

Document of  
The World Bank

Report No: 22743-TA

PROJECT APPRAISAL DOCUMENT  
ON A  
PROPOSED CREDIT  
IN THE AMOUNT OF SDR24.6 MILLION  
(US\$ 31.1 MILLION EQUIVALENT)  
TO THE  
UNITED REPUBLIC OF TANZANIA  
FOR THE  
FOREST CONSERVATION AND MANAGEMENT PROJECT

January 25, 2002

Environment and Social Development Unit  
Africa Regional Office

## CURRENCY EQUIVALENTS

(Exchange Rate Effective September 1, 2001)

Currency Unit = Tanzania Shillings (TSh)

TSh 1000 = US\$1.09

US\$1.00 = TSh 917

## FISCAL YEAR

July 1 -- June 30

## ABBREVIATIONS AND ACRONYMS

CEPF	Critical Ecosystems Partnership Fund	LEAT	Lawyers Environmental Action Trust
CFP	Catchment Forest Project	LKEMP	Lower Kihansi Environmental Management Project
CI	Conservation International	MNRT	Ministry of Natural Resources and Tourism
CSD	Civil Service Department	NFP	National Forest Program
Danida	Danish International Development Assistance	NGO	Non-Governmental Organization
DIDC	Department of International Development Cooperation, Ministry of Foreign Affairs, Government of Finland	NORAD	Norwegian Agency for Development
DOF	Danish Ornithological Foundation	PDF	Project Development Facility
EAMCEF	Eastern Arc Mountains Conservation Endowment Fund	PHRD	Policy and Human Resources Development (Japanese Grant)
EC	European Commission	OP	GEF Operational Program
EUCAMP	East Usambara Conservation Area Management Project	PFM	Participatory Forest Management
FBD	Forestry and Beekeeping Division of the Ministry of Natural Resources and Tourism	PRSP	Poverty Reduction Strategy Paper
FCMP	Forest Conservation and Management Project	STAP	Scientific and Technical Advisory Panel of the GEF
FRMP	Forest Resources Management Project	TAFORI	Tanzania Forestry Research Institute
GEF	Global Environment Facility	TANAPA	Tanzania National Parks Authority
GOT	Government of Tanzania	UNDP	United Nations Development Program
ICR	Implementation Completion Report	VFR	Village Forest Reserve
IFMS	Integrated Financial Management System	WB	World Bank
IPG	Interagency Planning Group on Environmental Funds (Africa Working Group)	WCST	Wildlife Conservation Society of Tanzania
JFM	Joint Forest Management	WWF	World Wide Fund for Nature
LAC	Local Advisory Committee		

Vice President:	Callisto E. Madavo
Country Director:	James W. Adams
Acting Sector Manager:	Agi Kiss
Task Team Leader:	Peter A. Dewees

**TANZANIA  
FOREST CONSERVATION AND MANAGEMENT PROJECT**

**CONTENTS**

<b>A. Project Development Objective</b>	<b>Page</b>
1. Project development objective	2
2. Global objective	6
3. Key performance indicators	6
<b>B. Strategic Context</b>	
1. Sector-related Country Assistance Strategy (CAS) goal supported by the project	6
2. Main sector issues and Government strategy	8
3. Sector issues to be addressed by the project and strategic choices	10
<b>C. Project Description Summary</b>	
1. Project components	12
2. Key policy and institutional reforms supported by the project	16
3. Benefits and target population	17
4. Institutional and implementation arrangements	18
<b>D. Project Rationale</b>	
1. Project alternatives considered and reasons for rejection	21
2. Major related projects financed by the Bank and other development agencies	21
3. Lessons learned and reflected in the project design	22
4. Indications of borrower commitment and ownership	23
5. Value added of Bank support in this project	24
<b>E. Summary Project Analysis</b>	
1. Economic	24
2. Financial	26
3. Technical	26
4. Institutional	27
5. Environmental	28
6. Social	31
7. Safeguard Policies	32

F. Sustainability and Risks	
1. Sustainability	33
2. Critical risks	33
3. Possible controversial aspects	34
G. Main Credit Conditions	
1. Effectiveness Condition	34
2. Other	34
H. Readiness for Implementation	35
I. Compliance with Bank Policies	35
 Annexes	
Annex 1: Project Design Summary	36
Annex 2: Detailed Project Description	39
Annex 3: Estimated Project Costs	58
Annex 4: Economic and Financial Considerations	59
Annex 5: Financial Summary	70
Annex 6: Procurement and Disbursement Arrangements	71
Annex 7: Project Processing Schedule	79
Annex 8: Documents in the Project File	81
Annex 9: Statement of Loans and Credits	82
Annex 10: Country at a Glance	84
Annex 11: Environmental and Social Considerations	86

MAP(S)

IBRD 31719

TANZANIA  
Forest Conservation and Management Project

**Project Appraisal Document**

Africa Regional Office  
Environment and Social Development Unit

<b>Date:</b> January 25, 2002		<b>Team Leader:</b> Peter A. Dewees						
<b>Country Manager/Director:</b> James W. Adams		<b>Sector Manager:</b> Agi Kiss						
<b>Project ID:</b> P058706		<b>Sector(s):</b> AT - Forestry, BA - Civil Service Reform, BI - Institutional Development, VY - Other Environment						
<b>Lending Instrument:</b> Specific Investment Loan (SIL)		<b>Theme(s):</b> Environment						
		<b>Poverty Targeted Intervention:</b> N						
<b>Global Supplemental ID:</b> P057234		<b>Team Leader:</b> Peter A. Dewees						
<b>Focal Area:</b> B - Biodiversity		<b>Sector Manager/Director:</b> Agi Kiss						
<b>Supplement Fully Blended?</b> Yes		<b>Sector(s):</b> AT - Forestry						
<b>Program Financing Data</b>								
<input type="checkbox"/> Loan <input checked="" type="checkbox"/> Credit <input type="checkbox"/> Grant <input type="checkbox"/> Guarantee <input type="checkbox"/> Other:								
<b>For Loans/Credits/Others:</b>								
<b>Amount (US\$m):</b> 31.1								
<b>Proposed Terms (IDA):</b> Standard Credit								
<b>Financing Plan (US\$m):</b>								
	<b>Source</b>	<b>Local</b>	<b>Foreign</b>	<b>Total</b>				
BORROWER		1.10	0.60	1.70				
IDA		19.70	11.40	31.10				
GLOBAL ENVIRONMENT FACILITY (PLANNED)		1.10	5.90	7.00				
NON-GOVERNMENT ORGANIZATION (NGO) OF BORROWING COUNTRY		0.20	0.00	0.20				
<b>Total:</b>		<b>22.10</b>	<b>17.90</b>	<b>40.00</b>				
<b>Borrower/Recipient:</b> GOVERNMENT OF TANZANIA								
<b>Responsible agency:</b> MINISTRY OF NATURAL RESOURCES AND TOURISM								
Forestry and Beekeeping Division								
Address: P.O. Box 426, Dar es Salaam, Tanzania								
Contact Person: Prof. Said Iddi, Dr. Felician Kilahama								
Tel: 255-22-2111602		Fax: 255-22-2130091		Email: tfcmp@intafrika.com				
Other Agency(ies):								
Eastern Arc Mountains Conservation Endowment Fund								
Address: P.O. Box 40832, Dar es Salaam, Tanzania								
Contact Person: Vincent Shauri								
Tel: 255-22-2780859		Fax:		Email:				
<b>Estimated disbursements ( Bank FY/US\$m):</b>								
<b>FY</b>	2003	2004	2005	2006	2007			
<b>Annual</b>	4.70	6.40	8.30	6.50	5.20			
<b>Cumulative</b>	4.70	11.10	19.40	25.90	31.10			
<b>Project implementation period:</b> 5 years								
<b>Expected effectiveness date:</b> 06/15/2002 <b>Expected closing date:</b> 12/31/2007								

## **A. Project Development Objective**

### **1. Project development objective: (see Annex 1)**

#### **Background: Forests and woodlands in Tanzania**

Tanzania is covered extensively with woodlands and forests. The bulk of these resources -- between 30 and 40 million hectares -- are comprised of extensive dry woodlands, primarily of the *miombo* type, which provide critical wood resources and other forest products both to rural communities and urban centers, and perform important services as watershed catchments and as dry season grazing reserves. Miombo woodlands are typically very resilient, and regenerate freely after disturbance if left alone. Although rates of species diversity and endemism in miombo woodlands are relatively low, they do provide extensive large mammal habitats (which, in part, support a valuable tourism industry) and are recognized as one of WWF's 'Global 200' priority ecoregions.

In contrast, the country's tropical moist forests account for a relatively small percentage of the total. The bulk of the country's forest biodiversity is found in its mountain forests, and in a narrow strip of forests along the coast which in total comprise less than 5 percent of the total forest area. Amongst the most important of these are the Eastern Arc forests, which cover an area of around 5,350 square kilometers spread across 10 separate mountain blocks in Tanzania (and one in Kenya). The Eastern Arc forests represent one of the oldest and most stable terrestrial ecosystems on the continent and are recognized globally as one of 25 biodiversity hotspots, which are characterized by high concentrations of endemic species under considerable threat.

The Eastern Arc forests have the highest known number of plant and animal species of any region in Tanzania. Approximately 27 percent of the plant species, 63 percent of the linyphiid spider species, 43 percent of butterfly species, 33 percent of amphibian species, 37 percent of the reptile species, 37 percent of the bird species, and 34 percent of the mammal species found in Tanzania occur in these forests. The Eastern Arc is also characterized by high concentrations of endemic species. Indeed, the Eastern Arc forests are known as one of the most important sites in Africa for endemic birds, amphibians, reptiles, many groups of invertebrates, and plants, and contains one of the highest proportions of endemic species of any region worldwide. There are at least 16 endemic plant genera in the Arc. Twenty of 21 African violet species (*Saintpaulia spp.*) are endemic to the Arc. Of the known species occurring within the Eastern Arc, approximately 23 percent of montane plant species, 82 percent of linyphiid spider species, 39 percent of the butterflies species, 63 percent of forest dependent amphibian species, 68 percent of forest dependent reptile species, 3 percent of the bird species, and 6 percent of the mammal species are endemic. Patterns of species diversity and endemism in the Eastern Arc have been the subject of extensive research.

The fragmentation of the Eastern Arc into multiple forest blocks has contributed to enhancing its endemism. Most mountain blocks are comprised of a number of fragmented forest patches, which also differ in their species assemblages. Because of its global biodiversity significance, the Eastern Arc is expected to be proposed as a World Heritage Site in the near future.

Tanzania's forests and woodlands are extremely important for mitigating the impacts of rural poverty. Recent studies have shown that fully 40 percent of total household consumption in some rural areas is accounted for by forest and woodland products such as firewood, construction material, and wild fruit and other foods (a point noted in Tanzania's Poverty Reduction Strategy Paper). In addition, woodlands are an important source of dry season grazing, reducing households' exposure to environmental risk. Rural households generally use a wide variety of environmental resources from woodlands, and the sizeable

aggregate value of environmentally-derived income is made up of a fairly large number of smaller individual income sources. In other studies from the region, it has also been shown that there is a negative relationship between aggregate environmental income share and total household income, that the poor are more resource-dependent than the rich (though better off households are, in quantitative terms, the most significant users of environmental resources). There is considerable complexity in the factors which determine levels of resource use: different households use different resources for different reasons at different times. Still, the conclusions are inescapable: the rural poor are heavily dependent on resources derived from woodlands, and deforestation and forest degradation poses a significant threat to rural livelihoods.

In addition to Tanzania's indigenous forests, there are an estimated 135,000 ha of industrial plantations, dominated by pine and cypress, of which 80,000 ha are under Government control and management. These plantations are a key resource for the production of industrial roundwood, primarily to meet domestic demands.

In 1998, the export of forest products amounted to US\$6.5 million while imports totalled around US\$4.2 million. Wood carvings, blackwood clarinet sets, and logs from natural forests are the most important export products, whereas imports are dominated by value-added products such as paper, paperboard, fiberboard, plywood, and other panels, and high quality sawnwood.

Like virtually every major forest area of global importance, Tanzania's forests and woodlands are under growing pressures from population growth and economic development, and because of the need for timber and forest products. Many forested areas have no protected status. The absence of protected status has meant that these forests may be converted, legally, to other uses (primarily agriculture, which tends to be of very low productivity). For forested areas which are under some sort of protected status, there is often substantial political pressure to use them for new settlement -- pressures which are amplified because of encroachment in some areas. It is accepted that formal protection or reservation is no panacea, though, and recent policy and legal changes have sought to improve the context for locally-based village-level woodland management and protection.

Large-scale timber extraction still occurs, albeit illegally because of a moratorium on the felling of high forests established in the early 1990s. Logging has been almost completely stopped in some areas (such as in the East Usambaras). However, there are few incentives -- or the capacity -- otherwise to reduce or even to monitor the rates of extraction. In practice, District Forest Officers (who are accountable to the local District Administration rather than to FBD) sometimes condone harvesting in high forests. Many Districts make their own decisions about logging, and some have even called for logging in their District forest management plans, irrespective of national policy. Bans on the harvesting of timber from dry woodlands are occasionally enforced, but only on an *ad hoc* basis. The issue is far less critical in these woodlands because of their resilience, regenerative capacity, and relatively low conservation value.

State-managed industrial plantations could ease some of the pressures on indigenous forests, but these have been poorly and ineffectively managed. There are sixteen state forest plantation areas. The bulk are found in Sao Hill (41,600 ha), Meru/Usa, North Kilimanjaro, and West Kilimanjaro, which collectively account for 72 percent of the total area under plantations. The private sector currently operates 55,000 ha of plantations including about 6,000 ha of wattle, teak and softwoods managed by Tanganyika Wattle Company in Njombe District, Escarpment Forest Company in Mufindi District, and Kilombero Valley Teak Company in Kilombero District respectively.

The state plantation sector accounts for the bulk of all revenues collected by the Forestry and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism (MNRT) -- around 46 percent in 1998 -- largely because only a small proportion of the revenue from natural forests (which account for most domestically marketed forest products) is collected.

In light of the large inefficiencies and relatively high costs of continuing to manage the state plantation sector, there is a limited economic rationale for continued Government involvement in the sector. It has been estimated that the plantation labor force exceeds that which is needed by 150 percent. Total employment in the Forestry and Beekeeping Division is around 2,150 staff, of which 1,050 are employed in the plantation sector. [In contrast, staffing in the entire Eastern Arc forests, an area covering over 5,000 square kilometers, consists of 8 Forest Officers and 57 Assistant Forest Officers.]

The management and conservation of all of these forest resources is widely agreed to be in the country's national interests, but not surprisingly has proven to be an enormous challenge. Of the wooded area, around 10 million ha are Central Government Reserves and 3 million ha are Local Government Reserves. The balance, estimated at around 20 million ha, has no protected status. A new category of reserved forest, the Village Forest Reserve, poses much promise for legitimizing community-based woodland management and conservation, but this tenure category has yet to be formally legislated.

The Forestry and Beekeeping Division provides overall policy guidance for the forestry sector, and some technical oversight and supervision. For the most part, however, management and protection of all reserves has been highly decentralized, and is primarily the responsibility of District Forest Officers (DFOs) and their staff, who report to local district administrations (with the exception of a number of major catchment forests, which are under the management of FBD). The current institutional structure has been problematic, and badly in need of reform. The fundamental orientation of the institutional structure is toward regulation and enforcement of forest legislation -- roles which were largely appropriate in an earlier context when there were few needs to mediate between the demands of rural people, the state, and the private sector, but which are mostly inappropriate in contemporary Tanzania where forest protection and management can no longer be undertaken independently of the needs of rural communities.

In particular, Government has been aggressively searching for more effective ways to support the involvement of communities in forest and woodland management and protection, as the bulk of wooded areas are under their ultimate control. The potential for the involvement of communities in woodland management has been explored and supported through a series of innovative pilots. These experiences have been captured in extensive policy reforms, and legal mechanisms are being drafted which will reinforce the role of communities in this respect.

Until recently, the institutional, policy, and legal framework provided only limited scope for supporting forest biodiversity conservation. As a signatory to the Convention on Biodiversity, Tanzania is increasingly recognizing its important obligation to put in place sound mechanisms for forest biodiversity conservation, but is ill-equipped to do so within the prevailing institutional structure. Forest protection was undertaken in the past only to meet the needs of the timber industry, and also for watershed catchment protection. There is a very limited capacity to take on the wider issues associated with biodiversity conservation within FBD, and a widespread recognition that this constraint needs urgently to be addressed.

Resources to finance the management of woodlands and forests are tightly constrained, and the sector remains heavily dependent on donors. The more effective collection of revenues from the felling of timber and other forest products, coupled with greater protection from local and government sources, could begin to address the problem. Poor governance in the sector, and the lack of accountability and supervision in the

field, however, are constraints to doing so. Further, the ability to use these limited resources to finance biodiversity conservation is limited, given the low returns which can be anticipated from these investments.

Finally, although donor support has provided badly needed resources for forest and biodiversity conservation and management, this support remains highly fragmented and largely ineffective at addressing Tanzania's national policy priorities. In 1996, it was estimated that the ratio of donor support in the forestry sector to publicly-financed support for forestry was 19 to 1 and that donor resources were largely not being captured by the budget process. This disparity between donor and public funding, and the inefficiencies which in some respect are driven by it, suggests that it is extremely difficult for Government to address its own policy priorities (rather than the donor community's) through the public expenditure program.

### **Past Bank support for the sector**

IDA's most recent past support for the sector (through the Forest Resources Management Project, FRMP) was formulated as a first step in addressing Tanzania's forest management challenges as articulated in the 1989 Tanzania Forestry Action Plan, and had three specific objectives: (a) to strengthen institutions in charge of the development of forest policies and natural resources information; (b) to support the development of rural land policies, strengthen crucial governmental and non-governmental organizations in charge of the implementation of these policies, and to support the implementation and monitoring of government's policy of village demarcation and titling; and (c) to strengthen regional and district forestry institutions in Mwanza and Tabora Regions. This project has now closed, and its modest successes provided important lessons and insights about the possibilities and potential for improving forest management.

In many respects, the forestry sector is at a critical turning point in Tanzania. A new national Forestry policy was adopted by the Cabinet in 1998, and supporting legislation is being drafted. The policy is innovative and provides substantial scope for developing alternative forest management and conservation regimes and financing mechanisms. Consistent with the on-going civil service reform program, policy recognized the need for substantive institutional reforms in the forestry sector, and has proposed the creation of a new Tanzania Forest Service (TFS). With regard to biodiversity conservation, the new policy commits government to establishing nature reserves in areas of high biodiversity value. Most importantly, however, the policy argues that local institutions and communities should have a central role in forest conservation and management. Policy provided the framework for preparation of the National Forest Program (NFP), which was approved by Government in November 2001, and future Bank support is seen to be entirely mainstreamed into the priorities outlined in the NFP.

### **Development objectives**

Building on experience gained through FRMP, and responding to the priorities outlined in the new Forest Policy and the National Forest Program, the objectives of the proposed Forest Conservation and Management Project (FCMP) are to provide the resources to assist Government in policy implementation, in particular by developing a framework for the long-term sustainable management and conservation of Tanzania's forest resources, strengthening the role of individuals, communities, villages, and the private sector in management and conservation of forests, and implementing this framework on a pilot scale. The project's specific objectives are to: (i) support the establishment of a new national forestry institutional framework effectively to support the sustainable management and protection of Tanzania's forest, woodland and industrial plantation resources; (ii) establish the framework for involvement of the private sector in industrial plantation development and management; and (iii) develop the institutional capacity

