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Southern Africa Regional Environmental Activities and Issues

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Table of Contents

	Page
Introduction	1
Overview of Regional Trends	1
Problems	3
USAID's Comparative Advantages	5
The RCSA and Regional Benefits	5
Recommendations and Conclusion	6

Appendices:

- A USAID Environment Strategy Obligations by Focus Area, Bureau for Africa, FY 1994-96
- B Focus of Intermediate Results within USAID's ENV/NRM Strategic Objectives
- C USAID Project Activities in Southern Africa
- D Bibliography
- E Energy Consumption from Traditional Fuels, and Maps

Introduction

The southern Africa region is comparable in size to the area of the continental United States. Similarly, the region possesses a large amount of geographic diversity in terms of climate, soil fertility, natural resources and biodiversity. The management of the resources which each of the twelve countries of the Southern African Development Community (SADC) possess will be essential to their regional and national development/economic growth.

The primary problem facing southern Africa today is supplying food for an ever-increasing population while preventing any further degradation of its natural resource base. Thus, the integration of agriculture and natural resource management is essential for the region's future. This linkage between the sectors of agriculture and natural resources management and is currently being attempted by some of the Africa Bureau's Strategic Objectives, such as in the RCSA and Malawi Missions.

Overview of Regional Trends

Population

In all countries but South Africa, annual rates of population growth for countries in southern Africa exceed 2.5%. A doubling time of 22 to 26 years is predicted for most countries. This population growth rate is significant because it will multiply the effects of the region's environmental problems. Thus, it is important that ENV/NRM projects are often accompanied by work in the population sector.

Population growth rates in urban areas have typically been double those in rural southern Africa. Eight countries in southern Africa have between 33 and 57 percent of their populations living in urban areas. Only three countries -- Tanzania, Malawi, and Lesotho have rural populations which amount to over 75% of the total population. These concentrations of population in rural and urban areas have significant impact in how resources are used and distributed as well as the demand for jobs, infrastructure, and the development and expansion of markets.

Water

The supply of fresh water is the most serious environmental factor constraining development. While much of southern Africa consists of arid and semi-arid land, excluding South Africa, approximately 13% of the region consists of freshwater ecosystems. A large proportion of the region's rural population is located in these areas. Large lakes and floodplains contain economically important and productive fisheries. Countries like Angola, Botswana and Mozambique have the potential to increase fish production dramatically.

There are many large and important water systems in the region. The Zambezi River is fed by rivers from eight countries and drains one-fifth of southern Africa. Other important rivers are the Zaire, Orange, Cunene and Limpopo. The Okavango Delta in Botswana is an

internationally famous wetland which is fed by tributaries from 3 countries and provides a wide range of ecological services and human uses

Land Use and Agriculture

One of the primary problems facing SADC countries is land degradation and soil erosion due to a multitude of interacting factors, like population growth and poverty, and improper land husbandry which leads to erosion and loss of fertility. Soil erosion is furthered by deforestation which results in shortages of fuelwood and building materials. Overstocking and improper range management lead to overgrazing and land degradation.

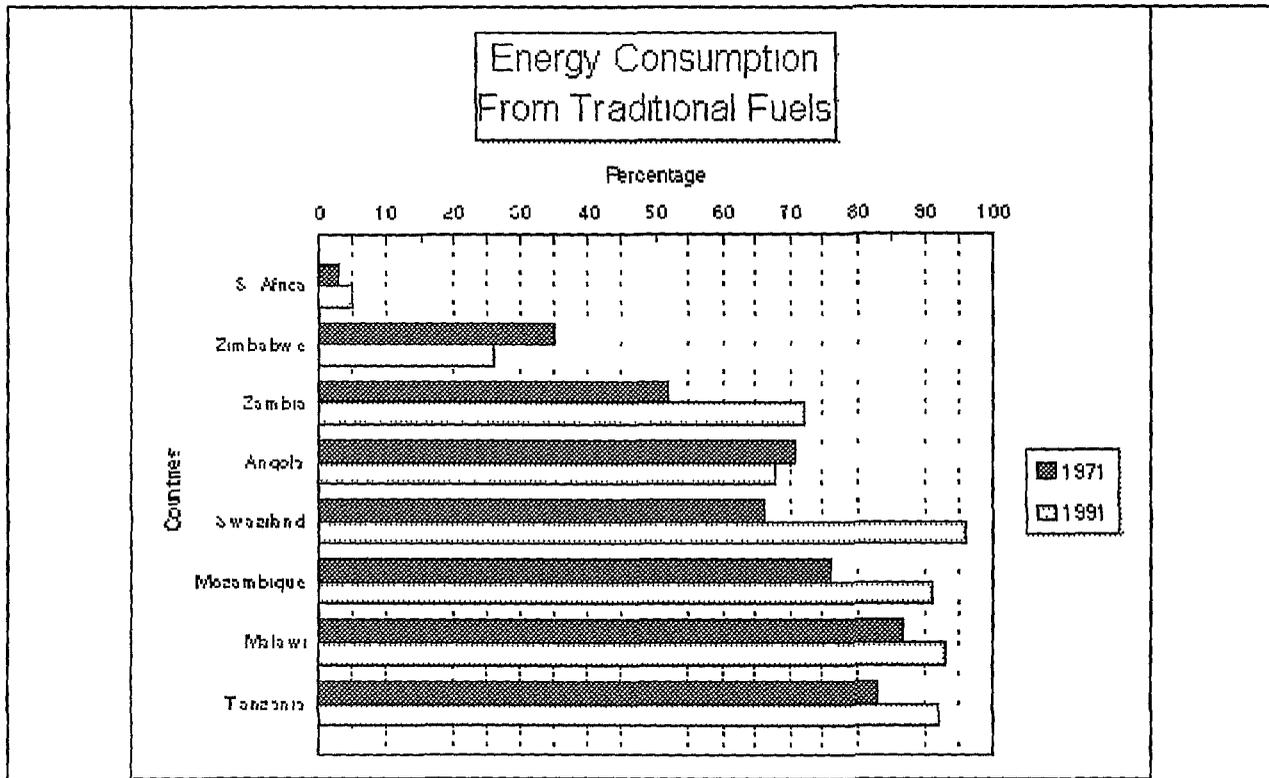
In terms of its contribution to income, employment and foreign exchange earnings, agriculture is the most important sector in southern Africa. Eighty percent of the population and labor force in the region is dependent on agriculture for subsistence as well as employment and income. As population grows, the demand for agricultural land is increasing rapidly. South Africa, Zambia, Tanzania and Angola have the largest areas of cropland, amounting to 71% of the total in the region. However, these areas may have less fertile soils and/or be limited by rainfall. About 30% of the land in southern Africa is suitable for agriculture, while the other 70% is desert, rangeland or forest. These rangelands and woodlands are important resources for livestock production, watershed protection and wildlife habitat. CBNRM projects in these areas help communities to benefit from marginal lands while at the same time conserving resources.

Protected Areas and Biodiversity

Southern Africa as a region is relatively rich in plant and animal species diversity. Almost 16% of the region is established as protected areas which represent a potentially valuable economic resource and globally significant environmental asset.

These parks are still threatened by poaching, human and agricultural encroachment, infrastructure development, dam construction and mining. In addition, wildlife populations have been negatively impacted by drought, disease, and in some areas, armed conflict.

Another problem southern Africa is facing is insufficient institutional, organizational and manpower resources and inadequate market incentives for agricultural activities in rural areas, which limit the possibilities for undertaking widespread conservation measures. Thus, many AID missions focus on improving environmental policy and institutional capacity building.



Energy

While coal and gas reserves exist along with hydropower in some areas, the majority of people in the region still rely on wood, charcoal or coal for most energy needs, especially cooking and heating. Although energy consumption in the SADC region is low by global standards, per capita fuelwood consumption in the region is among the highest in the world.

The average percentage of total energy consumption from traditional fuels in southern Africa from 1971 to 1991 is approximately 64%. This is incredibly high when compared with the total world average of 6% from traditional fuels. The use of biomass as fuel contributes significantly to land degradation and deforestation.

If combined with hydro-electric energy resources, coal resources could provide an alternative energy source in adjacent areas through rural electrification programs. Currently, the capacity of hydroelectric energy is a fraction of its known exploitable potential. In addition, the region's power generation systems are ineffective and out-dated, losing over 14% of their energy output.

Problems

Agricultural expansion will soon be limited by small amounts of available arable land. Thus, agricultural yields per hectare will soon have to be increased, instead of increasing the number of hectares available. Irrigated farming, rather than techniques like new seed varieties and inputs like chemicals or fertilizers, is the method that surpasses all others in production. Sixty percent of the region's water is already being used for irrigation. Eight of eleven countries in the region use more water for irrigation than for all other uses combined.

Water shortages are predicted for the region as demand and population will increase. South Africa, Botswana and Namibia will face chronic water shortages by the year 2000. Demand is expected to exceed supply in Swaziland, Malawi and Zimbabwe by 2030. In contrast, water resources in 2020 in Mozambique, Angola, Tanzania and Zambia are likely to surpass demand. The five-phase Lesotho Highlands Water Project, costing an estimated US\$8 billion, is designed to divert water from the southwesterly flowing Orange River to the northern industrial Transvaal region in South Africa through a series of dams, tunnels, and pumping stations. This project will transfer some of Lesotho's abundant water supply to a rapidly growing area of South Africa. The transfer of water from one region to another, like the Lesotho Highlands Water Project, will probably become increasingly common in the future.

Case Study -- The Okavango Conflict in Namibia and Botswana

Water is the limiting factor in the SADC region and it may increasingly lead to conflict in the future, as experience between Namibia and Botswana has illustrated. Namibia is planning to build a water pipeline to tap into the river which empties into the vast wetland area which forms the Okavango Delta. Eighty percent of Botswana's tourist revenue comes from the Delta. Therefore, Botswana was outraged by Namibia's proposal and the pipeline to Windhoek has been put on hold pending an environmental impact assessment.

This plan is very controversial because although Namibia states that they will only withdraw 1% of the river's flow, these withdrawals are likely to increase over time. In addition, the pipeline project would set a dangerous precedent for uncontrolled, unilateral water withdrawals and potential regional conflicts over water allocation.

Another threat to the Okavango Delta is the ongoing construction of wildlife fences. Botswana has installed game-proof fences along the Namibian Caprivi border in response to a severe outbreak of bovine lung disease, which has extensively infected Botswanan cattle. The impact of these fences, especially on Namibia's migratory wildlife in the Caprivi strip, could be catastrophic since the fencing cuts off wildlife from the Okavango Delta. This severs the only viable migratory corridor between the Delta and upstream protected areas in Namibia and Angola. Namibia is opposed to these fences due to the potential loss of biodiversity and harm to CBNRM in the Caprivi Strip, as herds of wildlife are cut off from

their watering and grazing areas. The \$45 million dollars which USAID has spent in Namibia and Botswana promoting CBNRM will be undermined by the fences and eventually by the water pipeline.

USAID's Comparative Advantages

USAID has a comparative advantage in CBNRM and has tended to be very active in this sector. The US is the originator of the national park concept and has a comparative advantage in the management of parks and their ecosystems, particularly in relation to wildlife habitat requirements and managing conflict between wildlife and livestock. As can be seen from the wildlife and livestock controversy over the Caprivi fences, USAID's expertise may be very useful to the region.

Through past activities in CBNRM throughout Africa (including Mali, Senegal, Niger, Botswana, Madagascar, Uganda, Kenya, Zambia and Zimbabwe), USAID has developed strong foundation of experience with CBNRM models. In some countries, like Zimbabwe, these models are being replicated nationally. In the SADC region many countries like Zimbabwe, Zambia and Namibia share not only similar environmental characteristics but also a history of colonization/apartheid and land tenure problems. Thus, there is a benefit to examining CBNRM regionally and applying lessons learned from other CBNRM implementers.

"Ownership" of natural resources on the land is a critical ingredient in achieving the objective of CBNRM. Thus, USAID's work in many SADC countries in creating an enabling environmental policy framework is an important contribution which helps CBNRM to become successful. The sharing of ideas, standards and lessons learned has high potential for accelerating the progress being made in natural resources management in southern Africa. The transfer of this kind of information can accelerate and shorten the time in which results are seen and people adopt sustainable NRM practices. This more rapid adoption due to regional collaboration leads to biodiversity protection, improved land use and resource productivity, increased income, more democratic governance in rural communities and improved prospects for political stability. Thus, a regional perspective is very much in the interest of USAID, as the benefits contribute to a wide range of Agency goals.

The RCSA and Regional Benefits

As seen from the examples of the Okavango Delta, many transboundary natural resource issues are not being adequately addressed and have the potential to lead to conflict in the region. SADC efforts to address transboundary issues are still developing, and there are few other regional institutions with a mandate or ability to address these issues. Considering the \$45 million investment by USAID in the Okavango region, it would be worthwhile for USAID to investigate opportunities in transboundary natural resource issues.

In addition, park plans tend to reflect national priorities instead of regional interests. The RCSA should work to establish transboundary parks so that parks will not just be islands of biodiversity but part of a regional land use and conservation plan. Regional cooperation, in areas such as transfrontier conservation areas, has the potential to increase tourism from one country to another. Continued growth of the tourism sector in southern Africa depends on the SADC countries cooperating not only on conservation and NRM across borders, but on enhancing infrastructure and other elements which can increase the power of the region as a tourism market.

Recommendations and Conclusion

While USAID has had a considerable impact in southern Africa through its environmental policy activities, which provide the necessary legal framework for further environmental activities, and CBNRM. However, these programs only contribute to 2 out of 5 Agency Environmental Objectives. Three other objectives, "Global Climate change threat reduced", "Sustainable urbanization promoted and pollution management improved", and "Increased provision of environmentally sound energy services" fail to be served by USAID's Southern Africa Environmental Portfolio.

As the bar graph of USAID/Africa Environmental Obligations by Focus Area indicates, there is generally very low levels of investment in energy, water resources, and urban issues. These are also issues which are expected to become more significant in the future.

Urban issues

At present rates of urban growth, in 2000, 50% of southern Africa's population will reside in urban areas. The Africa Bureau should anticipate this urbanization and consider expanding its urban environmental programming and anticipate the consequences of urbanization on its current activities.

South Africa's Urban Shelter SO is the only SO which comes close to being a solution to 'brown' environmental problems. While environmental funding is used for this program, it appears that the program is primarily focused on providing access to urban housing.

The United States has a large amount of experience in the field of pollution prevention which is transferable and appropriate for southern Africa as it develops.

Energy Issues

One energy source with high potential is biogas, but there are few pilot projects in the region (the World Bank has one in Tanzania). The potential for energy conservation in the urban and industrial sectors is high, but does not seem to be a significant policy focus.

Work in this sector could contribute to the Agency Objectives of "Increased provision of environmentally sound energy services" as well as "Global climate change threat reduced."

Water Issues

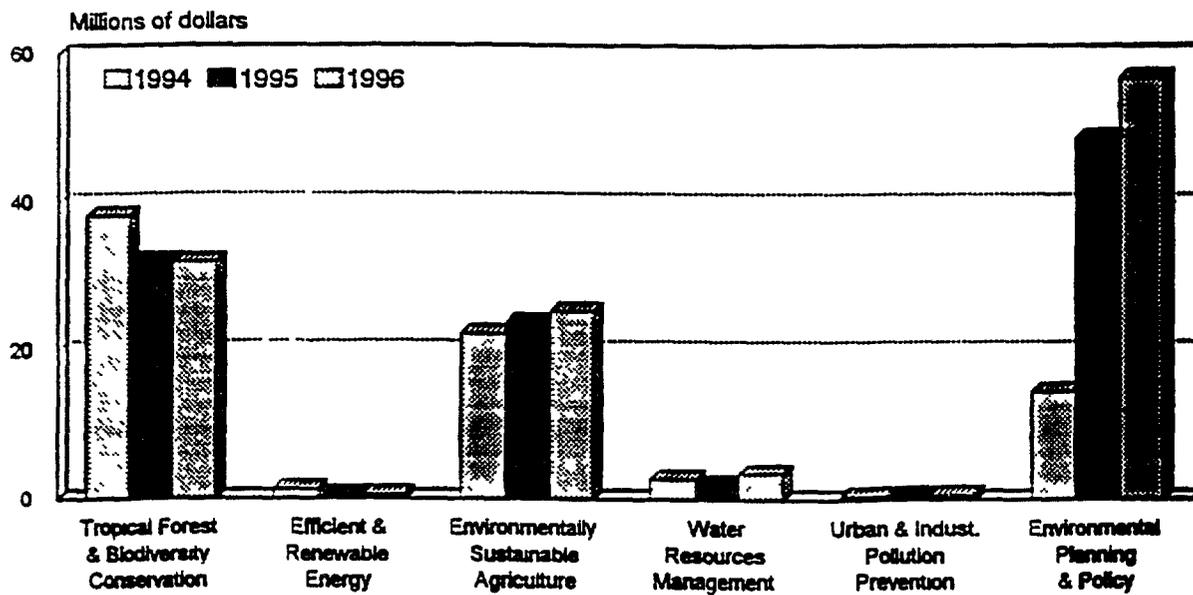
As regional urbanization and land development occur, demand for water is increasing along with pollution. Countries are going to need to become better at coordinating and negotiating over water. Solutions to the regional water constraint will not be found at the national level.

The United States has a large amount of experience in dealing with watershed management which may be relevant in southern Africa. For example, the Colorado River running through semi-arid and arid lands, resembles many of the major rivers in southern Africa.

As part of Special Objective A: Increased Regional Capacity to Manage Transboundary Natural Resources, the RCSA should follow up on the Stanley Consultants Regional Water Sector Assessment. In addition to investigating potential project activities from their prioritized list, the Assessment recommended USAID become involved in providing technical assistance, training, and strengthening and organizing river basin organizations.

Appendix A

USAID Environment Strategy Obligations by Focus Area,
Bureau for Africa, FY 1994-96



Source: 1996 CP Budget Data as of 4/13/95

ENRIC
5/22/95

Appendix B

Focus of Intermediate Results within USAID's ENV/NRM Strategic Objectives

	Agriculture	Market/ Credit Access	Capacity Building	Policy & Enabling Framework	Sustainable NRM/ CBNRM	Technology Transfer	Other
Angola							
Malawi							
Mozambique							
Namibia							
South Africa							Urban shelter
Tanzania							
Zambia							
Zimbabwe							
RCSA							

Appendix C

USAID Environmental Activities in Southern Africa

	Malawi	Mozambique	Namibia	South Africa	Zambia	Zimbabwe	Tanzania
Project Number(s)	656-0229	656-0229	673-0002 690-0251 73	674-1312 674-0318	611-0230 690-0251 11	690-0251	621-0174 621-0180 621-0183
Strategic Objective	Increased sustainable use, conservation and management of natural resources	Increased rural household income in target areas	Increased benefits to historically disadvantaged Namibians from sustainable local management of natural resources	Improved access to environmentally sustainable housing and urban services for the historically disadvantaged population	Increase the productive participation of rural enterprises and communities in the national economy	Increase household food security in communal areas of natural regions IV and V	A foundation established for adoption of environmentally sustainable natural resource practices in Tanzania
Geographic Scope of Project	Policy Framework-National Agroforestry and CBNRM - targeted rural areas	Approximately 30% of this SOs funding goes towards ENV/NRM activities Focuses on 4 central provinces Beira Corridor (Northern Sofala and Northern Manica), Zambezia and Nampula	Policy Framework-National Conservancy concept extends wildlife management option to all communal areas Pilot schemes operational in Caprivi, Bushmanland, & Damaraland	Located mostly in towns with high concentrations of low income settlements, especially in Eastern Cape, Kwa-Zulu Natal, and Mpumalanga Provinces	Potentially applies to 34 GMA's established as NP buffer zones 26 currently involved (1995)	Communal & commercial land Administrative authority granted to 23 of 54 RDC's Program fully operational in first 12 (1995)	Policy Framework-National CBNRM in Ngara, Karagwe, Babati, Hanang and Hadem Districts Morogoro Region,
Sub-sector	CBNRM, Policy Framework	Agriculture	CBNRM, Policy Framework	Urban shelter	CBNRM	CBNRM	CBNRM, Policy Framework

In addition, RCSA in Botswana has a number of programs falling under its Ag/NRM Strategic objective These include

- 690-0251 Natural Resources Management Program
- 690-0283 Improved Environmental Policy and Planning
- 936-5453 33 Access to land, water and natural resources (buy-in)
- 936-5555 33 Environmental policy analysis and training (buy-in)

Appendix C: USAID Environmental Activities in Southern Africa

Botswana

Natural Resources Overview

Botswana is a large, sparsely populated country with a dry climate, large numbers of cattle and wildlife living in the rich but fragile ecosystems of the Kalahari, Chobe and Okavango ecosystems

With twice as many cattle as people, the country's natural resource base, including its wildlife, is under severe pressure. Botswana's unique natural resources have become economically important. Tourism recently replaced agriculture (including livestock) as the second largest contributor to GDP after the diamond sector.

Approximately 75% of Botswana's population lives in rural areas and of these people, 80% depend on agriculture for their subsistence needs. The experience of the Botswana NRMP has shown that community based wildlife utilization can provide an ecologically and economically viable form of land use.

USAID Project Activities

The Botswana component of the Natural Resources Management Project (690-0251 3) has been extended to August 1999. This project promotes community based sustainable wildlife utilization through ecotourism, transfer of hunting quotas to community trusts, research and protected area management planning, environmental education, use and sale of grassland products, and personnel training for the Department of Wildlife and National Parks.

Intermediate Results

- 1 A minimum of six existing community based organizations (CBOs) are operating profitably and fully capable of managing their natural resources in a sustainable manner
- 2 District level capabilities in five districts are strengthened to support CBNRM (Central, Chobe, Ghanzi, Kgalagadi and Ngamiland Districts)
- 3 Selected NGOs are strengthened and work to support CBOs
- 4 DWNP is strengthened to support CBNRM
- 5 BWTI is strengthened to support CBNRM

- 6 GOB policies and regulations to facilitate CBNRM are in place and enforced
- 7 Regional collaboration of NRMP is increased

Links to RCSA and Agency Objectives

This project contributes to RCSA's SO3 "Accelerated regional adoption of Ag/NRM approaches" by establishing successful community based organizations in Botswana which manage the community's natural resources in a manner that benefits the community, by strengthening Botswana public and private institutions to support existing and future CBOs and by sharing its successes and lessons learned with other countries in the region. In addition, this program supports the Agency objectives of "biological diversity conserved" and "sustainable NRM"

Locations

Central, Chobe, Ghanzi, Kgalagadi and Ngamiland Districts, in addition to Sanyuko, Gwete area, Xa1 Xa1, Ghanzi District, Tswapong Hills, Matsumo, Zutwa and Ukwe

Other Donor Activities in the NRM/ENV Sector

IUCN/Botswana's major initiatives include Botswana National Conservation Strategy, State of the Environment and environmental monitoring of Botswana, National Parks and Protected Area Management Plans for Makgadikgadi/Nxa1 Pan National Parks and Khama Rhino Sanctuary, Environmental impact assessment such as Review of Southern Okavango Integrated Water Development Project and new National EIA legislation, Support program and capacity building for Botswana Environmental NGOs

Malawi

Natural Resource Overview

Malawi is endowed with some of the most fertile soils in southern Africa. Approximately 31% of the country's land area is suitable for agriculture at traditional levels of management, while another 31% is marginal. Forest resources supply 93% of the country's needs for energy and timber for construction and industrial use.

Lake Malawi and other wetland ecosystems have a large amount of aquatic biodiversity. In addition, these lakes serve as an important source of dietary protein, as the fishing industry provides 60 to 70% of the animal protein consumed. Terrestrial wildlife resources of Malawi are small compared to surrounding countries but still important in terms of their tourism potential. Five national parks, four wildlife reserves, and 69 forest reserves occupy 21% of the country's land area. These areas have been preserved to help protect watershed areas and biodiversity.

Environmental Issues

High population density (the highest in southern Africa), small land holdings, traditional agriculture and widespread poverty lead to deforestation, overworked soils, and result in low agricultural output. Ninety-five percent of Malawians rely on agriculture for food, employment and energy. As in much of southern Africa, soil erosion and deforestation in Malawi have reached alarming levels. Clearing land for cultivation is a major destructive force as well as high rates of tree cutting to meet demands for wood and fuel.

Other serious resource concerns in Malawi are the loss of biodiversity and diminishing surface and groundwater supplies. Siltation and contamination of rivers, lakes and dams have large and far reaching effects, combining with the above factors to threaten Malawi's national and household food security.

Malawi's ability to respond to these environmental problems is limited by many institutions with weak coordination, ineffective administrative procedures, a weak legislative framework, and the absence of public environmental awareness.

Strategic Objective

Increased sustainable use, conservation and management of renewable natural resources

NATURE (Natural Resources and Environmental Support Program)

Five year program initiated in 1995, to assist the Government of Malawi with environmental policy reform in addition to project activities and technical assistance. This program is the primary means for achieving Malawi's SO

Intermediate Results

1 Comprehensive policy and legislative framework established conducive to improved natural resource management and conservation

In 1994, the National Environmental Action Plan (NEAP) was approved. The NEAP identified nine key areas: soil erosion, deforestation, water resources degradation and depletion, threat to fish resources, threat to biodiversity, human habitat degradation, high population growth, air pollution and climatic change. In 1996, Malawi's first national Environment Management Act (EMF) was signed into law. This legislation laid the foundation for accelerating and harmonizing implementation of sectoral-level environmental policy reforms. In addition to establishing formal and high level mechanisms for addressing cross-sectoral problems, the EMF defines the role of the Department of Environmental Affairs within MOREA (Ministry of Research and Environmental Affairs), which is responsible for coordinating and monitoring environment, conservation and natural resource management activities.

2 Strengthened institutional capacity to administer and monitor environmental policies and programs

The Malawi Environmental Monitoring Program (MEMP) is building a national capacity for providing environmental information to answer questions about environmental conditions in specific situations for use in guiding mitigation measures, and to support a viable Environmental Information System to guide policy decisions.

3 Effective nationwide private sector-led agroforestry program established

The agroforestry assistance program piloted under ASAP I developed proven, low cost agroforestry practices with encouraging rates of farming adoption. This program will be expanded nationwide under private sector leadership. An agroforestry support network will be established to provide technical, training, and information services for public, NGO and private sector practitioners. In addition, a policy framework to guide and coordinate agroforestry research and expansion is being developed and implemented.

4 Capacity of communities to manage natural resources improved

Other Projects

The Agricultural Sector Assistance Program (ASAP) has financed field activities focused on developing and testing community based agroforestry techniques for smallholders, who are approximately one-third female. The ASAP project has also supported field based environmental monitoring activities, which helped to generate baseline data used with indicators.

Linkages to Agency and RCSA Objectives

USAID/Malawi's good integration of NRM techniques with agriculture and policy reform link this SO closely with the RCSA goal of "Accelerated regional adoption of sustainable agriculture and natural resource management approaches". In addition, the missions work contributes to the overall Agency goal of "environment managed for long term sustainability".

Beneficiaries

The 85% of Malawi's population who live and work in rural areas. Improved natural resource management contributes to increased agricultural productivity and hence increased sustainable rural incomes and food security.

Agricultural and Natural Resource Donors

Bilateral US, UK, Canada, GTZ, JICA, DFID (Dept for International Development) Denmark and Norway are doing feasibility studies in various areas of NRM/environmental management.

Multilateral WB, UN, EU, ADB/ADF

The World Bank and EU are developing assistance programs aimed at NRM and addressing constraints that USAID's program will complement. The World Bank supported the NEAP process and is supporting efforts to develop a comprehensive Environmental Support Program which will implement specific geographically based activities. Under this ESP, an Environmental Management Project has been approved. Historically, ODA has provided support for conservation and management of Malawi's fisheries. The EU is developing a region-specific forestry program emphasizing the rehabilitation of areas formerly occupied by refugees from Mozambique. In addition, microprojects which previously concentrated only on providing physical infrastructures--roads, bridges, schools and clinics, will also cover natural resource/environmental management related activities initiated by local communities.

The World Bank's Malawi/Nyasa Biodiversity Conservation Project will assist the riparian states in creating the scientific, educational, and policy basis necessary for

conserving the biological diversity of the Lake and its unique ecosystem. It will be done through the following specific activities: (a) building scientific capacity to survey, study and monitor the Lake's biodiversity, identify threats, and provide recommendations for the Lake's management, (b) surveying and inventorying species, identifying critical habitats and biodiversity hotspots and recommending preliminary measures to demarcate and protect such areas, (c) identify pollution sources and measuring water quality at sites where human activities threaten biodiversity, (d) preparing a Strategic Plan for the Nankumba Peninsula and Lake Malawi National Park for ecotourism development, consistent with the protecting the Lake's biodiversity, (e) preparing a comprehensive Biodiversity Map and Management Plan for Lake Malawi/Nyasa, (f) increasing conservation awareness among the lakeshore population and regional and national policy makers, whose decisions regarding regional development have an impact on the Lake's ecosystem, and (g) reviewing the adequacy of existing national environmental legislation in Malawi, Mozambique and Tanzania and making appropriate legislative recommendations for revision and/or strengthening enforcement for the conservation of the Lake's biodiversity.

Mozambique

Environmental Issues

Mozambique's environmental problems need to be viewed in the context of their long civil war. The war removed potential population stress on the environment in large areas but magnified it in sites of population concentration. Thus, in most areas, there is an overall lack of population pressure on resources. Another exceptional aspect of Mozambique is that it possesses a relatively rich but only partially explored and developed natural resource base.

Major environmental problems exist in Mozambique's coastal coral and mangrove ecosystems due to their over-exploitation and pollution caused by domestic and industrial wastes. In addition, Mozambique suffers from the environmental problems common to southern Africa as a whole.

USAID Project Activities

Strategic Objective: Increased rural household income in targeted areas

Intermediate Results

- 1 *Increased access to markets*
- 2 *Expanded rural enterprises*
- 3 *Sustainable agricultural output*

An increasing number of households changed their agricultural practices and increased yields. For example, the number of FHI-assisted farmers who used organic fertilizer for their crops increased from 42% in 1995 to 72% in 1996. Only 16% burned their field before planting, compared to 70% in the year before. Increased yields added an estimated \$86 to the income of each participating household.

Progress made on a revised land law and implementing regulations reduced the need for opening new fields in forested areas and increased incentives for farmers to control erosion and maintain soil quality on their fields.

In addition, the mission has taken a proactive approach to environmental monitoring and mitigation for road rehabilitation work. This environmental approach is especially implemented in routes near protected areas like Gorongosa National Park and its buffer zone. The mission plans to support sustainable CBNRM of forested ecosystems and for the development of environmental enterprises which will increase area household incomes without degrading the surrounding protected resources.

The Mission is also formulating an environment strategy to support this SO by addressing Mozambique's institutional and policy development needs, capitalising on opportunities within the SO focus area to pursue sustainable resource use, and responding to the Agency's programmatic emphasis on environmental protection

Linkages to RCSA and Agency Goals

The strategies to achieve increased rural household income will support goals of conflict prevention, food security and economic liberalization. Approximately 30% of SO1 resources contribute directly to the Agency's SO4, "Environment managed for long term sustainability" through 4.1 "biological diversity conserved" and 4.5 "sustainable natural resource management". In addition, this SO supports the RCSA SO of "accelerated regional adoption of sustainable ag/NRM approaches", particularly in the way that the SO is primarily based on agriculture and increased income but has focused on accomplishing these ends in an environmentally sustainable manner.

Locations

USAID projects focus on the central northern area of the country, including Nampula and Zambezia provinces, the northern districts of Manica and Sofala provinces, and Mutarara district of Tete Province. This area covers about 35% of Mozambique's territory and about 51% of its population.

Beneficiaries: Rural

Other Donor Activities in the NRM/ENV Sector

CARE The Sustainable Agriculture in Machaze Project (PN1926) seeks to improve the ability of 15,000 residents in northern Machaze District, Manica Province, to meet their food and nutritional needs. Project activities include setting up an extension network, facilitating information linkages with farmers aimed at improving production techniques, including crop diversity, and developing farmer-managed seed supply systems.

The Sustainable Agriculture in Nampula Project (PN 19XX) seeks to improve the food security of vulnerable populations in five rural districts of Nampula Province by improving farmers' access to extension services, establishing seed supply networks, and increasing small farmers' ability to market surplus crops. The project aims to increase overall agricultural production, productivity and marketability in the area, with a focus on poor women farmers. The project will reach 8,800 women through 440 women's groups in approximately 300 communities.

The Inhambane Province Community Water and Sanitation Project (PN 1910) seeks to ensure access to clean drinking water for 30,000 people in four rural districts of northern Inhambane Province, and to maximize the benefits of improved water supply through

environmental sanitation and hygiene education. The project has two main strategies: a regional decentralized maintenance program for hand pumps which is managed by the participants themselves, and integrated water and sanitation development activities based on a community-managed approach to construction, maintenance and repair. At least 60 new boreholes with hand pumps will be constructed, and 20 existing water points rehabilitated or improved. CARE will also expand its interventions to include the improvement and dissemination of local technologies for rainwater catchment and storage.

IUCN Major initiatives include Gorongosa-Marrromeu Natural Resource Management Area Emergency Programme (rehabilitation, management, demilitarization, integrated land use planning), CBNRM support programmes in Tete and Niassa Provinces, Zambezi Delta wetlands conservation project, technical support, networks and seminar series on Environment Economics, Resource Tenure and CBNRM, and a Coastal Zone Survey.

World Bank Preparation of National Biodiversity Strategy and Action Plan, Transfrontier Conservation Areas and Institutional Strengthening.

Namibia

Natural Resources Overview

Namibia is one of the least densely populated countries in the world. In the near future however, due to a doubling time of about 23 years and environmental and natural resource constraints, Namibia will increasingly be confronted with severe population pressures.

The seasonal occurrence of rainfall and prevalence of groundwater supplies have greatly influenced population distribution. About 60% of the country lives in the northern part of the country which receives higher annual rainfall. A majority of Namibia's disadvantaged live on marginal lands in the northern section of the country. Many of these lands are classified as 'communal areas', which amount to 40% of Namibia's land area.

Namibia is the driest country in Sub-Saharan Africa. 78% of Namibia is classified as arid and 21% as semi-arid. Rainfall varies regionally within the country, but is also highly unpredictable from year to year.

Namibia's only permanent rivers are along the northern and southern borders: the Orange River in the south and the Kunene, Kavango and Zambezi Rivers in the north.

Sixty-five percent of Namibia's land is unsuitable for any form of agriculture, and the majority of the remaining land cannot support intensive livestock or crop farming.

Namibia's two main economic sectors, agriculture and tourism, are strongly dependent on natural resources. Together, agriculture and tourism account for almost 25% of Namibia's national income, a significant portion of its foreign exchange earnings, and contributes to the livelihood of approximately 70% of the population.

USAID PROJECT ACTIVITIES

LIFE (Living in a Finite Environment)

LIFE is a component of USAID's Southern Africa Regional Natural Resources Management Project (NRMP) coordinated by the Regional Center for Southern Africa (RCSA). LIFE's goal is to "improve the quality of life for rural Namibians through sustainable natural resources management, and its purpose is for "communities to derive increased benefits in an equitable manner by gaining control over and sustainability managing natural resources in target areas." The project assists communities to become stakeholders in protecting wildlife and other natural resources by sharing in revenues from natural resource based economic activities. In addition, the LIFE project supports changes in national legislation, social and economic improvements in marginal communal areas, research, training and regional information exchange.

Implementation

The LIFE Project supports the National Community Based Natural Resources Management Program of the Ministry of Environment and Tourism. In cooperation with Namibia's Ministry of Environment and Tourism, local NGOs and USAID/Namibia, WWF launched LIFE project activities under a cooperative agreement (\$8.03 million from USAID and \$2.67 million from WWF) in May 1993. The Project has been amended in 1995 to \$13.33 million from USAID and \$2.96 million from WWF and is now planned to end on August 18, 1999. World Learning, Management Systems International, and the Namibia-based nongovernmental organization (NGO) Rossing Foundation are sub-contractors in the cooperative agreement.

The LIFE Project supports 8 Results Statements which contribute to the accomplishment of the LIFE Project Purpose. These are:

- 1 Social/economic/ecological knowledge base improved for management of communal natural resources in Target Areas,
- 2 Resource base of Target Areas developed and maintained,
- 3 Increased community awareness and knowledge of NRM opportunities and constraints,
- 4 Communities mobilized into legally-recognized bodies that are capable of managing communal resources,
- 5 Improved community skills in participatory and technical NRM and enterprise management,
- 6 Improved capacity of Namibian organizations to sustainably assist communities in the establishment of sustainable CBNRM enterprises and management systems,
- 7 Improved capacity of Namibian organizations to establish legal, regulatory and policy framework supportive of CBNRM, and
- 8 Analysis of CBNRM dynamics and experience and lessons learned shared throughout Namibia and between LIFE and southern African colleagues

General outputs in community-based natural resource management will include expanded government, NGO, and community-based organizational capacity to implement and strengthen environmental efforts, strengthening of community-based natural resource management projects in marginal areas, and promote increased participation of women in planning and implementing natural resource management efforts in communities.

The environmental education (EE) component, consisting of community-level activities is carried out by local NGOs under USAID's Reaching Out with Education to Adults in Development (READ) project. For this, the Rossing Foundation is helping to produce environmental education materials, train NGOs, and organize events nationally, mostly at government owned EE Centers, such as Etosha and Waterberg National Park environmental education centers.

Under the information exchange component, USAID, WWF, and the Ministry of Environment and Tourism are attempting to integrate regional and national efforts under USAID's Southern Africa Regional Natural Resources Management Project by networking and disseminating information on project results across borders. The Regional NRM Project Coordinating Committee (PCC) is also used to share information and lessons learned with other similar projects in the Southern Africa Development Community (SADC).

USAID/Namibia's Strategic Objective 3

Increased benefits to historically disadvantaged Namibians from sustainable local management of natural resources.

Linkages to RCSA and Agency Objectives

This SO contributes to USAID's goals in a variety of ways. It is directly linked to Agency Objective 4.5 Sustainable Natural Resource Management, and 4.1 biological diversity conserved. In working with a variety of local, conservation based NGOs and CBOs, this SO contributes to agency goals in the areas of supporting NGO capacity building, coalition building and advocacy, and human resources development in the fields of natural resources management and environmental education. It also contributes to micro-enterprise development in supporting communities to start enterprises like campsites, tourist villages and the sale of natural resources like thatching grass. In addition, it complements RCSA's SO #3 of Accelerated Regional Adoption of Sustainable Agriculture and Natural Resource Management Approaches.

Namibia was one of the last countries to join the NRMP. Thus, the design and implementation of the LIFE project has been based on lessons learned from other NRMP activities in the region. Namibia has become acknowledged as a leader in the field and even provides Monitoring and Evaluation technical assistance to other bilateral missions and the RCSA.

Intermediate Results

- 1 Improved policy and legislative environment for sustainable natural resource management*

Legislation to enable communities in communal areas to form conservancies for natural resource management within recognized physical boundaries has been passed by the Namibian Parliament and has been gazetted in the Government Gazette. Policies and regulations governing this legislation have been approved by the MET. In addition, policies involving Land Use Planning and the Conservation of biodiversity and Habitat Protection were adopted by the MET. In March 1997, the Parks and People Policy was drafted. This policy will enable communities inside national parks to benefit from the sustainable use of wildlife and related tourism activities. USAID has also had a policy impact in the formulation of tourism policy, initiating natural resource accounting and establishing a framework for an environmental investment fund.

2 *Strengthened community based natural resource management activities in target communities*

Pilot CBNRM activities have been developed in target communities through continued support to community management committees, resource-user decision groups, community enterprise units, and conservancy committees. Activities focus on assisting communities to further skills in conducting meetings, representing constituents and making sound natural resource management decisions.

As of June 1997, pilot CBNRM activities were underway in several communities in the three target areas. Two conservancies have been approved by the local authorities and are awaiting registration by the MET. It is anticipated that these pilot activities will be used as models for replication on a national basis. Combined with USAID/Namibia's environmental education activities, this IR is helping to build a political constituency for CBNRM that will continue policy dialogue for sustained environmental and CBNRM legislation.

USAID's assistance has fostered the formation of community institutions such as conservancy committees, community game guards and community resource monitors in three targeted areas in preparation for conservancy formation. Economic and social assessments have been undertaken in these major socioecological regions. The Community game guards have minimized poaching of all animals, including elephants, in target areas. Community members, trained in participatory techniques and in natural resource and enterprise management, have been given greater capacity to sustainably manage natural resources and increase community income. Work with local women's groups has resulted in sustainable harvesting of reeds and long grasses used for building, roofing thatch and basket making which generates income for these women.

Success in establishing community institutions has resulted in exceptional income (exceeding targets) being realized for more households in target communities involved in USAID assisted Community Based Natural Resource Management (CBNRM) activities. Micro-enterprise activities already operating on a net profit basis are crafts production (5), thatching grass (1), tourism cultural village (1), campgrounds (1) and sale of reeds (1).

This indicates significant progress towards the establishment of lucrative micro-enterprises in the target areas, benefiting households within and outside the planned Conservancy. Progress has been consistent and relatively stable, indicating potentially viable models emerging. These enterprises serve both as local models and important sources of lessons learned for the planned national implementation of CBNRM Program.

The NRM-based enterprises which are being managed by community based organizations are diverse, they do not depend on any one single resource, such as wildlife.

Additionally, USAID/Namibia's support to a community based management activity in northwestern Namibia, to establish and train water point committees in promoting democratic values through participatory decision-making, has become a model for rural water committees on a National level.

3a Community based natural resource management implemented nationally

This IR is beyond USAID/Namibia's manageable interest due to Regional funding uncertainties.

3b Improved natural resource base in communal areas

The natural resource base of the target areas is generally not expected to show significant, measurable increases within the 5 year SO timeframe. This is because much of the initial time will be spent organizing community institutions and training community members to appropriately manage their communal natural resources, and because it will take several years for the natural resources of the semi-arid and arid land to respond and recover once the new management approaches are implemented. The ten year period planned for the completion of the USAID/Namibia program will allow sufficient time for these changes to be measured and quantified.

Other Donors

While USAID is the largest donor in the CBNRM sector, several other donors provide assistance to Namibia in areas which directly relate to or complement USAID/Namibia activities under their natural resources SO. These other donors include Sweden, Norway, Denmark, Germany, the Netherlands and Finland.

Locations

Target areas are in East and West Caprivi, Eastern Bushmanland and a special area called Uukwaluudhi in the greater Western Etosha catchment area (revised performance monitoring plan 1996).

Beneficiaries

In a modest scenario in which only 20% of the communal areas population is participating in and benefitting from CBNRM, 200,000 ultimate customers will be served

25

South Africa

Environmental Issues

Urbanization is a major challenge confronting South Africa. Of the 65% of South Africans living in urban areas, at least one-third reside in informal housing and squatter areas. South Africa's urban landscape is currently dominated by sprawling slums and squatter settlements. These settlements have none or minimal access to utilities and basic environmental services such as water, sewers, and refuse removal.

South Africa is facing a range of urban environmental problems including indoor and outdoor air pollution - exacerbated by the burning of coal for cooking and heating, and by lead from gasoline, water pollution and scarcity of water and lack of solid waste management. In addition, South Africa suffers from problems common to the rest of the region such as energy inefficiency, biodiversity loss, and habitat destruction.

Air pollution is the country's principal urban environmental hazard, underscoring the importance of electrification among needed urban services. Urban sprawl is probably the second most important factor exacerbating environmental degradation. In spite of South African cities' dependence upon a fragile and limited natural resource base, urban systems tend to encroach on the productive peri-urban areas and not be designed to conserve and recycle resources, resulting in an extremely inefficient city environment.

Strategic Objective

Improved Access to Environmentally Sustainable Shelter and Urban Services for the Historically Disadvantaged Population (HDP)

This SO defines environmental sustainability as "the systematic utilization of environmental assessments in the planning and delivery of housing and urban services, as well as the on-going participation of targeted communities in the design and implementation process"

A portion of Shelter and Urban Development Support (SUDS) project funding provides technical assistance to the Government of South Africa in various aspects of environmental management and policy design. SUDS also provides technical assistance to local organizations for environmental education, training, and evaluation.

In addition to funding Agenda 21 programs for four South African cities, SUDS made a grant in 1996 to the Urban Environmental Education Coalition (UEEC), its first ever grant to an environmental organization. The UEEC project will address both "brown" and "green" environmental issues. The urban/brown issues include air and water pollution, environmental health, provision of municipal services, solid waste management and recycling, and land use planning. The "green" issues the project will address are problems caused by uncontrolled

harvesting of fuel-wood and the overgrazing of public lands, development of an open-space green belt, use of alternative energy sources, and development of jobs through recycling, ecotourism and nature conservation

With regard to environmental activities and initiatives, the principal focus of the Shelter and Urban Development Support Project is on capacity-building at the national and local level

Intermediate Results

- 1 *Improved environment for the development and implementation of a policy agenda for increasing access to housing and urban services for the HDP*
- 2 *Previously ineligible households, developers, builders, and municipal service providers obtain access to credit for housing and urban services*
- 3 *Increased, non-credit forms of assistance made available by participating institutions to HDPs for obtaining access to housing and urban services*
- 4 *Improved capacity to apply sustainable/participatory environmental management principles to local-level urban development*

This is a new IR which will help to improve the environmental aspects of this SO

Linkages to RCSA and Agency Goals

In increasing access to water and sanitation services, this SO contributes to Agency Goal 4 Environment Managed for long-term sustainability under Agency Objective 4 3 "Sustainable urbanization promoted and pollution management improved" This project also directly promotes the Global Bureau's SO of "More sustainable cities, including reduced pollution and more environmentally sound urbanization" While it does have some components of environmental sustainability, because of its focus on urban shelter, this SO does not link tightly to the RCSA's objective of "Accelerated regional adoption of sustainable Ag/NRM approaches"

Locations

Policy and Legislation - National

Housing access in Eastern-Cape, Kwa-Zulu Natal, Mpumalanga Provinces The UEEC is active in the informal townships and settlements of Port Elizabeth These selected locations provide synergy between other SOs in areas of democracy and governance, education and health which also focus on provinces of Eastern Cape and Kwa-Zulu Natal

USAID plays a major donor coordination role in South Africa's shelter and urban sector by chairing the Urban Sector Donor Coordinating Committee

Other U.S. Government Activities

The Gore/Mbeki Binational Commission is especially concerned with water conservation, biodiversity, and urban sprawl. In addition, USAID and the EPA are exploring possibilities for national and local technical assistance in environmental areas such as solid waste management. Building upon BNC work, the EPA, along with US NGOs, is initiating environmental training and community grant programs in South Africa. In the priority area of solid waste management, the EPA has developed a three part program of technical training, community action and technology transfer.

Tanzania

Overview of Environmental Issues

Tanzania is one of the five most biologically diverse countries in Africa. It contains a variety of internationally significant game parks and reserves, as well as Mount Kilimanjaro. In addition, Tanzania has been designated by USAID as a key biodiversity country because of the biodiversity, endemism and scientific importance of its forests. Tanzania is also endowed with rich coastal ecosystems high in endemic species.

Agriculture accounts for about 50% of the GDP and 60% of foreign exchange earnings. Potential tourism earnings based on coastal resources, diversity of habitats and biodiversity endowment are huge and expected to increase 12-15 % a year.

Currently 85% of the population live in rural areas, however, the urban population is growing rapidly at 7-8% a year.

Like much of southern Africa, Tanzania's major environmental problems are

- soil degradation
- degradation of inland water systems
- degradation of coastal and marine resources
- deforestation
- depletion of wildlife populations and habitat loss
- loss of biodiversity

A recent study reviewed donor supported activities for the environment in Tanzania. In 1995, 29% was donated to forestry and agroforestry activities, 23% at NRM in general, and 8.8% to biodiversity conservation. Less than one percent went to environmental policy formulation, analysis and legislation. Thus, USAID/Tanzania's efforts to create an enabling legal, institutional and regulatory framework is complementary to the efforts of the GOT and development partners.

While a large portion (25%) of Tanzania's land is designated as protected areas, weak institutions, low budgetary support and lack of political will have led to encroachment which threatens the integrity of these areas. In addition, current land use practices on unprotected land are unsustainable. The new government, elected in 1995, has stated that sustainable use of natural resources is a priority. Thus, the policy environment is supportive of USAID activities under this SO.

Strategic Objective

Foundation established for the adoption of environmentally sustainable natural resources management practices in Tanzania.

Intermediate Results

1 Policy Framework for sustainable NRM Established

Through policy dialogue with the Government of Tanzania USAID/T has continued to emphasize the need for the GOT to pass an official Environmental Policy and in following up the approved 1994 National Environmental Action Plan (NEAP)

The Mission has built on work done previously through the Planning and Wildlife Management (PAWM) activity. When a significant policy which was drafted with USAID assistance stalled within the Ministry of Tourism and Natural Resources, USAID/T sponsored a stakeholders workshop where the policy was reviewed and revised. This policy, the Wildlife Conservation and Utilization Policy, is now back in circulation for approval. Once translated into legislation, this policy will provide a framework for NRM which incorporates innovations for Tanzania like the concept of community management. The eventual passing of this legislation will be an important step towards establishing a modern enabling environment for NRM in Tanzania.

2 Institutional and Technical Capacity for Analysis Built

This is a long-term process which will not show immediate results. However, initial activities are promising especially at the community and local levels. Under the Kagera Resource Management Project (KRMP), Participatory Rural Appraisals (PRAs) were conducted in 30 villages. The methodology used encouraged local participation by both men and women to identify problems and solutions which could be initiated at the local level at a reasonable cost. Then Participatory Planning Activities were conducted in 20 selected villages, community based groups were identified and project proposals submitted.

A similar approach was taken in the Morogoro Region where PRA was used to create seventeen village profiles, to identify local needs and locally derived solutions. While these participatory processes are initially time consuming, greater sustainability of the activities should result because the local populations involvement in identifying problems and solutions.

Another capacity-building activity was a workshop held to familiarize NGOs with techniques in Environmental Impact Assessment.

3. Appropriate NRM Approaches and Technologies Identified, Field-Tested and Implemented in Pilot Areas

It is too early to report any results under this IR because technologies to be tried at the field level have just recently been identified and are being tested at this time.

USAID Project Activities

621-0174 University Linkage

621-0180 Participatory Environmental Resources Management (PERM)

621-0183 Kagera Resources Management

Description

621-0174 University Linkage

This is a linkage project between Tuskegee University and Tanzania's only agricultural university, Sokoine University of Agriculture (SUA). This project continues to enhance the capacity of SUA staff to plan, conduct, and monitor more appropriate, applied field based natural resources management research.

621-0180 Participatory Environmental Resources Management (PERM)

The PERM project will contribute to Tanzania's SO by supporting CBNRM in Tanzania. The focus of this project is CBNRM because of the immediate need to devote attention to resource utilization outside of protected areas as a means to enhance food security, alleviate rural poverty and safeguard the country's biodiversity and development options.

Other donors were consulted with during the development of the PERM project. It is expected to fill an important gap in Tanzania because of its holistic approach and because lessons learned were incorporated into its design.

CBNRM is a rural development paradigm that recognizes the legitimate rights of people to local resources, and aims to integrate social development and conservation through sustainable utilization of resources, particularly in buffer zones and in non-protected areas. CBNRM can be applied broadly to a variety of issues, including encouragement of local responsibility for watershed protection, soil conservation, appropriate dryland and irrigated cropping, and herding practices.

621-0183 Kagera Resources Management

This project is located in the Ngara and Karagwe Districts of the Kagera Region, where 600,000 Rwandan refugees have placed an enormous strain on the environment, encompasses a wide range of activities focused on mitigating the impact that the large number of refugees are having on the environment. Through participatory rural analysis, the program is working with local communities to identify and implement activities to make more sustainable use of their natural resources.

Linkages to RCSA and Agency Objectives

This SO contributes to the goal of real economic growth, because sustainable long term growth is dependent upon the wise use of Tanzania's natural resources. This SO directly links to the Agency Goal of "Environment managed for long term sustainability", as well as to the sub-goals of conserving biological diversity and sustainable natural resource management. This SO complements the RCSA objective of "Accelerated Regional Adoption of Sustainable Agriculture and Natural Resource Management Approaches" in both the policy realm and in terms of pilot natural resources management activities. In addition, this new Tanzania SO has incorporated lessons learned in NRM from other countries in the SADC region.

Locations

PERM (with Peace Corps cooperation) in Babati, Hanang and Hadem Districts
Other CBNRM in Ngara and Karagwe Districts and the Morogoro Region

Beneficiaries

Over 80% of the country's labor force live in rural areas and are involved in agriculture, herding, forest extraction or mining activities. Legislation and policies which support sustainable use of natural resources will directly benefit 40% of these residents as well as businesses involved in tourism, mining, and marketing of agricultural and forestry products. Visible improvements will be seen in terms of reduced erosion, more productive agriculture, increased benefits from wildlife and forest products and increased income in pilot communities.

Other Donors in ENV/NRM Sector

African Wildlife Foundation

Africare

CARE

-- Jozani Forest-Chwaka Bay Environment Project (PN 5505) works with the Zanzibar Government to create, develop and manage the Jozani Forest and Chwaka Bay Mangroves Nature Conservation Area. The project will establish the conservation area and cultivate a sense of ownership in communities bordering the area by insuring that they benefit from the income generated through ecotourism activities. The project will also create awareness of the importance of protecting natural resources through extension, training and conservation education on site. The project is funded by the Government of Austria.

-- Food and Livelihood Security (PN 5509) aims to enhance household livelihood security for people in the Lake Zone regions by improving agricultural production at the household level. This integrated project will introduce new or improved crop varieties, soil

conservation techniques, soil fertility and pest management while also exploring ways to improve crop marketing and increased access to capital for farm families

DANIDA (Denmark)

European Union

Food and Agriculture Organization

Finland

Frankfurt Zoological Society

GTZ

Irish Aid

JICA (Japanese International Cooperation Agency)

Netherlands

Norwegian Agency for International Development

Swedish International Development Authority- Land Management Program

Overseas Development Agency (UK)

United Nations Development Program

World Bank- Forest Resources Management (\$26M), GEF Program in
Electricity, Fuel and Fertilizer from Municipal and Industrial Organic Waste in
Tanzania A demonstration of a biogas plant for Africa (\$2.5M)

World Conservation Union (IUCN)

World Wide Fund for Nature (WWF)

Zambia

Natural Resources Overview

Zambia's wildlife protection system covers 31% of the country's land area. Much of the wildlife is found outside these areas on tribal lands.

Next to South Africa, Zambia is the second most urbanized country in the region, with over 50 percent of its population living in urban areas.

The Zambian economy is dominated by mining, the copper industry earns the country 90% of its total export earnings. However, this industry imposes serious environmental side effects like land degradation, and air and water pollution.

USAID Project Activities

ADMADE (Administrative Design for Game Management Areas)

As part of the Regional NRMP, ADMADE has aimed to demonstrate the economic values of wildlife use and management, helped communities gain governing authority over wildlife resources, strengthened institutional decision making processes, improve communities social welfare, and direct wildlife revenues to communities.

The Ministry of Tourism now shares 40% of safari hunting and park entrance fee revenue with communities surrounding protected areas. These revenues rose from \$1.9 million in 1995 to \$2 million in 1996.

Strategic Objective

Increase the productive participation of rural enterprises and communities in the national economy

USAID's Agriculture Sector Liberalization Project allows farmers to decide which crops are most profitable and environmentally suitable. In addition, USAID supports CARE's development of sustainable community based agricultural production activities in key biodiversity areas of the Kalahari Sands.

Other Donor Activities in the ENV/NRM Sector

CARE The PUSH Project (PN 9701) aims to reduce urban poverty in Lusaka and Livingstone by supporting low-income residents in activities that improve their environment, increase income-earning opportunities, strengthen their capacity to plan and manage community resources and improve equal access to household resources. The project offers a mix of training and employment opportunities, including a food-for-work component that

rehabilitates roads, drainage and sewerage systems, and community activities that establish pre-schools, adult literacy programs, workshops on preventive health care and HIV/AIDS education Other community activities include garbage clean-up days and promoting tree nurseries and home vegetable gardens

IUCN Major initiatives are primarily policy related, such as the Zambia National Conservation Strategy, NEAP, Zambia Environmental Support Program and Zambia Environmental Assessment Program Other activities of the IUCN include Zambia GEF Report, National Parks and Protected Areas Planning such as management plans for South Luangwa and Kasanka National Parks, integrated Management Natural Resources Programs such as the Upper Zambezi Program and capacity building for Zambian NGOs

World Bank Zambia's National Biodiversity Strategy and Action Plan, and Country Report to the COP

Zimbabwe

Natural Resources Overview

The population of Zimbabwe is predominantly rural with over 70 percent of people living in rural and agriculturally based areas. While a smaller percentage than the rural poor, urban poor in Zimbabwe are increasingly facing serious difficulties. Urbanization is increasing at over 5 percent and a serious urban shelter problem exists, with over 1 million people lacking adequate shelter.

Zimbabwe's 1982 Amendment to the 1975 Parks and Wildlife Act established an 'Appropriate Authority' (AA) status, to be conferred on any District Council which developed a management plan for the wildlife within its area. In 1986, the Department of National Parks and Wildlife Management created the CAMPFIRE Program to assist Council in obtaining AA which enables local communities to gain proprietorship over and directly benefit from their wildlife resource.

The success of CAMPFIRE is evidenced by the fact that, today, more than 80% of the country's land is devoted to some form of communal or private wildlife conservation and management, whereas only a small percentage is formally protected in official reserves and National Parks. This is significant since much of the wildlife lives or migrates outside of the national parks on other land like the communal areas.

Strategic Objective

Increased household food security in Communal Areas of Natural Regions IV and V

With the submission of this year's R4, USAID/Zimbabwe submitted a new CSP which has altered this SO to solely involve NRM. "NRM strengthened for sustainable rural development in CAMPFIRE communities". This new SO will have two intermediate results for which USAID will be primarily responsible: sustainable NRM practices adopted and sound community decision making processes established.

USAID Activities

Project Number/Title: 613-0241 Natural Resources Management (1994-1998)

The Communal Areas Management Program For Indigenous Resources program is the key operating entity for this strategic objective. CAMPFIRE has been active in the communal areas in Natural Regions IV and V since 1989. While CAMPFIRE originally focused in areas which have commercially exploitable wildlife populations, it has expanded to include other natural resources like woodlands, minerals and grasslands. These are the areas in which the greatest poverty and highest rates of environmental degradation are occurring.

CAMPFIRE is based on the concept that authority and capacity for productive, profitable and sustainable use of natural resources is best vested in the people who live where the resources are located. There are four components to CAMPFIRE: community based resource management and utilization, planning and applied research, wildlife and natural resource conservation, and regional communications and information exchange.

Community Based Resource Management and Utilization

Intermediate Results

1 Increased average household benefits generated by community-based natural resources management activities in natural regions IV and V

Average household contributions from CAMPFIRE activities have risen from \$Z95 in 1993 to \$146 in 1996. This gradual increase is much more substantial when considered in light of the increase in CAMPFIRE participating households. Rapid increases in the number of CAMPFIRE participants, from 9,000 in 1989 to 200,000 in 1996, have kept per household returns from increasing drastically. Overall revenues from have increased from Z\$600,000 in 1989 to Z\$15 million in 1996.

In addition, the people of Zimbabwe are realizing that proper management of natural resources means added cash and other incentives. CAMPFIRE is having success in publicizing that natural resources management is important for sustainable economic development in Zimbabwe. NRM has been incorporated into the secondary school agricultural syllabus.

CAMPFIRE is diversifying its CBO programming to include non-wildlife management activities. Several District Councils are developing and marketing things such as ecotourism, bee keeping, indigenous hardwoods- which exploit other resources on a sustainable basis.

Although preservationist-orientated animal welfare groups have campaigned against CAMPFIRE, significant financial benefits have been realized by thousands of previously economically disadvantaged households in the most marginal areas of Zimbabwe. Aerial census data indicates that in CAMPFIRE areas, elephant populations are growing and populations of other large mammals are stable. For example, the elephant population in Zimbabwe has grown by 5,000 since 1993.

2 More marketed grain available at lower cost for rural households in communal areas of natural regions IV and V

This IR has been successfully completed and is more agricultural than ENV/NRM related.

Links to RCSA and Agency Objectives

This SO contributes to Agency Goal 4 "environment managed for long term sustainability" and to conservation of biodiversity through encouraging sustainable natural resource management. In addition, in increasing local government participation in decision making, this SO contributes to Agency Goal 2 "sustainable democracies built". In addition, the agricultural and environmental focuses of this SO link it to RCSA's SO 3.

Locations: Communal Areas/Natural Regions IV and V

Activities of Other Donors

Donor/Partner	Description/Sector	Comment
Netherlands	Institution Building	This collection of donors has expressed interest in supporting the approach of CBNRM
European Union	European Lobbying	
Norway	Support to Dept of Nat'l Parks & Wildlife Management	
Japan	Institutional Support	
France	Biodiversity	
IUCN	District environmental action plans	
World Bank	Biodiversity conservation in Southeast Zimbabwe, Nat'l biodiversity Strategy & Action Plan, Photovoltaics for household and community use	

At the macro level, donor coordination is assured through the World Bank Consultative Group mechanism. Additional working-level bodies exist to ensure sectoral coordination in such areas as health and family planning, private sector development, low-income shelter, and natural resources management.

In addition to USAID, donors such as ODA, NORAD and GTZ have been important in contributing to funding CAMPFIRE as a national program.

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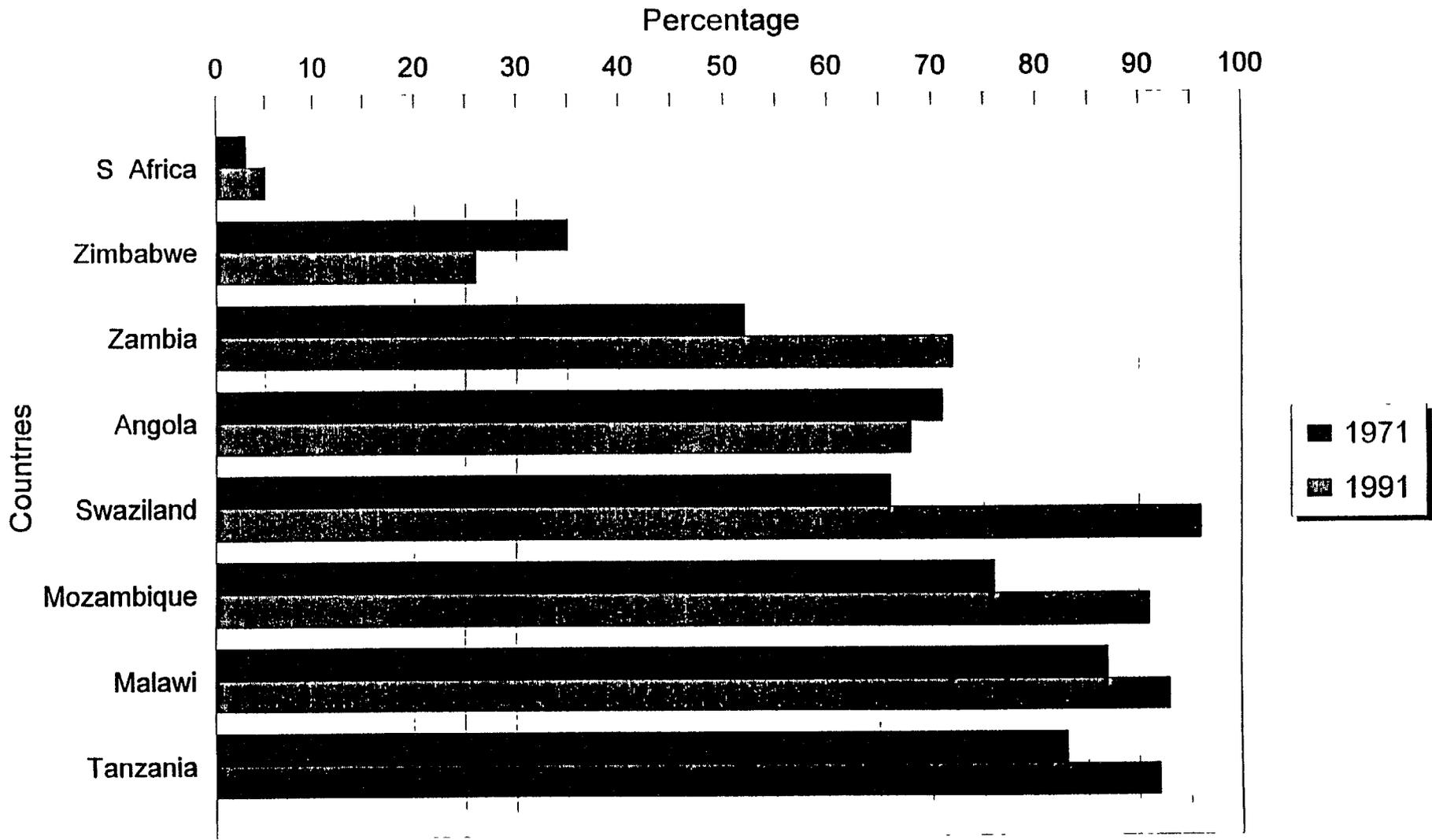
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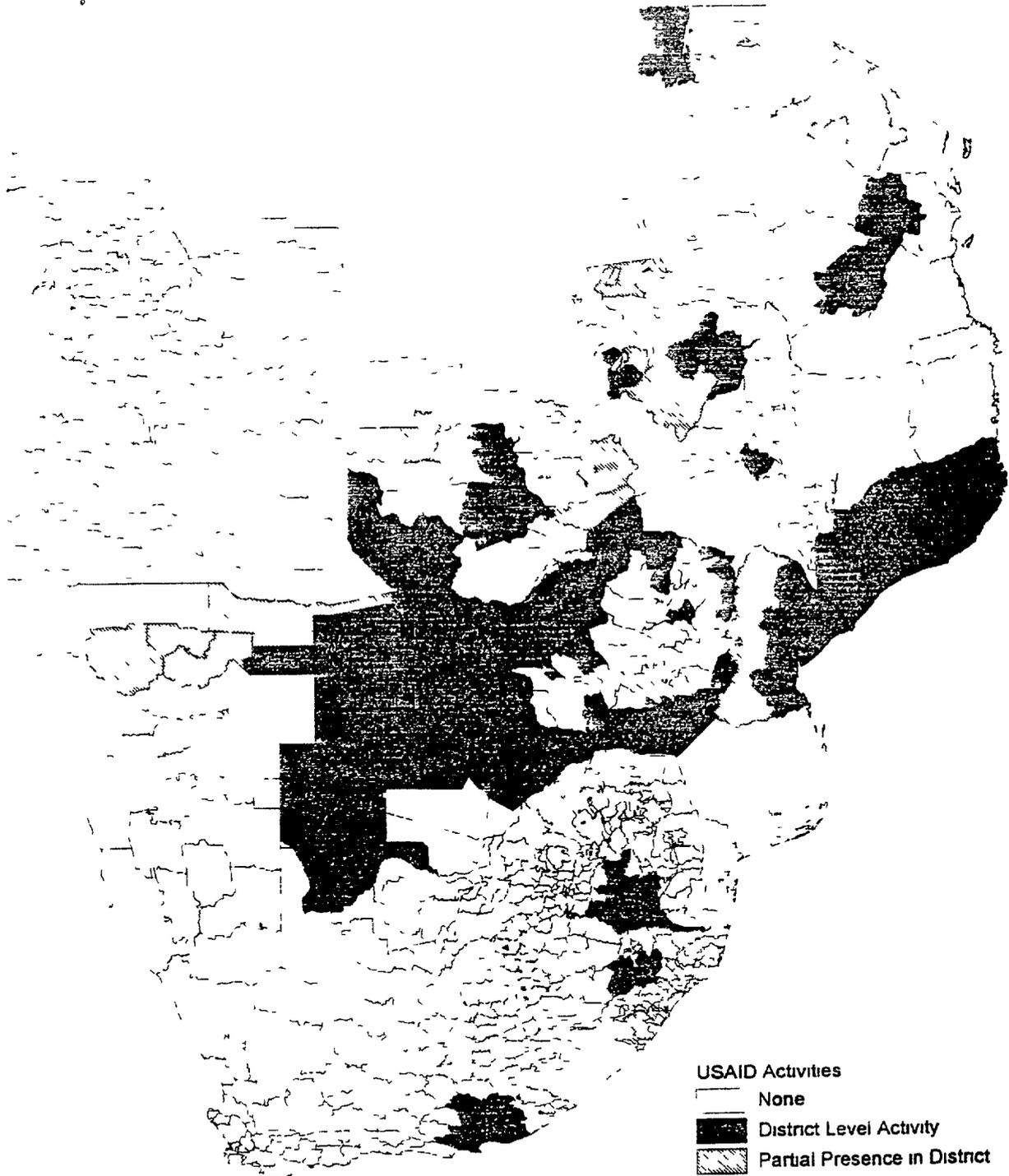
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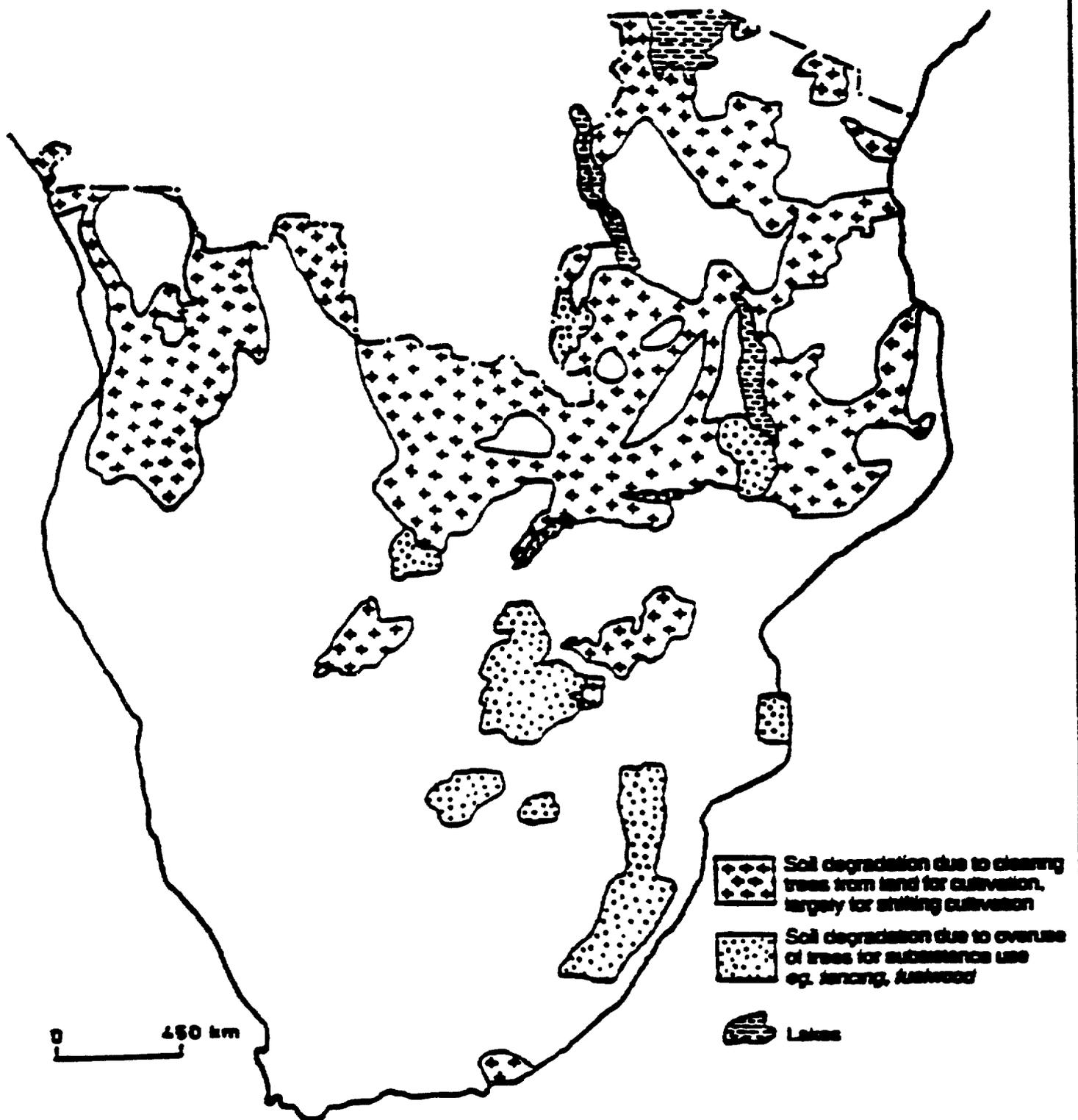


USAID Activities in Southern Africa



scale = 1 20,000,000

Areas affected by deforestation



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Protected Areas in Southern Africa



**SOUTHERN AFRICAN
DEVELOPMENT COMMUNITY**
Projected Urban Growth 2025

