges, which are both gazetted and protected areas, are the main water towers of the region providing 49 percent and 44 percent of the region’s waters respectively. The remaining 7 percent is provided by the Nyambene Hills and other minor catchments. The Region provides more than 70 percent of Kenya’s hydropower and 80 percent of the water consumed in Nairobi.
15. Tana Catchment Area also boasts several protected and gazetted areas which include four National Parks and eight Game Reserves. The major ones being the Aberdares Forest, Mt. Kenya Forest, Meru National Park, and Tsavo East National Park.

16. Key agencies with responsibilities in the area include National Environment Management Authority (NEMA), and Coast Development Authority, Tana and Athi Rivers Development Authority, Kengen, Mount Kenya East Pilot Project for NRM, ALRMP, various Government Departments and several NGOs like PLAN International and the Catholic Dioceses Development Offices.

17. The catchment area the upper Tana River basin, particularly the Aberdares, have undergone intensive environmental degradation resulting in the siltation of rivers, reservoirs and irrigation canals, which in turn exacerbates flooding in the lower parts of the basin. Thus proper management and conservation of the catchment areas is a key strategic requirement for Kenya’s economic growth. Problems include:

(a) over-exploitation and poor use of the natural resource base;
(b) excessive soil erosion, gulling and increased sediment loading of water bodies;
(c) nutrient depletion due to burning of biomass and leaching of nutrients/laterization of exposed soils;
(d) water pollution;
(e) reduced ground cover and lower carrying capacity of pastures;
(f) continued loss and degradation of forest areas as well as clearing for farms;
(g) reduced flows of water, drying up of water courses;
(h) habitat loss and threats to biodiversity;
(i) increased damage from the cycle of droughts and floods which are increasing in effective frequency and intensity; and
(j) loss of buffering capacities of swamps; and Increased vulnerability and gradual reduction in incomes of rural families.

18. In order to reverse the trend, an integrated approach to NRM is necessary. One of the major components of catchment management is to promote sustainable agriculture and land management practices. Catchment management programs need to integrate conservation activities with the requirements of local farmers and communities to undertake sustainable economic activity. In order for farmers of all types (subsistence, small-scale commercial and large-scale commercial) to be active participants in conservation activities they need to have clear incentives where conservation and improved production coincide.
19. **The focus will be on management of catchment area of Upper Tana River in the South-east Aberdares**. Activities will include strengthening of the information base, improving decision making to include water users, training and sensitization of farmers to improve land-use and water conservation methods. The WRMA will target microcatchment ‘hotspots’ and through the above mentioned process, and invest one million dollars per year in catchment protection activities such as erosion control and terracing, small to medium water storage infrastructure and the rehabilitation of existing structures as well as improvement of on-farm agronomic practices. The regional WRMA will work closely with the KFS to ensure synergies with their work in the gazetted forest and with neighboring communities.

20. **There are two levels of activities which will be funded by the project related to catchment management activities**—these are:

(a) **Level 1: WRUA activities, supported by WRMA funding**, include the following (Note that the costs incurred by the WRMA in supporting these activities would be recouped by the WRMA retrospectively on the basis of 15 percent of the project costs):

i) riparian demarcation;

ii) catchment protection;

iii) distribution of seedlings;

iv) establishment of WRUA;

v) planning and training workshops; and

vi) preparation of bankable proposals.

(b) **Level 2: These will be WRUA activities, funded independently of the WRMA**. The activities would be included in project proposals (which are subject to the approval of the WRMA) and could include, but not necessary be limited to the following:

i) training and capacity building for WRUA stakeholders;

ii) mobilization of water resource users in WRM activities;

iii) activities associated with mitigation of water use conflicts;

iv) works for abstraction works, including the costs related to the modification of intakes, installation of master meters and water abstraction control devises;

---

11 The Upper Tana catchment project area will include the area west of the major hydroelectric dams, including the districts of Kirinyaga, Muranga, Maragwa, Thika, and Nyeri.
v) development and implementation of water allocation plans;
vi) development of gauging stations and stations to assist in monitoring the quantity and quality of the Reserve;
vii) water storage development, including pans, small dams, rain water harvesting;
viii) river bank protection and improved land use and delineation, conservation or protection of riparian land;
ix) catchment protection, including the costs of seedlings and other activities;
x) settling ponds, composting pits and other structures to reduce effluent discharge;
xi) work and or activities orientated towards assisting abstractors or dischargers to become compliant to the WRM Rules;
xii) works to control runoff and soil erosion such as check dams, terraces, storm water drains, etc.; and
xiii) works associated with the protection, conservation or enhancement of the water resource quality.

21. **The role of WRMA will be to prepare and enforce codes of practice and standards relating to the abstraction, use, allocation and management of the resource.** As the WRM regulator, the WRMA will avoid engaging in the direct implementation of WRM activities, and avoid the holding of monies for the execution of such is fundamental to its maintaining its independent role and is a key element of best practice and good governance. Whilst WRMA energetically supports the WRUAs in the preparation and development of the SCMP and its related projects, it is not involved in the design or implementation work.

22. **The above principles represent a significant achievement in terms of establishing the clear delineations of roles and functions of water sector institutions** as a pre-requisite framework to enhance good governance, and supporting check and balance mechanisms for quality control within the sector. The funds provided to WRUAs to support them in the implementation of their SCMPs, whether from donors or from revenue collected by WRMA, are to be entirely routed through the WSTF or other mechanisms such as District Steering Committees. 80 percent of the funds are henceforth under the direct management of the WRUA and the stakeholders who have the most to gain (and to lose) through their effective and transparent use. In this clear way the activities of the WRMA and the WRUAs further supports the development of democratic mechanisms to empower local organizations. WRMA will provide direct financing to WRUAs for WRM capacity building activities in the preparation of the SCMPs and the funding proposals to be submitted to the local financing mechanism, which may include
the establishment of WRUAs, planning workshops, riparian demarcation, abstraction monitoring, catchment protection and other similar activities:

(a) WRMA will support WRUAs in preparing SCMPs for submission to the local funding mechanisms. WRMA may assist the WRUA to engage consultants/NGOs with experience in this field to support the WRUA to prepare detailed proposals, which may include the preparation of detailed engineering designs and other activities which are better out-sourced.

(b) WRMA will support the WRUA in developing TORs and selecting consultants/NGOs for the preparation of detailed designs and/or implementation support required. In this way it will reduce the risk of there being a conflict of interest, where the role of facilitator, supervisor and regulator become merged.

(c) The role of the WRMA in the preparation of SCMPs and related proposal preparation phase will be supportive. The WRUA will own the resources and manages the process. In supporting WRUA project proposal preparation WRMA will not engage in the detailed technical design of infrastructure components, as it will later approve the designs in accordance with standards. WRMA will further regulate implementation activities through inspection of the WRUA’s work.

23. **Subcomponent 1.2. - Consolidation of Irrigation Reforms and Investments (US$29.0 million, including US$23.8 million IDA).** The objective of this subcomponent is to contribute to sustainable irrigation development through the consolidation of reforms of the NIB and the development of irrigation in the downstream part of the Nzoia basin and rehabilitation of existing schemes. In so doing, the project will support establishment of a more favorable environment for use of inputs, agricultural technologies and marketing, thus supporting the emergency of a virtuous circle of increased productivity, improved capacity to pay for O&M, and improved irrigation service provision.

24. **Once the reforms are agreed and approved by the MoWI and the Cabinet, the project will support the necessary institutional realignment of the key institutions in the sector.** It is expected that the role of farmer organizations in the management of irrigation in Kenya will be enhanced, as will be the role of the private sector, and that NIB will progressively be transformed into an irrigation service provider. Specifically, NIB would explicitly explore the option to transform itself into an irrigation services provider (O&M) to both WRUAs for O&M of private infrastructure that has been transferred to the WRUAs, and to the Government for O&M of public infrastructure (e.g., pumping stations). WRUAs could thus take advantage of economies of scale in terms of equipment and machinery, and in view of their replacement costs. In addition, such organization could play an active role in the further development of Kenya’s irrigation assets. Resources have been allocated to support transformation of both public sector as well as farmers’ institutions, and for capacity strengthening. In support of this, the project will finance targeted investments in the modernization of public irrigation
schemes. Investments in hardware under the project will be conditioned by progress made in terms of agreed institutional reforms. The approach identifies three discreet steps:

(a) finalization of the Irrigation Policy, including a long-term vision statement and an update of the Corporate Plan 2008-13 by NIB. It is expected that the Policy will propose to further support transformation of the NIB into an irrigation (O&M) service provider, and to realign the irrigation institutions. NIB would also conduct a functional analysis to ensure adequate alignment of its internal organization, and identify sustainable financing mechanisms (including public and private sources). It is expected that this step will be complete before project effectiveness or early during project implementation;

(b) implementation of activities agreed under (a). Completion of a capacity assessment, including as assessment of current capacities, those capacities that are required to successfully undertake its agreed mission, and an assessment of the capacities that need to be strengthened. This will be translated into a comprehensive multi-year training program that the project will support. In addition, an assessment will be made of available and required assets and goods. NIB will also prepare an operations manual; and

(c) implementation of activities agreed under (b). Irrigation Management Transfer of selected irrigation infrastructure. NIB will identify irrigation infrastructure that can be operated and maintained by water users themselves, and those pieces of infrastructure that require the responsibility of the Government (e.g., pumping stations). NIB will also identify a process for identification, prioritization, implementation and M&E of O&M.

Achievement of the above agenda to the satisfaction of IDA would trigger investments in irrigation rehabilitation and development as is shown in the Table 5-2:
Table 5-2: Target Starting dates of Civil Works and Baseline Indicators

<table>
<thead>
<tr>
<th>Step</th>
<th>Indicators</th>
<th>Investment</th>
<th>Target starting date of works</th>
</tr>
</thead>
</table>
| (a)  | • Completed Irrigation Policy  
• Long-term vision statement  
• Institutional realignment  
• Corporate Plan 2008-13  
• Functional analysis  
• Capacity assessment  
• Assessment of assets and goods  
• Implementation of a  
• Comprehensive multi-year training program  
• Operations manual.  
• Identification of public/private irrigation infrastructure process for O&M  
• Irrigation Management Transfer | Bunyala/Budalangi (3,000 ha)          | July 1, 2008                   |
| (b)  | • Implementation of (a)  
• Comprehensive multi-year training program  
• Operations manual.  
• Identification of public/private irrigation infrastructure process for O&M  
• Irrigation Management Transfer | Mwea (10,000 ha),  
Ahero (900 ha),  
West Kano (900 ha),  
Bunyala (500 ha),  
Perkerra (500 ha) | July 1, 2009                   |

25. **In preparation of the investments, and in parallel to the institutional reform agenda identified above, the project will conduct necessary assessments.** The project will in all considered schemes and immediately after project effectiveness:

(a) conduct a capacity needs assessment of WRUAs and strengthen their capacities in the field of administration, bookkeeping, water management and crop husbandry through training, workshop, exchange visits and study tours. The project will also help develop user satisfaction surveys to monitor project impact; and

(b) conduct rapid feasibility assessments of the proposed schemes. On those schemes with satisfactory prospects for investments, the project will prepare a RAP and an environmental and social impact assessment, as well as detailed feasibility and design studies.

26. **Five schemes have been proposed for rehabilitation.** Mwea, the largest public irrigation scheme in Kenya, will benefit from scheme improvement to accommodate the unplanned 4,000ha top-end expansion of the scheme shortly after the events of 1998, as a result of which tail-end areas now suffer from water shortages. Options are currently being identified to improve overall scheme management and achieve equitable allocation of water. This could include, e.g., development of water storage facilities that will stabilize irrigation water supply at the tail ends of Wamumu section, downstream parts of the scheme, reducing conflicts and sustaining production during critical water scarce periods. Other schemes include Ahero, Bunyala, West Kano and Perkerra.

27. **The project will invest in the development of up to 3,500ha of gravity irrigation in the lower catchment of the Nzoia** in order to capture benefits from
upstream investments in catchment management and flood mitigation under the WKCDD/FM Project, and in consultation with key stakeholders in the sector. Feasibility studies are currently underway.

28. Critical assumptions include that stakeholders are willing to pay for better irrigation service provision, and that a more reliable access to water leads to higher agricultural productivity which in turn leads to an improved capacity to pay. The main risks are that stakeholders are not willing or able to respect agreed rules and regulations concerning management of the scheme.

29. Intermediate results are: (a) rehabilitation of 12,800 ha of irrigation scheme and expansion of irrigated area by 3,500ha; (b) satisfactory reforms of NIB and irrigation sector in accordance with the Irrigation Policy, (c) capacity strengthening of five WRUAs, (d) fully satisfactory payment of cost sharing contribution and O&M fees as agreed; and (e) satisfactory irrigation service delivery to and by WRUAs as evidenced by user satisfaction surveys.

30. Irrigation Outputs. Outputs of this sub-component include capacity strengthening of six WRUAs, capacity strengthening of NIB, achievement of agreed reform targets, rehabilitation of 12,800ha of public irrigation schemes and development of 3,500ha of new irrigation scheme. Procurement packages include: (a) support to NIB for the preparation of a vision statement, functional analysis, an Irrigation Strategy and Business Plan, an Irrigation Act, and Corporate Plan 2008-13; (b) capacity needs assessment, preparation of training plan and capacity strengthening of NIB; (c) preparation of operations manual; (d) rapid feasibility assessment of four irrigation schemes; (e) feasibility study and detailed design of four irrigation schemes and construction supervision; (f) detailed design for Mwea and Nzoia schemes, (g) rehabilitation works in Mwea (h) supervision of works in Mwea; (i) rehabilitation of four public irrigation schemes, (j) irrigation development in Nzoia; and (k) supervision of works in Nzoia.

Component Two: Management of Forest Resources ((US$22.4 million, including US$21.1 million IDA)

31. With the recent passage of the Forest Act, Kenya is advocating a major shift away from exclusive Government conservation and management of forest resources. The Act emphasizes co-management by local communities and private sector for the protection and sustainable use of forests. This requires participation and investment by stakeholders. This is consistent with the wider and ongoing reforms in related sectors such as water resources. To operationalize the Act the MENR and the newly established KFS will require: (a) assistance in creating a transparent and accountable regulatory and institutional framework; and (b) targeted support to implement the Act. To identify the priority areas of intervention, a SEA focusing on the forest sector was conducted in parallel to the preparation of this investment. The analytical and consultative process of the SEA informed activities selected for this investment both at the national level and in the critical watersheds where the investment will undertake WRM related activities. Foremost among the needs will be:
32. **Subcomponent 2.1 - Forest Sector Institutional Reforms (US$10.1 million, including US$9.4 million IDA).** Activities planned under this sub-component at national level will assist the Government with the reforms necessary to transform the FD to a semi-autonomous KFS. Inputs will be targeted at strengthening forest governance of the new service through systems for transparency, accountability and integrity not supported in the Government budget to facilitate technical and cultural change required for an effective and accountable KFS.

33. **KFS Strategic Plan** With the overarching focus being enabling institutional arrangements to enhance forest governance the assistance will support formulation and implementation of a strategic plan for KFS. The strategic plan should capture the vision, mission, goals and objectives of the service. It should detail how KFS will be a more transparent and accountable structure. Formulation of the strategic plan should involve a consultative process (including other key agencies, ministries, and stakeholders) to define roles of relevant stakeholders, detailing information management processes, a comprehensive disclosure policy, performance standards and a system for monitoring and detection to ensure socially and environmentally sound implementation.

(a) **Formulation of Forest Service Framework and Strategic Plan.** This document would detail the status of the KFS, its objectives, governance and organizational structure. The document should capture the aim, vision, mission, key result areas, goals and objectives of the service. It should briefly describe:

i) the governance structures and how they will increase transparency, accountability and integrity;\(^\text{12}\);  

ii) framework for decision-making;  

iii) information management and disclosure;  

iv) performance assessment (both financial and service);  

v) monitoring and detection;  

vi) roles and responsibilities of relevant stakeholders;  

vii) mechanism for accountability (to both management and clients, including communities);  

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\(^{12}\) The section on governance structure should detail specific steps taken to improve forest governance. It should highlight how transparency will be enhanced. It should also detail how law enforcement will be strengthened (more specifically concrete actions will be taken to demonstrate commitment to tackling illegal logging, determining legal sources of timber, improve detection, achieve up-to-date and reliable information, disclose information, reform inappropriate policies, encourage multi-stakeholder involvement in development and implementation of forest policy, help containment of corruption, improve forest laws and regulations, increase tenure security and livelihood options, improve revenue capture by government and local communities, build law enforcement capacity, amend laws and regulations and prosecute and convict major forest criminals.
viii) finance, planning and strategic control; and

ix) disclosure of annual reports.

It will also provide a brief summary of the business and human development plan. This plan should include a matrix that describes the goal associated with the key result areas, the rational, the strategies and actions, outputs and performance indicators. It should also include a prioritization of strategies.

(b) Formulation of a business plan. The business plan will be based on a business analysis that examines, inter alia, core assets, costs and revenue associated with actions for provision of services and products, and client group and their needs.

(c) Formulation of a human development plan.

34. **KFS Business and Human Development Plan.** Support provided would enhance the capacity for rationalizing and undertaking tasks related to policy, planning and legislation that are expected to remain in the Ministry. Associated with the strategic plan, KFS will develop a business plan and human development plan. To be effective at enforcement and guiding forest resource management, KFS will have to generate significant revenue to cover operating cost and improve capacity. The forest resource base of Kenya, if managed in a sustainable manner can be a source of long term revenue. Priority, therefore, will be given to enabling sustainable investment in the forest resource base. Taking into account that in the past only a quarter of the potential revenues have been captured, resources will be provided to design and implement a coherent forest revenue strategy. The strategy will focus on increasing net revenues and improving revenue collection.

35. **Building the information base.** Emphasis will be given to improving the information base in order to provide the necessary data for setting policy and management targets, including revenue generation from timber and NWFPs. Considering the lack of reliable data on forest resources, it is envisaged that the project will conduct a phased forest resource assessment (FRA) of all forest types. The first phase will entail a rapid forest assessment at a coarse resolution, providing a snapshot of the resource base. This will be followed by tailored inventories for forest plantations (to be funded under 2.3), indigenous forests and farm/private forests. This would be the basis for improved development and management of forest plantations and better protection and management of indigenous forests. This assessment will also capture the socio-economic dimension of forest users and provide baseline economic information to monitor implementation of the Act. Information on the extent of on-farm forest resources will reveal available timber supply. Linked to collection and updating of information will be public disclosure of key information, to engender transparency and accountability.

36. **Investing in human capacity will be critical to the success of the transformation.** The transformation of FD to a semi-autonomous KFS will require a significant shift in attitude and change culture of the organization. (As a service provider KFS staff must be accountable to those who are using their services, including
communities and consumers of the services that are not well identified [e.g., consumers of global public goods]). To facilitate this change, necessary investments in training and sensitization of staff, equipment and other infrastructure will be made at different levels with emphasis on the district level. Resources will also be used for technical assistance and training to offer options for private sector employment and entrepreneurship.

(a) Training/re-training of staff, equipment and other infrastructure for different levels with emphasis on the district level. The training/re-training will focus on sensitization of staff to their new roles in KFS, enhancing capacity to enable PFM, private sector investment and entrepreneurship.

(b) A phased FRA of all forest resources. This will entail a rapid spatial assessment at a coarse resolution of the forest resource base. This information will be overlaid with poverty and infrastructure information to assist in identifying priority areas and planning. Following this, more tailored inventories for forest plantations, indigenous forests and farm/private forests will be carried out. These assessments will include information on socioeconomic characteristics of forest users and provide baseline economic and financial information.

(c) Design and implementation of a coherent strategy to improve forest revenue.

37. The NRM project will support the Government to enhance personnel capacity in the forest sector. In order to support the objectives of the reformed institutional framework for forestry in Kenya following the operationalization of Forest Act 2005, forestry education and training must be carried out both at the technical and professional level to better respond to demands of the sector. Training must be relevant and responsive to emerging issues in forestry. To this extent, basic capacity and curricula reviews are needed at Londiani Forestry College and for Bsc level training in Moi University. Furthermore, collaboration between training and KFS need to be strengthened to create capacity synergies needed in expanded forest management mandates. These actions are needed to urgently reverse declining human resource capacity especially at the technical level and to lay a firm foundation for desired culture and institutional growth of KFS.

38. **Subcomponent 2.2 - Enabling Community Participation and Benefit Sharing (US$9.6 million, including US$9.3 million IDA).** Forests play an important role for the wellbeing of Kenyans. Participation of relevant stakeholders in decision making regarding management and benefit sharing is critical to sustainable use and conservation of these resources. Planned intervention (initially in Kakamega, Mt. Elgon, Aberdares and Upper Tana) should use approaches which involve key stakeholders such as communities (adjacent to and within forests), FD/KFS, KWS, WRMA, NEMA, private sector and other local stakeholders. Currently existing inter-governmental partnership arrangements, such as the MOU between FD and KWS for the Aberdares National Park and its buffer zones, should be broadened and further supported to involve all beneficiaries.
39. **While the new Forest Act is innovative with respect to the promotion of stakeholder participation assistance is need in implementation.** For example, the Act does not articulate well the rights and responsibilities of concerned parties, and benefit sharing arrangements. The Act also lacks clarity on criteria for approval of management plans. The subsidiary legislation of the Forests Act will be critical in determining the types of partnerships for management of state-owned forest lands. It will also guide distribution of: (a) decision-making power; (b) approval of management plans; (c) management responsibility; and (d) cost/benefit sharing among the Government, community partners and private sector. The project will provide funding to identify and prioritize an array of partnership models to implement this framework. This will support activities that: (a) enable formulation and implementation of ecosystem management plans; (b) enable formulation and implementation of PFMPs; and (c) improve baseline economic and forest resource conditions in the target areas. The Bank financing of this subcomponent will emphasize sustainable and participatory forest management.

40. **Bank support also aims to change the present incentive structure to conserve and/or sustainably manage forests, which is inadequate.** Bank financing will support development and piloting of PES schemes and facilitate carbon emission trading. This would provide direct financial benefits to stakeholders employing sustainable management techniques.

41. **To facilitate effective implementation of forest activities, the Bank will support boundary demarcation of forests.** The process of boundary demarcation will include development of biophysical, social and legal criteria for determining what areas remain gazetted forests and which are degazetted.

42. **Bank supported activities will also address issues of rights to forest resources, conflict over land and resettlement.** In certain forest areas another issue of high relevance for sustainable partnership arrangements and increasing community engagement in forest management is forest encroachment by groups and individuals, leading to conversion of forests, and degradation of these lands. In an attempt to reclaim these areas, the Government has been evicting encroachers of gazetted forest lands. In several cases, eviction has aggravated the already tense relationship between these groups and the Government, and enforcing these evictions has been challenging. To comply with international standards, including the World Bank’s Operational Policies on Indigenous Peoples (OP/BP 4.10) and Involuntary Resettlement (OP/BP 4.12), and qualify for funding from the World Bank, the Government elaborated an IPPF and a RPF. Financing will be provided to implement these coherent and transparent frameworks to mitigate current and future conflicts over land, customary rights and rights of indigenous people. In addition the project will provide financial resources for compensation and/or resettlement, conflict mitigation approaches and assisting such households with alternative livelihoods. The frameworks will include a process for assessing the rights of persons residing in gazetted forests, categorizing the forest encroachers, and selecting the appropriate approach for addressing the problem. The potential approaches could include adequate compensation, support for alternative livelihoods, providing financial support to relocate community services (e.g., school) and assisting households to establish their livelihood in the new areas, and reforestation. The approaches that support alternative
livelihoods and improved forest management will be identified and formalized through the PFMP preparation process. It is expected that involuntary resettlement of persons who are customary or traditional rights of forests will not be carried out till the aforementioned framework is in place.

43. The Bank will also support sensitization of KFS staff in resettlement issues. The Government has started training key staff persons on issues of resettlement and human rights (through a recent UNHRC program). The Bank will fund further training of staff in such areas. These activities will be closely coordinated with the Green Zone Project financed by AfDB to avoid overlaps.

44. **Subcomponent 2.3 - Community and Private Sector Investment in Commercial Forestry (US$2.7 million, including US$2.4 million IDA).** The underlying rationale for this component is to respond to provisions in the Forest Act aimed at revitalizing Kenya’s forest industries and to ensure closer integration between forest products manufacturing, harvesting and forest management objectives as well as to generate increased rural incomes.

45. **Support for investment in forests.** Assistance will be provided to strengthen institutional support services for the creation of an enabling environment for community and private sector involvement in development and management of production forests. This would be achieved by supporting the establishment and operationalization of a KFS Information Center. The specific activities will include: (a) design and implementation of a communication strategy; (b) preparing a plan of action with agreed upon principles and clearly set objectives for transferring the management of production forests to private entities and/or communities; (c) development of instruments for transparent resources valuation and tendering; (d) preparation of memoranda, leases and contract models; (e) an improved log sale system; (f) an action plan for improving forest taxation and investment environment in plantations; (g) organizing study tours on commercialization of forest resources and enabling community and private sector investment; (h) sensitization of communities to investment opportunities and training communities in relevant skills for investment (e.g., business plan development); and (i) training of FD/KFS staff in facilitating investment. These activities will be closely coordinated with work to strengthen the legal and institutional framework for forest management undertaken by the FAO/Netherlands Partnership Program (FNPP).

46. **Additional funding will be provided to improve the plantation resource information base and management planning capacity.** This is necessary to select priority sites and monitor and evaluate management impacts. Bank financing will assist in assessing technical and financial feasibility of the plantation estate in a transparent manner. Main activities will include: (a) mapping and indicative plantation inventory and valuation (*to be financed under Component 2.1*); (b) development of a forest plantation database and updating mechanism; (c) preparation of basic guidelines for plantation management and framework for monitoring commercials operations; (d) preparation of basic growth and yield tables for key species and representative growing conditions using existing data; (e) estimation of growing stock and allowable cut; (f) identification and categorization of key stakeholders, concerns and expectations for
inclusion in management interventions; and (g) training of staff to facilitate undertaking
the above activities and to build local capacity.

Component Three: Livelihood Investments in the Upper Tana Catchment (US$6.2
million, including US$4.5 million IDA)

47. Financing community microprojects in the project area. As the roles and
opportunities for communities in implementation of components one and two above are
identified, a third, more demand driven window of funding for livelihoods investments in
the Upper Tana Catchment will be offered. Using a CDD approach, proposals will be
sought from communities in the treatment catchments and forest perimeters to invest in
livelihood enhancing microprojects which support the natural resource base. For
example, opportunities to establish afforestation schemes in the watersheds, development
of private sector/community partnerships for timber, fuelwood and pulp production,
production and sale of seedlings, introduction of productivity-enhancing techniques of
agro-forestry or conservation farming, and other investments in on farm agriculture
development will be considered. The approach will bring different actors from different
sectors under a steering committee to vet and prioritize proposals. One million dollars
per year would be available for community microprojects, with additional funds for
capacity building and training. A secretariat for the component will be established in the
WRMA offices in Nyeri, to manage the component. Once proposals are selected,
targeted engagement with communities, employing capacity building techniques and
technical training will be used to support the communities in implementation of their
microprojects. Arrangements would maximize synergies for capacity building, building
on existing CBOs to support community microprojects. This would provide an efficient,
multisectoral delivery mechanism for community based interventions in the catchment.

Component Four: Management and M&E (US$4.9 million, including US$4.8
million IDA)

48. This component will provide the resources necessary for effective
management and monitoring of the project. Management of the tasks undertaken by
the two line ministries, Water and Irrigation, and Environment and Natural Resources,
and their respective organizations, will be mainstreamed. The ministries will, however,
be strengthened in the financial management and procurement functions in order to
manage the requirements of IDA credit management, and a PCO will be established in
the MoWI to provide a place for component coordinators, M&E and fiduciary staff to do
their work. Funds will also be made available for the development and implementation
of a communications strategy. In addition, an overarching framework for M&E will be
necessary. To accomplish the management of M&E, each ministry will have a M&E
expert assigned. Additional resources will be made from other sustainable development
projects in Kenya (WKCD/FM Project, KAPP, KAPSLM Project and WKIEMP) to
establish an overarching MIS and impact evaluation system. The projects will have to
the extent possible a merged set of indicators M&E capturing both the changing status of
the natural resources (water, forests, and biodiversity) and the welfare of participating
communities. A steering committee comprised of PS’s from the OP, MoWI, and MENR
and other relevant ministries will meet twice annually upon the occasion of the implementation support missions to review progress and agree on needed actions.

49. **Support to development of a National Resettlement Policy.** Bank will support activities contained in the progressive new Land Policy (which was available in draft format at appraisal), specifically addressing the issue of resettlement. At the same time the project will support the Government implementing a set of transparent safeguard frameworks (IP and resettlement) developed to mitigate current and future conflicts over land, customary rights and rights of indigenous people. Financing will be provided to carry out IP options assessment and RAP development and implementation. In addition and to ensure that the project impact is lasting with regard it is however necessary to consolidate these issues into one single policy framework. To address this, the project will finance the preparation of a National Resettlement Policy.
**Annex 6: Project Costs**

KENYA: Natural Resource Management Project

<table>
<thead>
<tr>
<th>Project Cost By Component and/or Activity</th>
<th>Local US $million</th>
<th>Foreign US $million</th>
<th>Total US $million</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component 1. Water Resource Mgmt. and Irrigation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Strengthening Capacity of WRMA, with Direct Investment in Upper Tana Catchment</td>
<td>11.5</td>
<td>2.4</td>
<td>13.9</td>
</tr>
<tr>
<td>1.2 Irrigation Reform and Investments</td>
<td>21.0</td>
<td>5.3</td>
<td>26.3</td>
</tr>
<tr>
<td><strong>Component 2. Mgmt. Of Forest Resources</strong></td>
<td><strong>13.1</strong></td>
<td><strong>6.9</strong></td>
<td><strong>20.0</strong></td>
</tr>
<tr>
<td>2.1 Forest Sector Institutional Reforms</td>
<td>5.1</td>
<td>3.9</td>
<td>9.0</td>
</tr>
<tr>
<td>2.2 Enabling Comm Participation and Benefit Sharing</td>
<td>5.9</td>
<td>2.6</td>
<td>8.5</td>
</tr>
<tr>
<td>2.3 Comm and Private Sector Investment in Commercial Forestry</td>
<td>2.1</td>
<td>0.3</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Component 3. Microcatchment Investments</strong></td>
<td>5.4</td>
<td>0.1</td>
<td>5.5</td>
</tr>
<tr>
<td>3.1 Livelihood Based Multisectoral Microcatch. Mgmt Investments in Upper Tana</td>
<td>5.4</td>
<td>0.1</td>
<td>5.5</td>
</tr>
<tr>
<td><strong>Component 4. Project Management</strong></td>
<td><strong>4.1</strong></td>
<td><strong>0.2</strong></td>
<td><strong>4.3</strong></td>
</tr>
<tr>
<td>4.1 Management and M&amp;E</td>
<td>4.1</td>
<td>0.2</td>
<td>4.3</td>
</tr>
</tbody>
</table>

| **Total Baseline Cost** | 55.1 | 14.9 | 70.0 |
| **Physical Contingencies** | 0.8 | 0.5 | 1.2 |
| **Price Contingencies** | 5.4 | 1.4 | 6.8 |

**Total Project Costs**<sup>1</sup> | 61.3 | 16.8 | 78.0 |

Interest during construction Front-end Fee

**Total Financing Required**

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<sup>1</sup>Identifiable taxes and duties are US$ 2.76m, and the total project cost, net of taxes, is US$ 75.24m. Therefore, the share of project cost net of taxes is 96%.
Annex 7: Implementation Arrangements

KENYA: Natural Resource Management Project

1. The project will be implemented through the MoWI and the MENR. A national PSC consisting of Permanent Secretaries of MoWI, MENR, Special Programmes of the OP, Ministry of Agriculture, Lands and any other relevant institutions to be determined would meet twice a year to discuss project work program, progress and potential areas of synergy with other programs and projects. Full time component coordinators will be appointed by the two implementing agencies. WRMA and NIB will appoint full time subcomponent leaders. A PCO will be established in MoWI to facilitate staff from all implementing agencies to prepare the necessary fiduciary and monitoring reports, and for overall project coordination (Figure 7-1).

I. WRM and Irrigation Component

2. The MoWI is the lead agency in the sector and is responsible for sector strategy, policy and legislation. The Ministry has been substantially down-sized through the reform process from an institution with several thousand employees to ultimately under 200 once the reform process is complete. The four main subsidiary institutions which fall under the authority of the Ministry and have responsibility for implementing water related activities are the newly established WRMA, the NWCPC, the Water Services Boards and the NIB.

3. The WRMA will play a key role in the implementation of the project. The authority is the lead agency in WRM and its overall development objective is to ensure a rational and effective framework to meet the water needs of national economic development, poverty alleviation, environmental protection and social well being of the people. WRMA is responsible for the regulation of the use of water resources with a view to ensuring the sustainable management of the nation's water resources. The mandate of WRMA includes responsibility for the conservation of water resources but does not however directly extend to responsibility for the construction implementation of water storage facilities such as dams. WRMA at national level will manage the institutional strengthening subcomponent. The Tana River Regional Office will manage the catchment management component, with strong partnerships with the relevant line ministries and civil society organizations in the catchment. The mandate of WRMA includes facilitating the establishment of WRUAs and assisting them in their development and operation. The establishment of the CAACs and support to the operations of numerous WRUAs encompasses an important part of its present work load.

4. MoWI headquarters and the NBI will manage the Irrigation Reform and Investment subcomponent. The NIB is a semi-autonomous body, established under the Irrigation Act of 1966, and is responsible for planning, construction, settling and managing national irrigation schemes. Once the reforms are agreed and approved, the project will support the necessary institutional realignment of the key institutions in the sector. It is expected that the role of farmer organizations in the management of irrigation in Kenya will be enhanced, as will be the role of the private sector, and that NIB will progressively be transformed into an irrigation service provider.
II. Forest Resources Component

5. The MENR and the FD (which will become the KFS in early 2007) will manage this component. FD/KFS will designate a full time coordinator for the overall implementation oversight, s/he will be supported by financial management and procurement staff to guarantee that the activities are being implemented in accordance to agreed performance standards. In addition, FD/KFS will provide technical leadership through the appointment of component leaders, for the three sub-components. In the areas of interventions the FD/KFS headquarters team will work closely with forest staff at Conservancy level. It is at this level where the different components of the project will be closely coordinated between KFS staff and WRMA/NIB counterparts. Taking into account the shift in the new Forest Act communities, civil society and private sector will become much closer involved in the management of Kenya’s forest resources. By forming bilateral and/or tripartite partnerships, transparency and accountability is expected to be improved in the forest sector. Planning and carrying out of activities at community level will be facilitated through CFAs, which are likely members in WRUAs in catchment areas. Interaction water and forest institutions as well as user associations with regards to catchment management (including forest management) in the sedimentation hotspot catchments will facilitate coordination among these two sectors and enhance the contribution of this project to the overall use of the landscape for productive purposes.

III. Livelihood-based Investments in the Upper Tana Catchment

6. This component will be managed by a Secretariat seated in the WRMA offices in Embu. A steering committee consisting of water, forestry, environment, agriculture and other key ministry and civil society organizations involved in NRM will vet community microprojects for approval. At local level, the implementation will be carried out using district based delivery mechanisms. Training programs to build capacity of local communities in record keeping and procurement processes will be undertaken. Technical assistance will be also provided through WRMA and FD/KFS staff on the ground to ensure a coordinated approach towards the overall project objective as well as mid and long term sustainability of the microprojects.

7. Microcatchments within the project areas would be selected based on criteria such as: (a) community readiness (pre-existing and functional river basin committees); significance of the micro-catchments’ contribution to downstream sedimentation; (b) environmentally sensitive or critical areas, particularly those which are highly vulnerable to degradation; (c) presence of springs or other sources of surface or ground water critical to the maintenance of ecosystem services; concentration of small producers; (d) forest resources; and (e) existing level of community organization; and land use and soil management aspects. Local capacity would be enhanced through training and community field visits so that communities can implement their micro-catchment management activities. Funds would flow through WRMA Tana Catchment office for onward disbursement to the communities.
Figure 7-1: NRM Project Organigram
I. EXECUTIVE SUMMARY

1. This assessment covers the financial management functions of the project's implementing entities. The assessment is carried out in accordance with Bank financial management operational guidelines.13

2. Financial management risk is rated substantial given that a number of proposed project institutional arrangements, notably the deployment of project finance staff, are not yet in place. The assessment will be revised as soon as ongoing institutional arrangements are completed. Institutional arrangements are expected to comprise: (a) the establishment of acceptable financial management systems; and (b) safeguards that respond to country level fiduciary risks of weak governance and corruption. Once satisfactorily implemented, financial management risk rating is expected to improve to modest.

3. The design of this project is based on and existing IDA funded project, the ALRMP Phase II, which has been satisfactory operation for a number of years. Similar arrangements will be applied as follows:
   
   (a) oversight of the project by the PSC Audit and Finance Committees;

   (b) employment of the Government internal and external audit functions; and

   (c) employment of funds flow and accountability mechanisms including financial management operations manuals.

4. Establishment of financial management systems. In order to satisfy minimum conditions for: (a) timely and reliable financial information; (b) effective internal controls; and (c) an effective audit process, the following systems are expected to be put in place during the ongoing project preparation.

5. Project planning and budgeting function. Satisfactory arrangements have been made for the project’s budgeting system to be consistent with the Government’s Medium Term Expenditure Framework (MTEF) and integrated in the annual budget cycles of the MENR and the MoWI.

6. Accounting and internal control systems. Satisfactory progress has been made for the establishment of accounting and reporting systems that are integrated into the Central Government General Ledger system are required. System standards include: (a) monthly balancing of accounts and reconciliation with the MoWI and MENR ministry general ledgers; (b) arrangements for safe custody and sequential filing of accounting documents; (c) timely and accurate production of periodic reports; (d) reconciliation of

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subsidiary accounts; and (e) effective internal control arrangements. The system is based on the Government Financial Management Regulations and documented in the draft PIP.

7. **Staffing.** The process of assigning staff to be responsible for project financial management is underway. Arrangements will include IDA review and approval of the organization charts and staff terms of reference.

8. **Financial management manuals.** The preparation of Procedures Manuals that comprehensively describe accounting and internal control processes at national institution, district and community levels will be maintained to guide accounting and reporting practices. They will include simplified manuals to guide the provision of grants to communities. Expected key contents of the manuals are included in the PIP which has been subject to IDA review.

9. **Internal audit function.** Internal audit is currently adopting a risk based audit approach that is designed to identify, assess and respond to operational risks on an ongoing basis. The Internal Audit function's independence and effectiveness are expected to be enhanced by its central location in the MOF and arrangements for ultimate reporting directly to respective ministries’ audit committees.

10. **Financial reporting arrangements.** The development of interim financial statement reporting formats is complete. Annual financial statements are expected to be presented in accordance with International Public Sector Accounting Standards (IPSAS) in accordance with the Government reporting guidelines. The project is required to present quarterly financial statements and annual audited financial statements within prescribed reporting deadlines. Reporting arrangements will include elaborate information collation arrangements to be set out in financial management manuals. Draft formats of quarterly financial arrangements were presented and agreed during project negotiations.

11. **External audit function.** Annual financial statements audit arrangements will ensure adequate coverage of all key activities, adopt a risk-based approach and ensure timely reporting. The function will be executed by the Kenya National Audit Office (KNAO) which is assessed as sufficiently independent and effective. KNAO is currently responsible for the audit of all IDA funded projects in Kenya and has consistently been rated satisfactory. It was also agreed during project negotiations and included in Dated Covenants that the Government will provide assurance that the scope of the audit of financial statements will include funds allocated to communities through community subprojects. These will be under TOR similar to those of the ALRMP Phase II.

12. **Additional fiduciary safeguards.** As part of proposed institutional arrangements, the following additional fiduciary safeguards, expected to be in place by project effectiveness, are intended to respond to country level risks:

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13. **Governance and corruption risk mitigation arrangements.** The outcome of a recent Government-commissioned forensic audit and the Bank’s Integrity Department DIR of selected projects in the Kenya portfolio have been considered in developing the following recommendations for enhanced financial management effectiveness.

14. **Institutional risk management.** Project management is expected to carry out comprehensive risk assessments and develop mitigation action plans to be contained in respective institutional risk management policy frameworks. The PSC through the Audit and Finance Committees will be responsible for monitoring implementation of the frameworks and action plans. Development of the frameworks and action plans is a condition of project effectiveness.

15. **Establishment of audit and finance committees.** MoWI and MENR are expected to constitute audit and finance committees.

   (a) Audit Committees will be responsible for: (i) monitoring implementation of the risk management policy frameworks; (ii) monitoring and ensuring timely implementation of audit and operational review recommendations of various fiduciary oversight responsibilities including, internal and external auditors, the Government project monitoring agencies and IDA periodic review and supervision missions; (iii) overseeing the continuing efficacy of accounting and internal control standards, policies and practices; (iv) ensuring compliance with legal covenants of the IDA funding agreement; (iv) overseeing the effectiveness of the internal audit functions; and, (iv) monitoring performance of key internal audit staff against approved performance contracts.

   (b) Finance Committees will be responsible for: (i) review and approval of quarterly financial statements; (ii) approval of periodic operational budgets and financial performance; (iii) review and approval of annual financial statements; and, (iv) monitoring the performance of key financial management staff against approved performance contracts.

   The mandates, composition and functioning of respective financial management sub-committees are expected to be documented and approved by the PSC. Treasury guidelines\(^{16}\) for the establishment of audit committees have been assessed as substantially consistent with professional best practice guidelines. It is expected that the committees will be staffed with appropriately experienced persons and meet regularly, at least once each quarter.

16. **Social accountability.** It is recommended that proactive and innovative community oversight activities are put in place to respond to fiduciary risks. The following arrangements expected to be included in the Institutional Risk Management Policy Framework are proposed and are expected to be included in the project’s institutional arrangements:

\(^{16}\) Expected to be based on Government Treasury Circular No 16/2005 titled “Establishment and Operationalisation of Audit Committees in Public Service” dated October 4, 2005.
(a) public disclosure of information regarding: (i) periodic resource appropriation and fund accountability; (ii) project implementation progress and operational results; and (iii) sharing of best practice experiences amongst beneficiary entities. Arrangements should be made for prominent disclosure of such information in the media and public locations; and for timely update of information;

(b) anti-corruption hotlines including toll free communication lines should be established with explicit arrangements for collation of information, follow-up action and public reporting. It is proposed that collation and follow-up responsibilities are vested in Internal Audit and overseen by Audit Committees; and

17. **Efficient funds flow and accountability arrangements.** Proposed improvements to project funds flow and accountability arrangements include:

(a) simplification of accounting processes: Unnecessarily long fund remittance and payment processes are being reviewed. MOF through the Internal Auditor General is assessing payment processing procedures with a view to improving efficiency, effective control and timeliness. Key considerations in the process include: (i) realigning the role of technical oversight functions from involvement in routine transaction processing to conducting independent reviews; and (ii) developing benchmark processing timelines to be adopted and monitored.

(b) fund remittance: Bureaucratic delays in the remittance of project funds from the Special Account through the Central Bank of Kenya, MOF, MoWI/MENR and ultimately to the respective Project Accounts are being reviewed as part of ongoing country portfolio monitoring. Required actions will be included in the Institutional Risk Management Policy Framework expected to be in place by project effectiveness.

18. **Role of External Resources Department.** Effective project monitoring by the MOF External Resources Department is being enhanced through ongoing capacity building in project oversight effectiveness.

19. **Interim financial reporting.** Quarterly financial statements have been identified as the preferred basis of funding disbursements. Draft financial statement were presented and accepted by IDA during project negotiations.

20. **Financial management action plan.** The outcome of this review is included in a financial management improvement plan comprising actions to be completed during project appraisal and prior to credit effectiveness and those to be monitored on an ongoing basis. Monitoring arrangements are included in the Implementation Support Plan.

**II. SUMMARY PROJECT DESCRIPTION**

21. The objectives of the project are to enhance the institutional capacity to manage water and forest resources; reduce the incidence and severity of water shocks in river
catchments; and improve the livelihoods of communities participating in the co-
management of water and forests.

22. The project will be implemented through MoWI and MENR. A PSC consisting of permanent secretaries of MoWI, MENR, Special Programmes of the OP, Ministry of Agriculture, Lands and other relevant institutions will provide policy direction and oversee overall project implementation, including fiduciary oversight.

23. The project will be managed by a PCO, consisting of project coordinators, financial controllers and procurement officers from the implementing agencies. An internal audit function will also be established at the PSC level. Independent fiduciary oversight will be provided by the PSC Audit and Finance Committees.

III. COUNTRY ISSUES

24. Financial management reforms. Through the PFM Reform Strategy, the Government remains committed to strengthening fiduciary safeguards with a view to achieve economy, efficiency and effectiveness in the use of public funds. With the support of a number of development partner-assisted initiatives, including the IDA-funded Institutional Reform and Capacity Building Project, the Government is seeking to rapidly enhance the financial accountability framework, particularly through strengthening legislation related to public financial accounting and audit. Activities to be funded under the Institutional Reform and Capacity Building Project include:

(a) adoption of modern accountability and reporting standards;

(b) adoption of risk based audit approaches; and

(c) supporting the establishment of effective Ministerial Audit and Finance Committees.

25. Diagnostic reviews. The most recent piece of diagnostic work that provides an up to date critical assessment of issues that may impact on this operation is an ongoing Country Integrated Fiduciary Assessment. The assessment, together with the current CAS that was affected in May 2004 review the Government’s performance since the last Country Financial Accountability Assessment (in 2001) and CAS (in 1998). A recurring theme is that policy changes agreed under past and ongoing projects have not been implemented consistently. Project implementation has generally been slowed down by constraints in the flow of resources and limited absorptive capacity arising from bureaucratic processes in the Government.

26. Portfolio review. The 2005 CPPR follow-up review highlighted the Government’s commitment to improving portfolio performance. Agreement was reached on several key issues, some of which have been applied in the design of this operation. These include actions to improve audit compliance, closer monitoring of project performance by MOF and improvements in the flow of project resources.

27. Forensic audits. The findings of forensic audits of the Government
commissioned forensic audits of selected projects in the country portfolio (November 2004 and June 2005) include the following financial management related issues:

(a) projects were generally not controlled using a balancing general ledger system that was fully integrated and regularly reconciled with the rest of the Government's central accounting system;

(b) project designs did not identify fraud risks and fraud risk management was not an integral part of each project;

(c) senior Government oversight of the projects was weak;

(d) management accounts and project quarterly reports reflect levels of activity but do not necessarily identify major issues so that they can be actioned; and

(e) lessons learned and best practices are not shared among similar projects or passed into the wider Governmental structure.

27. **Use of country systems.** The project will, as much as possible, rely on the existing Government financial management systems for overall project management, audit and oversight. Due consideration will be taken of the various fiduciary safeguards enhancement recommendations, including all significant matters raised in various diagnostic and other reviews.

**IV. RISK ASSESSMENT AND MITIGATION**

28. The summary of the assessment of country, implementing entity and project-specific risks and proposed mitigating arrangements is as follows:
29. **Inherent Risk.** Risks associated with the environment in which the project is situated is summarized in the table below.

<table>
<thead>
<tr>
<th>Risk</th>
<th>Preliminary Risk Rating</th>
<th>Risk Mitigating Measures to be Incorporated in Project Design</th>
<th>Conditionality</th>
<th>Residual Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Corruption</td>
<td>S</td>
<td>• Government has prepared a governance action plan that has been considered and is being monitored.</td>
<td>Development of institutional risk management policy frameworks and independent oversight by the PSC will be <em>effectiveness</em> conditions.</td>
<td>M</td>
</tr>
<tr>
<td>2. Poor governance</td>
<td>S</td>
<td>• Government and sector-specific anti-corruption action plan to be considered and monitored.</td>
<td>Development of institutional risk management policy frameworks and independent oversight by the PSC will be <em>effectiveness</em> conditions.</td>
<td>M</td>
</tr>
<tr>
<td>3. Weak judiciary</td>
<td>S</td>
<td>Government and sector-specific anti-corruption action plan to be considered and monitored.</td>
<td>Development of institutional risk management policy frameworks and independent oversight by the PSC will be <em>effectiveness</em> conditions.</td>
<td>M</td>
</tr>
<tr>
<td>Entity level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Delayed flow of funds</td>
<td>S</td>
<td>The 2005 CPPR action plan is monitored on a quarterly basis.</td>
<td>None</td>
<td>S</td>
</tr>
<tr>
<td>5. Weak management capacity</td>
<td>S</td>
<td>Assignment of appropriately qualified and competent management staff at the PCO and key spending units.</td>
<td>Assignment of appropriately experienced staff is an <em>effectiveness</em> condition.</td>
<td>M</td>
</tr>
<tr>
<td>6. Ineffective oversight functions</td>
<td>S</td>
<td>• Project internal audit function to enhance independence and adopt a risk based audit approach.</td>
<td>Adoption of a risk based internal audit approach and independent oversight by the PSC will be <em>effectiveness</em> conditions.</td>
<td>M</td>
</tr>
<tr>
<td>Project level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Lack of prior project implement-</td>
<td>S</td>
<td>There are ongoing initiatives to appropriately staff and enhance the technical capacity of the PCO, implementing entities and Government oversight functions.</td>
<td>Deployment of competent and appropriately experienced staff is an <em>effectiveness</em> condition.</td>
<td>M</td>
</tr>
<tr>
<td>8. Lack of desired staffing at the</td>
<td>S</td>
<td>There are ongoing initiatives to appropriately staff and improve the technical capacity of the PCO and implementing entities.</td>
<td>Assignment of appropriately experienced staff is an <em>effectiveness</em> condition</td>
<td>M</td>
</tr>
<tr>
<td>implementing entity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Inherent Risk</td>
<td>S</td>
<td></td>
<td></td>
<td>M</td>
</tr>
</tbody>
</table>

---


18 Following successful implementation of risk mitigation measures.
30. **Control Risk.** The risk that the project’s financial management system is inadequate to ensure project funds are used economically and efficiently and for the purpose intended.

<table>
<thead>
<tr>
<th>Risk</th>
<th>Preliminary Risk Rating</th>
<th>Risk Mitigating Measures Incorporated in Project Design</th>
<th>Conditionality</th>
<th>Residual Risk Rating</th>
</tr>
</thead>
</table>
| Budgeting                                      | S | • Project budgeting included in Government MTEF budget framework.  
• Budget execution to be monitored through quarterly financial statements. | Quarterly financial statement reporting arrangements and formats have been agreed prior to project negotiations. | M |
| Accounting                                      | S | • Accounting and internal control procedures to be established and documented in operational manuals.  
• Institution of independent and effective internal audit and risk management function.  
• Quarterly Financial Monitoring Reports (FMRs) to be used as the basis of disbursement. | • Presentation of acceptable financial management manuals is an **effectiveness** condition.  
• Adoption of a risk based internal audit approach and independent oversight by the PSC will be **effectiveness** conditions.  
• Quarterly financial statement reporting arrangements and formats have been agreed prior to project negotiations | M |
| Internal Control                                | S | • Streamlining and COO coordination of quarterly financial statement reporting arrangements.  
• Project reporting guidelines and timelines included in the FM manual.  
• Implementation to be monitored by the PSC. | Quarterly financial statement reporting arrangements and formats have been agreed prior to project negotiations | S |
<p>| 11. Accountability and reporting difficulties owing to the project’s multiple accounting units and diverse communities’ participation. | S | The PCO will establish an acceptable accounting and reporting systems that will be integrated into Government accounting and reporting systems. | Effective operation of an acceptable accounting and internal control system is an <strong>effectiveness</strong> condition. | S |
| 12. Information Systems – delayed rollout of IFMIS. | S | The Government Internal Audit function has adopted a risk based approach. Its independence and effectiveness will be enhanced by the establishment of an audit committee of the project. | Adoption of a risk based internal audit approach and independent oversight by the PSC will be <strong>effectiveness</strong> conditions. | M |
| 13. Internal control policies and procedures | S | Project specific policies and procedures expected to be consistent with Government Guidelines and to be documented in FM manuals. | Effective operation of an acceptable accounting and internal control system is an <strong>effectiveness</strong> condition. | M |</p>
<table>
<thead>
<tr>
<th>Risk</th>
<th>Preliminary Risk Rating</th>
<th>Risk Mitigating Measures Incorporated in Project Design</th>
<th>Conditionality</th>
<th>Residual Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds Flow</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Delayed funds flow</td>
<td>S</td>
<td>Removal of unnecessary bureaucratic approvals in Special Account fund remittances.</td>
<td>• Effective operation of an acceptable accounting and internal control system is an effectiveness condition.</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Quarterly financial statement reporting arrangements and formats have been agreed prior to project negotiations</td>
<td></td>
</tr>
<tr>
<td>Financial Reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Accountability and reporting difficulties owing to the project's multiple accounting units and diverse communities' participation.</td>
<td>S</td>
<td>• Streamlining and PCO coordination of quarterly financial statement reporting arrangements.</td>
<td>Quarterly financial statement reporting arrangements and formats have been agreed prior to project negotiations</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Project reporting guidelines and timelines included in FM manuals.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Implementation to be monitored by the PSC.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Delayed finalization and submission of annual financial statements.</td>
<td>M</td>
<td>Government financial reporting regulations and guidelines consistent with IDA requirements and consistently applied.</td>
<td>Presentation of acceptable financial management manuals is an effectiveness condition. The manuals include reporting guidelines and formats.</td>
<td>M</td>
</tr>
<tr>
<td>Auditing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Weak audit capacity at the National Audit Office</td>
<td>M</td>
<td>The capacity of KNAO has improved significantly and is being monitored.</td>
<td>Confirmation of project audit arrangements, including adequate coverage of CDD activities have been agreed prior to project negotiations</td>
<td>M</td>
</tr>
</tbody>
</table>

Overall Control Risk     | S                       |                                                                                                                          |                                                                                                                                                                                                             |                     |
31. **Detection risk.** The risk that a material misuse of loan proceeds fails to be detected.

<table>
<thead>
<tr>
<th>Risk</th>
<th>Preliminary Risk Rating</th>
<th>Risk Mitigating Measures Incorporated in Project Design</th>
<th>Conditionality</th>
<th>Residual Risk Rating</th>
</tr>
</thead>
</table>
| 19. Misuse of and failure to account for project funds | S | • Institution of independent and effective internal audit and risk management function.  
• Quarterly financial statements to be used as the basis of disbursement. | • Adoption of a risk based internal audit approach and independent oversight by the PSC will be effectiveness conditions.  
• Quarterly financial statement reporting arrangements and formats have been agreed prior to project negotiations | M |
| Overall Detection Risk | S | | | M |

32. Financial management risk is rated **substantial** given that the proposed project’s institutional arrangements, particularly the deployment of appropriately experienced staff, are not yet in place. Institutional arrangements are expected to comprise: (a) the establishment of acceptable financial management systems; and (b) safeguards that respond to country level fiduciary risks of weak governance and corruption. Once satisfactorily implemented, financial management risk rating is expected to improve to **modest**.

V. PROJECT FINANCIAL MANAGEMENT DESCRIPTION

A **Implementing Entity**

33. Financial resources will be included in the Government budget and channeled from MOF to MoWI/MENR for onward remittance to respective implementing agencies. Accountability will be monitored through the same channel and ultimately included in the Government financial reporting system. This arrangement is consistent with IDA funded projects in Kenya.

B **Planning and budgeting**

34. Budgeting for the project has been undertaken centrally by the PCO in consultation and with extensive detailed input by the respective implementing entities. The budgeting process is based on the Government MTEF. Proposed periodic reporting guidelines require quarterly activity, cash flow and procurement projection, analysis and review on an ongoing basis, comprising quarterly financial statements that may form the basis of requests for reimbursement of funds.

C **Accounting**

35. **Books of account and list of accounting codes.** The project’s accounting records will be maintained on a computerized accounting system. The codes relating to the project will be integrated in the Chart of Accounts that match the classification used in
financial statements. Financial Management Manuals will include simplified guidelines to implementing entities for required classification designed to facilitate consolidated project reporting.

36. **Accountability.** The PCO will coordinate with respective implementing entities the utilization of funds to meet the eligible expenditure based on approved budgets and work plans, following the accounting procedures to be outlined in the Financial Management Manual and guidelines.

37. **Accountability at the community level.** Simplified accountability arrangements will be adopted including the following:

   (a) Community control of financial resources, including bank accounts;

   (b) Public sharing of information;

   (c) Ongoing independent oversight and strengthening of fiduciary management capacity; and

   (d) Disbursement in tranches based on approved subproject, signed financial agreements, and simplified financial and physical reporting.

38. **Community supervision arrangements.** Community supervision arrangements will integrate fiduciary oversight with M&E. This will be under responsibility of the Internal Audit Unit in the PSC. Arrangements will be articulated in the financial management manuals and guidelines

39. **Interim financial reporting.** The form and content of quarterly financial statements have been developed and agreed upon during project negotiations. Primary contents of quarterly financial statements will comprise: (a) financial reports, including a statement of sources and uses of funds by funding source, a statement of uses of funds by project activity/component, and fund balance statements supported by bank statements; (b) physical progress (output monitoring) report; and (c) a procurement plan and progress report. Financial statements will cover all project activities, including the Government counterpart funding, resources provided by partners and non-cash contributions wherever reasonably quantifiable.

40. Quarterly financial statements will form the basis of periodic funding disbursements in which case they will include a detailed report of projected cash requirements for each ensuing 6 months period supported by: (a) a procurement progress report and related cash flow projection; (b) a fund balance statement supported by bank balance certificates and reconciliation statements; and (c) additional disclosures in respect of contracts paid out of project funds.

41. Respective implementing entities will prepare separate quarterly financial statement inputs accounting for funded activities and detailing projected cash requirements for purposes of periodic replenishment. Inputs will be collated and consolidated by the PCO for project accountability and reporting purposes.
42. Quarterly financial statements are due within 45 days following the end of respective calendar quarters. In order to meet this deadline, the PCO will issue internal reporting timelines, to be included in the Financial Management Manual and Guidelines, to be complied by respective implementing entities.

D Internal Control

43. **Internal controls and financial management guidelines.** The project's internal controls will be based on the Government established accounting and internal control systems and documented in a Financial Operations Manual and guidelines.

44. **Internal audit.** The PSC is expected to oversee the establishment of Internal Audit functions, centrally coordinated by the Government IAG. Internal audit mandates, reporting frameworks and functioning will be guided by best practice guidelines issued by the international Institute of Internal Auditors. These will include responsibility for overall project risk management, monitoring compliance with fund accountability and reporting policies, procedures and guidelines and risk based approaches. The effectiveness of internal audit will be complemented by the institution of periodic audit issues follow-up by the PSC which will also support the demand for internal audit services.

45. The IAG is currently rolling out a risk-based approach in the Government. The proposed approach has been assessed as reasonably compliant with professional best practice.

E Flow of funds and disbursement arrangements

46. **Disbursement arrangements.** The following options are provided under IDA funding arrangements:

(a) *Report based disbursement.* Requests for disbursement by IDA will be made on the basis of approved work plans and cash flow projections for eligible expenditures. IDA will make advance disbursements in agreed proportions from the proceeds of respective Credits into project Special Accounts to expedite project implementation. Advances will be used by the borrower to fund eligible project expenditures and evidenced in quarterly financial statements.

(b) *Direct payment.* Another acceptable method of withdrawing funds under this arrangement is the direct payment method, involving direct payments to suppliers for works, goods and services upon the borrower’s request. Payments may also be made to a commercial bank for expenditures against pre-agreed special commitments. Direct payment amounts will be included in quarterly financial statements.

45. The IDA Disbursement Letter will stipulate the minimum application value for direct payment and special commitment procedures as well as detailed procedures to be complied with under respective funding arrangements.
46. **Flow of Funds.** Funds flow arrangements for the project shall be as follows: (a) IDA will make an initial advance disbursement from the proceeds of the Credit by depositing into the Borrower-operated Special Account; (b) Actual expenditure will be reimbursed through submission of Withdrawal Applications and against interim financial statements; (c) the Government counterpart funds and transfers from the Special Accounts (for payment of transactions in local currency) will be deposited in the project account in accordance with the Government exchequer control and funding arrangements (Figure 8-1).

47. The following bank accounts will be used to channel project resources:

(a) **Special Accounts.** The Government will establish two US dollar Special Accounts that will receive respective ministries' deposits/transfers from the credit account. The accounts will be managed by MOF in accordance with the Government procedures for the management of Special Accounts.

(b) **Project Accounts.** Local currency project accounts operated in local commercial banks would be opened to form the primary source of finance for project activities and will be managed directly by the respective ministries. Remittances from Special Accounts will flow through the MoWI and MENR Paymaster General accounts, again in line with the Government procedures.

48. Respective bank accounts are expected be operational by credit effectiveness. Initial cash flow forecasts upon which the advance disbursement will be made from the IDA Credit should also be prepared by the same date.

49. **Flow of funds to communities.** Communities will be expected to operate bank accounts into which IDA funds will be disbursed in tranches on the basis of physical progress and simplified accountability. Details will be included in the financial management manuals and guidelines.

50. **Counterpart funds.** MoWI and MENR will ensure advance availability of counterpart funding contribution by depositing amounts equivalent to estimated quarterly cash requirements into respective Project Accounts. Counterpart funds will be allocated through the normal central Government budgetary process.

51. **Remedies for non compliance.** If ineligible expenditures are found to have been made from Special Accounts, the borrower will be obligated to refund the same. If the Special Account remains inactive for more than six months, IDA may reduce the amount advanced.

52. IDA will have the right, as to be reflected in the terms of funding agreement, to suspend disbursement of the funds if significant conditions, including reporting requirements, are not complied with.
Figure 8-1: Illustrative Funds Flow and Accountability Arrangements

IDA Credit Account

Corrective action on rejected application/refund of ineligible expenditure

FMR and WA Acceptable?

Yes

IDA will replenish Special Accounts quarterly based on approved FMRs and Withdrawal Applications.

No

MOWI Special Account

MoENR Special Account

Corrective action on rejected application/refund of ineligible expenditure

FMR Acceptable?

Yes

MOF will review quarterly FMRs on the basis of which Withdrawal Applications will be prepared and submitted to IDA.

No

NIB Project Account

WRMA Project Account

Finance NIB project activities

Finance WRMA project activities

Finance FD project activities

Finance HQ project activities

FD Project Account

HQ Project Account

NIB Quarterly FMR Input

WRMA Quarterly FMR Input

FD Quarterly FMR Input

MoWi FMR

MoENR FMR

Implementing entities will provide quarterly FMR input for Ministry level consolidation and reporting to Treasury.
F  Financial Reporting

52. Annual financial statements. Project financial statements shall be prepared in accordance with IPSAS which inter alia includes the application of the cash basis of recognition of transactions.

53. The PCO will provide the form and content of financial statements inputs to be provided by respective implementing entities, including submission timelines in the Financial Management Manual and guidelines.

G  External Audit

54. External audit. Under Kenyan legislation, the responsibility to audit all Government funds and activities is vested in KNAO, which is mandated to subcontract such services in the event of capacity or other constraints. KNAO is currently responsible for the audit of all IDA funded projects in Kenya and has consistently been rated satisfactory. There have been significant improvements in the office’s ability to ensure timely auditing and reporting. The office is considered to be sufficiently independent, applied internationally acceptable auditing guidelines and therefore, acceptable to IDA.

55. IDA funding agreements agreed during project negotiations included the Dated Covenants that require the submission of audited financial statements, taking into consideration IDA guidelines, within six months after the year-end.

VI. CONDITIONALITY

56. Actions which have been met prior to project negotiations:

   (a) establishment of accounting and internal control arrangements included in PIP;

   (b) documentation of financial management arrangements to be included in the FM manual and guidelines; and

   (c) quarterly interim financial statement reporting arrangements in place.

57. Actions required prior to credit effectiveness:

   (a) the Recipient has adopted an Institutional Risk Management Policy Framework satisfactory to the Association. The framework sets out, inter alia, the following elements of a sound risk management system:

      i) establishment of a National Project Steering Committee, PSC Audit Committee and Finance Committees with clear terms of reference consistent with the Recipient’s Government’s financial management guidelines;
ii) updated financial management manuals setting out operational policies, procedures and fiduciary oversight methods;

iii) complaint handling mechanisms; and

iv) an effective system of internal and external audits.

58. Actions required following credit effectiveness:

(a) project independent audit arrangements completed; and

(b) financial management capacity of the PCO and implementing entities developed and monitored on an ongoing basis.

VII. IMPLEMENTATION SUPPORT PLAN

59. Based on the outcome of the financial management risk assessment, the following implementation support plan is proposed:

<table>
<thead>
<tr>
<th>FM Activity</th>
<th>Frequency</th>
<th>FM Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desk reviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Interim financial statements</td>
<td>Quarterly</td>
<td>Financial statements review report</td>
</tr>
<tr>
<td>review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Audit report review</td>
<td>Annually</td>
<td>Audit review report</td>
</tr>
<tr>
<td>On site visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Review of controls</td>
<td>Six monthly</td>
<td>(a) Clearance of FM effectiveness conditions.</td>
</tr>
<tr>
<td>d) Transaction reviews</td>
<td>Annually</td>
<td>(b) FM review report.</td>
</tr>
<tr>
<td>Capacity building support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) In-house FM training sessions</td>
<td>Six monthly</td>
<td>Delivery of training sessions.</td>
</tr>
<tr>
<td>f) Participation in regional</td>
<td>Annually</td>
<td>Information on available training programs</td>
</tr>
<tr>
<td>specialized training workshops</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

60. The missions' objectives will include that of ensuring that strong financial management systems are maintained for the project throughout its life. In addition, Detailed Financial Management Reviews will be carried out regularly to ensure that expenditures incurred by the project remain eligible.

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19 Respective reviews will be based on mutually agreed terms of reference
20 These will include a specific follow-up of FM effectiveness conditions that comprise the underlying reason for a Substantial FM risk rating.
21 To be based on existing arrangements in conjunction with the Loan and Procurement Departments
Annex 9: Government's Side Letter on Transparency and Accountability

KENYA: Natural Resource Management Project

REPUBLIC OF KENYA
MINISTRY OF FINANCE

Ref. No.: EA/FA 63/330/01/E (36)  Date: February 23, 2007

Mr. Colin Bruce
Country Director
Kenya, Ethiopia and Somalia
World Bank Country Office
NAIROBI

Dear Bruce,

NATURAL RESOURCES MANAGEMENT (NRM) PROJECT: GOVERNANCE, TRANSPARENCY AND ACCOUNTABILITY

This is further to the negotiations on the Natural Resource Management Project that were held in Washington DC from 9th to 16th February, 2007, and resulted in the Financing Agreement and the Project Appraisal Document (PAD). We would like to take this opportunity to confirm to the World Bank that the Government of Kenya is fully committed to the principles of transparency, accountability, enhancement of governance and fighting corruption in the country. The tools to be used in this fight are the Public Officer’s Ethics and the Anti-corruption and Economic Crimes Acts that were passed by Parliament in 2003.

In addition, the Government has enacted key legislations aimed at improving governance and service delivery including the Government Financial Management Act (2004), the Public Audit Office Act (2004), the Privatisation Act and Public Procurement Disposal Act. Most recently, the Government developed a Governance Action Plan for the period July 2006 – June 2007, for which it is committed to full implementation.

At the sectoral level, the Government is pleased to report that the Ministries of Environment and Natural Resources (MoENR) and Water and Irrigation (MoWI) have developed and strengthened systems focused on enhancing transparency, accountability and governance in their operations and programmes at the headquarters and at the field levels.

The Natural Resources Management Project (NRM) being financed by the World Bank, has been under implementation since 16th October, 2006, financed by Project Preparatory Facility. This project will be independently monitored, audited and evaluated and it will include strong transparency and social accountability features. It will also initiate a centralised disbursement of funds mechanism with qualified and experienced financial management by each respective Ministry or to be hired through competitive bidding.
The Project Implementing Entities namely the Water Resources Management Authority (WRMA), National Irrigation Board (NIB) and Kenya Forest Service (KFS) will be submitting their annual procurement plans and work plans to the Ministry of Water and Irrigation as the Lead Agency for consolidation and subsequent submission to the Bank for review and approval. After approval, the plans will then be posted to the website of the Ministries of Water and Irrigation, Environment and Natural Resources. In addition to increasing overall efficiency and substantially reducing project costs through consolidation of needs and lotting of similar items, the system has proved reliable and sustainable for the implementation of the project.

For smooth implementation of the NRM project, institutional and management structures at line Ministries and the implementing entities were comprehensively analyzed. However, as a requirement, additional structures will be put in place to oversee the smooth running and management of the programme, these will include the National Steering Committee. At present, modalities are already in place to ensure effective coordination, reporting, exchange and sharing of information between the different committees and stakeholder groups.

At the sectoral level, the project will be managed by MoWI and MoENR, each of which will nominate a Project Coordinator for the Water and Forestry Components respectively. Each Ministry will also recruit a Finance Specialist, a Procurement Specialist, and a Monitoring and Evaluation Specialist. The first two specialists will prepare financial reports and procurements activities in line with the guidelines approved by the Bank. The National Steering Committee comprising stakeholders will oversee the overall strategic direction of the project.

To further enhance governance, both the MoWI and MoENR and the entities benefiting from the project with the guidance of the Ministry of Finance will undertake the following measures aimed at entrenching accountability and transparency practices.

(i) Adoption of a risk-based internal audit system;

(ii) Establishment of the Ministerial Audit Committee;

- Introduction of innovative public dissemination measures, such as the posting of procurement plans on the MoWI and MoENR websites;
- Comprehensive capacity building in financial management and procurement;
- Annual auditing of project accounts;
- Establishment of Finance and Audit Committees within the National Steering Committee;
- Issuing clear guidelines and manuals for the management of the project;
Developing annual work plans for the implementation of the NRM project and placing them on the MoWI and MoENR websites; and

Compliance with the Public Officers' Ethics Act on declaration of wealth.

In as much as we recognize the steps so far made in strengthening governance, we also appreciate that more remains to be done in order to strengthen it in the entire sector. In this regard, planned actions for its enhancement include the following:

(i) **Public disclosure of information** regarding reports of the meetings of the National Steering Committee. Information will be made available on the websites and also using the media and public notice boards in WRMA and NIB Headquarters.

(ii) **Strengthened risk management and anti-corruption measures** through; enhanced complaints procedures (with anti-corruption/Complaints boxes established at headquarters and at the Regional and Sub-Regional levels); continued use of risk-based internal audit; undertaking an annual procurement audit; revision as necessary of the financial and procurement manuals and their distribution to all agencies participating in the project;

(iii) **Comprehensive consultation process** with joint NRM project reviews to be undertaken biannually; quarterly Government/Donor consultative meetings; sharing reports with all key stakeholders; and having a fully participatory approach to the implementation of the new Forest Act 2005, which has transformed the Forest Department into a semi-autonomous agency, known Kenya Forest Service (KFS).

(iv) **Capacity building** at all levels, including training on financial and procurement procedures.

In the process of implementing the NRM project, technical assistance will be sought where necessary to strengthen governance, transparency and accountability. We are convinced that these measures, together with those already put in place, will ensure effective and transparent use of public resources availed to the sector.

We thank the Bank for the continued assistance towards our development agenda.

Jackson Ngabirano
Director
External Resources Department
For: **PERMANENT SECRETARY/ TREASURY**
Annex 10: Procurement Arrangements
KENYA: Natural Resource Management Project

I. Procurement Environment

1. Kenya’s first National Procurement Law (The Public Procurement and Disposal Act 2005) was passed by Parliament in October 2005 and enforced in January 2007. The Regulations supporting the Law were also published by the Minister for Finance in January 2007. Prior to the enforcement of the Law, procurement under the public sector had been governed by a set of Regulations (the Public Procurement Regulations 2001) issued by the Minister for Finance in 2001 and amended in 2002.

2. The Public Procurement and Disposal Act (2005) created a central PPOA to replace the Public Procurement Department developed under the Regulations (2001) in the MOF. The Act also re-establishes the Public Procurement Complaints, Review and Appeals Board (the Appeals Board) which had been in operation since 2001. In addition, all public procuring entities have a Procurement Unit and a Tender Committee which are responsible for the implementation of procurement process of the procuring entities. The Executive Officers of the procuring entities together with their Tender Committees are accountable for the procurement decisions of their entities.

3. Public Procurement in Kenya is recognized as a very important process via which over 70 percent of public funds (excluding staff emoluments, debt servicing and other statutory payments) are spent. A major challenge in Kenya is to ensure sound and efficient public procurement systems that ensure value for money, efficiency in service delivery and transparency, including providing equal opportunity to the bidding community. It also recognizes that corruption in public procurement is a major issue in Kenya as it is very erosive of public funds intended for public good and its resultant economic growth.

4. Among the overarching features of the Procurement Law towards promoting transparency and accountability of public procurement decisions include specific provisions for administering security-related procurement which has hitherto been vulnerable to corrupt practices. In addition, the Government has established a number of complimentary anti-corruption legislative and administrative instruments. In 2003, it enacted an Anti-Corruption and ECA which creates the KACC—an independent body corporate with immense powers relating to the fight against corruption, accountable to Parliament, and the Kenya Anti-Corruption Advisory Board. The board members were drawn from the civil society, professional bodies, trade unions, and religious sectors, vetted by Parliament and appointed by the President. In the same year, a Public Officer Ethics Act was passed and enforced. This Act provides for Codes of Conduct and Ethics for all public officers to enhance ethics and integrity in the Public Sector and govern the wealth declaration process. The Government introduced Performance Contracting for public agencies (parastatals in 2004-05 and the Government Ministries and Departments in 2005-06). Chief Executives of all public agencies are required to sign Performance
Contracts on behalf of their respective agencies. One aspect of performance contracting, which every agency is assessed on, is the initiation of anti-corruption measures to curb corruption.

5. Under its Governance Action Plan, the Government has included implementation of the following procurement reform actions:

(a) inject sunshine principles in bidding and procurement contracts including: (i) ensuring all Ministries, Departments and agencies publish the inform on contracts required by law on a Government website; and (ii) ensuring the website is working effectively and is accessible to the public;

(b) introduce a Vetting System to pre-qualify companies interested in bidding for Government contracts to address the issue of conflict of interest;

(c) establish a mechanism for reporting and enforcing the current provision of the law on “Blacklisting” companies; and

(d) introduce e-procurement.

II. Procurement Risk Assessment and Mitigation

6. An in-depth procurement capacity assessment was carried out during Project Appraisal, which rates the procurement risk “high” due to the following reasons:

(a) none of the proposed Project Implementing Agencies has implemented a Bank-funded project or program before. They all lack experience in international procurement procedures;

(b) because the procurement staff in public sector were trained in material management, i.e., supplies of goods, the capacity in administering procurement processes or managing works and consultancy service contracts is generally limited;

(c) administratively procurement personnel of central Government Ministries report to the Accounting Officer (Permanent Secretary) of MOF and not to that of the Ministry to which they are seconded. MOF transfers them frequently from one Ministry or Department to another. This arrangement hampers capacity building or sustainability of acquired procurement capacity in the central Government institutions;

(d) there are no National SBD that have been reviewed by and cleared with the Bank; and

(e) institutional arrangement for procurement oversight is weak.

7. The proposed mitigation measures are presented in the Table 10-1.
III. Procurement Arrangements

8. The implementation of the NRM will be carried out by MENR, FD/KFS, MoWI, the WRMA, and NIB. The proposed credit will in addition support community development micro-projects to be proposed by communities in the project area. Approximately US$8.9 million of Goods, US$29.4 million of works, and US$8.9 million of consultancy services will be procured under the project.

9. **Bank Guidelines and SBD.** Procurement of goods, civil works and employment of consultants will be subject to the provisions of the “World Bank Procurement and Consultants Guidelines for the selection and employment of Consultants (May 2004)”. Bank’s SBD will be used for all ICB contracts. Bank’s Standard RFP will be used for all prior review consultancy contracts.

10. **National Procurement Procedures.** Until National SBD acceptable to the Bank have been published, the Bank’s SBD (modified as appropriate) will be used for procurement of goods, works. Equally the Bank’s Standard RFP will be used for procurement of all consultancy services.

11. **Scope of Procurement and Applicable Procurement Methods.** The implementation of the NRM Project entails procurement of various types of: (a) goods (i.e., vehicles, computers, office furniture, etc.); (b) works (new construction and rehabilitation of facilities); (c) consulting services (i.e. technical assistance, and various types of studies, etc.); and (d) training and workshops. The project implementing institutions will be responsible for the procurement of their own requirements. Communities benefiting from the Credit will also be carrying out procurement of goods and services for implementation of micro-projects.

12. **ICB** will be used for contracts above US$500,000 per contract for works and US$250,000 per contract for goods. Contracts below the above thresholds will be procured in accordance with the National Competitive Bidding (NCB) procedures.

13. **Limited International Bidding** may be used when there are only a limited number of known suppliers in the world.

14. For all Goods and Works contracts below the respective ICB threshold and all consultancy contracts of consulting firms that are estimated to cost less than US$ 100,000 equivalent, may be awarded on national procurement procedures and bidding documents that have been cleared with the Bank.

15. **QCBS** will be used under such circumstances when: (a) the type of service required is common and not too complex, (b) the scope of work of the assignment can be precisely defined and the TOR are clear and well specified, and (c) the staff time, the assignment duration, and other inputs and cost required of the consultants can be estimated with precision. Contracts for which short lists may consist exclusively of local consultants will be determined in the procurement plan on the basis of its nature and an availability of firms. NGOs and CBOs may be hired to provide services related to the implementation of community micro-projects in the project districts.
16. **Least Cost Selection** may be used for assignments of a standard and routine nature such as financial audits and other repetitive services that are estimated to cost less than US$ 200,000 equivalent.

17. Selection based on **Consultants Qualifications** (CQ) may be used for assignments costing less than US$ 100,000 equivalent and for which the full-fledged preparing and evaluating proposals would be not justified.

18. **Single-Source** Selection will be applied only in exceptional cases when of consultants through competitive process is not practicable and upon Bank's concurrence of the decision on the Single-Source Selection method.

19. **Selection of Individual Consultants.** Consultants for services meeting the requirement of Section V of the Consultants’ Guidelines will be selected under the provisions for the **Selection of Individual Consultants (IC)** method. Individual Consultants will be selected through comparison of job description requirements against the qualifications of those expressing interest in the assignment or those approached directly.

20. **Bank’s Review Thresholds.** Works and Goods valued at the equivalent of US$150,000 per contract will are subject to prior review of the Bank. Consultancy contracts for services to be provided by consulting firms costing the equivalent of US$100,000 or more and for individual consultants contracts estimated to cost the equivalent of US$50,000 or more will subject to Bank’s prior review. All single-source contracts, regardless of their value, shall be cleared with the Bank. (See Table 11-2).

21. **All other contracts** will be subject to post-review and procurement audit by the Bank. All implementing agencies will maintain accurate records of all procurement activities and documents related to the Program. The procurement files will be maintained for review by the Bank's supervision missions and independent auditing, including consolidating procurement activities into Quarterly and Annual Progress Reports.

22. **Procurement Plans.** All implementing agencies will be required to prepare their procurement plans consistent with Annual Workplans, the Government budget cycle and approved budget allocations. The Procurement Plan for the first 12 months of project implementation has been prepared. Subsequent Procurement Plans will be prepared as part of budget preparation process and, and cleared with the Bank. Training programs to build capacity of local communities in record keeping and procurement processes will be undertaken. Additional technical supports will be provided by WRMA and FD/KFS staff on the ground.

23. The procurement plans will be posted in the Bank’s external website. The “Actual” column of the Procurement Plan will be updated regularly so as to reflect progress made on each contract package, to include any new packages that were not foreseen at the time of preparing the plan and to indicate any packages no longer needed. The management of each implementing agency will at the end of each fiscal year review
the performance of the execution of its procurement plans, so as to determine the quantity of the plan achieved each year. Low performance could mean that procurement is holding hostage budget execution and service delivery.

24. **Frequency of Procurement Supervision.** Bank supervision missions will be carried out every 4 months for the first year and every 6 months thereafter. Two ex-post procurement review audits will be done during the first year and from thereon at least once a year.
<table>
<thead>
<tr>
<th>Item Assessed</th>
<th>Assessment</th>
<th>Major Weaknesses</th>
<th>Risk Assessment</th>
<th>Actions Proposed</th>
<th>Proposed Completion Date</th>
</tr>
</thead>
</table>
| 1. Procurement capacity (Professional knowledge and Experience in procurement procedures) | Poor | - Lack of experience in Bank procurement procedures.  
- Lack of professional knowledge and practical experience in the procedures for hiring contractors and consultants, or procuring specialized or high-valued goods. | High | - Organize a training workshop at the Bank’s Kenya Country Office for all procurement staff of implementing agencies (for at least a full day).  
- Send those procurement staff that will be directly involved in the procurement implementation of the project components for formal training with the regional training institutions (i.e. ESAMI and GIMPA). | The training at the Country Office: prior to project effectiveness; and  
Formal training: after the one-day workshop but as early as possible. |
| 2. Sustainability of existing capacity or to have been built during project implementation | Null | - Procurement Units of former FD (now KFS) and MoWI are staffed with personnel seconded by MOF for a short period (usually not exceeding 3 years); too frequent transfers of personnel hampers capacity growth and thus perpetuates delays in procurement implementation. | High | - Once procurement staff has been trained, retain it throughout the project implementation period. If some members have to be transferred, ensure that transfers are carried out in a manner that guarantees there will be no procurement capacity vacuum in the implementing agencies at any given time. | Confirmed |
| 3. Size of procurement staff | Poor | - WRMA and NIB Procurement Units are staffed with one procurement officer each. | High | - Deploy in each entity at least one additional procurement officer who will be responsible for procurement implementation under regional offices. | At early as possible but no later than 3 months of project effectiveness. |
| 4. Office Equipment | Poor | - KFS Procurement Unit lacks essential office equipment, e.g., computers, printers, a photocopier, a fax machine. | High | - Procure adequate office equipment and train all members in the operations of office equipment. | Immediately after project effectiveness. |
### B. Operational Procurement Documents

<table>
<thead>
<tr>
<th>Item Assessed</th>
<th>Assessment</th>
<th>Major Weaknesses</th>
<th>Risk Assessment</th>
<th>Actions Proposed</th>
<th>Proposed Completion Date</th>
</tr>
</thead>
</table>
| 1. SBD for NCB contracts      | Poor        | • Public entities use National SBDs that were produced on the basis of the Public Procurement Regulations (2001), and not cleared with the Bank. | High           | • Produce National SBDs on the Public Procurement and Disposal Act (2005), and clear them with the Bank.  
• In the mean time, adapt the Bank’s SBDs. | As early as possible.  
Beginning from the first NCB contract. |
| 2. RFP for selection of consultants | Poor        | • There is no National Standard RFP.                                              | High           | • Produce a National SRFP on the Public Procurement and Disposal Act (2005), and clear it with the Bank.  
• In the mean time, adapt the Bank’s SRFP. | As early as possible.  
Starting with the first consultancy contract. |
| 3. Procurement Manual for CDD sub-projects | Poor        | • There are no standard Guidelines for procurement under Community micro-projects. | High           | • Develop a Procurement Manual for micro-projects. | By project effectiveness |

### C. Procurement Process Administration and Contract Management

<table>
<thead>
<tr>
<th>Item Assessed</th>
<th>Assessment</th>
<th>Major Weaknesses</th>
<th>Risk Assessment</th>
<th>Actions Proposed</th>
<th>Proposed Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Process Administration</td>
<td>Poor</td>
<td>• Delays in procurement process decisions common in the public sector.</td>
<td>High</td>
<td>• Set up service standards for completion of procurement process decisions, and a tracking system for monitoring compliance to the agreed service standards.</td>
<td>By project effectiveness, and during project supervision.</td>
</tr>
<tr>
<td>2. Contract management</td>
<td>Poor</td>
<td>• Poor contract management or lack of capacity in contract management.</td>
<td>High</td>
<td>• Prepare a monitoring system of fulfillment of contractual obligations by both parties.</td>
<td>Throughout project implementation period</td>
</tr>
<tr>
<td>3. Record keeping of procurement documentation</td>
<td>Poor</td>
<td>• Procurement documents filed under various subject files and kept by different units within each the procurement entity.</td>
<td>High</td>
<td>• Introduce a proper procurement filing system on contract by contract basis, preferably under the custody of the Procurement Unit.</td>
<td>Immediately</td>
</tr>
</tbody>
</table>

### D. Procurement Audits

<table>
<thead>
<tr>
<th>Item Assessed</th>
<th>Assessment</th>
<th>Major Weaknesses</th>
<th>Risk Assessment</th>
<th>Actions Proposed</th>
<th>Proposed Completion Date</th>
</tr>
</thead>
</table>
| 1. SBD for NCB contracts      | Poor        | • Public entities use National SBDs that were produced on the basis of the Public Procurement Regulations (2001), and not cleared with the Bank. | High           | • Produce National SBDs on the Public Procurement and Disposal Act (2005), and clear them with the Bank.  
• In the mean time, adapt the Bank’s SBDs. | As early as possible.  
Beginning from the first NCB contract. |
| 2. RFP for selection of consultants | Poor        | • There is no National Standard RFP.                                              | High           | • Produce a National SRFP on the Public Procurement and Disposal Act (2005), and clear it with the Bank.  
• In the mean time, adapt the Bank’s SRFP. | As early as possible.  
Starting with the first consultancy contract. |
| 3. Procurement Manual for CDD sub-projects | Poor        | • There are no standard Guidelines for procurement under Community micro-projects. | High           | • Develop a Procurement Manual for micro-projects. | By project effectiveness |

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Table 11-2: Thresholds for Procurement Methods and Prior Review

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Contract Value Threshold (US$)</th>
<th>Procurement Method*</th>
<th>Contracts Subject to Prior Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Works</td>
<td>≥500,000</td>
<td>ICB</td>
<td>All Contracts</td>
</tr>
<tr>
<td></td>
<td>≥70,000 &lt; 500,000</td>
<td>NCB</td>
<td>≥150,000</td>
</tr>
<tr>
<td></td>
<td>&lt; 70,000</td>
<td>Shopping</td>
<td>None</td>
</tr>
<tr>
<td>2. Goods</td>
<td>≥250,000</td>
<td>ICB</td>
<td>All contracts</td>
</tr>
<tr>
<td></td>
<td>No limit</td>
<td>LIB</td>
<td>≥150,000</td>
</tr>
<tr>
<td></td>
<td>≥70,000 &lt; 250,000</td>
<td>NCB</td>
<td>≥150,000</td>
</tr>
<tr>
<td></td>
<td>&lt; 70,000</td>
<td>Shopping</td>
<td>None</td>
</tr>
<tr>
<td>3. Services, Consultant Services, Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Firms</td>
<td>No Limit</td>
<td>QCBS</td>
<td>≥100,000</td>
</tr>
<tr>
<td></td>
<td>&lt; 200,000</td>
<td>LCS</td>
<td>≥100,000</td>
</tr>
<tr>
<td></td>
<td>≤100,000</td>
<td>CQ</td>
<td>None</td>
</tr>
<tr>
<td>(b) Individual Consultants</td>
<td>≥50,000</td>
<td>Individual consultants</td>
<td>All contracts</td>
</tr>
<tr>
<td></td>
<td>&lt; 50,000</td>
<td>Individual consultants</td>
<td>None</td>
</tr>
</tbody>
</table>

*Contracts for which short lists may consist exclusively of local consultants will be determined in the procurement plan on the basis of its nature and an availability of firms.
Annex 11: Economic and Financial Analysis

KENYA: Natural Resource Management Project

1. The economic and financial analysis of the NRM Project is structured as follows: (a) an overview of the economic importance of natural resource and agricultural production in Kenya; (b) a brief summary of general issues for economic analysis of the NRM Project; (c) estimation of the potential IRR and NPV for the proposed project investment; and (d) conclusions and recommendations.

I. Economic Importance of Natural Resource and Agriculture in Kenya

2. Sound management of natural resource is an important element of Kenya’s development process. Natural resource plays two basic roles in development. The first, most applicable to developing countries, is the role of local natural resource as the basis of subsistence. The second is a source of development finance. Commercial management of natural resource can be an important source of profit and foreign exchange. Rents on exhaustible, renewable and potentially sustainable resources can be used to finance investments in other forms of wealth. Natural resource makes up a very significant share of the total wealth in low-income countries. In Kenya, natural capital accounts for 21 percent of the total wealth, whereas produced capital, defined as the sum of machinery, equipment, and structures, including urban land, account for only 13 percent. It is estimated that land resources, including cropland and pastureland, account for 65 percent, timber and non-timber forest resources for 27 percent, and protected areas for 8 percent of the total natural capital (World Bank, 2006a). Hence, sound management of the natural resource can support and sustain the welfare of countries, such as Kenya, as they move up the development ladder. This also suggests that managing natural resource must be a key part of development strategies.

3. The condition of Kenya’s natural resource, such as land, water and forests, are reported to have deteriorated over the last decades and thereby negatively affecting sustainable economic growth. Available estimates indicate that the rate of soil fertility depletion is very high in Kenya—as is the case in most Sub-Saharan Africa countries (Sheldrick and Lingard, 2004). Soil fertility depletion thus represents a substantial loss in Kenya’s natural capital, and contributes to reduction of agricultural productivity and income. Forests cover only about 1.7 percent of Kenya’s land area and annual deforestation between 1976 and 2000 about 15,000 ha or 2 percent. The frequency of floods and droughts has been increased in the last decades and water quality is reported to have deteriorated, partly due to inappropriate application of agro-chemicals (Emerton, 1998). The agricultural sector directly affects the condition of natural resource. In addition, the agricultural sector is of particular importance for poverty.

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reduction and economic growth. It contributes 24 percent to the GDP, provides 60 percent of total employment and 75 percent of merchandise exports. 80 percent of the poor live in rural areas. Kenyan agriculture is dominated by resource-poor smallholders, with 3.5 million farm families, of whom 80 percent have an average farm size of 1.2 ha. The average growth rates in the sector have been only 1.9 percent during 2000-04. In 2005, however, the agricultural sector grew by 6.9 percent. A rapidly rising population and subdivision of farms is resulting in declining farm sizes and pressure on natural resource. Future growth will clearly have to come from more intensified sustainable agriculture with a focus on smallholders for poverty impact. The Government's vision for the development of the sector, as articulated in the Strategy for Revitalizing Agriculture, is to transform agriculture into a profitable, commercially oriented and internationally competitive activity while conserving the natural environment.

II. Economic and Financial Analysis of NRM Project

4. Cost-benefit analyses of the NRM Project pose special challenges for rigorous economic analysis. Natural resources generate a substantial number of goods and services that benefit humankind, but the value of a number of these goods and services is not determined through market mechanisms. In general, values of natural resources may be classified as follows: (a) direct use values: values arising from consumptive and non-consumptive uses of the natural resource, e.g. forests for timber production and extraction of genetic material; and (b) indirect use values: values arising from various environmental services, e.g., protection of forests of watersheds and carbon storage. Theoretically, all direct and indirect use values of natural resources are capable of being measured in monetary terms. In practice, as will be discussed in more detail below, there is limited evidence of some of these values (Pearce, 2001). Another challenge related to the NRM Project is the quantification of off-site effects. SLM practices, for example, are not only likely to generate positive on-site effects, such as increased yields through reduced soil erosion, but can also be expected to reduce sediment loads of reservoirs and other facilities downstream. These externalities may also contribute to reduced frequency and severity of flooding and reduce the costs for hydro-power and water-supply companies for silt removal. However, the precise quantification of the complex relation between watershed management activities (such as adoption of SLM practices), their physical effects (e.g., stabilization of top soil, reduced flooding), and their translation into value measures require substantial amount of long-term data and biophysical modeling by hydrologists and watershed management specialists. This analysis makes an attempt to quantify some of these benefits based on previous studies in the intervention area, quantitative modeling, estimates from project consultants and team members, and literature review.

5. Reviews of watershed management projects in different regions, including Africa, have shown that even distribution of upstream and downstream benefits is key to success of project implementation (World Bank, 2006b). Farmers will only

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adopt SLM practices upstream, and thereby contribute to reduced sedimentation downstream, if they realize financial benefits not only in the long-term but already in the short-term. Therefore, the economic analysis of the NRM Project places particular emphasis on conducting a financial analysis from the perspective of the land users. In addition, the economic analysis determines whether the proposed investments are economically viable from the perspective of the society as a whole.

III. Calculation of IRR and NPV

6. Ex-ante quantification of economic benefits of certain components, such as legal and institutional strengthening of the water sector or forest sector, is difficult, if not impossible. This is mainly due to the long-run nature of the reforms, and difficulties in linking cause and effect. Hence, estimation of single summary measures, such as IRR or NPV, for the whole project is not very useful and may not be warranted. The calculation of economic measures for individual components within the project may be more appropriate. With regard to quantification of economic values, the analysis focuses on the profitability of investments in the Tana and Nzoia Catchments, such as SLM, irrigation schemes, reforestation, and CDD Micro-Projects. The analysis captures both on-site and off-site effects. In the following, the approach and results of the economic and financial analysis will be described for some major interventions.

3.1. SLM

7. To determine the returns to SLM interventions, both the on-farm and off-site costs and benefits are taken into account. The adoption of SLM practices will be promoted in the upper Tana Catchment mainly to: (a) reduce soil erosion and thereby increase yields and farmers' income; and (b) reduce sedimentation of reservoirs and regulate water flows and water quality. Private costs and benefits might differ from the social costs and benefits for natural resource conservation, because: (a) market failures or policy-induced distortions might distort price signals perceived by agricultural producers; and (b) externalities caused by land degradation (off-site effects) might impose costs or benefits on the society in addition to the decline in productivity on the fields where degradation occurs.

8. As part of the private CBA, financial returns of SLM practices from farmers' perspective are assessed over a time horizon of fifty years. Using a discount rate of 10 percent (Pagiola, 1996), NPV and IRR are computed with and without SLM practices recommended by KARI. KARI has identified integrated soil fertility management, agroforestry and soil and water conservation structures as interventions suitable for operational areas with similar agro-ecological conditions as the NRM Project areas. Benefits of adopting SLM practices are expected to occur through reduced soil erosion and reduced soil fertility mining which ultimately result in improved crop yields. This study uses mainly data from long-term experiments conducted at KARI Kabete and Embu Research Stations. Both stations are located in the high potential areas that reflect

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the biophysical environment of the operational areas. Since the experiments do not measure soil loss over time, the Revised Universal Soil Loss Equation is used to quantify the erosion-crop yield relation. The Feasible Generalized Least Squares Model was used to compute yields with and without SLM practices. Technology diffusion is estimated based on the classical diffusion model with a logistic distribution.

9. **To estimate off-site effects, the social CBA includes the impacts of SLM on sedimentation and carbon sequestration.** The private CBA from the farmers’ perspective does not take into account these off-site costs and benefits that result from adoption or non-adoption of SLM practices. The quantification of benefits due to reduced sedimentation are based on research conducted by Jacobs et al. (2005), who assessed the impact of land use-change in the Upper Tana-Catchment on sediment load in the Masinga Dam. The drainage area of the Masinga Dam also constitutes major parts of the NRM Project interventions areas. The dam serves as storage reservoir to help to control water flow for a series of hydro-electric reservoirs downstream and also generates some electricity itself, but at a lower capacity than the other reservoirs. Expected benefits due to reduced sedimentation include: (a) reduced dredging costs for the reservoir; (b) better regulated water flows for agriculture and municipal drinking water purposes; (c) fewer disruptions in hydro-electric power generation; and (d) reduced probability of flooding. Limited data availability constrains the analysis to the estimation of reduced dredging costs. These costs were also identified by watershed management experts as the most significant ones. Since, the other benefits due to reduced sedimentation are not quantified, the total benefit can be considered as a conservative estimate.

10. **Reduced sedimentation and carbon sequestration are expected to contribute significantly to the economic viability of SLM interventions.** Based on the Soil and Water Assessment Tool Model, Jacobs et al. (2005) estimated that land use changes in the form of reforestation on about 120,000 ha would reduce the annual sediment load of the Masinga Reservoir by 7 percent. Literature review indicates that soil loss on forest land can be compared roughly with the soil loss from agricultural land managed in a sustainable manner (Chomitz, 2006; Nkonya et al., 2005). In addition, the NRM Project supports the construction of off-farm erosion control measures which also would contribute to reduced sedimentation of the Masinga Reservoir. Based on these figures, it is assumed that the NRM interventions would have a comparable impact on sedimentation of the reservoir as the land use change scenarios analyzed by Jacobs et al. (2005). A reduction of 7 percent would be equivalent to a reduction of sediment load of 216,496 tons per year. The dredging costs for sediment removal are in the range of


US$8-25 per ton. Assuming a cost of US$8 per ton would result in total avoided cost of sediment removal of US$1,731,968 per year. Costs of US$16.5 per ton would result in total avoided costs of US$3,572,184 per year. Another benefit to be captured as part of the social CBA of SLM is its contribution to reduction of greenhouse gases through carbon sequestration. However, as Pugiolu (1999) notes, the links between land degradation and carbon dioxide emission are numerous and complex and hence difficult to quantify. Due to these difficulties, coefficients generated through previous studies are used and adapted to the Kenyan conditions (Vagen et al., 2005; Gachene, 1997). For this study the more conservative figure of 0.5 tons C per year of carbon sequestration per ha SLM is used. The value of these ERs is based on the price the BioCarbon Fund of the World Bank pays per ton of CO₂ which is about US$4 in average.

11. **The IRR of selected SLM interventions can be expected to be approximately 30 percent.** With a 10 percent adoption rate the private IRR would be 27 percent (NPV of US$148 per ha). Including off-site benefits from reduced sedimentation and carbon sequestration would increase the IRR to 36 percent (NPV of US$230 per ha). If all costs for promotion of on-farm activities and overhead costs of the respective component are added the IRR would be 30 percent (NPV of US$218 per ha). As Table 10-1 indicates private and social IRRs are very stable with different adoption rate scenarios. These figures indicate that the selected best management practices would meet the necessary condition of financial profitability from the farmers’ perspective. It is important to note that the adoption of these best management practices would imply high initial investment costs which could constitute a barrier for adoption.

<table>
<thead>
<tr>
<th>Adoption rate</th>
<th>Private IRR (NPV)</th>
<th>Social IRR (incl. off-site benefits) (NPV)</th>
<th>Social IRR (incl. off-site benefits plus overhead costs) (NPV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>26.9% (US$154/ha)</td>
<td>35.9% (US$240/ha)</td>
<td>28.9% (US$225/ha)</td>
</tr>
<tr>
<td>10%</td>
<td>27.2% (US$148/ha)</td>
<td>36.2% (US$230/ha)</td>
<td>29.6% (US$218/ha)</td>
</tr>
<tr>
<td>20%</td>
<td>27.6% (US$191/ha)</td>
<td>36.7% (US$295/ha)</td>
<td>30.6% (US$284/ha)</td>
</tr>
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</table>

3.2. **Reforestation**

12. **Like SLM, reforestation is expected to generate both on-site and off-site effects.** Another component of the NRM Project focuses on reforestation with

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indigenous trees in the upper Tana and Nzoia Catchments. As described for natural resource in general, forest goods and services can be classified as: (a) direct use values; and (b) indirect use values. Under direct forest use values, *Pearce* (2001) lists the following: (a) timber values; (b) fuelwood and charcoal; (c) NWFP; (d) biodiversity and genetic information; and (e) tourism and recreation values. The quantitative analysis focuses on the second and third values.

13. **The private IRR for reforestation is estimated to be between 11 percent and 16 percent.** About 1,000-2,000 ha of the upper Tana and Nzoia Catchments will be reforested with indigenous trees on gazetted forest reserve land as part of this project. Cost and benefit data for reforestation has been collected from the FD and Kakamega Environmental Education Program (KEEP). Based on these data net benefits per year for beekeeping and fuelwood collection can be expected to amount to about US$246 per ha (with six beehives per ha) and US$39 per ha respectively. Since benefits of medicinal plants are neglected, the total benefits from reforestation can be considered as a conservative estimate. The time period under consideration to calculate IRR and NPV is fifty years. For the calculation of NPV a discount rate of 10 percent was assumed. Two scenarios are considered for this analysis: with and without opportunity costs for the forest land. Since the area under consideration is gazetted forest land no economic activities such as grazing are allowed according to the law. However, it can be assumed that grazing is conducted on at least part of the intervention area. The private CBA indicates that without opportunity costs for land the IRR would be 16 percent (NPV of US$450 per ha) and with opportunity costs for land the IRR would be 11 percent (NPV of US$53 per ha).

14. **The social IRR for reforestation is estimated to be between 14 percent and 23 percent.** The social CBA includes the benefits from carbon sequestration. The valuation of emissions reductions can be based on existing trading schemes. The World Bank BioCarbon Fund signed an ER Purchase Agreement with the GBM in Kenya in November 2006. As part of project preparation, the research institute Joanneum Research modeled the amount of carbon expected to be sequestered based on growth rates of indigenous tree species. The results have been adapted to the NRM Project activities. The maximum amount of carbon sequestration generated on 1,000 ha is expected to be about 118,266 tons CO₂ e per year. The BioCarbon Fund purchases ERs for an average of about US$4 per ton CO₂e. Based on these calculations, the social IRR would be 23 percent (NPV of US$1,156 per ha) without opportunity costs for land. With opportunity costs for land the social IRR would be 14 percent.

15. **The social CBA does not aim at including economic benefits from biodiversity and genetic information, ecotourism, and watershed protection in the calculation of IRR and NPV.** Hence, the benefits due to reforestation can be considered as a conservative estimate. With regard to biodiversity and genetic information, *Pearce* (2001) concludes that research remains very unsatisfactory in terms of quantifying the values of biodiversity and genetic information. Some research findings suggest that pharmaceutical genetic material could be worth several hundreds of dollars per ha in
most hotspot areas. For example, Simpson and Craft (1996)\textsuperscript{35} estimated the social value of genetic material in Tanzania to be US$290 per ha and Rausser and Small (1998)\textsuperscript{36} estimated the willingness to pay of pharmaceutical companies to be US$811 per ha in Tanzania. For major parts of the world's forest, however, values would be extremely small and close to zero.

<table>
<thead>
<tr>
<th>Table 10-2: Reforestation – Summary Private and Social IRR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Private IRR (NPV)</strong></td>
</tr>
<tr>
<td>Without opportunity costs land</td>
</tr>
<tr>
<td>With opportunity cost land (grazing)</td>
</tr>
</tbody>
</table>

16. **Ecotourism is a growing activity and constitutes a potentially valuable non-extractive use of tropical forests in Kenya.** Pearce (2001) reviewed studies focusing on evaluating the benefits of ecotourism for tropical forests and observed economic values between US$2 and US$400 per ha and year depending on accessibility and other characteristics. As there is currently little organized tourism in Kenya's indigenous forests, Emerton (1995) points out that it is difficult to estimate their recreational value. However, it is known that Mount Kenya forest (15,500 visitors in 1992), Aberdares forest (63,000 visitors in 1992), and Kakamega Forest Reserve are important tourist destinations in Kenya. The Kenya Forest Master Plan (1992)\textsuperscript{37} estimates the recreational value of forests which form part of National Parks and Reserves in Kenya at about $28 per ha. Emerton (1995) uses contingent valuation and travel cost surveys to demonstrate that the forest holds an annual tourist value in excess of $0.3 million, which would rise by approximately 25 percent if visitors perceived that the forest were adequately conserved and well-managed. These values can give a rough estimate of the tourism and recreation values of forests in the project area.

17. **The impact of reforestation on water flows is subject to controversial discussions within the research community.** In the past, the popular view was that reforestation can significantly reduce flooding. However, this view changed in recent decades. Douglas et al. (2006)\textsuperscript{38} and Chomitz (2006)\textsuperscript{39} conclude that the impact of


Deforestation on flooding depends on many ecological factors, but can be considered as not significant in general. Douglas et al. (2006) estimated the hydrological impacts of deforestation for different watersheds in the tropics, including Kenya. Assuming that all protected forests would be converted to agricultural land use in Kenya, the average annual water discharge increased by 2 percent, and maximum discharge by 1.2 percent. These results confirm the emerging view of limited impact of deforestation on flooding.

3.3. Irrigation

18. The project plans to support: (a) the rehabilitation of the Mwea Irrigation Scheme and other existing schemes on about 12,500 ha in total; and (b) the development of 3,500 ha of irrigation through a gravity scheme in the lower Nzoia Catchment. The MIS is the largest irrigation scheme in Kenya and was started in the 1950s as a resettlement project. It was intended for rice production under irrigation and has become the largest irrigation scheme in Kenya. The MIS played a pivotal role in the 1980s when the costs of food imports increased significantly and it was expected to play an increasingly greater role in reducing the gap between domestic food demand and production. A household survey conducted by Tegemeo University in 2002 indicates that when water is available total annual incomes for MIS farmers could be up to Ksh197,432. Households outside the scheme earn on average Ksh65,784 per year of which 50 percent is derived from crops and 50 percent from off-farm sources.

19. The planned investments into the Mwea Irrigation Scheme are expected to be financially and economically attractive. The CBA is based on comparison of rice budgets estimated under current management of the schemes with rice budgets estimated for the scenario of improved scheme management. The discount rate is set at 10 percent and the time period considered is 25 years. Required data have been collected from the NIB. The benefits would be expected to occur through increased productivity both in terms of yield per harvest and cropping intensity. Rehabilitation costs would be about US$2,500 per ha and tertiary rehabilitation about US$250 per ha. O&M costs which would be assumed to be covered by the farmers would be about US$141 per ha. Based on the assumption that the project would finance rehabilitation of the schemes with US$6.62 million, about 2,400 ha could be financed as part of project implementation. Based on these data, the economic IRR (which would include the investment costs, resettlement costs, O&M costs, and overhead costs) would be 17 percent. The financial IRR from the farmers' perspective would be much higher (115 percent) since they would only cover tertiary rehabilitation and O&M costs.

20. The development of new irrigation schemes in the lower Nzoia Catchment are estimated to reach an economic IRR of 11 percent and a financial IRR of 49 percent (Table 10-3). The estimated costs for the development of this gravity scheme would be US$4,000 per ha plus US$1,000 per ha for tertiary development. The US$12 million allocated for this investment would allow for the establishment of about 2,400 ha of a new irrigation scheme. The O&M costs are expected to be the same as for the

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rehabilitation investment (US$141 per ha) and would be covered by the benefiting farmers. In addition, the development of a new scheme would require compensation payments of US$1 million. The current agricultural land use in the intervention area is dominated by cassava, maize, and rice. It is assumed that the planned investment would shift production to rice mainly. Hence, the benefit would occur through production of a higher value crop and increased yields for the area already under rice production. The economic IRR (including investment costs, O&M costs, and overheads) would be 11 percent. The financial IRR from the farmers’ perspective would be higher (49 percent) since they would only cover tertiary rehabilitation and O&M costs.

<table>
<thead>
<tr>
<th>Table 10-3: Irrigation – Summary Private and Social IRR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation scheme rehabilitation</td>
</tr>
<tr>
<td>Private IRR (NPV)</td>
</tr>
<tr>
<td>115%</td>
</tr>
<tr>
<td>(US$4,843/ha)</td>
</tr>
<tr>
<td>Social IRR (NPV)</td>
</tr>
<tr>
<td>17%</td>
</tr>
<tr>
<td>(US$2,000/ha)</td>
</tr>
<tr>
<td>Development new irrigation scheme</td>
</tr>
<tr>
<td>Private IRR (NPV)</td>
</tr>
<tr>
<td>49%</td>
</tr>
<tr>
<td>(US$4,328/ha)</td>
</tr>
<tr>
<td>Social IRR (NPV)</td>
</tr>
<tr>
<td>11%</td>
</tr>
<tr>
<td>(US$235/ha)</td>
</tr>
</tbody>
</table>

3.4. Livelihoods Micro-Projects

21. Potential CDD micro-projects have been selected and evaluated as part of the economic analysis. The NRM Project would also support the preparation and implementation of Micro-Projects focusing on livelihood-enhancing interventions which simultaneously improve the condition of the natural resource base. A particular challenge related to the ex-ante economic analysis of CDD projects is the selection of interventions and activities to be evaluated, since—by definition—the communities can select from a wide range of potential activities. The analysis is not able to capture all these diverse activities due to time and resource constraints. Based on discussions with communities in the targeted areas, the Government officials and team members the following activities have been identified as likely CDD interventions and have been evaluated: (a) woodlots; (b) medicinal plants (including processing); (c) SLM practices; and (d) beekeeping. Primary data have been collected from NGOs and Government institutions. In addition, secondary data received from literature review have been used. For the NRM-related micro-projects the communities are expected to cover about 10 percent of the total costs. Each micro-project is assumed to have a budget of US$15,000, of which 50 percent are used for non-production purposes, such as technical advice, access to information, farmer exchange and overheads.

22. Woodlots on private, community, or public land are one potential type of micro-projects with attractive IRR. Woodlots could be established for example with pine for sawtimber. Data for the CBA analysis are taken from Sedjo (2004) and a case study.

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study of the Hombe Forest Station conducted as part of the SEA. For the pine sawtimber woodlot a rotation of 26 years was assumed. The wood volume would be expected to be 285 $m^3$ and the price Ksh 1400 per $m^3$. The opportunity costs of land are based on the forgone benefit for grazing and maize. Two scenarios were considered: the first one would include the benefit from fuelwood collection, the second would not include other benefits than timber. For the scenario with fuelwood benefits, the financial IRR was estimated to be 19 percent (NPV of US$818 per ha). Without fuelwood benefits, the financial IRR is estimated to be 10 percent (NPV of US$13 per ha). Assuming benefits from maize production as the forgone benefit changed the IRR and NPV only slightly. It is important to note that the economic NPV which does not include the benefits from fuelwood collection, but accounts for project overhead cost, is negative.

23. **Production and processing of medicinal plants could constitute another economically viable option for communities.** An example for medicinal plants would be intercropping of Ocimum (medicinal plant), with Mundia (medicinal plant) and agroforestry (Sasbania). One potential partner for implementation of micro-projects—the NGO KEEP—is conducting this activity on a pilot basis. The analysis reveals that based on the data collected, mono-cropping of Ocimum would not be financially viable if the without-project benefit assumes maize production. The production of Mundia must be linked to agroforestry due to the need of the medicinal plant to climb a tree. Intercropping of Ocimum, Mundia and Sasbania is expected to result in an IRR of 101 percent from the perspective of the participating community, i.e., when costs for non-production purposes and overheads are not included. If both costs are taken into account, the IRR would be 37 percent. Processing of Ocimum is another potential CDD micro-project. Data for the CBA have been collected at a small processing facility in Kagamega. Currently, the processing facility collects the Ocimum from surrounding farmers and has a capacity to produce 15 kg oil per month. The oil is transported to the International Center for Insect Physiology and Ecology (ICIPE) in Nairobi. ICIPE does the purification of the oil, packaging and selling of the final product. The processing facility sells the oil to ICIPE at a price of Ksh 4650 per kg. Based on the data collected, the micro-project would not be financially viable if the investment costs would include the construction of all required buildings for storage and processing, and the purchase of all required machines and equipments. However, if the costs for construction and major machinery is covered, as is the case for the visited facility, and the micro-project would invest in some additional equipment and cover O&M costs, the project is likely to be financially viable. For the second scenario a private IRR of 63 percent (NPV of US$4,733) was calculated. If overhead costs and non-production expenses would be included the IRR would be 51 percent (NPV US$4,399).

24. **The financial viability of beekeeping on forest land or woodlots is significantly determined by the number of beehives per ha.** As mentioned for the reforestation intervention above, with 6 beehives per ha a benefit of US$246 could be realized. In addition, the benefit of fuelwood collection is estimated to be about US$39 per ha. The benefits of wax—a by-product of honey production—have not been included in the analysis. If the forgone benefit of grazing constitutes the opportunity cost for land, the private IRR from the community’s perspective would be 19 percent (NPV US$64 per ha). If expenses for other non-production expenses are taken into account the IRR would
be reduced to 9 percent and a negative NPV of US$72 per ha. For the scenario with maize production determining the opportunity costs for land, the private IRR would be 9 percent (NPV of US$103 per ha) and taking the other expenses into account the IRR would be reduced to 4 percent (NPV of US$579 per ha). These figures illustrate that establishment of woodlots with low beekeeping intensity is unlikely to be economically viable. However, the profitability can be realistically improved through more intensive beekeeping, i.e. through increasing the number of beehives per ha. If a woodlot with 10 beehives per ha can be established, the economic IRR including the overhead costs and assuming maize production determines the opportunity costs for land, would increase to 14 percent and the NPV to US$476 per ha. Hence, it would be important to determine upfront how many beehives could be realistically implemented and whether the market demand is sufficient for increased honey production.

Table 10-4: CDD Microprojects – Summary Private and Social IRR

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Financial IRR (NPV)</th>
<th>Economic IRR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Woodlots – Pine Sawtimber</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with fuelwood</td>
<td>19.4% (US$818/ha)</td>
<td>19.2% (US$793/ha)</td>
</tr>
<tr>
<td>without fuelwood</td>
<td>10.1% (US$13/ha)</td>
<td>10% (US$13/ha)</td>
</tr>
<tr>
<td><strong>Ocimum - mono</strong></td>
<td>Not viable</td>
<td>Not viable</td>
</tr>
<tr>
<td><strong>Ocimum-Mundia-Agroforestry (Sasbania)</strong> intercropping</td>
<td>101% (US$3,104/ha)</td>
<td>37% (US$2,391/ha)</td>
</tr>
<tr>
<td><strong>Ocimum processing</strong></td>
<td>Not viable</td>
<td>Not viable</td>
</tr>
<tr>
<td>Including construction of new buildings and purchase of major machinery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Without construction of new buildings and purchase of major machinery</td>
<td>63%</td>
<td>51%</td>
</tr>
<tr>
<td><strong>Beekeeping (indigenous woodlots) – opportunity costs land: maize production</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 beehives/ha</td>
<td>9% (US$103/ha)</td>
<td>4% (US$579/ha)</td>
</tr>
<tr>
<td>10 beehives/ha</td>
<td>34% (US$1,764/ha)</td>
<td>14% (US$476/ha)</td>
</tr>
<tr>
<td><strong>SLM practices (agroforestry, intergrated soil fertility management, SWC)</strong></td>
<td>30% (US$443/ha)</td>
<td>23% (US$376/ha)</td>
</tr>
</tbody>
</table>
IV. Conclusions and Recommendations

25. The ex-ante economic evaluation of the different NRM Project interventions, such as SLM, reforestation, irrigation, and CDD micro-projects, has indicated that most activities are likely to be profitable from the beneficiary and project perspective. In many cases, the off-site effects add significantly to economic viability from the society's perspective. The results of the analysis have some important implications for the design and implementation of the NRM Project:

(a) Financial viability of interventions from the farmers’ or community’s perspective is a necessary condition of sustainable watershed management. Potential technologies that meet this requirement could be identified in collaboration with research institutes, such as KARI. A similar rigorous screening for financial viability, as conducted for this analysis, could be systematically mainstreamed into project implementation. For potential CDD micro-project this could imply that the submission of proposals should require a sound financial and economic analysis. The results suggest the need to promote SLM practices that complement each other and other farm enterprises. This also implies that promoting a package of complementary technologies is likely to make them more profitable and less risky. In the quest to promote a package of technologies, the project could anticipate and plan for the expected stepwise adoption of components of the technologies. If promotion of a mix of complementary enterprises is not feasible, high value crops are likely to make SLM practices more profitable.

(b) High initial investment costs constitute a potential barrier for adoption of SLM practices. Improved access to credit would potentially enable farmers to overcome this constraint. However, credit in the form of cash may not work due to its fungible nature. In kind credit, such as by providing agroforestry planting materials on longer term credit basis could help farmers to obtain these inputs easily. The project could facilitate establishment of agroforestry nurseries in the operational areas. The agroforestry nurseries would need to be established on a commercial basis to ensure their sustainability. For the case of SWC structures that involve high labor inputs, there is need to encourage creation of labor groups.

(c) Enforcement of existing NRM-related rules and regulations constitutes a critical challenge. Non-farm activities are likely to give farmers alternatives to their land degrading agricultural activities. Research has shown that farmers who, for example, pursue non-farm activities are more likely to fallow than those without. Project design and implementation could be informed by an analytical study identifying feasible alternative livelihoods. In addition, local institutions should be strengthened to enact and enforce SLM regulations. NRM regulations enacted locally have higher compliance than those imposed on the community by higher authorities. Community awareness of existence of NRM regulations usually increases the level of compliance with such regulations. There is also need for the project to help strengthen local government and customary institutions, which would enact and enforce these regulations.
(d) **An enabling economic and policy environment facilitates the adoption of SLM practices.** Profitability from the farmers’ perspective is only a necessary, but not sufficient condition for sustainable NRM at the catchment level. In order to address the problem of resource degradation in a holistic and effective manner, policy makers and planners need to better understand all the factors that underlie the proximate cause, such as population pressure; poverty; high purchased input costs; lack of access to rural finance, markets and public services; weak decentralization and basic rural service delivery; and land tenure relationships. Policy and socio-economic analyses could inform policy reforms which enable the widespread adoption of sustainable NRM practices. A baseline study would help to better understand factors affecting SLM and alternative livelihoods and their impacts on conditions of natural resource.

(e) **Market analysis is an important step to assess the viability of alternative livelihoods and high-value crops.** Alternative livelihoods and high-value crops are mentioned as viable option to address natural resource degradation. However, risk and access to market are likely to be of concern for high value crops and other alternative livelihoods. Efforts by the project to connect farmers and farmer groups to markets are likely to form a foundation for addressing the risk and market access concerns. Concerning activities which are expected to significantly contribute to increasing outputs, a market analysis should be considered as an important input for implementation.

(f) **PES is an innovative instrument to foster adoption of SLM practices.** For PES to be sustainable it needs to be a win-win situation, i.e. it increases returns to SLM practices and also helps downstream communities and/or companies to avoid or minimize the off-site effects of land degradation. The project would need to explore the possibility of PES since such service payments are not necessarily feasible or economic wherever there are off-site costs, considering the costs of establishing and monitoring such a payment system. Skepticism from potential downstream beneficiaries to engage in a PES could be addressed through accurate measurements and data collection during project implementation.
Annex 12: Safeguard Policy Issues

KENYA: Natural Resource Management Project

1. Safeguards Policy triggered by the WKCD/FM Project and the related NRM Project include those on Environmental Assessment (OP/BP 4.01) Involuntary Resettlement (OP/BP 4.12), and IP (OP/BP 4.10). In order to address these safeguard policy issues, and to ensure that implementation of project activities will be carried out in an environmentally and socially sustainable manner, the Government prepared a joint ESMF, a RPF and an IPPF. The three documents were reviewed, commented on and approved by both the Government and the World Bank and disclosed to the public in-country and at the Bank’s Information Centre in Washington D. C. on January 10, 2007. Regarding the Projects on International Waterway (OP/BP 7.50), a notification of the commencement of the project sent out by the MOF on January 11, 2007 to the parties of the Nile Basin Agreement. The following sections of this Annex present the rationale for these three documents, and include their executive summaries.

I. Environment and Social Management Framework

2. Background and Rationale: The unified ESMF prepared for the WKCD/FM Project and the complimentary NRM Project will allow the implementing agencies to identify, assess and mitigate potential negative environmental and social impacts of sub projects, and to ensure that proper mitigation and possibly the preparation of appropriately costed environmental impact assessments (EIA) and mitigation and management plans as well as RAPS where necessary. The ESMF presents guidelines and procedures consistent with the Environmental Management and Coordination Act of Kenya and the World Bank’s safeguard Policy on Environmental Assessment OP/BP 4.01.

3. Mitigation of potentially negative impacts. The ESMF outlines an environmental and social screening process for sub-projects which will enable the water service agencies, the forest services, and local communities to simultaneously identify potential environmental and social impacts of sub projects and to address them through the incorporation of the relevant mitigation and management measures. To effectively ensure the minimization or elimination of such negative impacts, the ESMF encourages the inclusion of mitigation impacts at the design of sub-projects prior to implementation. The screening process has been developed as the locations and types of sub-projects are not yet defined and therefore potential impacts cannot be precisely identified. Both the WKCD/FM and the NRM Projects directly address environmental and NRM issues and poverty reduction, and are likely to deliver significant positive environmental and social benefits. Both projects will address ongoing problems of environmental destruction and associated deepening poverty. Specifically, the two projects will address: (a) forest destruction due to encroachment and the resulting loss of water, non-timber forest products, timber; and cultural values; and (b) mitigation through watershed and catchment management and flood plain management. While the proposed interventions are anticipated to have significant positive impacts on the environment and on the
livelihood of the affected communities, some of the individual projects that the WKCDD/FM and the NRM Projects will be funding may involve some environmental and social risk. The ESMF lays out measures to screen and mitigate impacts that may arise during project implementation, including the following:

i) Guidance on preparation of comprehensive checklists of potential environmental and social impacts and their sources;

ii) Systematic procedures for participatory screening of sub project sites and activities and the environmental and social considerations;

iii) A step by step approach for forecasting the main potential environmental and social impacts of the planned project activities;

iv) A typical environmental management planning process for addressing negative externalities in the course of project implementation;

v) A monitoring system for implementation of mitigation measures; and

vi) An outline of recommended capacity building measures for environmental planning and monitoring of project activities.

4. **Executive Summary**: The ESMF is prepared for the NRM Project and the WKCDD/FM Project which the Government intends to implement. This ESMF has been prepared by the Borrower consultant and reviewed and approved by the World Bank and the Government and disclosed in-country and at the World Bank’s InfoShop. The purpose of this ESMF is to provide a strategic guide for the integration of environmental and social considerations in the planning and implementation of both project activities.

5. The development objectives of the NRM Project are to enhance the institutional capacity to manage water and forest resources; reduce the incidence and severity of water shocks in river catchments; and improve the livelihoods and improve the livelihoods of communities participating in the co-management of water and forests. Achievements under the project will be measured by indicators tracking changes in organizations and their performance, in the health of the natural resource base, and in welfare of participating communities.

6. The NRM Project and the WKCDD/FM Project embodies effective institutionalized linkages between key sector actors, including central government, local government, Regional WRMA, KFS, External Support Agencies, the private sector, NGOs, CBOs, and the communities themselves. Under the two projects, the Government will continues to provide the necessary technical and financial support, as well as coordination and regulation of WRM flood and catchment management as well as ensuring the improved livelihoods for the communities. The private sector provides support to the communities in planning, design, construction and supply of materials, equipment, spare parts, and in some cases operations.
7. According to the National Environmental Management and Coordination Act of 1999, the World Bank's safeguard policy OP/BP 4.01 and Kenya's EIA Guidelines, the NRM Project and the WKCD/FM Project would fall under the list of projects for which environmental impact assessment is mandatory, prior to implementation. The basis is that the proposed projects constitute several components of activities, which would generate changes and impacts to both the physical and social environment.

8. The proposed NRM and WKCD/FM activities have been categorized as B, according to the Environmental Assessment Operational Policy; and therefore, the appropriate environmental work has been carried out for Category B projects while the scope of EIA for Category B may vary from one sub-project to another. Since the locations of the infrastructure investments and their potential negative localized impacts could not be determined prior to appraisal, the ESMF has been prepared to ensure appropriate mitigation of potential negative environmental and social impacts.

9. Although the program activities will vary in size, location, scope and the approach in implementation, most of these activities will involve civil engineering and construction works which might have generic environmental impacts.

10. As sub-project proposals are finalized, the complete proposal shall include the environmental category of the sub-project. For category B and A sub-projects requiring an EIA, the proposal shall include the EIA report and proof of its approval by NEMA and the World Bank and any interested Development Partner or Financing Agency. For less contentious category B projects that do not require the preparation of a separate EIA, the completed environmental and social checklist will be attached to the sub-project proposal.

11. The ESMF has been prepared as a guide for the initial screening of the proposed project sites, and for negative environmental and social impacts, which would require attention prior to project implementation. The ESMF outlines a number of strategies in undertaking the exercise. These include:

   (a) an outline of a comprehensive checklist for the potential environmental and social impacts and their sources;

   (b) systematic procedures for participatory screening processes for project sites and project activities for environmental and social considerations;

   (c) a step-by-step procedure for forecasting the main potential environmental and social impacts of the planned project activities;

   (d) a typical EMP for addressing negative externalities in the course of project implementation and operations within the environment;

   (e) a monitoring system for implementation of mitigation measures; and

   (f) an outline of recommended capacity-building measures for environmental planning management and monitoring of the project activities.
12. The framework recommends that in order for the implementation of the ESMF to be successful, there is need to ensure that other sub projects being implemented in the same areas as the WKCD/FM and the NRM Projects have their own comprehensive environmental and social management plans. It also recommends that the National Environment Management Council and sector ministries and agencies should ensure that human activities that lead to environmental and social problems are properly managed and monitored.

13. The framework also suggests that for successful implementation of this ESMF, involvement and participation of local communities is paramount. Specifically the framework recommends:

(a) using the screening process of both the ESMF and RPF prior to any project activity of the two projects;

(b) environmental and social awareness and education for the key stakeholders and affected communities;

(c) training the local community structures to implement the ESMF and the screening process;

(d) regularly updating this ESMF to respond to changing local conditions;

(e) building capacities for developing appropriate information management systems to support the environmental and social management process;

(f) providing the necessary resources and equipment for the KFS, WRMA and other players to be able to produce the necessary documentation and forms for the implementation of the ESMF; and

(g) empowering the relevant environmental officers to adequately administer the ESMF.

14. As a reference material, the framework will be useful to several stakeholders who will be involved in planning, implementation and monitoring of the proposed project. Some of the key users of this framework are:

(a) funding agencies/donors for the proposed NRM Project and the WKCD/FM Project;

(b) District Environmental Management Officers and Committees;

(c) Sector Environmental Management Coordinators;

(d) participating sectors in the implementation of the two projects;

(e) politicians and local traditional leaders;
(f) senior central government officials responsible for policymaking and project planning;

(g) central government officials responsible for environmental planning and management;

(h) NGOs and the private sector involved in the selected districts;

(i) planners and engineers for preparation of plans and designs of the project activities; and

(j) engineers and contractors to be involved in implementation of the project activities.

15. Annual reviews should be undertaken after implementation of the recommended action ESMF report has been prepared, at the closing of each year of the Project. It is expected that each review would require three to four weeks of field work (interviews, examination of subprojects), and that the review report would be completed within two weeks of completing the fieldwork. The reviews will have a total cost of about US$753,000 for the whole program period.

II. Resettlement Policy Framework

16. Background and Rationale: In accordance with World Bank social safeguard policy on Involuntary Resettlement OP/BP 4.12, which has been triggered by both the NRM Project and the WKCD/FM Project, the Government is required to prepare a social safeguards instrument. Since the sub projects are not determined in advance, the appropriate instrument is the RPF, which will be employed in conjunction with the ESMF to ensure that social impacts due to sub-project activities are appropriately addressed. The RPF document outlines the principles and procedures to be followed in the event that a sub-project leads to land acquisition and/or the loss of livelihoods.

17. Should the environmental and social screening results indicate that any of the planned sub-projects will lead to land acquisition or loss in economic activity or livelihood, the local authorities will apply the principles and procedures for compensation as outlined in the RPF.

18. The RPF establishes the Resettlement and Compensation principles, organizational arrangements and design criteria to be applied to meet the needs of the people and communities who may be affected by the project activities. As Kenya does not have a national resettlement policy, the RPF and eventual RAPS are prepared based on the World Bank policy OP/BP 4.12. It is, however, noted that, while no policy directly equivalent to the Bank’s social safeguard policies or expressly devoted to safeguarding social issues may exist, the rights of citizens and residents of Kenya are nevertheless laid out in the country's constitution and further elaborated in various laws and statutes all of which seek to ensure fair play in administration of public affairs and conflict whether over land or other natural resources. When specific planning information becomes available and the land areas are identified, subproject
resettlement/compensation plans will be subsequently prepared consistent with the RPF and will be submitted to the Bank for approval before any land acquisition, resettlement or any other negative impact on livelihood occurs.

19. Consistent with the World Bank Operational Policy on Involuntary Resettlement OP/BP 4.12, the RPF prepared for the NRM Project and the WKCDD/FM Project covers: (a) principles and objectives governing resettlement and compensation; (b) a description of the process for preparing and approving Resettlement and Compensation Action Plans; (c) land acquisition and likely categories of impact; (d) eligibility criteria for defining various categories of project affected persons; (e) a legal framework reviewing the fit between the laws of Kenya and regulations and policy requirements of the World Bank and measures to bridge any gaps between them; (f) methods of valuing affected assets; (g) organizational procedures for the delivery of entitlements, including the responsibilities of the Government and the private developer; (h) a description of the implementation process, linking resettlement and compensation implementation to civil works; (i) a description of grievance redress mechanism; (j) a description of the arrangements for funding resettlement and compensation, including the preparation and review of cost estimates, the flow of funds, and contingency arrangements; (k) a description of mechanisms for consultation with and participation of displaced persons in planning, implementation, and monitoring; and (l) arrangements for monitoring by the implementation agency and if required by the independent monitors.

20. Apart from the earlier evictions which took place before the two projects were identified and for which data is scarce, it is important to note that the number of PAPs that will require resettlement and/or compensation is not yet known. For this reason, it is not possible to prepare RAPs at this stage. The RM Project has however taken it upon itself to assist the Government to address the resettlement issues in the project’s area of influence. To achieve this important objective, the project will have to first carry out a comprehensive and participatory survey to map out the issues before any RAP is drawn up and implemented. The indicative budget provided by the project includes a provision to ensure that resettlement is integrated into the participatory forest management to be developed in these areas.

21. Executive Summary: The Government with assistance from World Bank and other development partners is implementing the NRM Project and the WKCDD/FM Project. These projects will focus on prioritized water resources and flood management and service delivery and wealth creating activities in the communities.

22. The development objectives of the NRM Project are to enhance the institutional capacity to manage water and forest resources; reduce the incidence and severity of water shocks in river catchments; and improve the livelihoods and improve the livelihoods of communities participating in the co-management of water and forests. Achievements under the project will be measured by indicators tracking changes in organizations and their performance, in the health of the natural resource base, and in welfare of participating communities. The development objective of the WKCDD/FM Project is to empower local communities of men and women to engage in wealth creating activities, lower the incidence of poverty and reduce the vulnerability of the poor to adverse
outcomes associated with recurrent flooding. Similar indicators as the NRM Project will be used to measure success.

23. In cases where new land has to be acquired for there will be need for the preparation of procedures and principles for land acquisition, resettlement and compensation. This entails providing sufficient investment resources to meet the needs of the Project Affected Persons (PAPs) who may be displaced from their habitat and resources. It also requires adequate collaborative consultation and agreement with the PAPs to ensure that they maintain or improve their livelihoods and standards of living in the new environment. This RPF which has been prepared by the Borrower consultant and reviewed by the World Bank and Borrower has been approved, by both parties and disclosed in-country and at the World Bank’s InfoShop, is to ensure effective preparation and implementation of the land acquisition, resettlement and compensation processes for both parties should the need to do so arise.

24. The legal instruments have been noted to contain relevant legislation that defines the different classifications/categories of land, and specific issues that relate to land acquisition and land transfer including the management of the land acquisition and transfer processes itself. The legal basis has been found very useful in the preparation of this RPF.

25. The RPF has been prepared in anticipation that the two projects’ activities will require additional land. The RPF therefore, provides safeguards against adverse impacts of development activities of both the NRM and WKCDD/FM Projects, through minimizing the number of PAPs in the first place. It provides procedures and means for adequately compensating for the losses the PAPs may incur, in the case that resettlement cannot be avoided.

26. This RPF includes guidelines for compensation for land contributed voluntarily for the Projects without seeking compensation; as well as land acquired involuntarily. The guiding principle for land acquisition shall be that where land is required for implementation of the sub-project activities, the recommended safeguards shall be observed to reduce the suffering of the affected community members.

27. The RPF is intended to assist all funded projects of category (A-C) on NRM and WKCDD/FM. The overall responsibility for implementation of this Framework shall reside with the implementing agencies.

28. The projects will ensure that the Framework is publicly disseminated and that the program implementers have the requisite skills and knowledge and, where necessary, they have received appropriate training to implement the RPF as indicated in the ESMF.

29. The District Councils/authorities shall take responsibility for implementation of the RPF at respective local authorities, with assistance from other line local offices of the above mentioned Government ministries. Implementation of the RPF shall require a number of steps including:
(a) a full understanding of the project components, particularly those requiring land acquisition;
(b) determination of land ownership;
(c) screening of the project sites and activities;
(d) property and asset valuation;
(e) preparation and approval of resettlement plans;
(f) implementation and monitoring of the resettlement plans;
(g) effective redress of complaints and grievances; and
(h) public consultation and participation.

30. These steps will ensure that WSDP projects are satisfactorily and efficiently implemented to effectively address any adverse social, economic and environmental impacts so that PAPs are fairly treated on land acquisition and resettlement.

III. Indigenous Peoples Planning Framework

31. **Background and Rationale:** The NRM Project will address key issues regarding IP and other forest dependent communities in the project's area of influence. It will attempt to harmonize the forest Policy with the draft Lands Policy, implement a participatory forest management, support the elaboration of a comprehensive resettlement policy and improve in the operational areas the livelihoods of the populations which have been evicted. The Project will ensure that:

(a) present and past settlements, land use areas and cultural sites of IP are comprehensively documented;

(b) the IP are well represented in all forest and resettlement related decision making bodies and processes;

(c) a comprehensive strategy to improve the livelihoods of evicted IP is elaborated in an open-minded and fully participatory options assessment;

(d) this strategy is implemented in a comprehensive and timely manner; and

(e) the IP are enabled to benefit from participatory forest management and reforestation.

32. The Government is fully aware that, given their close association with land, forests, water, wild life and other natural resources, the physical relocation of IP or other measures which reduce their access to livelihoods-related activities has complex implications and may entail significant adverse impacts. For these important reasons, the recommended options analysis will explore all possible options in the most participatory
manner possible. In addition to carrying out an Options Assessment, the NRM and the WKCDD/FM Projects will, among other actions:

(a) promote the effective management of natural resources which offer benefits to the entire population and ensure environmental sustainability and biodiversity;

(b) foster the full respect for the dignity, rights and culture of the IP;

(c) assure that the IP receive culturally appropriate benefits equal to any other ethnic groups;

(d) protect the IP from suffering adverse effects; and

(e) reduce poverty for all ethnic groups and lower the dependence on and degradation of the natural resources.

33. **Executive Summary:** The WKCDD/FM and the NRM Projects in Kenya seek to improve social welfare, enhance living standards and promote the sustainable use of water, land, forests and other natural resources through a support of small-scale initiatives (community-driven development as well as subprojects related to natural resources, forests and water management), construction of small- to medium-scale infrastructure (dams, irrigation schemes, etc), policy advice, and institutional development. The WKCDD/FM and NRM Projects will be complementary and add value to one other.

34. During preparation, it became clear that the projects might impact on IP rights, lands, livelihoods, and culture. To comply with international standards, including the World Bank’s Operational Policy on IP (OP/BP 4.10), the Government has commissioned the elaboration of this IPPF. The purpose of the IPPF is to ensure that the development process fully respects the dignity, human rights, economies, and culture of IP, and that the projects are able to gain the broad community support of affected indigenous populations through free, prior, and informed consultations. To that end, the IPPF presents guidelines which will avert any potentially adverse effects on the IP communities; or if avoidance proves not to be feasible, minimize, mitigate, or compensate for such negative impacts. An additional goal of the IPPF is to ensure that the IP receive social and economic benefits that are culturally appropriate, and inclusive in both gender intergeneration terms. Under OP/BP 4.10, an IPPF is for community-driven development projects, social funds, sector investments, financial intermediary loans and other projects which involve the preparation and implementation of annual investment programs. The IPPF is thus essential to the compliance of WKCDD/FM and NRM with World Bank safeguard policies. The present IPPF draws upon from the IPP developed for the KAPSLM, which was adopted by the Government in January 2006. Further work was carried out in December 2006, including stakeholder consultations and workshops with all stakeholders (IP communities and organizations, other populations, Governmental services, donors, NGOs, etc.). The report was adopted by the Government in January 2007.

35. **IP in the Operational Areas:** The African Commission’s Working Group of Experts on Indigenous Populations and Communities affirms that “almost all African
states host a rich variety of different ethnic groups (...). All of these groups are indigenous to Africa. However, some are in a structural subordinate position to the dominating groups and the state, leading to marginalization and discrimination. It is this situation that the indigenous concept, in its modern analytical form, and the international legal framework attached to it, addresses.”

36. The two projects will work in 24 districts in Western and Central Kenya. As regards the groups which the IPPF is required to address, the report documents that members of the Sengwer ethnic group are found in a structurally subordinate position in four of the project districts, and Ogiek in a further four. In some districts, it is not clear whether any populations fall within this category. To address this lack of information, the projects provide for comprehensive screening mechanisms to identify, inform, and consult the Sengwer, Ogiek, and other IP in all operational areas of the two projects well in advance of any investment or subproject implementation.

37. IPPF for WKCDD/FM and NRM: The aspirations of the IP in the project area are simple: to live in peace with theory neighbors, to have access to sufficient land to practice agriculture and graze a their livestock, to have access to forests to gather honey for consumption and sale, to practice their culture, to have equitable access to social infrastructure and technical services, and to be fairly represented in the institutions which make decisions affecting their lives at local, regional and national levels. They are not looking for special treatment, only, rather for the rights and opportunities enjoyed by other citizens of Kenya.

38. This report proposes a specific framework to address the needs and rights of IP in the WKCDD/FM and NRM Projects. This is shown to be necessary to mitigate the risks that the challenges facing IP are not exacerbated, and in particular that they do not:

(a) face further physical and economic displacements from land and forests traditionally utilized by them as a source of livelihood and basis for their cultural and social survival;

(b) lose all legal access to natural resources, which are an important source of livelihood and basis for their cultural and social system;

(c) continue to be harassed by land grabbers and cattle rustlers;

(d) become even more marginalized in the society and become alienated from nation life;

(e) receive less support from Governmental services;

(f) have less capacities to defend their legal rights;

(g) become or remain dependent on other ethnic groups; and

(h) lose their cultural and social identity.
39. **The WKCD/FM Project** will fund a two-level screening process to identify possible adverse effects on IP. In primary screening, all groups which are in a "structural subordinate position to the dominating groups and the state" (and thus indigenous according to the definition quoted above), will be identified in all operational areas (the 10 districts of the CDD component and the three micro-catchments likely to be located within 6 additional districts). The secondary screening will consist of a detailed social assessment undertaken for each of these indigenous communities and fulfill the operational requirements of OP/BP 4.10. To implement this strategy, the project will: (a) assist the IP to create an elected Indigenous Peoples' Screening Structure (IPSS) in all districts where IP use or claim land and/or resources; and (b) empower these IPSS to document, in free, prior and informed consultations, the position of the IP on all funding requests, which might impinge upon their land or resources (as will have been identified in the social assessment stage of screening). As the WKCD/FM will not work in gazetted and protected forests, its sister-project (NRM) will address forest related issues of the IP in the WKCD/FM operational areas. For subprojects which do not in the first instance gain broad support from the affected IP, the DSG (which decides on the funding of subprojects) and the IPSS will search for mutually acceptable solutions. IPPs can be prepared to assist and reflect transparent decision-making in the case of controversial subprojects, and will also be elaborated for large scale infrastructures (dams, etc.), if the screening suggests that rights, livelihoods, and culture of the IP might be affected. Taken together, the measures described above would ensure that negative impacts are avoided.

40. The project will apply four mechanisms to ensure that IP receive cultural appropriate benefits: (a) support and capacity building will be provided to communities of the IP through the IPSS to assist community planning and applications for resources for priority sub-projects; (b) communities of the IP will be given priority for subproject identification and funding; (c) communities of the IP will be allowed the option of making the required community sub-project contribution in kind (i.e. through labor or the supply of local materials); and (d) representatives of the IP will be invited to sit in relevant decision-making bodies at district and catchment level (e.g., DSG).

41. **The NRM Project** will address key issues regarding IP and other forest-dependent communities in Kenya: It will harmonize the forest policy with the draft land policy, implement a participatory forest management, support the elaboration of a comprehensive resettlement policy and rehabilitate in the operational areas (Aberdares, Upper Tana, Kakamega, Mt Elgon as well as the Nandi and Cherangani hills) the livelihoods of populations, which have been evicted from forests after the new Government was sworn in December 30, 2002. The project will ensure: (a) that present and past settlements, land use areas and cultural sites of IP are comprehensively documented; (b) that the IP are well represented in all forest and resettlement related decision-making bodies and processes; (c) that a comprehensive strategy to rehabilitate the livelihoods of evicted IP is elaborated in an open-minded and fully participatory option assessment; and (d) that this strategy is implemented in a comprehensive and timely manner and that the IP are enabled to benefit from participatory forest management and reforestation.
42. The Government recognizes that, given, their close association with land, forests, water, wildlife, and other natural resources, the physical relocation of IP, or other measures which reduce their access to livelihood-related resources, has complex implications, and may entail significant adverse impacts on their identity, culture, and customary livelihoods. For these reasons, the option assessment will explore all avenues of addressing the issues.

43. Discussions with a broad range of stakeholders indicate a willingness of all parties to work together with the projects and the IP to implement the measures outlined above. The main parties responsible for the implementation of the IPPF for the WKCDD/FM and NRM Projects are the OP, the MoWI, MENR, Ministry of Lands, the Kenya National Commission for Human Rights, the IP organizations and the IP themselves.

44. The measures elaborated here will ensure that the WKCDD/FM and NRM Projects:

(a) reduce poverty for all ethnic groups and lower the dependence on and degradation of natural resources;

(b) promote the effective management of natural resources, which offers benefits to the entire population and as well as environmental sustainability and biodiversity;

(c) foster the full respect for the dignity, rights and culture of the IP;

(d) assure that the IP receive culturally appropriate benefits equal to any other ethnic groups;

(e) protect the IP from suffering adverse effects; and thus

(f) comply with international standards (OP/BP 4.10).
Annex 13: Government's Letter of Sectoral Policy
Kenya: Natural Resource Management Project

REPUBLIC OF KENYA
MINISTRY OF FINANCE

Telegraphic Address: 22921
FINANCE - NAIROBI
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When replying please quote


Dr. Paul Wolfowitz,
President
The World Bank
1818H Street
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Dear [Name],

KENYA: WESTERN KENYA COMMUNITY DRIVEN DEVELOPMENT AND FLOOD MITIGATION AND NATURAL RESOURCE MANAGEMENT PROJECTS- LETTER OF SECTORAL POLICY

1. As you may be aware, Kenya's economic performance during the 1980s and 1990s fell to levels far below its potential. The result of this protracted poor economic performance was increased poverty and serious deterioration of the standard of living for the majority of Kenyans. On assuming political leadership of Kenya in 2002, the Government prioritized its development agenda as contained in the Economic Recovery Strategy for Wealth Employment and Creation document. The Government instituted major reforms aimed at turning around the economy to a growth path. We are happy to inform that the reforms have started yielding results, with GDP growth rising from 3% in 2003 to 4.9% in 2004, 5.8% in 2005 and currently estimated at 6.0% (2006). The growth is underpinned by improved performance in key sectors of Tourism, Transport and Communication building and construction, Agriculture and Trade.

2. Provision of good infrastructure is key to our economic growth. The Government is committed, within limited financial resources to provide an
enabling environment for growth. Provision of water is key to our economic growth as it impacts on health, agriculture and industrial development. It is against this background that the Government of Kenya has instituted various reforms in the water sector with the effort of protecting, conserving and sustainably managing the environment. The Government is also developing a policy on National Disaster Management in order to undertake effective flood related preparedness based on a comprehensive and continuous assessment of vulnerabilities and risks.

3. The Government enacted the 2002 Water Act that provides for the establishment of a new institutional framework for the management and development of water resources. A similar recognition of acute problems in forestry led the Government of Kenya to prepare a new forest policy and a new Forest Act, which received Parliamentary approval in 2005.

4. Kenya constitutes one of the most degraded areas in the region with about 70% of Kenya's population living on the 12% of total land area (581,679 km²) which is classified as being of medium to high potential for agriculture and livestock production. The growing population and the resulting increase in demand for land, energy and water is putting tremendous pressure on the natural resource base.

5. It is on the basis of the above that the Government of Kenya is putting a lot of efforts in preparing the two proposed projects for financing by the World Bank (IDA). These are the Natural Resource Management (NRM) and the Western Kenya Community Driven Development and Flood Mitigation (WKCDD/FM) Projects respectively.

6. The Natural Resource Management Project seeks to enhance institutional capacity to manage water and forest resources, reduce the incidences and severity of water shocks in river catchments and improve the livelihoods of communities participating in the co-management of water and forests. The project will also finance development of new irrigation schemes and rehabilitation and expansion of existing irrigation schemes in the Lake Victoria Basin.

7. The Western Kenya Community Driven Development and Flood Mitigation (WKCDD/FM) Project seeks to empower the local communities to engage in wealth creating activities, lower the incidences of poverty and reduce the risks and the vulnerability of the poor to adverse outcomes associated with recurrent flooding. The project will also finance small-scale irrigation development, flood management infrastructure and small-scale water storage infrastructure in the Lake Victoria Basin.
8. The implementing agencies for the two projects will be three government ministries namely Office of the President — Special Programmes, Water and Irrigation and Environment and Natural Resources.

The Policy on Water Resources Management and Development

9. The Water Sector in Kenya is governed by the Sessional Paper No. 1 of 1999 on National Policy on Water Resources Management and Development. The policy draws a clear distinction between water resources management issues and those of water services with the realization that the resource needs to be secured first before its utilization can be planned. This was with the realization that previously, more emphasis had been placed on water development instead of water resources management resulting in degradation of water catchments and decrease in available water.

10. The Policy therefore aims at reversing the degradation that has occurred in the water catchments and securing these catchments for posterity while at the same time providing sustainable water and sanitation services. The policy views water in the following perspectives: Water as a finite resource and that Kenya is a water scarce country; Water is both an economic and social good; Water is also the catalyst for socio-economic development.

In 2002, the Government reviewed the legislation governing the water sector and enacted the Water Act 2002. This Act operationalised the Water Policy with the following outcomes:

(a) Devolution of implementation roles from the Ministry of water and Irrigation to semi-autonomous state corporations and the private sector for efficient and cost-effective delivery of services.

(b) Limiting the role of the Ministry of Water and Irrigation to policy formulation and review in addition to overall oversight and management of the sector.

(c) Creation of key autonomous and semi-autonomous institutions to manage and regulate the various services in the sector including the Water Resources Management Authority (WRMA), Water Services Regulatory Board (WSRB), Seven Water Services Boards (WSBs), Water Services Companies, Catchment Area Advisory Committees (CAACs) and Water Services Trust Fund. The aim was to set up lean and efficient units with no overlaps in mandates and structured to provide efficient services.
(d) Establishment of Water Resources Users Associations (WRUAs) to provide a platform for engagement of beneficiaries and the private sector in the management of water resources and provision of services.

(e) Accommodation of private sector investment and decision making in the provision of water services and water resources management by allowing and encouraging the establishment of private Water Service Providers and involvement of private citizens, in various capacities, in water resources management.

(f) Introduction of charges for raw water that is aimed at encouraging responsible and sustainable use of the water resource while providing for affirmative action to protect the poor from unaffordable costs of potable water.

(g) Introduction of the polluter pays principle that seeks to clean up the water sources and protect the poor and general population from health hazards and costly medical care and other adverse effects on the environment.

12. The policy has prioritized engagement of communities in water catchment protection in order to ensure a sustainable supply of water, reduce conflicts, stem degradation of catchments and inculcate ownership of the principle of sound catchment management in the communities residing in or benefiting from a catchment. It has also prioritized the provision of optimal water and sanitation services to both urban and rural communities in a sustainable manner.

3. The policy is expected to support the implementation of the NRM project by emphasizing the involvement of communities in catchment area restoration, improvement and protection while promoting benefit-sharing within a catchment basin. The policy also emphasizes continuous assessment and review of the status of catchments and water resources involving communities. The policy will also support the strengthening of the Water Resources management Authority in line with the water Act 2002.

The Policy on Irrigation and Drainage Development

4. The Government has consulted various stakeholders and developed a draft policy on Irrigation and Drainage Development. This document is currently being used as source material in the final stages of developing a policy to govern the irrigation and drainage sector in Kenya. The policy document is expected to be adopted by Government and passed by parliament in 2007.

5. The thrust of the policy is the reform of the sector to facilitate farmer management of irrigation systems, improvement of scheme productivity and
performance, reform of government service delivery mechanisms and realignment of state institutions supporting the sector with a view to enhancing food security and reducing poverty in the rural communities. The aim is to spur growth in the sector by creating a conducive environment for private-public partnerships in development and management of public irrigation schemes.

16. The policy aims to further restructure and realign the National Irrigation Board (NIB) into an irrigation services provider while also being responsible for irrigation development. The department of Irrigation and Drainage in the Ministry of Water and Irrigation will be restructured to provide oversight and policy services only. The policy envisages a situation where beneficiaries, farmers’ organizations and the private sector play complementary roles to ensure that production, marketing and operation and maintenance services are provided in a sustainable and mutually beneficial manner and that the government, through its agencies, only provides back-stopping services.

7. The policy will support the project by prioritizing institutional realignment within the sector, supporting stakeholder involvement and envisaging sustainability of irrigation schemes. These issues are conducive to achieving Irrigation Management Transfer (IMT) which facilitates handing over of management responsibilities to farmers.

The Policy on National Disaster Management

8. The Government through wide consultation with stakeholders has finalized a draft Policy on National Disaster Management (NDMP). It is expected that the draft policy will be approved by parliament in the course of the year (2007). The policy emphasizes a paradigm shift by the Government and other stakeholders from reactive and ad hoc disaster management to addressing disasters issues wholistically through the entire cycle of disaster management.

9. Priority areas of the policy include increasing awareness of risk preparedness, prevention and mitigation at local community to national levels; promotion of public leadership and commitment to disaster reduction, building multidisciplinary and inter-sectoral partnerships and networks in disaster risk initiatives, improving scientific knowledge on causes of natural disasters and their resultant effects and international partnership in disaster risk reduction.

20. The policy is expected to facilitate the implementation of WKCDD & FM as follows; the policy emphasizes that effective flood related preparedness be based upon a comprehensive and continuous assessment of vulnerabilities and risks. The assessment of risks will create awareness of the most likely hazards, their geographical spread, their magnitude and the elements at risks.
21. Further the NDMP emphasizes establishment of multi-sectoral structures for coordination and management of flood related disasters in Kenya in order to minimize losses and resultant disruptions on the population, economy and environment. The structure will cover local communities among other stakeholders.

22. The NDMP also emphasizes that flood vulnerability analysis be linked directly to mitigation activities and provide the context for understanding the effect of flood hazard on the population, property and the environment. Floods risk mapping will be undertaken and integrated flood management projects implemented in flood prone areas in order to minimize the occurrence and negative effects of floods.

23. We realize the extent of the role the Early Warning System (EWS) can play in disaster management. The Government has set up a multi-disciplinary team of professionals from the Meteorological Department, Ministry of Water with support and guidance from United States Geological Survey (USGS) to formulate/initiate a flood warning system for the country. Our experience in Arid Lands Management Project has shown that effective EWS and subsequent information dissemination goes a long way in reduction of impacts of disaster, whereby proper mitigation measures are put in place. The National Disaster Operation Centre has played a key role in response to disaster, with the enactment of the NDMP. The centre will be strengthened to continue to participate in disaster management more effectively.

The Policy on Management of Forest Resources

24. Sustainable management of the environment and natural resources is linked to the improvement in the economic and social conditions of Kenyans, hence the objective of achieving equity, ecological sustainability and economic growth. The Government’s commitment to poverty reduction is clearly stated in the Economic Recovery Strategy for Wealth and Employment Creation (2003-2007) (ERS). The ERS recognizes the need to achieve broad macro and sectoral objectives without compromising the environment. The ERS also recognises the country’s serious environmental challenge that is compounded by rampant poverty, resulting in the increased use of wood fuel especially by the rural population and the urban poor.

25. The current, 9th National Development Plan (2002-2008) highlights that increased socio-economic activities have compounded environmental problems such as deforestation, depletion of land resources, harmful land use practices, pollution, water catchment degradation and poor conservation of flora and fauna. The Plan recognises the need to fully integrate environmental concerns.
in development planning at all levels of decision making as well as valuing the
collection of the environment to the national economy. Similarly, it
recognises the need for adopting measures towards sustainable management of
the environment and natural resources.

26. Sustainable development is considered to be a key concern to economic growth,
equity and ecological concerns. The Government is therefore expected to play a
major role in meeting this global and national objective. Towards meeting the
sustainable development objective, the Government has to address various
challenges that include de-forestation and environmental degradation.

27. Environmental and natural resource management issues are multi-sectoral in
nature and require positive interactions with both national and international
partners. The Government will seek to develop appropriate and effective
linkages and collaborative mechanisms with all the other sectors of the
economy. Similarly, appropriate reforms mainly targeting institutional, policy
and legal frameworks will be developed and implemented towards
environmental conservation and management of natural resources.

28. While it has been recognized that environment and natural resources contribute
significantly to the economic and social development, the benefits have not
been fully realised mainly due to weak policy, legal and institutional
frameworks in the forestry sector. The Government will institute appropriate
reforms with the objective of enhancing the management of environment and
natural resources for sustainable development.

29. To address the sector challenges, the Government is committed to, among other
things, the full implementation of the Environmental Management Co-
ordination Act (1999) and the Forests Act 2005. In addition, the Government
will articulate and implement the country's commitment to global and regional
environmental conventions including Agenda 21 on sustainable development,
the Millennium Development Goals and the NEPAD initiative.

30. Development of a robust forestry sector has been recognized as key to the
country's socio-economic and cultural development. This recognition stems
from the multiplicity of functions that forests play in provision of goods and
services including regulation of water flow, biodiversity conservation,
mitigation of climate change and provision of other economic and cultural
benefits.

31. Full realization of the above benefits within the forestry sector has been faced
with a myriad of challenges. These challenges include increasing demand for
forest products and services, competition with other land use systems, poor
governance in natural resource management and administration, low resource provision and weak institutional arrangements for sound forest management. Under-valuation of forest resources and low level of industrial investment in modern technology have further impacted on the ability of the sector to substantially contribute to economic growth.

32. The Forests Act, 2005 addresses the above concerns by providing a framework through which the forest sector can effectively contribute in addressing the challenges of population growth, high poverty levels, unemployment, inefficiency in resources utilization and environmentally adverse effects of development. The Act provides for the establishment, development, sustainable management, utilization as well as conservation of forest resources for the socio-economic development of the Country. In addressing national concerns, the Act takes into account the obligations to international conventions and agreements, to which Kenya is a signatory.

33. Under the new legislation, a semi-autonomous Kenya Forest Service has been established to spearhead forestry development in the country. The Service shall collaborate with other agencies on matters of promoting sustainable forest management and enforce forest related laws, rules and regulations in the country. Forest conservation and management has been opened up to wider participation of stakeholders. These new arrangements require active participation of communities and the private sector in management of state forests.

34. The Forests Act recognizes Community Forest Associations (CFAs) as major stakeholders in the management of forests and provides for their formation to participate in forest management and conservation through joint management agreements, as well as representation in Forest Conservation Committees. Joint management arrangements will be developed to ensure communities benefit while protecting the forest estates for purposes of water, soil and bio-diversity conservation, carbon sequestration and sustainable production of wood and non-wood forest products.

The Land Policy

35. Kenya has not had a clearly defined or codified National Land Policy since independence. This, together with the existence of many land laws, some of which are incompatible, has resulted in a complex land management and administration system. From the advent of colonialism, Kenya has been grappling with the land issues, which subsequent government regimes were unable or unwilling to resolve. The land question has manifested itself in many ways including fragmentation, breakdown in land administration, disparities in land ownership and poverty. This has resulted in environmental, social,
economic and political problems including deterioration in land quality, squatting and landlessness, disinheritance of some groups and individuals, urban squalor, under-utilization and abandonment of agricultural land, tenure insecurity and conflict.

36. To address these problems, the Government embarked on the formulation of a National Land Policy through a widely consultative process with the aim of producing a policy whose vision is to "guide the country towards a sustainable and equitable use of land". This Land Policy has thus been formulated to address the critical issues of land administration, access to land, land use planning, restitution of historical injustices, environmental degradation, conflicts, unplanned proliferation of informal urban settlements, outdated legal framework, institutional framework and information management. It also addresses constitutional issues, such as tenure. It recognizes the need for security of tenure for all Kenyans (all socio-economic groups, women, pastoral communities, informal settlement residents and other marginalized groups).

37. The Policy designates all land in Kenya as Public, Community or Private. Most significantly, it recognizes and protects customary rights to land. It also recognizes and protects private land rights and provides for derivative rights from all categories of land rights holding. Through the policy, the government will ensure that all land is put into productive use on a sustainable basis by facilitating the implementation of key principles on land use, productivity targets and guidelines as well as conservation. It will encourage a multi-sectoral approach to land use, provide social, economic and other incentives and put in place an enabling environment for agriculture and livestock development.

38. Land management and administration problems (such as systematic breakdown in management, over-centralization, lack of participation by communities, high costs, unnecessary delays) will be addressed through streamlining and strengthening surveying and mapping systems, adjudication procedures and processes, land registration and allocation systems and land markets. To ensure access to justice in land related matters, land dispute institutions and mechanisms will be streamlined through the establishment of independent, accountable and democratic systems and mechanisms including Alternative Dispute Management regimes.

39. Land issues requiring special intervention, such as historical injustices, land rights of minority communities (such as hunter-gatherers, forest-dwellers and pastoralists) and vulnerable groups will be addressed. The rights of these groups will be recognized and protected. Measures will be initiated to identify such groups and ensure their access to land and participation in decision making over land and land based resources.
40. Mr. President, in conclusion, let me reiterate Kenya Government’s appreciation of the financial assistance the Bank has continued to provide in support to our development programmes. We are committed to continue working closely with the Bank and other Development Partners in order to realize our vision of making “Kenya a Better Home for All”. We assure you the support we are seeking to finance the Natural Resources Management and Western Kenya Community Driven Development and Flood Mitigation Projects will be used prudently. We are confident that the successful implementation of these two projects will contribute greatly to the realization of our national vision.

Amos Kimunya, EGH, MP,
MINISTER FOR FINANCE

C.C. Mr. Hartwig Schafer
Acting Vice President for Africa Region
World Bank
Washington D. C.
U.S.A

Ms. Mulu Ketsela
Executive Director
World Bank Group
Washington D. C.
U.S.A.

Mr. Colia Bruce
Country Director
Comoros, Eritrea, Kenya, Seychelles and Somalia
World Bank Country Office
NAIROBI
Annex 14: Project Preparation and Supervision
KENYA: Natural Resource Management Project

<table>
<thead>
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<td>05/11/2005</td>
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<td>Planned closing date</td>
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Key institutions responsible for preparation of the project:
MENR, FD. MoWI, WRMA, NIB. OP, Special Programmes.

Bank staff and consultants who worked on the project included:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Unit</th>
</tr>
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<tbody>
<tr>
<td>Christine Cornelius</td>
<td>Lead Operations Officer</td>
<td>AFTS2</td>
</tr>
<tr>
<td>Nyambura Githagui</td>
<td>Sr. Social Development Specialist</td>
<td>AFTS2</td>
</tr>
<tr>
<td>Enos E. Esikuri</td>
<td>Sr. Environmental Specialist</td>
<td>ENV</td>
</tr>
<tr>
<td>Leonard John Abrams</td>
<td>Sr. Water Resources Management Specialist</td>
<td>AFTU1</td>
</tr>
<tr>
<td>Christian Peter</td>
<td>Sr. Forest Specialist</td>
<td>AFTS2</td>
</tr>
<tr>
<td>Jsbrand Harko de Jong</td>
<td>Sr. Water Resources Specialist</td>
<td>AFTS2</td>
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<tr>
<td>Johannes Woelcke</td>
<td>Economist</td>
<td>AFTS2</td>
</tr>
<tr>
<td>Moses Wasike</td>
<td>Sr. Financial Management Specialist</td>
<td>AFTFM</td>
</tr>
<tr>
<td>Dahir Warsame</td>
<td>Sr. Procurement Specialist</td>
<td>AFTPC</td>
</tr>
<tr>
<td>Serigne Omar Fye</td>
<td>Sr. Environmental Specialist</td>
<td>AFTS1</td>
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<tr>
<td>Johan A. Mistiaen</td>
<td>Economist/Statistician</td>
<td>DECDG</td>
</tr>
<tr>
<td>Paul Francis</td>
<td>Sr. Social Development Specialist</td>
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<tr>
<td>Wendy Wiltshire</td>
<td>Operations Analyst</td>
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<tr>
<td>Sandra Jo Bulls</td>
<td>Program Assistant</td>
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<tr>
<td>Lucie Muchekehu</td>
<td>Program Assistant</td>
<td>AFCE2</td>
</tr>
<tr>
<td>Diji Chandrasekharan Behr</td>
<td>ET Consultant</td>
<td>ARD</td>
</tr>
<tr>
<td>Tom Mboya Owiyo</td>
<td>E T Consultant</td>
<td>AFTS2</td>
</tr>
<tr>
<td>Yuko Kurauchi</td>
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<td>George Annandale</td>
<td>Consultant</td>
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</tr>
<tr>
<td>Nightingale Rukuba-Ngaiza</td>
<td>Sr. Counsel</td>
<td>LEGAF</td>
</tr>
<tr>
<td>Christine Onyango</td>
<td>ET Consultant</td>
<td>LEGAF</td>
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Bank funds expended to date on project preparation:
1. Bank resources: US$300,000
2. Trust funds: US$200,000
3. Total: US$500,000

Estimated Approval and Supervision costs:
1. Remaining costs to approval: US$100,000
2. Estimated annual supervision cost: US$100,000
Annex 15: Documents in the Project File
KENYA: Natural Resource Management Project

A. Bank Document
1. Project Concept Note
2. Project Information Documents (Concept Stage and Appraisal Stage)
3. Integrated Safeguard Data Sheets (Concept Stage and Appraisal Stage)
4. Project Appraisal Document
5. Mission Aide-Memoire Package
6. PPF Agreement
7. PHRD Grant Agreement

B. Project Studies and Reports
1. Environmental and Social Management Framework Report
2. Resettlement Policy Framework Report
4. Riparian Notification
5. Stakeholder Workshop Report on the Results Framework and Monitoring and Evaluation on August 10-11
6. Terms of Reference for Feasibility Study for the Irrigation Development Preparation of Irrigation Component
7. Terms of Reference for Finalization of National Irrigation and Drainage Policy
8. Terms of Reference for Production of Legal and Institutional Framework
9. Terms of Reference for the Water Resources Management in the Aberdares and the Upper Tana Catchment
10. Study Report and Workshop Reports for the Institution-Centered Strategic Environmental Assessment of Forest Sector in Kenya.
12. Study Report for Review of the Road Map for the Transition from Forest Department to Kenya Forest Service
13. Terms of References for Forest Plantation Inventory Quality Control

C. Technical Reports
11. NIB. Lower Nzoia Irrigation Project Proposal.
   b. Draft MOU WRMA and WSTF
   c. Draft Proposal (Water and Sanitation Sector Programme) Sub Component Flood and Drought Mitigation (Financing for WRUAs)
Annex 16: Statement of Loans and Credits

KENYA: Natural Resource Management Project

<table>
<thead>
<tr>
<th>Project ID</th>
<th>FY</th>
<th>Purpose</th>
<th>Original Amount in US$ Millions</th>
<th>Difference between expected and actual disbursements</th>
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KENYA

STATEMENT OF IFC’s Held and Disbursed Portfolio

In Millions of US Dollars

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<th>Equity</th>
<th>Quasi</th>
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<td>22.00</td>
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<td>0.83</td>
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Total portfolio: 140.23 3.63 12.55 13.91 93.90 3.32 11.55 13.91

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<tr>
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<th>Equity</th>
<th>Quasi</th>
<th>Party</th>
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Total pending commitment: 0.02 0.00 0.00 0.00
Annex 17: Country at a Glance

KENYA: Natural Resource Management Project

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<th>Key Development Indicators</th>
<th>Kenya</th>
<th>Sub-Saharan Africa</th>
<th>Low income</th>
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<tr>
<td><strong>(2005)</strong></td>
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<tr>
<td>Population, mid-year (millions)</td>
<td>34.3</td>
<td>741</td>
<td>2,353</td>
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<td>Surface area (thousand sq. km)</td>
<td>580</td>
<td>24,265</td>
<td>29,265</td>
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<tr>
<td>Population growth (%)</td>
<td>2.3</td>
<td>2.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Urban population (% of total population)</td>
<td>42</td>
<td>37</td>
<td>31</td>
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<tr>
<td>GNI (Atlas method, US$ billions)</td>
<td>11.0</td>
<td>552</td>
<td>1,364</td>
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<tr>
<td>GNI per capita (Atlas method, US$)</td>
<td>530</td>
<td>745</td>
<td>580</td>
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<tr>
<td>GNI per capita (PPP, International $)</td>
<td>1,770</td>
<td>1,881</td>
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<td>GDP growth (%)</td>
<td>2.8</td>
<td>5.3</td>
<td>7.5</td>
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<tr>
<td>GDP per capita growth (%)</td>
<td>0.4</td>
<td>3.1</td>
<td>5.6</td>
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(most recent estimate, 2000–2005)

| Poverty headcount ratio at $1 a day (PPP, %) | 23  | 44 | 100 |
| Poverty headcount ratio at $2 a day (PPP, %) | 56  | 75 | 100 |
| Infant mortality (per 1,000 live births) | 79  | 100 | 90  |
| Child malnutrition (% of children under 5) | 20  | 29 | 39  |
| Adult literacy, male (% of ages 15 and older) | 78  | 73 | 73  |
| Adult literacy, female (% of ages 15 and older) | 70  | 50 | 50  |
| Gross primary enrolment, male (% of age group) | 114  | 99 | 110 |
| Gross primary enrolment, female (% of age group) | 188  | 87 | 99  |
| Access to an improved water source (% of population) | 62  | 58 | 75  |
| Access to improved sanitation facilities (% of population) | 48  | 36 | 35  |

Net Aid Flows

<table>
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<td>Net ODA and official aid</td>
<td>397</td>
<td>1,166</td>
<td>512</td>
<td>635</td>
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<td>Top 3 donors (in 2004):</td>
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<td>United States</td>
<td>39</td>
<td>95</td>
<td>46</td>
<td>141</td>
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<tr>
<td>Japan</td>
<td>27</td>
<td>93</td>
<td>67</td>
<td>71</td>
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<tr>
<td>United Kingdom</td>
<td>39</td>
<td>67</td>
<td>73</td>
<td>46</td>
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<tr>
<td>Aid (% of GNI)</td>
<td>5.6</td>
<td>14.4</td>
<td>4.1</td>
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<tr>
<td>Aid per capita (US$)</td>
<td>24</td>
<td>51</td>
<td>91</td>
<td>91</td>
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</table>

Long-Term Economic Trends

| Consumer prices (annual % change) | 3.6  | 10.0 | 13.3 |
| Implicit GDP deflator (annual % change) | 9.6  | 6.1  | 3.7  |
| Exchange rate (annual average, local per US$) | 7.4  | 22.9 | 76.2 | 75.8 |
| Terms of trade index ($, 2000 = 100) | 77   | 84   | 100  | 92   |

| GDP (US$ millions) | 7,265 | 8,591 | 12,705 | 17,977 |
| Agriculture | 32.6  | 29.5  | 32.4  | 27.4  |
| Industry | 20.6  | 19.0  | 19.9  | 17.8  |
| Manufacturing | 12.6  | 11.7  | 11.0  | 12.4  |
| Services | 46.6  | 53.4  | 50.7  | 54.9  |
| Household final consumption expenditure | 62.1  | 82.8  | 75.5  | 68.8  |
| General govt final consumption expenditure | 19.8  | 16.6  | 16.1  | 11.0  |
| Gross capital formation | 24.5  | 24.2  | 17.4  | 25.4  |
| Exports of goods and services | 29.5  | 26.7  | 21.6  | 24.7  |
| Imports of goods and services | 35.9  | 31.3  | 29.9  | 30.9  |
| Gross savings | 15.4  | 16.6  | 18.2  | 23.8  |

Note: Figures in italics are for years other than those specified. 2005 data are preliminary estimates. Indicates data are not available.


Development Economics, Development Data Group (DECDG).
**Balance of Payments and Trade**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total merchandise exports (fob)</td>
<td>2,820</td>
<td>727</td>
</tr>
<tr>
<td>Total merchandise imports (cif)</td>
<td>5,665</td>
<td>2,759</td>
</tr>
<tr>
<td>Net trade in goods and services</td>
<td>-1,729</td>
<td>-1,015</td>
</tr>
<tr>
<td>Workers' remittances and compensation of employees (receipts)</td>
<td>494</td>
<td>538</td>
</tr>
<tr>
<td>Current account balance as a % of GDP</td>
<td>-6.0</td>
<td>-2.2</td>
</tr>
<tr>
<td>Reserves, including gold</td>
<td>2,043</td>
<td>867</td>
</tr>
</tbody>
</table>

**Central Government Finance**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue (%) of GDP</td>
<td>22.6</td>
<td>19.6</td>
</tr>
<tr>
<td>Tax revenue</td>
<td>17.2</td>
<td>18.8</td>
</tr>
<tr>
<td>Expense</td>
<td>20.6</td>
<td>19.5</td>
</tr>
<tr>
<td>Cash surplus/deficit</td>
<td>-2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Highest marginal tax rate (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Corporate</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

**External Debt and Resource Flows**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total debt outstanding and disbursed</td>
<td>6,828</td>
<td>6,145</td>
</tr>
<tr>
<td>Total debt service</td>
<td>42.4</td>
<td>48.4</td>
</tr>
<tr>
<td>HIPC and MDRI debt relief (expected, flow)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total debt (% of GDP)</td>
<td>42.4</td>
<td>48.4</td>
</tr>
<tr>
<td>Total debt service (% of exports)</td>
<td>8.5</td>
<td>21.2</td>
</tr>
<tr>
<td>Foreign direct investment (net inflows)</td>
<td>46</td>
<td>111</td>
</tr>
<tr>
<td>Portfolio equity (net inflows)</td>
<td>3</td>
<td>-6</td>
</tr>
</tbody>
</table>

**Composition of total external debt, 2004**

<table>
<thead>
<tr>
<th></th>
<th>IBRD</th>
<th>IFC</th>
<th>IDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,882</td>
<td>175</td>
<td>2,262</td>
</tr>
<tr>
<td>US$ millions</td>
<td>47</td>
<td>1</td>
<td>72</td>
</tr>
</tbody>
</table>

**Private Sector Development**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time required to start a business (days)</td>
<td>54</td>
<td>-</td>
</tr>
<tr>
<td>Cost to start a business (% of GNI per capita)</td>
<td>49.2</td>
<td>-</td>
</tr>
<tr>
<td>Time required to register property (days)</td>
<td>73</td>
<td>-</td>
</tr>
<tr>
<td>Ranked as a major constraint to business (% of managers surveyed who agreed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption</td>
<td>73.9</td>
<td>-</td>
</tr>
<tr>
<td>Cost of financing</td>
<td>73.3</td>
<td>-</td>
</tr>
<tr>
<td>Stock market capitalization (% of GDP)</td>
<td>24.2</td>
<td>10.1</td>
</tr>
<tr>
<td>Bank branches (per 100,000 people)</td>
<td>1.4</td>
<td>-</td>
</tr>
</tbody>
</table>

**Governance indicators, 2000 and 2004**

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice and accountability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political stability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule of law</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control of corruption</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Technology and Infrastructure**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paved roads (% of total)</td>
<td>12.1</td>
<td>12.1</td>
</tr>
<tr>
<td>Fixed-line and mobile phone subscribers (per 1,000 people)</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>High technology exports (% of manufactured exports)</td>
<td>3.1</td>
<td>3.9</td>
</tr>
</tbody>
</table>

**Environment**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural land (% of land area)</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>Forest area (% of land area, 2000 and 2005)</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Nationally protected areas (% of land area)</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Freshwater resources per capita (cu. meters)</td>
<td>619</td>
<td>646</td>
</tr>
<tr>
<td>Freshwater withdrawal (% of internal resources)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO2 emissions per capita (mt)</td>
<td>0.22</td>
<td>0.31</td>
</tr>
<tr>
<td>GDP per unit of energy use (2000 PPP $ per kg of oil equivalent)</td>
<td>2.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Energy use per capita (kg of oil equivalent)</td>
<td>494</td>
<td>507</td>
</tr>
</tbody>
</table>

**World Bank Group portfolio**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>(US$ millions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBRD</td>
<td>1</td>
<td>47</td>
</tr>
<tr>
<td>Disbursements</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Principal repayments</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>Interest payments</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>IDA</td>
<td>79</td>
<td>2,798</td>
</tr>
<tr>
<td>Total debt outstanding and disbursed</td>
<td>73</td>
<td>45</td>
</tr>
<tr>
<td>Disbursements</td>
<td>79</td>
<td>170</td>
</tr>
<tr>
<td>Total debt service</td>
<td>73</td>
<td>45</td>
</tr>
</tbody>
</table>

**Development Economics, Development Data Group (DECDG).**
Millennium Development Goals

With selected targets to achieve between 1990 and 2015
(estimates closest to date shown, +/- 2 years)

Goal 1: halve the rates for $1 a day poverty and malnutrition

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty headcount ratio at $1 a day (PPP, % of population)</td>
<td>33.5</td>
<td>22.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty headcount ratio at national poverty line ( % of population)</td>
<td></td>
<td>52.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of income or consumption to the poorest quintile (%)</td>
<td>6.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence of malnutrition (% of children under 5)</td>
<td>23</td>
<td>21</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

Goal 2: ensure that children are able to complete primary schooling

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>67</th>
<th>79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary school enrolment (net, %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary completion rate (% of relevant age group)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary school enrolment (gross, %)</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth literacy rate (% of people ages 15-24)</td>
<td></td>
<td></td>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>

Goal 3: eliminate gender disparity in education and empower women

<table>
<thead>
<tr>
<th></th>
<th>94</th>
<th>98</th>
<th>94</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of girls to boys in primary and secondary education (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women employed in the non-agricultural sector (% of non-agricultural employment)</td>
<td>21</td>
<td>27</td>
<td>34</td>
<td>39</td>
</tr>
<tr>
<td>Proportion of seats held by women in national parliament (%)</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

Goal 4: reduce under-five mortality by two-thirds

<table>
<thead>
<tr>
<th></th>
<th>97</th>
<th>111</th>
<th>117</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under-5 mortality rate (per 1,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant mortality rate (per 1,000 live births)</td>
<td>64</td>
<td>72</td>
<td>77</td>
<td>79</td>
</tr>
<tr>
<td>Measles immunization (proportion of one-year olds immunized, %)</td>
<td>78</td>
<td>83</td>
<td>75</td>
<td>73</td>
</tr>
</tbody>
</table>

Goal 5: reduce maternal mortality by three-fourths

<table>
<thead>
<tr>
<th></th>
<th>1,000</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal mortality ratio (modeled estimate, per 100,000 live births)</td>
<td>50</td>
<td>45</td>
<td>44</td>
<td>42</td>
</tr>
</tbody>
</table>

Goal 6: halt and begin to reverse the spread of HIV/AIDS and other major diseases

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of HIV (% of population ages 15-49)</td>
<td></td>
<td></td>
<td></td>
<td>0.1</td>
</tr>
<tr>
<td>Incidence of tuberculosis (per 100,000 people)</td>
<td>27</td>
<td>33</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Tuberculosis cases detected under DOTS (%)</td>
<td>108</td>
<td></td>
<td></td>
<td>619</td>
</tr>
</tbody>
</table>

Goal 7: halve the proportion of people without sustainable access to basic needs

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>45</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to an improved water source (% of population)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to improved sanitation facilities (% of population)</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest area (% of total land area)</td>
<td>6.5</td>
<td></td>
<td>6.3</td>
<td>6.2</td>
</tr>
<tr>
<td>National protected areas (% of total land area)</td>
<td></td>
<td></td>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td>CO2 emissions (metric tons per capita)</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>GDP per unit of energy use (constant 2000 PPP $ per kg of oil equivalent)</td>
<td>2.2</td>
<td>2.2</td>
<td>2.0</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Goal 8: develop a global partnership for development

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>14</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed line and mobile phone subscribers (per 1,000 people)</td>
<td>7</td>
<td>10</td>
<td></td>
<td>85</td>
</tr>
<tr>
<td>Internet users (per 1,000 people)</td>
<td>0</td>
<td></td>
<td>3</td>
<td>45</td>
</tr>
<tr>
<td>Personal computers (per 1,000 people)</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Youth unemployment (% of total labor force ages 15-24)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Figures in italics are for years other than those specified. ... indicates data are not available.

Development Economics, Development Data Group (DECDG).

Draft 17 - 8/9/06