



UNITED REPUBLIC OF TANZANIA

VICE PRESIDENT'S OFFICE

**PROPOSED NATIONAL ACTION PROGRAMME
TO COMBAT DESERTIFICATION**

AUGUST, 1999

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Abbreviations:

ADB	African Development Bank
AICT	Africa Inland Church of Tanzania
CBO	Community Based Organisation
CCD	Convention to Combat Desertification
CDTF	Community Development Trust Fund
CRS	Christian Relief Services
DALDO	District Agricultural and Livestock Development Officer
DCAO	District Council Agricultural Officer
DCC	District Council Chairman
DCDO	District Community Development Officer
DCDO	District Forest Officer
DCO	District Community Officer
DED	District Executive director
DFO	District forest Officer
DLDO	District Land Development Officer
DLNREO	District Lands, Natural Resources and Environment Officer
DMMO	District Manpower Management Officer.
DNRO	District Natural Resources Officer
DPLO	District Planing Officer
DWE	District Water Engineer
DWSP	Domestic Water Supply Programme
FAO	Food and Agriculture Organisation
FINNIDA	Finish International Development Agency
FP	Focal Point
FRMP	Forest Resource Management Project
GEF	Global Environment Facility
GOT	Government of Tanzania
GTZ	Germany Technical Assistance
HADO	Hifadhi Ardhi Dodoma - Soil and water conservation in Dodoma
HASHI	Hifadhi Ardhi Shinyaga – Soil and water Conservation in Shinyanga
HEM	Habari, Elimu na Mawasiliano
ILO	International Labour Organisation
INCD	Intergovernmental Negotiating Committee on Desertification
KFW	Germany International Bank
MCHP	Mwanza Rural House Programme
MEM	Mpango wa Elimu ya Malezi
NAP	National Action Programme
NCB	National Co-ordinating Body
NEF(D)	National Environment Fund (Desertification)
NGO	Non Government Organisation
NORAD	Norwegian Agency for Development
NSC	National Steering Committee
NTC	National Technical Committee
PAC D	Plan of Action to Combat desertification
RALDO	Regional Agricultural and Livestock Officer
RCDO	Regional Livestock Development Office

RCDO	Regional Community Development Officer
RIO	Regional Informational Officer
RLA	Regional Livestock Adviser
RLDO	Regional Administrative Officer
RNRO	Regional Natural Resources Officer
RPLO	Regional Planning Officer
SIDA	Swedish International Development Agency
TAHEA	Tanzania Home Economics Association
TIP	Traditional Irrigation Programmes
UNCED	United Nations Conference on Environment and Development
UNCOD	United Nations Conference on Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
VI	Tree Planting
VODP	Village Oriented Development Programme
WCST	Wildlife Conservation Society of Tanzania
WFP	World Food Programme
WWF	World Wildlife Fund
YADEC	Youth Advisory and Development Council

EXECUTIVE SUMMARY

Desertification, defined as land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities, is a world-wide problem. In Africa, desertification is a chronic problem which is exacerbated by frequent droughts. It has reduced and continues to reduce the capacity of the land to produce food.

At the global level efforts to combat desertification started well back in the seventies, when the United Nations Environment Programme held a conference on Desertification (UNCOD) in Nairobi, Kenya in 1977. This conference called upon affected countries to prepare and adopt a Plan of Action to Combat Desertification. Tanzania participated in the 1977 Conference on Desertification and made efforts to prepare a Plan of Action. Several studies were undertaken to identify ways and means of combating desertification in the country in the context of this plan of action. Unfortunately the plan of action did not meet the expectations due to various reasons, including lack of adequate financial resources, lack of adequate coordination and little participation of the affected communities in the planing, design and implementation of the plan.

Tanzania also participated in the United Nations Conference on Environment and Development (UNCED) which was held in Brazil in 1992 and which noted that desertification was still a major problem threatening the sustainability of drylands and thus demanded concerted efforts in solving it. The United Nations General Assembly established an Intergovernmental Negotiation Committee on Desertification which consulted and negotiated amongst affected countries to produce the Convention to Combat Desertification (CCD) in those countries seriously affected by drought and/ or desertification, particularly in Africa. This Convention was adopted in 1994 and Tanzania ratified it in 1997.

The Convention requires affected countries to formulate National Action Programmes to Combat Desertification using the bottom-up approach and involving all stakeholders. These National Action Programmes are prepared through a process which has three phases, namely:-

1. Launching the NAP Process;
2. Implementing the 1st NAP Forum agreements;
3. Full implementation and monitoring of the implementation process.

Tanzania has concluded the first phase which included the following activities:-

1. Establishing Institutional framework;
2. Elaboration of an umbrella project support document;
3. Fact finding and assessment of national experience;
4. Awareness campaigns and decentralised consultation;
5. Holding a National Forum on Desertification.

The National Forum on Desertification is the last activity of the first phase. The forum provides a mechanism to build national consensus and facilitating agreements on actions to combat desertification. The forum also paves the way for phase II of the NAP process which has the following activities:-

- (a) Consolidation of the outcome of the first forum meeting;
- (b) Implementation of catalytic urgent action;
- (c) Initiation of programme Development;

- (d) Establishment and operationalization of funding mechanism.
- (e) Approving the programmes/projects and
- (f) Assessment of available data sets on drylands.

The National Action Programme to Combat Desertification has reviewed the state of desertification in Tanzania through a consultative process and summarises the findings of the consultative process undertaken. On this basis, the programme has drawn up priority areas and programmes, which are a pre-requisite in combating desertification. The Programme also identifies the implementation arrangement and the role of each key stakeholder.

The National Action Programme shall be implemented in the context of sustainable development and within the context of the overall national development vision-vision 2025. It is suggested that this programme should link closely with other existing initiatives and ongoing programmes and should not be implemented as a new undertaking but as an intergral part of the natural resources use and development processes at all levels and by all stakeholders. What is important for the success of the programme is the bottom up approach and the full participation of all stakeholders particularly the affected communities in the planning, designing and implementation of the programme.

Because of the gravity of the problem, at the national level, a National Secretariat to Combat Desertification is proposed. This Secretariat will be under Vice President's Office and will be linked to the Regional, District, Ward and Village initiatives through Environmental Committees as they have been proposed in the 1997 National Environmental Policy, and also as shown in the reviewed local Government Act of 1999. The secretariat will be charged with the implementation of the agreed National Action Programme including financial mobilisation and dissemination.

1. INTRODUCTION.

1.1 General

Desertification is a major economic, social and environmental problem facing 900 million people all over the world. 70 percent of the world's drylands used for agriculture are already degraded. In Africa, desertification is a chronic problem in drylands where it has claimed about 73 percent of the total land area. It has reduced and continues to reduce the capacity of the land to produce food and thus exacerbating food shortages leading to frequent famines and starvation. The situation is serious and is growing worse. In Tanzania, the central areas that include Dodoma and Singida and parts of Mwanza, Shinyanga, Mara, Iringa and Arusha regions are seriously threatened by desertification.

International efforts to Combat desertification started way back in the seventies when the United Nations Environment Programme (UNEP) held an international conference on desertification (UNCOD) in Nairobi, Kenya. The conference adopted a plan of action to combat desertification (PACD). In 1992 the United Nations Conference on Environment and Development (UNCED) noted that desertification was still a major problem and supported a new integrated approach to the problem. It emphasised action to promote sustainable development at the community level. In view of this, The United Nations General Assembly established an Intergovernmental Negotiating Committee (INCD) to prepare a Convention to Combat desertification in those countries experiencing drought and/or desertification, particularly in Africa. The committee completed its negotiations and then the convention to combat desertification (CCD) was adopted in June 1994 in Paris. The Convention entered into force on 26 December 1996 and Tanzania ratified it in April, 1997. The CCD seeks to build the capacities of affected countries to mitigate the effects of drought and desertification. In order to achieve this, Article 9 (1) of the Convention requires affected countries to prepare National Action Programmes to combat desertification through a participatory process. The purpose of these National Actions Programmes is to identify factors contributing to desertification and practical measures necessary to combat desertification and mitigate the effects of drought.

1.2 Physical Context

The United Republic of Tanzania is located just south of the equator in tropical East Africa between latitudes 1° – 12° south and longitude 30° – 40° East. It is a country of highly varied physical features and tropical savannah climate with distinct wet and dry seasons. Temperatures and rainfall are modified by altitude, with high elevations receiving more precipitation. High plateaux demarcated by mountains as well as deep valleys and Lake Basins characterise much of the country. An 800-km coastline makes up the eastern border of Tanzania mainland where mangroves, coral reefs and other marine life abound. About 90 percent of the country's landscapes is covered by savannah vegetation mainly grasses, bushes, shrubs and widely scattered trees. This is home to a wide range of wildlife and other natural species. Notwithstanding its natural resource base, Tanzania's physical environment is fragile largely as a result of variable soil quality and uneven precipitation.

The country is divided into seven Agroecological zones (see Appendix 1). Two of these zone, the arid and semi-arid zones together with the dry sub-humid areas constitute the dryland areas of Tanzania. These dryland areas cover about 61% of the total land area. Rainfall in these areas is

low, unreliable and erratic, ranging from 400 mm to 800 mm per annum. The rainfall period is usually short and is followed by a long dry season of six to eight months. Temperatures, evaporation and evapotranspiration are high while relative humidity is low. The ratio of annual precipitation to potential evapotranspiration is 0.65 – a factor coupled with poor soil quality thus inhibiting the establishment of a good ground vegetation cover to protect the soil from the agents of erosion. Despite this harsh environment, most of the vegetation in dryland areas has an in-built recovery mechanism against various natural pressures. This resilience is, however, fragile when perturbed by uncontrolled and excessive human activities as well as unsustainable development practices.

1.3 Socio economic context.

The population of Tanzania mainland was estimated to be 7,430,400, 11,258, 654, 17,048,329, and 22,533,800 in 1948, 1967, 1978 and 1988 respectively. For forty years (1948 – 1988) the population of Tanzania mainland increased by 15,043,400. This increase is equivalent to 201 percent. The current growth rate is 2.8 percent per year. At the national level, population growth is mainly due to natural growth i.e. the difference between births and deaths.

There is a rapidly growing migration from rural areas to urban centres. In 1948, only 2.5 percent of the population were living in urban areas. The corresponding figures for 1967, 1978 and 1988 are 4.1 percent, 5.7 percent, 13.78 percent and 19.6 percent respectively. If the population of peri-urban dwellers is included in the census of urban centres in 1988, the population of urban centres in Tanzania increases from 4,518,995 to 6,219,173 and thus giving 29 percent of urban dwellers in 1988. The decline of agricultural production in rural areas has increased in recent years and when this is coupled with the availability of better social services in urban centres than in villages, the rural urban migration trend is difficult to reverse or even reduce in the near future. The high increase of urbanites has a lot of environmental and social consequences. Urban demand for firewood and charcoal is very high and is on the increase. This trend has affected and will continue to affect adversely the forest resources in the areas surrounding urban areas. To make it worse, unemployment in urban areas is very high and there is very little evidence that it will increase substantially in the near future.

On the other hand, the government has implemented and continues to implement a number of policy, political and social reforms to spearhead the improvement of the growth of the national economy. Measures undertaken so far include liberalisation of most of the economic sectors, introduction of multiparty democracy, privatisation of some of the commercial, production and marketing parastatals, reform of the financial sectors, liberalisation of the foreign exchange regime, reduction of the size of the government, strengthening local governments and improving revenue collection. The success of these and other measures in accelerating social services and speeding up the growth of the economy is a prerequisite to sustainable development. The challenge facing the country is how to integrate conservation measures/approaches into development efforts to maximise use of its natural resources and to mitigate major degradation emanating from the use.

2. STATUS AND DEVELOPMENT OF NATURAL RESOURCES

2.1 Natural resources.

Tanzania is well endowed with natural resources. Its landscapes have over a long period undergone significant changes influenced by natural causes and human interventions. The intensity and scale of change has increased drastically in recent decades. Degradation of the natural resources (Land, water, forests, woodlands, grasslands and wildlife) is one of the biggest environmental problems in Tanzania.

2.1.1 Land.

Out of the total land area of Tanzania (931,082 km²), 46% is in forests and woodlands, 40% is covered by grasslands, 8% is in Agriculture and the rest is water surface. A large area of the country has low rainfall and poor soils and about 60% of the total land is infested with tsetse flies which hinder the use of these lands for agriculture and livestock production. About 61% of the country is estimated to suffer from desertification problems. Localised problems of land degradation in the central areas of the country surrounding Dodoma as well as in Shinyanga, Mwanza, Arusha and Tabora region has already exceeded the natural regeneration rate of these areas. The net result is decline in land productivity.

The arid and semi-arid areas are environmentally fragile and highly vulnerable to land degradation and soil erosion. Human and animal interaction as well as soil characteristics, heavy seasonal rainfall, water and wind erosion and inadequate soil conservation measures exacerbate this characteristic. Estimates show that 9% of the country has soils of medium to high fertility, 23% are of low to medium fertility and the remaining 68% they are of low fertility. Most areas in the country can only sustain the drought tolerant crops such as millet and sorghum and a limited number of livestock. Seasonal heavy rainfall and flash flooding cause water erosion and thus reducing land productivity due to the loss of top soil which is rich in nutrients. Poor soil protection resulting from poor farming practices, wild bushfires and overgrazing grazing and overstocking aggravates the process of soil erosion.

Agriculture as the main land use activity, is dominated by small holders. The most arable and easily cultivatable land lies in the volcanic North-eastern and Southern highlands and near lake Victoria. These areas are also experiencing some of the greatest human pressure. Soil erosion is common in many farming areas especially in the dryland areas due to intensive cultivation based on unsustainable farming practices, short fallow periods, low input farming and inadequate soil and water conservation measures.

2.1.2 Water.

Although Tanzania is blessed with a variety of surface water resources (7% of land area is covered by lake surface and numerous rivers draining into four major river basins), surface water is limited throughout the country for most of the year due to uneven distribution of rainfall, a prolonged dry season and arid or semi-arid conditions. To this end, groundwater plays a major role in meeting the demand of water especially in rural areas. In Tanzania water is used mainly for domestic purposes and watering livestock as well as for power production, irrigation and industries. Water shortages and quality are common problems in Tanzania. In urban areas water is contaminated by

effluent disposal and leakage while in rural areas water quality is affected by turbidity during the rainy season and bacteriological contamination.

2.1.3 Forests

About half of the land area of Tanzania, approximately 44 million hectares is classified as forest, mostly open miombo woodlands. These and other woody formations are vital for environment services and stability, protecting watersheds, steep slopes and fragile soils. Forests maintain air and water quality and contain a wealth of biological diversity that provides genetic resources for medicinal, scientific and other uses. A large portion of the population depend on the forest and woodlands for energy (wood fuels) and building materials. Wood biomass accounts for about 95% of energy consumption in the country and will continue to be an important source of energy in the coming decades.

Despite the richness in forests and woodlands, uncontrolled deforestation (for agriculture, pasture, mining and settlement) and over exploitation (for charcoal, fuelwood, timber and poles) are depleting this resource at a faster rate than it is being regenerated or renewed

2.1.4 Grasslands

About 40% of the land area of Tanzania is covered by grasslands. In many areas these grasslands are interspersed with bushes and trees and are infested with tsetse flies, which restrict human settlement and animal grazing. These grasslands encompass diverse ecological conditions such as arid, semi-arid to sub-humid ranges, humid plateau lands, humid low lands and highlands influenced by varying altitudes, climate conditions and rainfall patterns.

Extensive grazing is common in the northern arid lands, the Masai steppe and the central semi-arid lands. Open access to grazing is also common in communal and public lands. In some areas overgrazing has depleted grass cover, thus increasing soil erosion and uncontrolled movement of herders from northern to the Southwest regions.

The national herd consists of 13 million cattle, 12 million sheep and goats and millions of other ruminant animals, which depend on grasslands for forage. Huge populations of animals coupled with alienation of grasslands for agriculture and ranching have contributed to the concentration of the national herd in small areas. Drought causes herd concentration in areas of water availability resulting in severe overgrazing and damage to affected areas. Although semi-arid areas are not suitable for agriculture due to scanty rainfall, marginal farmers are increasingly encroaching these areas and thus resulting in conflict over land use and hardship for the pastoralists.

2.1.5 Wildlife

Tanzania is rich in terms of natural habitats, animals and plants species. A network of National parks, game reserves and game controlled areas combine to constitute a contraction of large numbers of large mammals. This resource contributes directly to the country's economy but is under considerable threat due to fragmentation, degradation, over exploitation of some species and loss of critical ecosystems and resources. Ground bushfires contribute significantly to the disruption of wildlife habitats. In many areas, population pressure and poverty are pushing the poor to exploit forests and poaching which threatens endangered animals.

2.2 Causes of Desertification/Land Degradation in Tanzania

Desertification is the final outcome and last phase of a degradation process of vegetation and soil. This is brought about by a combination of natural and man made processes which can be grouped into two categories, namely, direct and indirect causes. The direct causes of desertification in each region have been summarised in Table 2.

2.2.1 Direct causes

The direct causes have a clear and visible bearing on the vegetation and the soil. These include overgrazing, poor crop cultivation practices, removal of vegetation cover, bushfires and natural causes.

Overgrazing

Overgrazing, resulting from localised large numbers of livestock in grazing lands, degrades vegetation cover and exposes soil to wind and water erosion. Soil compaction, especially on livestock routes, also occurs and thus exacerbating land degradation. The increase in livestock numbers is a consequence of natural increase enhanced by modern veterinary services coupled with poor markets and marketing infrastructures, which impede annual offtake. Moreover the areas suitable for grazing have naturally being restricted due to 60% of the total land infested by tsetsefly. Furthermore, the area suitable for grazing has been and continue to be reduced in size by alienation for National Parks, game reserves, forest Reserves, large agricultural farms and ranches, and increased sedentarism in these areas. Overgrazing is also exacerbated by traditional/cultural practices/beliefs in relation to livestock ownership.

Poor crop cultivation practices

Traditional rainfed farming in Tanzania involves complete removal of vegetation and burning it before cultivation is done. The area is cultivated for a number of years and when yield shows signs of dropping the area is abandoned to allow it to revert to bush and forest in order to restore soil fertility. This traditional bush-fallow farming allowed for long fallowing periods which helped to ensure sustainable production of crops.

Increased population, both of human and livestock, has forced farmers to abandon long fallows in favour of short ones or continuous cultivation of an area with little or without applying fertilisers or manure. This trend coupled with the practice of burning farm residues every year leads to land and soil degradation. Unfortunately, most farmers in drylands areas do not practice soil and water conservation measures when cultivating their land hence aggravating land degradation process.

Deforestation

Deforestation includes all actions destructive of the woody vegetation, trees or shrubs found in an area. Primarily it results from uncontrolled cutting of wood, mainly of woodfuel for cooking, sale, drying fish, tobacco curing, burning bricks and also for building poles and other roundwood. These actions lead to expanding land degradation circles around villages and settlements.

Other factors contributing to deforestation include cutting branches trees to provide fodder to livestock and to make fences for the herds, clearing for cultivation, clearing to drive away marauding animals and grain-eating birds, clearing to expand grazing areas and clearing to control tsetse fly. Deforestation also has an adverse effect on the herbaceous pastoral vegetation towards which the trees and shrubs have a marked protective effect.

Bush fires

Farmers usually use fire as a tool to clean their farms after harvesting. Sometimes the fire get out of hand and commence into big bush fires. Herders also set fire deliberately to burn grazing lands to induce new grass. Again this fire becomes a bush on fire where it is not controlled. Hunters, farmers, herders may also set the bush on fire to drive away marauding animals and to increase visibility. In all these cases, bush fires destroy large quantity of odder and cause degradation of the vegetation by burning young trees and shrubs, leaving the soil bare and expose it to the erosive action of wind and rain.

Natural causes

Natural causes, which lead to land degradation, include geological processes and climatic variation. Geological processes such as tectonic movements lead to the formation of gullies. Examples are found in Kondoa district. Climatic variation, especially alternate short wet and long dry season exacerbates the deterioration of vegetation cover and as such assist and speed up the process of land degradation.

2.2.2 Indirect Causes

Poverty

Poverty is both the cause and effect of land degradation. While land degradation leads to widespread poverty, poor people tend to over exploit natural resources found in their surroundings, to meet their basic needs. People who are struggling for survival in the harsh environment of dry lands have a problem of food insecurity and most of them lack nutritious food.

Poverty was recognised since independence as one of the three bottlenecks to development in Tanzania. Efforts to alleviate poverty have not been able to reduce the magnitude of the problem. It was estimated, in 1995, that over 50 percent of all Tanzanians were living below the poverty line and that 36 percent of them were reported as living in abject poverty (Mbonde, 1998). Unfortunately most of the poor people (90%) live in rural areas, especially in the dryland areas. The dry lands ecosystem has a low level of productivity and when subjected to excessive pressure to over exploit the natural resources, it becomes very vulnerable and collapses easily.

Rapid population growth

It is estimated that 17 million people in Tanzania live in the dryland areas. Population growth in these areas is a consequence of natural growth and migration from highlands areas. This increase in population concentrates people in a small area, which has to meet their basic needs. Increased population increases demand and once this demand exceed the sustainable yield of natural systems, the resource itself begins to shrink. This state of affairs aggravates land degradation which reduces the resource base from which to get future food production. On the other hand people migrating from high density areas to low density areas (mostly drylands) tend to import with them their habits especially farming habits, which may have been appropriate for the areas they migrated from but not appropriate for dryland areas. Furthermore, the placement of people in villages in 1974-1976 concentrated many people in small areas and this led to a breakdown of

indigenous agriculture and animals husbandry systems. Similarly, systems of transhumantic pastoralism and seasonal grazing reserves have broken down under the weight of increase bovine population.

Land tenure

The ownership of land and the right to use it together with the natural resources found therein is extremely important since it raises the level of care accorded to the land and its natural resources. Security of land tenure, is therefore, a necessary though not a sufficient pre-requisite for sustainable land use. The picture we get is that most of the land in Tanzania, constituting rangelands and woodlands, are not properly regulated by customary or statutory law. Common property as a way of privatising the rights to use a resource without having to divide it up into individual holding was prominent and efficient in traditional systems and governance. However, the new land Policy and its bill have tried to elaborate some of the basic problems associated with land tenure and it is expected that this new policy will address some of the problems that have encouraged desertification in Tanzania.

2.3 The effects of desertification

Land degradation affects the social, cultural and economic aspects of affected communities. Unfortunately the impact of land degradation becomes obvious in the long run as lands eventually become unproductive, i.e. exhibiting loss of vegetation and desert-like conditions. At this stage the livelihood of the affected people is at risk since the resources they depend on for their survival and income has been depleted. The loss of assets and income triggers off immigration in search of better conditions. For example the maasai and barbaig of Arusha and sukuma of Shinyanga and Mwanza have migrated to Morogoro, Iringa, Mbeya, Tabora, and Rukwa. In these areas conflicts come into play between the immigrants and the local communities not only on land use issues but also on the destructive habits of the immigrants.

Environmentally, land degradation reduces the resilience of the land to natural variations. Land degradation also causes loss of biological diversity and hence loss of the species adapted to the degraded areas. This is exacerbated by loss of topsoil and fertility, which delays or prolongs the recovery process of the affected areas.

3. EFFORTS TO COMBAT DESERTIFICATION

3.1 Pre-independence efforts

Land degradation was observed in the early 1900's. Initial institutional measures included the establishment of a Soil Erosion Committee, which studied the causes of erosion and advised the government on action required. In the 1930's ant-erosion rules were promulgated to protect slopes and water sources as well as to control bushfires and introduced cover crops.

In the 1940's the colonial government adopted a schemed approach to deal with land degradation problems. The first scheme was the Sukumaland Resettlement Scheme (1944-1958) which covered the present Mwanza and Shinyanga regions. The scheme aimed at:

- (a) Education on proper land use methods such as improvement of crop culture; conservation of crop residues for dry season fodder and manure; gully stopping/plugging; planting of live hedges and proper land use.
- (b) Resettling excess population and livestock on prepared expansion areas.
- (c) Compulsory destocking at the rate of 5 percent per year was introduced.
- (d) Underdeveloped land was surveyed for orderly and controlled resettlement.

Rules and orders formed the basis for implementing the scheme.

The second scheme was the Destocking and Resettlement Scheme in Mbulu and Masailand (1945 - 1960). In Mbulu (present Mbulu, Babati and Hanang districts) the scheme had the objective of tackling the problem of overgrazing and overstocking through planned clearing of tsetse fly infested areas together with compulsory destocking. People from densely populated areas were also resettled and soil conservation measures were enforced in cultivated areas.

In maasailand (present Ngorongoro, Monduli, Kiteto and Simanjiro districts) the scheme aimed at providing more and better water supplies in order to obtain a better distribution of livestock and to enable wet season grazing areas to be used for a longer period. Tsetse fly areas were cleared but control of livestock was not introduced.

Both schemes were abandoned just before independence. In Mbulu and Masailand the overstocking problem continued to grow due to lack of adequate control of the number of livestock entering the areas cleared of tsetse fly. Introduction of water points in Northern Masailand lead to disastrous land degradation. The little success of the Sukumaland scheme collapsed with abandonment of the scheme.

3.2 Post independence efforts

Little effort was put in land degradation in the first six years of the National government. In 1967, however, the government pronounced the famous Arusha declaration, which among other things gave prominence to land as one of the natural resources of the nation. From there on conservation of natural resources as well as good agricultural practices and livestock husbandry was advocated

and supported. The second five year, National Development Plan (1969 - 1974) included measures to conserve the soil. Most of the initiatives have, however, been and continue to be sectoral.

The government in collaboration with donors has undertaken different programmes related to combating desertification. Two major soil conservation programmes in the dryland areas probably stand as a testimony of the government commitment to solving the problem of land degradation. . First, the Soil Conservation Programme in Dodoma (HADO) started as an afforestation and engineering project aiming to prevent further land degradation in Dodoma especially the Kondoa Irangi highlands. Overstocking was the major cause of land degradation and the enforcement of a 1988 bylaw of the Kondoa District Council removed all livestock from the Kondoa highlands.

The second national program is the Soil Conservation Programme for Shinyanga (HASHI). It was started as a follow up of a national conference held in Shinyanga in 1984 on "Environmental Conservation through tree planting". The aim has been to encourage and involve the people in Shinyanga in environmental conservation measures to mitigate the adverse effects of land degradation and to improve the standard of living of the people. The programme has capitalised on education, awareness raising and use of indigenous knowledge to achieve its targets. HASHI has a lot of lessons to learn from for any programme on land reclamation and conservation through working with the people. Other important programmes include the National Soil Conservation Programme as well as the National Agriculture extension programmes both under the Ministry of Agriculture and Cooperatives.

In 1980 the government launched a Nation-wide afforestation campaign to arrest deforestation, protect forest and promote better practices in the utilisation of arable land and grazing areas as well as wood resources. Emphasis was put on extension and awareness raising on conservation of natural resources, uncontrolled fires and community participation in afforestation. Similarly, in 1998, a high level segment workshop was held and among the resolutions was the planting of 100 million trees by the year 2000 in efforts to combat desertification.

3.3 Experience and lessons learnt

The experience and knowledge gained in designing and implementing measures to prevent land degradation in Tanzania provide a good basis for designing and implementing the NAP to Combat desertification. Poor performance in managing land degradation is attributed to many factors including:

- (a) Inadequate participation of the affected communities, in the designing and implementation of the programmes.
- (b) Inadequate co-ordination and collaboration among all those responsible for managing dryland areas. Sectoral government ministries and donors design and implement programmes without consulting each other and this has resulted in conflicts in policies, legislation strategies and implementation. Sometimes this problem has also lead to parallelism in programme development and implementation.
- (c) Crisis programmes based on desire to solve a perceived problem but without having adequate knowledge and vision. These programmes usually end up prematurely either due to lack of funds or failure to address the real needs of the affected communities.

- (d) Lack of appreciation and acknowledgement of indigenous knowledge and skills of the people who have survived in the harsh environment of dryland areas for centuries and incorporating the same in the design and implementation of programmes.
- (e) Lack of sustainable enabling environment - trained human resources, financial resources and materials - have always hindered progress in implementing programmes.

4. NAP FORMULATION AND ELABORATION

4.1. Objectives :

The main objective of NAP is to identify the factors contributing to desertification and practical measures necessary to combat desertification and mitigate the effects of drought (Article 10.1). The overall strategy of NAP is based on:

- (a) The participation of all stakeholders in the design and implementation of the programme.
- (b) The creation of enabling environment at higher levels to facilitate action at national and local levels.
- (c) The use of past experiences in combating desertification and/or mitigating the effects of drought in designing and implementing NAP

4.2 NAP Process

The process is geared to facilitate popular participation of various stakeholders in the design and implementation of the NAP. It entails;

- (a) The establishment and strengthening of a National Co-ordinating Body
- (b) The establishment of NAP consultative process based on the bottom-up approach.
- (c) The identification of stakeholders and defining their roles and responsibilities.
- (d) The establishment and initiation of public awareness and education.
- (e) The establishment of partnership with stakeholders and other partners in development.
- (f) Building the capacity of the various stakeholders to enhance their participation in the NAP process.
- (g) The identification of financial resources and funding mechanisms including the establishment of a National Desertification/Environmental Fund (ND/EF).
- (h) Defining the elements and contents of the NAP

This NAP process is, therefore, long and complex in strategies, approaches and methodologies. Furthermore it involves various actors and must be integrated into national initiatives for sustainable development.

4.3 NAP Formulation Process Structure

Tanzania participated in the negotiation of the convention to combat desertification and there after it ratified the convention. It has also set up the institutional structure to co-ordinate and guide the NAP process. These are:

- National Co-ordinating Body (NCB)

A National Co-ordinating Body under the leadership of the Permanent Secretary in the Vice Presidents' Office has been set up. The main duty of the NCB is to co-ordinate and guide the NAP process by making requisite decisions.

- Focal Point (FP)

The Division of Environment in the Vice Presidents' Office is the national focal point. The Division has appointed a National Co-ordinator to lead the NAP Secretariat and the National Technical Committee.

- National Steering Committee (NSC)

This committee consists of 13 members drawn from various institutions. The Director of Environment (Vice President's Office) chairs it.

- NAP Secretariat

A five-member secretariat has been formed and it reports to the National steering Committee.

- National Technical Committee

A national technical committee is composed of 15 members representing the key stakeholders and sectors. Members are from the Donor community, the NGOs, the privates sector and the Government sectoral ministries and departments.

- Task force on National Desertification/Environment Fund (ND/EF)

A task force of 18 people from various institutions was formed to work out the modalities of establishing a National Desertification/Environment Fund.

4.4. Establishment and Execution of the NAP Consultative Process

The National Steering Committee and Technical Committee planned and executed the following consultations:

a) Sensitisation and awareness raising

The Technical Committee divided the country into four zones and organised themselves into four teams. Each team toured one zone to identify stakeholders, to sensitise them, to raise their awareness on desertification and to collect data relevant to the NAP. They used approved terms of reference and questionnaires (appendix 2) during the entourage. The team visited 13 regions, 18 districts and 27 local communities.

(b) Awareness through mass media and publications

Booklets on the Convention have been produced in Swahili to increase awareness and informations disseminate. Similarly the mass media has been involved throughout the

formulation process. The Journalist Environmental Association of Tanzania (JET) is a permanent member to the National Technical Committee.

(b) Consultations with Institutions

The Technical Committee also carried out consultation with various national institutions including government ministries and donors to establish their awareness on desertification and identify measures to be taken by these institutions to combat desertification.

(c) Zonal workshop

Three zonal workshops were held in Dodoma, Iringa and Mwanza. The aim of these workshops was to build on the consultations carried out at the community, district, region and national level to obtain requisite input for NAP from a wide spectrum of stakeholders.

4.5 Output of the consultative process

The consultative process produced a wide range of useful information relevant to NAP. Table 1 and 2 summarises the main findings.

Table 1: A summary of the outcome of the Consultative Process

Findings	Possible actions/measures
1. Stakeholders were identified, although they were aware of the problem they lack the capacity to solve the problem	<ul style="list-style-type: none"> a) Establish and enhance capacity building for all stakeholders and at all levels. b) Assign roles and responsibilities to each stakeholder with full mandate to implement them.
2. Poor livestock management practices contribute significantly to land degradation especially through overgrazing/overstocking and uncontrolled livestock movement. Either pastoralists and agropastoralists are reluctant to implement destocking regulations due to cultural and traditional attitudes as well as due to lack of good marketing infrastructure and pricing incentives	<ul style="list-style-type: none"> a) Study the traditional practices of the pastoralists and agropastoralists and base future action on improving these practices. b) Produce comprehensive land use plans to cater for the requirements of all land users c) Develop good marketing infrastructure and pricing incentives as a prerequisite to destocking d) Educate and sensitise communities to slowly change cultural and traditional habits which are detrimental to the environment e) Guided and negotiated movement of livestock be based on social contacts between leaders and communities involved f) Introduce tested alternatives ways of livelihood in dryland areas

<p>3. Poor and inappropriate agricultural practices contribute significantly to desertification. On the other hand, shifting cultivation is seen as a survival strategy adopted by communities to produce food after the soil has lost fertility. Extension workers and marketing strategies in dryland areas are inadequate.</p>	<ul style="list-style-type: none"> a) Establish an effective and strong extension services to advice farmers on best agricultural practices in their areas b) Introduce incentives packages to encourage farmers to use agricultural inputs especially organic manure and fertilisers c) Produce land use plans to ensure that agriculture is practised on areas suitable for agriculture d) Institute rewards for good land husbandry e) Improve marketing strategies
<p>4. Most programmes implemented by different sectors including NGOs, CBOs in any one area are not properly coordinated.</p>	<ul style="list-style-type: none"> a) Co-ordinate all programmes being planned and implemented in any area for maximum effectiveness. b) Develop effective co-ordination mechanism for cross-sectoral programmes
<p>5. Woodfuel continues to dominate as the major source of energy in the country despite the fact that it is exacerbating forest degradation. Existing alternative sources of energy are either unavailable, underdeveloped or too expensive</p>	<ul style="list-style-type: none"> a) Encourage Tanzanians to plant trees to provide the fuelwood they require. This is particularly true for large user of fuelwood b) Provide incentives to promote the development, dissemination and use of alternative source of energy
<p>6. Present land use tenure system demotivate land users from conserving natural resource</p>	<p>Expedite action to put all land in Tanzania under customary and statutory law</p>
<p>7. Bushfires are rampant and widespread</p>	<p>Educate stakeholders especially local communities on the adverse effects of bushfires and require them to enforce by-laws on fire protection and fighting</p>
<p>8. There are inter-sectoral conflicts in policy and laws on land use</p>	<ul style="list-style-type: none"> a) Strengthen cross sectoral co-ordination b) Produce comprehensive land use plan to subscribe to the requirements of each land user
<p>9. Some laws are either obsolete or poorly/weakly enforced. Either some laws do not take the aspiration of stakeholders especially local communities into consideration</p>	<ul style="list-style-type: none"> a) Review and revise ineffective laws b) Enforce, effectively, good laws c) Involve local communities in formulating policy and laws affecting their ways of life
<p>10. Water is the biggest problem in dryland areas and is accorded, the highest priority by the inhabitants of these areas</p>	<ul style="list-style-type: none"> a) Assign high priority to the development and supply of water to man and his animals in dryland areas as a prerequisite for development b) Educate and mobilise inhabitants of dryland areas to conserve water resource in their localities
<p>11. There is a growing list of village groups, some acting as pressure groups while others are development oriented</p>	<ul style="list-style-type: none"> a) Sensitise and educate local communities to form NGOs and CBOs at their level b) Strengthen and empower these groups

<p>12. Commitment by the government (central and local) to combat land degradation has been mostly of political nature and lacks technical and financial back up</p>	<p>a) Commitment equivalent to that given to the polio vaccination and current white paper on constitutional changes should be accorded to measures to combat land degradation b) Re-ignite and encourage the self-help spirit</p>
<p>13. A number of people have been displaced from their traditional lands either by alienation or establishment of villages</p>	<p>a) Ban any future displacement of people from their traditional land b) Use good traditional set-up and ways of life to conserve the environment</p>
<p>14. On information systems:</p> <ul style="list-style-type: none"> • There is lack of reliable, accurate and appropriate information on desertification • There is lack of adequate and continuous awareness raising on the causes of desertification • There is lack of information exchange and especially on successful initiatives 	<p>a) Encourage private individuals to seek, collect, compile and disseminate this information b) Districts should build their own capacity to collect and manage information c) Use community media, civil societies, schools, drama, traditional means, etc to keep the awareness alive d) Use environmental committees to enhance information exchange e) carryout programmes evaluation to provide feed back to stakeholders f) Establish information units in programmes and information centres at local levels g) Publicise laws governing the management of natural resources</p>
<p>15. High population densities and growth rate exacerbate desertification</p>	<p>a) Educate and sensitise communities to adopt family planning measures b) Sensitise and encourage through provision of incentives, people in high density areas to move and settle in low density areas</p>
<p>16. Women and youth have a major role to play in combating desertification</p>	<p>Sensitise and encourage these groups to participate in measures to combat desertification</p>

TABLE 2: AREAS MOST SERIOUSLY AFFECTED BY LAND DEGRADATION IN TANZANIA

REGION	DISTRICT	DIVISIONS	CAUSES
1. ARUSHA	Arumeru Mbulu Hanang'I Kiteto Simanjiro, Babati, Monduli	All divisions with King'ori and Muhulat being most affected.	Overgrazing, deforestation, poor farming practices and high population.
2. DODOMA	Kondoa, Dodoma Mpwapwa	Bahi, Mondo, Kilo Goima and Kondo Urban in Kondoa. Mpwapwa, Kongwa, Mlali, Rudi Kibakwe, Zoiza in Mpwapwa. Zuzu, Kikombo, Hombolo, Chinolwa, Pahi, Itizo Mvumi, and Mudemu in Dodoma.	Overgrazing, poor farming practices mostly shifting cultivation, bush fires and deforestation.
3. IRINGA	Iringa, Makete, Ludewa, Mufindi, Njombe	Isimani, Pawaga, Idodi, Mazombe, Mahenge and Kalenga in Iringa. Matamba, Bulongwa, Magoma and Lulalilo in Makete. Ukwama, Malangali, Masasi and Mawengi in Ludewa. Saadani, Kasanga and Ifwagi in Mufindi. Makambako, Wanging'ombe and Imalinyi in Njombe.	Overgrazing, poor farming practices, bush fires, tobacco farming.
4. KILIMANJARO	Mwanga, Same, Hai and Rombo.	Mengwe in Rombo, lowlands in Same, Mwanga and Hai.	Poor farming practices and deforestation.
5. LINDI	Kilwa and Nachingwea		Poor farming practices, deforestation, bushfires and mining.
6. MARA	Musoma, Bunda, Tarime and Serengeti	Majita, Issenye, Kowak	Overgrazing, bad farming practices bush fires and deforestation.
7. MBEYA	Chunya, Mbarali and Mbozi.	Kamsamba, Msangano, Igamba, Luanda in Mbozi. Ilongo, and Rujewa in Mbarali. Kiwanja, Songwe, Kwimba, Kipembawe in Chunya.	Deforestation, bush fires, bad farming practices, mining and overgrazing.

8. MOROGORO	Morogoro, Kilosa and Mahenge		Deforestation, bush fires, bad farming practices mining and overgrazing in some areas.
9. MWANZA	Kwimba, Magu, Geita, Mwanza and Sengerema.	Mwamashimba, Ibindo, Mkula, Bubinza, Kabila, Kisesa, Sengerema, Geita, Ilangala, Misungwi and Buswelu.	Overgrazing, bad farming practices bush fires and deforestation.
10. MTWARA	Newala, Mtwara and Masasi.	Chilangala, Mahuta, Newala, Chikundi, Ndanda, Lukuledi and Mchauru.	Deforestation, Bush fires and bad farming practices.
11. RUKWA	Sumbawanga, Mpanda and Nkansi.	Upper and Lower Ufipa Plateau, Inyonga, Karema, Nsimbo, Mpimbiwe and Kabungu.	Bad farming practices, Tobacco farming practices, Bush fires, Mining and deforestation.
12. RUVUMA	Tunduru and Songea.	Ndendeule and Namtumbo.	Mining, tobacco farming practices and bush fires.
13. SHINYANGA	Shinyanga, Maswa, Meatu, Bariadi and Kahama.	Kishapu, Negezi and Ibadakulini, Shinyanga, Sengerema, Nung'hu and Mwangala in Maswa. Kimali, Nyalanja and Kisesa in Meatu. Isaka in Kahama. Ntuzu, Itilima, Kanadi and Dutwa in Bariadi.	Overgrazing, bush fires, mining, deforestation and bad farming practices.
14. SINGIDA	Singida, Manyoni and Iramba.	Kisiriri, Kinampanda, Kinyangiri, Ndago, Nduguti and Kirumi in Iramba. Mgori, Ikungu, Murigaa, Ihanja, Ilongero and Ntiko in Singida Rural. Unyamikumi and Mungumaji in Singida urban. Itigi, Kitinku, Kilimatende in Manyoni.	Overgrazing, bush fires, bad farming practices and deforestation.
15. TABORA	Nzega, Igunga, Urambo, and Tabora rural.	Mwakalundi and Nyasa in Nzega. Igurubi and Igunga in Igunga. Usoke in Urambo and Ilolangulu in Tabora.	Overgrazing, deforestation, bush fire and bad farming practices.
16. TANGA	Muheza, Korogwe, Lushoto and Handeni.	Kizara, Mbugu, Mlalo, Mtae, Amani, Maramba, Manolo, Kamwewe and Kwelengana.	Deforestation, bad farming practices and bush fire.

4.6 Lessons from the consultative process

Proper community consultation and decision making takes time. The short visit discussions with 27 communities, 18 districts and 13 regions and various institutions were only able to gauge the awareness of the problem of desertification, the possible solution to this problem, the willingness of actors to participate in combating desertification and identify the constraints. This was reinforced by the zonal workshops. The consultations confirmed that communities have good knowledge on how to combat desertification and have the ability to set planning priorities and implement programmes but they lack capacity to do so. The visits were also very useful in obtaining local information and raising awareness on the problem of desertification

There is a need to establish a research network that will assist to constantly appraise on the extent of desertification in the country, underlying factors contributing to it and resource availability to combat desertification, and also that will assist in identifying benchmarks and indicators of desertification at village level in all the affected areas.

This can be achieved through the active involvement of research and high learning institutions like the Sokoine University of Agriculture, University College of Lands and Architectural Studies and the University of Dar es Salaam, linking them to other sub regional and regional research institutions and programmes.

5 THE NATIONAL ACTION PROGRAMME

The National Action Programme is the key operational tool for transforming the provision of the convention into concrete actions and measures to combat desertification. The design and implementation of the NAP is based on utilising and building on existing relevant successful plans and programmes in a participatory approach. NAP must be integrated and interlinked with other national programmes for sustainable development.

5.1 Objective of the National Action programme (NAP)

NAP is a long-term process with the main objective of promoting proper management and sustainable use of the resources of arid and semi-arid areas to meet both the local and national needs sustainably. Success in achieving this objective depends on skilful and effective co-ordination of many and varied inputs based on popular participation. After consultations it is proposed that the immediate goals of the NAP include the following;

- a) To reduce the destruction of resources in arid and semi-arid areas and to promote their sustainable use for the wellbeing of the inhabitants of these areas.
- b) To strengthen the human resources participating in the NAP
- c) To increase public awareness and participation in the NAP
- d) To establish and support effective administrative structures for the implementation of the NAP
- e) To introduce and/or improve intersectoral planning, management and monitoring approaches
- f) To establish partnership with stakeholders and other partners in development and management of drylands
- g) To identify and mobilise financial resources for the implementation of the NAP process.

5.2 Contents of the National Action Programme

The Programme includes the following features: -

- The use of past experiences in combating desertification and/or mitigating the effects of drought, taking into account social, economic and ecological conditions
- The identification of factors contributing to desertification and or drought and the resources and capacities available and required and the setting up of appropriate policies and institutions and other responses and measures necessary to combat these phenomena and/or mitigate their effects.

- The increase in participation of local populations and communities including women, farmers and pastoralists and delegation to them of more responsibility for management
- Measures to improve the economic environment with a view to eradicating poverty
- Measures to conserve natural resources
- Measures to improve institutional organisation
- Measures to improve knowledge of desertification
- Measures to measure and monitor the effects of drought and desertification

5.3 Principal causes of land degradation by Agroecological zone

Table 3, below, summarises the principal causes of land degradation by Agroecological zones.

TABLE 3: MAIN PROBLEMS BY AGRO ECOLOGICAL ZONES

AGROECOLOGICAL ZONE	MAIN PROBLEM	AREA: MILLION HA.
1. COAST: Tanga except Lushoto, Coast, DSM, East Lindi and Mtwara except Makonde Scarpment	<ul style="list-style-type: none"> • Infertile soils • Shifting cultivation • Bushfires • Deforestation • Water shortages • Soil erosion 	6
2. ARID LANDS: Serengeti, Ngorongoro, Mkomazi, Pangani in Same, Eastern Dodoma	<ul style="list-style-type: none"> • Overgrazing • Unimodal and unreliable rainfall ranging from 400 to 600 mm/yr • Alkaline and saline soils in the Pangani river flood plains • Soil erosion • Bushfires • Shifting cultivation • Deforestation • Water shortage 	21.1
3. SEMI-ARID LANDS: Central dodoma, Singida, North Iringa, some parts of Arusha, Shinyanga, Mwanza, Morogoro and except Kilombero, Wami basin, Uluguru Mts. Lindi and Southwest Mtwara.	<ul style="list-style-type: none"> • Saline soils in eastern rift valley • Black cracking soils in Shinyanga • Infertile soils in Dodoma, Singida and Iringa • Unimodal and unrealible rainfall 500-600 mm/yr • water shortage • Soil erosion 	

	<ul style="list-style-type: none"> • Poor farming practices • Shifting cultivation • Bushfires 	
4. PLATEAUX: Western Tabora, Rukwa, (North and Centre) Mbeya, North, Kigoma and parts of Mara	<ul style="list-style-type: none"> • Deforestation • Bushfires • Uncontrolled grazing • Shifting cultivation • Soil erosion 	32.7
5. SOUTHERN AND WESTERN HIGHLANDS: A broad ridge from Morogoro, North to Lake Nyasa covering parts of Morogoro, Iringa and Mbeya Ufipa Plateaux the shores of Lake Tanganyika in Kigama and Kagera	<ul style="list-style-type: none"> • Bushfires • Soil erosion • Uncontrolled grazing • Poor farming practices • Shifting cultivation • Deforestation • Poor mining practices 	12.8
6. NORTHERN HIGHLANDS: Foot of Mt. Kilimanjaro and Meru, Eastern rift to Lake Eyasi, Uluguru mts in Morogoro, pare Ms, Granitic Mts in Tanga and Tarime	<ul style="list-style-type: none"> • Soils in dry areas are prone to water erosion • Poor farming practices • Deforestation • Bushfires • Shift cultivation 	5.8
7. ALLUVIAL PAINS: Kilombero and Wami in Morogoro, Usangu in Mbeya, Rufiji in coast	<ul style="list-style-type: none"> • Overgrazing in the Usangu Plains • Poor farming systems • Bushfires • Deforestation 	10.2

5.3. Priority areas for NAP.

Priority areas for the NAP can be chosen on the basis of various criteria such as vulnerability of the environment and resource base or economic criteria. In Tanzania the criteria of vulnerability of the environment and resource base is considered to be appropriate. Since prevention is better and cheaper than cure, priority one is accorded to areas that are least degraded so that degradation can be checked and controlled now. Resources required for rehabilitation of these areas are fewer, most donors are already in highly degraded areas, and it is important to highlight the hidden threat of desertification In these areas. Based on this rationale the following priority areas have been identified:

(i). **Areas that are not degraded or slightly degraded.**

The areas require preventive measures. Areas qualifying for this priority include Kigoma, Lindi, Mtwara, and Ruvuma Regions as well as parts of Morogoro, Iringa, Mbeya, Rukwa, Tabora, Shinyanga, Mwanza, Kagera, Tanga and Coast regions.

(ii) **Areas moderately degraded**

These areas require corrective measures to check/halt land degradation. Parts of Rukwa, Tabora, Mbeya, Morogoro, Iringa, Coast, Tanga, and Kagera fall under this priority.

(iii) **Areas seriously degraded**

These areas require comprehensive rehabilitation programmes. Dodoma and Singida regions fall in this priority as well as large parts of Mara, Shinyanga, Mwanza and Arusha regions and some parts of Kilimanjaro, Tabora, Iringa and Tanga.

Intervention measures in these priority areas can be implemented concurrently but resources requirement increases from priority one to three. Empowering local communities to manage and control the use of natural resources in their localities is a pre-requisite preventive measure in priority one areas.

5.4 Priority programmes for NAP

Table 4 summarises the main programmes to be implemented in the three-priority areas. These programmes are only indicative and the real programmes will be identified amplified by the stakeholders living in the respective area.

TABLE 4: PRIORITY PROGRAMMES IN EACH PRIORITY AREA

Priority areas	Priority programmes
1. Areas that are not degraded or slightly degraded	1. Empowerment programme for local communities to conserve and manage natural resources in their area of jurisdiction
	2. Education and awareness programme for all stakeholders
	3. Capacity building programme from district downwards
	4. Information and technology acquisition and dissemination programme
	5. Ecological monitoring programme
	6. Agricultural and livestock development programme
	7. Water resource development programme
	8. Programme on alternative sources of energy and improved stoves
2. Areas that are moderately degraded	1. Education, awareness and information programme
	2. Water resource development programme
	3. Agricultural and livestock development
	4. Natural resources conservation and reforestation
	5. Capacity building programme
	6. Programme on alternative sources of energy and improved stove
3. Areas that are seriously degraded	1. Water resource development
	2. Education, awareness and information programme

	3. Technology acquisition and dissemination programme
	4. Programme to provide alternative source of energy and improved stove
	5. Capacity building programme
	6. Agricultural and livestock development programmes
	7. Natural resources conservation, afforestation and reforestation programme
4. In all the three priority areas	1. Establish and strengthen early warning systems
	2. Strengthen food security systems
	3. Prepare and execute poverty alleviation programmes
	4. Establish databank and NAP monitoring systems

Table 5 proposed Action Programmes in a matrix form for each region. Programmes and measures required to be taken at various levels for all regions have also been defined.

TABLE 5: ACTION PROGRAMME IN A MATRIX FORM FOR EACH REGION

REGION	CORE PROBLEM	MAIN PROGRAMMES	EXPECTED RESULTS	ACTORS	TIME-FRAME	SOME EXISTING DONOR
1. Arusha	Water shortage Overgrazing Soil erosion Deforestation	Water dev. and Supply Livestock development Soil conservation Conservation & reforestation	More time available for development work Improved livestock management Increased food production Improved & protected environment	GoT, NGOs,CBOs GoT, NGOs,CBOs GoT, NGOs,CBOs GoT, NGOs,CBOs GoT, NGOs,CBOs		SIDA and NETHERLANDS
2. Coast	Shifting cultivation Bush fires Deforestation	Agricultural development Education, awareness & law enforcement Conservation & reforestation	Increased food production Reduced agency of bushfires Improved & protected environment	GoT, NGOs,CBOs GoT, NGOs,CBOs GoT, NGOs,CBOs		WCST, WWF, GEF, ADB
3. D'Salaam	Population pressure Deforestation	Education & awareness Afforestation & reforestation	Reduce & planned population growth Improved & protected environment	got, ngos,cbos, donors, private on public institutions		ADB

4. Dodoma	Water shortage Overgrazing Shifting cultivation Bushfires	Water Dev. & Supply Livestock development Soil Conservation Education, awareness & law enforcement	More time for development Work Improved livestock management Increased food production Reduced frequency of bushfires	Got, NGOs CBOs Private & Public institutions & donors		SIDA and Netherlands
5. Iringa	Soil erosion Deforestation Overgrazing	Soil Conservation Conservation & reforestation Livestock development	Increased food production Improved & protected Environment Improved livestock management	GoT, NGOs CBOs, private & public institutions and Donors		DANIDA
6. Kagera	Soil erosion Deforestation	Soil conservation Conservation & reforestation	Increased food production Improved & protected environment	GoT, NGOs, CBOs, Private & Public Institutions & Donors		DANIDA, Netherlands, GTZ
7. Kigoma	Deforestation Soil erosion	Conservation & reforestation Soil Conservation	Improved & protected environment Increased food production	GoT, NGOs, CBOs, donor, private & public institutions		NORAD
8. K'njaro	Soil erosion Deforestation	Soil Conservation Afforestation & reforestation	Increased food production Improved & protected environment	GoT, NGOs, CBOs, donor, private & public institutions		GTZ, JICAK FW

9. Lindi	Water shortage Bushfires Shifting cultivation	Water Development & Supply Education, awareness & law enforcement. Agricultural development	More time available for work Reduced frequency of bushfires Increased Agricultural production	GoT, NGOs, CBOs, donor, private & public institutions		FINNIDA
10. Mara	Overgrazing Soil erosion Bushfires Deforestation Shifting cultivation	Livestock development Soil conservation Education, awareness & law enforcement. Afforestation & Reforestation Agricultural development	Improved Livestock management Increased food production Reduced frequency of bushfires Improved & protected Environment Increased Agricultural production	GoT, NGOs, CBOs, donor, private & public institutions		
11. Mbeya	Soil erosion Deforestation Uncontrolled grazing	Soil conservation Conservation & reforestation Livestock development	Increased food production Improved & protected environment Improved Livestock management	GoT, NGOs, CBOs, donor, private & public institutions		EEC

12. Morogoro	Soil erosion Bushfires Deforestation Shifting cultivation Uncontrolled grazing	Soil conservation Education, awareness & Law enforcement. Conservation & reforestation Agricultural development Livestock development	Increased food production Reduced frequency of bushfires Improved & protected Environment Improved Agric.Production Improved livestock & management	GoT, NGOs, CBOs, donor, private & public institutions		NORAD & Ireland
13.Mwanza	Overgrazing Deforestation Bushfires Soil erosion	Livestock development Conservation & reforestation Education, awareness & law enforcement. Soil conservation	Improved livestock management Improved & protected environment Reduced frequency of bushfires Increased food production	GoT, NGOs, CBOs, donor, private & public institutions		Word Bank
14. Mtwara	Soil erosion Bushfires Deforestation Shifting Cultivation	Soil conservation Education, awareness & law enforcement. Conservation & reforestation Agricultural development	Increased food production Reduced frequency of bushfires Improved & protected environment Increased Agric.Production	GoT, NGOs, CBOs, donor, private & public institutions		FINNIDA

15. Rukwa.	Soil erosion Uncontrolled Grazing Shifting Cultivation Deforestation	Soil conservation Livestock Development Agricultural Development Conservation & Reforestation	Increased food production Improved & protected environment Increased Agric.Production Improved & protected environment	GoT, NGOs, CBOs, donor, private & public institutions		NORAD
16.Ruvuma	Soil erosion Bushfires Deforestation	Soil conservation Education, awareness & law enforcement. Conservation & Reforestation	Increased food production Reduced frequency of bushfires Improved & protected environment	GoT, NGOs, CBOs, donor, private & public institutions		EEC DANIDA ILO
17.Shinyanga	Overgrazing Shifting Cultivation Soil erosion Bushfires	Livestock Development Agricultural Development Soil conservation Education, awareness & Law Enforcement.	Improved livestock management Increased Agric.Production Increased food production Reduced frequency of bushfires	GoT, NGOs, CBOs, donor, private & public institutions		NORAD UNDP FAO WFP

18. Singida	Overgrazing Shifting Cultivation Water shortage Soil erosion	Livestock Development Agricultural Development Water Development & Supply Soil conservation	Improved livestock management Increased Agric.Production Moretime available for work Increased food production	GoT, NGOs, CBOs, donor, private & public institutions		SIDA
19. Tabora	Water shortage Shifting cultivation Bushfires Uncontrolled grazing Deforestation	Water development & Supply Agricultural development Education, awareness & law Enforcement. Livestock development Conservation reforestation &	Moretime available for work Increased Agricultural production Reduced frequency of bushfires Improved livestock management Improved & protected environment	GoT, NGOs, CBOs, donor, private & public institutions		World Bank ODA

20. Tanga	Soil erosion Bushfires Deforestation	Soil Conservation Education, awareness and law enforcement Conservation and reforestation	Increased food production Reduced bush fires Improved and protected environment	GoT, NGOs, CBOs, donor, private & public institutions		GTZ, FINNIDA and NORAD
All Regions	1. Inadequate land use plans 2. Weak Institutions and legal framework 3. Lack of information 4. Poor Technologies and Inadequate Research	1. Land Use planning 2. Capacity building 3. Information development 4. Technology and research development	1. Better Land use 2. Improved permanence 3. Improved knowledge and understanding 4. Improved technology and Research	GoT, NGOs, CBOs, donor, private & public institutions		
	5. Conflicting sectoral policies	5. Sectoral policies harmonization.	5. Harmonised policies and programmes			
	6. Inadequate financial resources.	6. Establishment of reliable, secure and predictable financial mechanism	6. Activities implemented.			
	7. Ineffective laws and by-laws	7. Laws enforcement	7. Sustainable utilisation of natural resources.			

5.5 Action Programme for the various stakeholders

The proposed action programmes by stakeholders is based on their perception of the problem of desertification and the required remedial measures

5.5.1 Local communities

In this group we include farmers, women, youths, pastoralists, agropastoralists, civil societies and community based organisations. This is the basic group whose wellbeing is dependent on the use of natural resources available in their areas. Their participation in measures to combat desertification is of paramount importance. Proposed programmes include:

- Capacity building
- Environmental sensitisation and education
- Soil conservation
- Improved Agricultural practices
- Improved livestock management methods
- Conservation and management of natural resources
- Strengthening of existing land management/rehabilitation efforts
- Re-forestation/afforestation
- Co-ordination of proposed programmes

5.5.2 Non – governmental organisations.

These supportive organisations cut across all administrative levels and are well placed to enhance popular participation. Proposed action include

- Capacity Building
- Environmental sensitisation and Education
- Harmonisation of approaches
- Co-ordination improvement

5.5.3 Government (local & central) and Government Institutions

The government, as a public organisation, plays a leading role of co-ordination. To this end, proposed programmes include:

- Capacity building at all levels
- Formation of appropriate policies and laws.
- Continued devolution of authority and responsibility to local governments
- Financial mobilisation and disbursement
- Assign responsibilities
- Monitoring activities and funding mechanisms

5.5.4 Private sector

Degradation of natural resources affects the private sector and as such it is in the interest of the private sector to participate in efforts to combat desertification. Proposed programmes for this sector include:

- Establish & strengthen collaboration mechanisms between this sector and other sectors especially governments
- Environment sensitisation and education
- Financial mobilisation

5.5.5 Politicians

Politicians are well placed to mobilise popular participation. Proposed programmes include:

- Environmental Sensitisation and education
- Capacity building
- Information acquisition and dissemination

5.5.6 Research and Training Institutions.

Inadequate research data and information constitute a big bottleneck in efforts to combat desertification. Programmes for these sectors include:

- Development of user oriented research priorities
- Co-ordination of research and production
- Co-ordination of environmental research and information
- Networking co-operation
- Technology acquisition, transfer and adaptation.

5.5.7 Donors

Co-operation, solidarity and partnership of the donor community in the efforts to combat desertification is paramount. Proposed programmes for this group include:

- Co-ordination and collaboration
- Support capacity building, research, information collection and exchange, and acquisition and transfer of technology
- Financial mobilisation.
- Support Priority programmes

5.6 Linkages with other Programmes and Priorities

Desertification is primarily a problem to sustainable development. It is a matter of addressing poverty and human wellbeing as well as preserving the environment. In Tanzania like elsewhere, it has been ascertained that social and economic issues including food security and migration are closely linked to land degradation and so are such issues like climate change, biological diversity and fresh water supplies. The National Action Programme shall be implemented in the context of these related concerns.

The long term strategy is to achieve the development objectives of vision 2025. The National Action Programme shall be an intergral part of the other development programmes to achieve this vision. In the long term the programme is expected to reverse land degradtion and thus alleviate poverty. The

combined efforts shall involve improving food security, educating and training people, and coordinated research, strengthening the capacity of local communities and mobilising NGOs. Specific measures to improve this shall include;

- (i) Provision of reliable, secure and sustainable financial instruments suited to local needs;
- (ii) Diversification of energy sources
- (iii) Promoting research activities in dryland areas
- (iv) Putting in place drought contingency plans, and
- (v) Improving early warning systems

These efforts to combat desertification are part and parcel of the national development objectives. The sectoral ministries, NGOs, private sector, regions, districts and villages should see the National Action programme as part of their development programmes. The National Action programme is not a new and parallel initiative, what is new is its innovative approach that advocates bottom up and the full participation of the affected communities in the formulation, implementation and monitoring of the development programmes, and the coronation of stakeholder efforts including the donor funds so as to maximise the few available resources.

5.7 Cross Border Linkages

The Convention to Combat Desertification is being implemented also through sub regional and regional action programmes to address the management of cross boarder resources and also cooperate in areas of common concern. The sub regional action programmes have been launched. The existing sub regional organisations entrusted with cordinating these programmes in Africa are; The Arab Magreb Union for Northern Africa, the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) for the west, the Intergovernmental Authority on Development (IGAD) for the East, and the Southern African Development Community (SADC) for the South. Tanzania is a member to SADC.

A regional Action Programme is also in place where by the regional cordination unity is hosted by the African Development Bank in Abijan. Programmes at sub regional and Regional levels include; management of cross border resources, and issues such as promotion of agroforestry and soil conservation, rangeland use and fodder crops, integrated management of international rivers, lakes, and hydrological basins; ecological monitoring, natural resources mapping, remote sensing and early warning systems, new and renewable energy sources and technologies; sustainable agricultural farming systems; and enabling environment and capacity building.

The National Action Programmes will be implemented closely linking to the SADC subregional Action programme to combat desertification that address most of these crossborder concerns. The Programme shall also be implemented in the context of other development programmes that shall be implemented in the context of renewed East African Co-operation.

6. STEPS TO OPERATIONALIZE THE NAP

6.1 Improvement of Institutions and Legal Framework

The existing administration structure (Village - Ward - division - district - region, national) is well placed to combat desertification as long as the following improvements are made:

- Devolve more power and responsibility to the local government.
- Educate and orient government staff on the bottom-up approach.
- Provide enabling environment and encourage innovative ideas/plans to combat desertification.
- Review and revise ineffective laws and enforce effective laws.
- Harmonise laws and involve stakeholders in formulating laws affecting them.

6.2 Capacity building for local organisations

The bottom-up consultations revealed that most stakeholders are aware of the problem of desertification and are ready and willing to take remedial measures. There is, however, a need to take the following actions to enhance full participation of these organisations.

- Education and sensitisation on environmental concerns.
- Build capacity through workshops, experience sharing, etc
- Strengthen Community based organisations and local NGOs.
- Build on and popularise successful efforts
- Encourage and strengthen co-operation and collaboration among CBOs, NGOs and other actors.

6.3 Partnership arrangements

Successful partnership of all stakeholders must be based on:

- Strong co-ordination and collaboration of all stakeholders.
- Clear institutional structure, which cater for the needs of all stakeholders.
- Strong bilateral linkages

- Past experiences on partnership
- Integration of the NAP in the strategies for sustainable development
- Clear guidelines/directives on popular participation
- Availability of requisite information to help all stakeholders to design and implement NAP
- Forum at all levels for the stakeholders to share their experiences and vision
- Effective and efficient networking among all partners
- Efficient and effective Secretariat and Co-ordinating body
- Replication of the national organisation of NAP at the district level
- Clear definition of the role/responsibilities of each partner.

7. IMPLEMENTATION ARRANGEMENTS

7.1 National Co-ordination Body (NCB)

The overall supervision and guidance of the NAP implementation will continue to be the responsibility of the National Co-ordinating Body. This Body is made up of all relevant ministries and institutions and is chaired by the Permanent Secretary in the Vice President's office. The main tasks of the NCB include:

- Co-ordination, guidance and decision on NAP activities
- Assess and assign responsibilities to various players
- Approve policy and legal measures/changes to create enabling environment
- Monitor the process and evaluate the effectiveness of the NAP and adopt national progress reports.

7.2 Focal Point (FP)

The Division of Environment will continue to be the Focal point for the NAP. The co-ordinating unit of NAP in the Division shall be elevated to a National Secretariat to Combat Desertification and will continue to be responsible for the day to day co-ordination and facilitation of the NAP implementation. The main tasks of this co-ordinating unit include:

- Acting as a Secretariat for the NCB
- Co-ordinating and managing the financial mechanism and keeping information on financial flows, donor support, etc
- Prepare regular monitoring report on NAP implementation
- Provide information to all stakeholders
- Co-ordinate and participate in the elaboration and implementation of NAP
- Coordinate legal issues and link with other Conventions, policies and development programmes
- Carry out duties assigned by the NCB
- Prepare national progress reports

7.3 Lead Agency

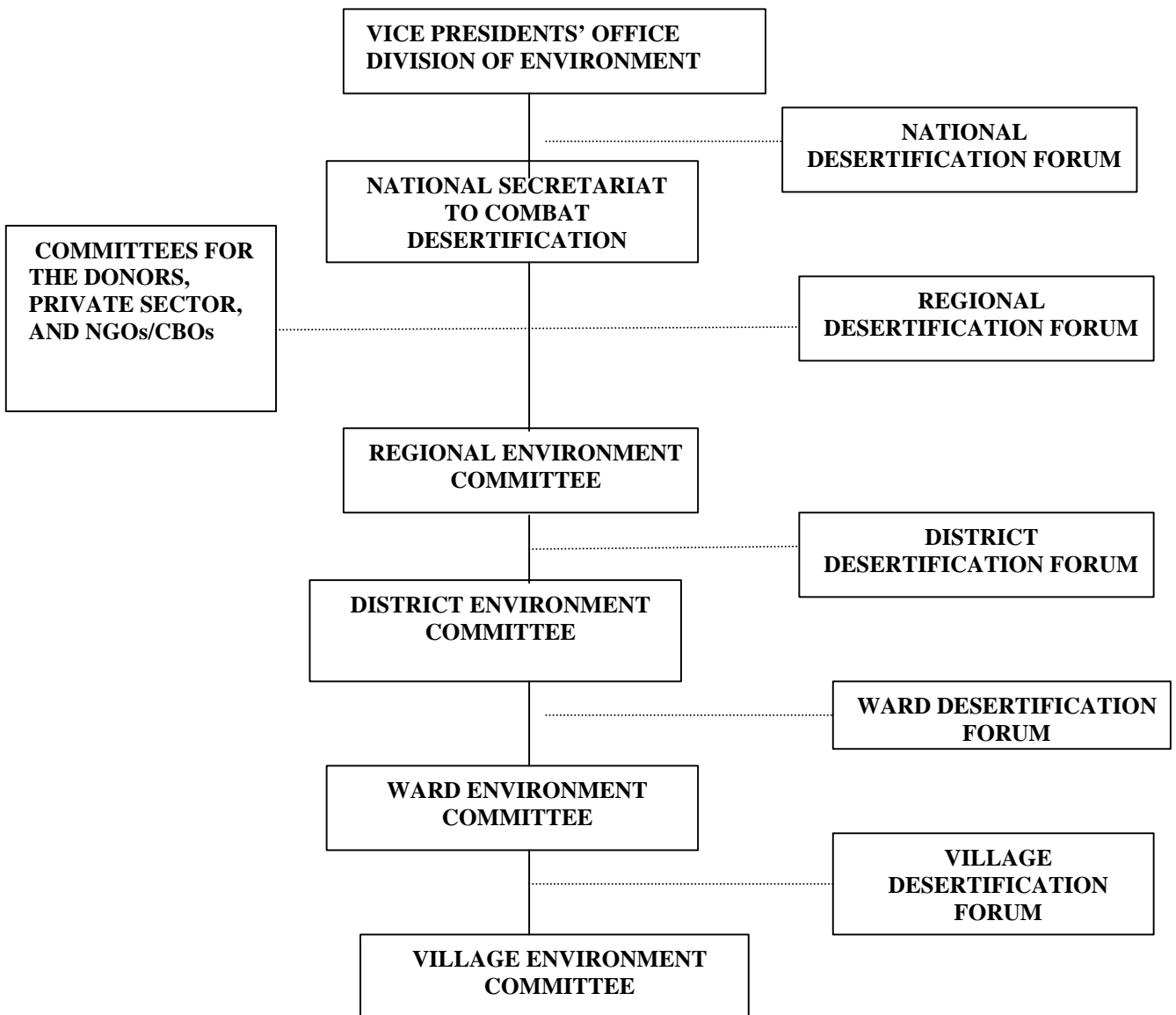
The Vice President's office will continue to be the main National lead Agency of the NAP implementation. The Division of Environment, local district governments and sector ministries will bear the main responsibility for the implementation of the NAP.

7.4 Proposed NAP Implementing Structure

Due to the gravity of the problem of desertification, it is proposed that the co-ordinating unit which shall be known as the National Secretariat be mandated to co-ordinate all the efforts to combat desertification. In the course of implementing the National Action Programme, it will co-ordinate desertification activities at all levels and for all stakeholders. It will enhance vertical and horizontal integration and develop linkages and networking among institutions and stakeholders. This organ will provide overall supervision and guidance of efforts and initiative to combat desertification. It will be semi-autonomous. The employees to this Secretariat will be drawn from key stakeholders.

The following chart outlines the proposed structure to Implement the National Action Programme to Combat Desertification in Tanzania

ORGANOGRAM TO COMBAT DESERTIFICATION



The Secretariat will have full time employees who will share the responsibilities and duties of combating desertification to maximum co-ordination of efforts and resources. The Secretariat will have four section heads that will be responsible for: natural resources management; education, research and awareness; Information and technology and co-ordination, Administration and Finance. The Secretariat will receive technical support from ministries and institutions. Representative of the main stakeholders will be included in the environmental committees at all levels.

The committees will act as supervisors and watchdog at their level on desertification issues. The Forum at each level will be bringing together all stakeholders at that level to make decision on desertification issues at their level. These forum will act as general assemblies in which decision on priority problems/areas as well as priority programme/action approaches and funding mechanism will be agreed upon.

7.5 Donors and Private Sector Consultative Group

These groups need to be established to co-ordinate efforts to implement the NAP at the National level.

7.6 National NGOs Co-ordinating Committee

Currently this committee is composed of ten members NGOs representing all NGOs working on Desertification. The existing Committee needs to be supported so as to play the role effectively.

7.7 Financial Mechanisms

The recommendations of the National Environmental Fund (Desertification) should form the basis for funding the NAP. Other funds will be also sought from the Global Funding mechanism (IFAD), the CCD Secretariat, International Financial Institutions, as well as from bilateral and multilateral organisations. Funds can be made also through an innovative funding mechanism Dept-for-Enrichment conversions or the so-called “dept swaps” to fund long-term natural efforts to protect and regenerate the environment.

APPENDICIES

APPENDIX 1. THE AGROECOLOGICAL ZONES OF TANZANIA

Zones	Sub-zones and areas	Soil and topography	Altitude (m)	rainfall (mm.yr)	Area mil. Ha
I Coast	North: Tanga (except Lushoto), Coast and Dar Es salaam. South: Eastern Lindi and Mtwara, (except Makonde plateau)	Infertile sands on gently rolling uplands.. Alluvial Soils in Rufiji Sand and infertile soils Fertile soils on uplands and river flood plains	Under 300	North: Bimodal, 750-1200 South: Unimodal. 800-1200	6
II. Arid lands	North: Serengeti, Ngorongoro Parks, part of Masailand Masai steppe Tarangile Park, Mkomazi reserve, Pangan and Eastern Dodoma	North: Volcanic ash and sediments. Soils variable in texture and very susceptible to water erosion. South: Rolling plains of reddish sandy clays of low fertility. Susceptible to water erosion. Pangani river floodplain with saline/alkaline soils.	North: 1300-1800 South: 500-1500	North: Unimodal, Unreliable: 500-600 South: Unmodal and unreliable, 400-600	
III. Semi arid lands	Central Dodoma, Singida, N. Iringa, some part of Arusha and Shinyanga Southern: Morogoro (except Kilombelo and Wami Basin and Ulugulu mountains) Also Lindi and SW Mtwara	Central: Undulating plains, with rocky hills and low scarps. Well-drained soils with low fertility. Alluvial hardpan and saline soils in eastern rift valley and lake Eyasi Black cracking soils in Shinyanga. South-eastern: Flat or undulating plains with rocky hills. Moderately fertile loam and clay in South (Morogoro) infertile sands in center.	Central: 1000- 1500 South-eastern: 200-600	Central: Unmodal and unreliable: 500-800 Southern: Unimodal: 600-800	21.1
IV. Plateaux	Western: Tabora, Rukwa (North and Centre), Mbeya (North), Kigoma, part of Mara Southern: Ruvuma and Southern Morogoro	Western wide sandy plains and rift valley scarps. Flooded swamps of Malagalasi and Ugalla rivers have clay soils with high fertility sands in north.	800-1500	Western: Unimodal, 800-1000 Southern: Unimodal, very reliable, 900-1300	32.7

V. Southern and Western highlands	Southern: A broad ridge from N. Morogoro to N. Lake Nyasa, covering part of Iringa and Mbeya South-western: Ufipa plateau in Sumbawanga Western: Along the shore of lake Tanganyika in Kigoma and Kagera.	Southern: Undulating plains to dissected hills and mountains. Moderately fertile clay soils, with volcanic soils in Mbeya, South western: Undulating Plateaux above rift valleys. Sandy soils of low fertility. Western: North-South ridges separated by swampy valleys. Loam and clay soils of low fertility in hills with alluvium and clays in valley ponds.	Southern: 1200-1500 South-western: 1400-2300 Western: 100-1800	Southern: Unimodal, reliable, local rain shadows, 800-1400 South-western: Unimodal, reliable, 800-1000 Western: Bimodal, 1000-2000	12.8
VI Northern highlands	Northern: Foot of Mt. Kilimanjaro and Mt. Meru, Eastern Rift to Lake Eyasi Granitic Mts: Uluguru Mountain in Morogoro, Pare Mts. In Kilimanjaro, and Usambara Mts. In Tanga, Tarime Highlands in Mara.	Northern: Volcanic uplands, Volcanic soils from lava and ash. Deep fertile loam and clays. Soils in dry areas prone to water erosion. Granitic mts. Steep mt. Sides to highland Plateaux. Soils are deep friable and moderately fertile on upper slopes; shallow and stony on steep slopes.	North: 100-2500 Granitic mts: 1000-2000	Northern: Bimodal, varies widely: 1000-2000 000-2000	
VII Alluvial plains	K-Kilombero (Morogoro) R-Rufiji (Coast) U-USangu (Mbeya) W-Wami (Morogoro)	K-Central clay plain with alluvial fans East and West R. Wide mangrove swamp delta. Alluvial soils, sandy upstream, loamy downstream in flood plains. U- Seasonal Alluvial fans with well drained black loam in West.		K- Unimodal, very reliable, 900-1300 R- Unimodal, often inadequate 800-1200 U- Unimodal, 500-800 W- Unimodal, 600-1800	19.2

APPENDIX 2: QUESTIONNAIRES USED FOR CONSULTATION

- A. Questionnaires for grassroots
- B. Questionnaire for District Executives/Extension officers
- C. Questionnaire for Ministries and Institutions
- D. Questionnaire for the Business Community
- E. Questionnaire for the Donor community

A. QUESTIONNAIRE FOR GRASSROOTS

Utangulizi

Kutokana na hali ya ukame katika maeneo mengi na kwa muda mrefu, serikali inafanya juhudi mbalimbali kuikabili tatizo hili, mojawapo ikiwa ni kuwasiliana na wananchi katika maeneo husika ili kujua juhudi zinazoweza kurekebisha hali hii.

Maswali:

1. Kufahamiana
2. Unajishughulisha na nini?
3. Unatumia zana gani katika shughuli zako/zenu?
4. Ardhi ya hapa inatumika kwa shughuli gani?
5. Mashamba yanachukua eneo gani la ardhi?
6. Ni mazao yepi yanayolimwa na wenyeji?
7. Katika kipindi cha miaka 5 iliyopita hali ya uzalishaji imekuwa ikipungua au kuongezeka?
8. Unadhani kuongezeka au kupungua kwa mazao kunasababishwa na nini?
9. Je? Unaonaje majira ya mvua; yako kama zamani au kuna mabadiliko? Kama kuna mabadiliko, je, unafikiri ni kwa sababu zipi?
10. Je, unaonaje hali ya miti na mimea hapa kijijini; kuna mabadiliko yoyote ukilinganisha na sasa? Kama kuna mabadiliko unafikiri ni kwa nini?
11. Je, katika kijiji/kata/tarafa yenu kuna ongezeko la shughuli zinazohusiana na:-
 - a. Mashamba ya kilimo
 - b. Ukataji miti kutosheleza mahitaji ya nyumbani au biashara (kuchoma mkaa, Kupata kuni, kupata miti kujengea, kupata mbao n.k.)
 - c. Uchomaji wa misitu unaofanywa na watu tofauti kama vile warina asali, wafugaji n.k.
 - d. Upanuaji wa shughuli za utafutaji, uchimbaji na uchambuzi wa madini
 - e. Shughuli zingine kama vile ongezeko la mifugo na miradi mikubwa ya kimaendeleo yanayoathiri mazingira.
12. Je, unajua ongezeko la athari zozote zinazotokana na shughuli zote hizo hapa juu au mojawapo ya shughuli hizo ukilinganisha na kipindi kilichopita kabla ya ongezeko la shughuli zenu?
13. Je wewe/kijiji mmechukua hatua zipi ili kukabiliana na athari hizo mlizozitaja? Je mnashirikiana vipi kikazi?

- 14 Je, ni vikwazo vipi kati ya vifuatavyo vinavyowazuia wananchi kutumia mbinu za kisasa ambazo zinapendekezwa kwa matumizi ya ardhi, misitu, kilimo, ufugaji n.k.:-
- Ukata
 - Ukosefu wa wataalamu
 - Mila na Desturi
 - Ukosefu wa Elimu (ujinga)
 - Sababu nyinginezo
- Je, kati ya hizo ni sababu ipi iliyo kuu?
- 15 je, wewe/kijiji/tarafa mna matatizo yoyote ya ardhi?
- 16 Je, ardhi ya kijiji/tarafa imepimwa na Maafisa wa ardhi? Je, Wanakijiji wa hati miliki ya ardhi ya kijiji?
- 17 Je, kuna utaratibu gani katika kupata na kumiliki ardhi? (Kupata hati Miliki ya ardhi)
- 18 Je kuna tatizo lolote linalotokana na ongezeko la watu kijijini/kwenye tarafa ukizingatia hali ya ardhi iliyopo?
- 19 Je, kuna huduma zipi za maji, afya, elimu na biashara hapa kijijini/tarafani?
- 20 Je, kuna mipango yoyote ya wanakijiji ya kutatua tatizo la maji, usafiri na Kufuta ujinga kwa juhudi zao wenyewe? Je, kama wanayo nia ya kujitegemea kutatua matatizo yao, tatizo lao hasa liko wapi?
- 21 (a) Je, kuna shirika/taasisi/makampuni au watu binafsi mnaoshirikiana nao katika kuboresha mazingira (kwa mfano- kuzuia mmomonyoko wa ardhi, upandaji miti na kuongeza elimu ya Mazingira)
- (b) kama zipo, ni zipi? Ushirikiano wenu ni vipi?
22. (a) Je, mashirika yasiyo ya kiselikali (NGOs/CBOs) yanajishughulisha na shughli zipi?
23. Je, kila shirika lisilo la kiserikali (NGOs na CBOs) linajishughulisha na nini? Linashirikiana na wananchi vipi? Linashirikiana na serikali Kuu vipi.
- Lina matatizo na mafanikio yapo katika kupambana na uharibu wa mazingira na ongezeko la Jwangwa?
24. Katika eneo la ufugaji, ni mifugo gani hufugwa katika eneo hili?
25. Kwa wastani, mfugaji mmoja anaweza kuwa na ng'ombe wangapi?
26. Kwa kawaida wa kiangazi malisho ya mifugo hupatikana wapi.
27. Je, maeneo haya ya malisho huwa ndiyo maeneo ya kunyweshea mifugo?
28. Je malisho haya huwa ni ya kila siku au huwa ni ya kuhamia muda wote wa kiangazi?
29. Ni kwa sababu gani inabidi kutafuta malisho katika maeneo mbalimbali Kijiji?
30. Katika eneo hili kuna matatizo ya matumizi ya ardhi kati ya wafugaji na wa kulima?
31. Kuna matumizi ya kawaida hupatikana kutoka wapi?

32. Je upatikanaji huu unatosheleza mahitaji ukilinganisha na miaka ya nyuma?
33. Je, kuna biashara ya kuni/mkaa katika eneo hili?
34. Kaya inatumia muda gani kupata kuni?
35. Shughuli zipi zingine zinazohitaji matumizi ya miti katika eneo hili?
36. Unaionaje hali ya miti katika eneo hili?
37. Hali hii ya kupingua miti inaweza kurekebisha kwa namna gani?
38. Je, kuna juhudi zozote zinazofanyika kurekebisha hali hii?
39. Je kuna mto katika eneo hili?
Mto huu unakuwa na maji katika vipindi vyote vya mwaka?
Kama unakauka unadhani sababu gani zinachangia mto huu kukauka?
40. Kumekuwa na juhudi zozote kurekebisha hali hii?
41. Je, kuna shughuli zingine za kiuchumi zinazofanyika katika eneo la Kijiji kwa jumla?
42. Kuna juhudi zozote zinazofanuika kukabiliana na tatizo hili?
43. Kuna mifuko yoyote ambayo kijiji kimeanzisha kushughulikia matatizo ya kijiji?
44. Mifuko hii ni kwa ajili ya shughuli gani?
45. Usimamizi wa mifuko jii ukoje?
46. Ni matatizo gani yaliyopo katika usimamizi wa mifuko hii?
Kama kuna matatizo, yanatokana na nini?
47. Je kumekuwa na mafanikio katika uendeshaji wa mifuko hii?
Kama kuna matatizo, yanatokana na nini?
48. Ni utaratibu gani unaweza kutumika katika kutatua tatizo hili la hali ya ukame?
49. Tatizo kubwa la hapa kijijini ni lipi?
Ukosefu wa maji
Ardhi ya kulima
Upatikanaji wa kuni.
50. Mnapataje fedha za matumizi ya kawaida?
51. Ni vikundi gani vya kiasili vinavyoheshimika hapa kijijini?
52. Je, vikundi hivi vya kiasili vinaweza kusaidia katika usimamizi wa mifuko hii?

53. Je, vikundi hivi vya asilia vinaweza kusaidia katika kurekebisha hali ya ukame?

54. Je mnaweza kuanzisha mfuko wa kurekebisha atahari za ukame kwa kutumia vikundi asilia vilivyopo?

55. Mfuko huu kimsingi katika eneo lenu hili utatumika katika shughuli zipi kukabiliana na tatizo la ukame?

Mnashauri uongozi wa Wilaya usaidie namna gani katika kufanisha malengo ya mfuko huu?

B. QUESTIONNAIRE FOR DISTRICT EXECUTIVES/EXTENSION OFFICERS

Utangulizi:

Kutokana na hali ya ukame kuwepo katika maeneo mengi na kwa muda mrefu, Serikali inafanya juhudi mbalimbali kukabili tatizo hili, mojawapo ikiwa ni kuwasiliana na wananch katika maeneo husika ili kujua juhudi zinazoweza kufanyika kurekebisha hali hii.

1. Katika wilaya hii, shughuli kuu za matumizi ya ardhi ni zipi?
Kulima
Ufugaji
Uendelezaji/Uvunaji misitu
Uvuvi
2. Ni shughuli zipi zinachangia katika kuongezeka na kuenea kwa ukame?
3. Ni maeneno gani kaika Wilaya hii yameathirika zaidi?
4. Kuna juhudi zozote zinazofanywa na wilaya kurekebisha hali hii?
5. Ni matatizo gani manayokabiliana nayo katika juhudi zenu za kurekebisha hali hii?
6. Kuna vikundi vovyote wilayani vianavyojishughulisha na kukabiliana na tatizo hili la ukame?
7. Vikundi hivi vyote ni vya kutoka wilayani hapa hapa?
8. Wilaya inaratibuje shughuli za vikundi hivi?
9. Kuna matatizo yoyote ambayo wilaya inayapata katika kuratibu Vikundi hivi?
10. Kuna Jumuiya zozote zaidi ya hivi vikundi ambazo zinajishughulisha na kutatua matatizo yanayotokana na ukame? Ni Jumuiya zipi?
11. Kuna mifuko yoyote katika wilaya kuhusu uendeshaji wa shughuli zozote?
12. Je mifuko hii inahusisha vikundi asilia katika maeneo ya walengwa?
13. Mafanikio/matatizo ya mifuko hii ni yapi?
14. Je mnashauri njia zipi za kuboresha mifuko hii?
15. Je kuna ushauri wowote wa wilaya kuhusu kuanzishwa kwa mfuko wa kusaidia katika suala la kukabiliana na ukame?
16. Wilaya inashauri uongozi wa mfuko huu uweje?
17. Uongozi wa mfuko huu wilayani utashirikiana vipi na uongozi wa Mkoa katika maeneo ya kijiji?

18. Usimamizi wa mfuko huu katika ngazi zote kwa kushirikisha
Taifa
Mkoa
Wilaya
Kijiji uweje?
19. Vyanzo vya mapato kwa ajili ya mfuko huu vitokane na nini?
20. Wilaya inatoa ushauri gani katika kuhamasiha wananchi kuendeleza mfuko huu?.

C. QUESTIONNAIRE FOR THE MINISTRIES/INSTITUTIONS

Preamble:

Tanzania is a signatory of the Convention to Combat Desertification. This questionnaire aims at understanding the values, interest, priorities, the level of awareness of the issues of drought, desertification and land degradation among the key stakeholder.

1. Do you know anything about drought and desertification in this country?
2. How does your ministry/Institutions address to the requirements of desertification and drought?
3. Are there any specific programmes addressing environmental management issues?
4. What are the problems encountered and progress achieved in implementation of these policies?
5. What do you think can be done to remove the present policy constraints?
6. What is your opinion/comment on the coordination of the various policies addressing socio-economic and environmental issues
7. In your opinion, is your sector policy given enough legal framework on environmental issues?
8. What is your opinion on the state of serious land degradation in our arid and semi-arid areas?
9. What efforts do you think need to be carried out to counter this ugly situation?
10. What kind of coordination and communication exists between your institution and others in the country as regards environmental protection activities?
11. Is the present level of vertical and horizontal enough?

If not, what is the major constraint and what can be done in your view to improve it?
12. How does your ministry assist village communities to contribute in countering severe land degradation in their respective areas?
13. Are there any on-going initiatives by your ministry/institution?

How are these initiatives being carried out?

How do these initiatives benefit the communities in the villages?

Are there any donors assisting village communities to counter the situation through your Ministry

14. Is there any government commitment in implementing the convention
 - in terms of manpower
 - in terms of finance
 - in terms of legal backing
15. What incentives do you think are relevant to combating severe land degradation in the village communities?
16. Do you think a national fund for combating desertification and other environmental disasters in village communities is an appropriate tool?
17. What is your opinion on the formation and management of such a fund?
18. What should be the initial source of this fund and what is your opinion for the fund to be sustainable?

D. QUESTIONNAIRE FOR THE BUSINESS COMMUNITY

Preamble:

Tanzania is a signatory to the convention to combat Desertification. This questionnaire aims at understanding the values, interest, priorities, the level awareness of the issues of drought, desertification and and degradation among the key stakeholder.

1. What effect does the deterioration of the environment have on your business
2. Do you have any strategies for ensuring the sustainability of the natural resources required in your business?
3. How do these strategies assist/affect the village communities?
4. What is your business role in encountering land degradation in your areas where you are doing your business?
5. How are you responding to the on-going tax collection in relation to your business activity?
6. Do you contribute to any environmental management schemes?
Where
How
7. What is your opinion on the establishment of a national fund for curbing Desertification and other environmental hazards aiming at assisting village communities?

8. How do you think the management of this fund should be?
9. What should be the initial source of this fund and what is your opinion for the fund to be sustainable.

E. QUESTIONNAIRE FOR THE DONNOR COMMUNITY

Preamble:

Tanzania is a signatory to the Convention to combat Desertification. This questionnaire aims at understanding the values, interest, priorities, the level awareness, the level awareness of the issues of drought, Desertification and land degradation among the key stakeholder.

1. What is your experience on the on-going land degradation?
2. What are you opinion on ways to counter the on-going land degradation?
3. Does your institution have any on-going programs on anti-Desertification activities
Where?
How?
4. What are the successes attained so far?
5. How do village communities contribute to these programs?
6. Does your institution have an on-going fund for anti-Desertification/land degradation projects in village communities?
How does the fund reach the communities?
How do villages Communities contribute to the management of this fund?
7. What is your opinion on the formation of a national fund for curbing Desertification and other environmental hazards in village communities?
8. How should this fund be managed at all levels to make it sustainable?
9. What should be the sources of the fund for it to be sustainable?
10. What could be the appropriate approach in dealing with External Partners in your view?
11. How are Tanzania strategies and operational plans differ from those of your country of origin as far as desertification, drought and land degradation are concerned?
12. How can Tanzania effectively use the external environmental opportunities to successfully implement opportunities to successfully Implement the convention to Combat Desertification and mitigate the effects of drought?

APPENDIX 3: LIST OF REGIONS, DISTRICTS, VILLAGES, NGOs, AND CBOs CONSULTED

REGION	DISTRICT	VILLAGE	NGO/CBO/ INSTITUTION
1. ARUSHA	ARUMERU	Lengijane Elkurot Lemongo Oldonyosambu	SCAPA TIP HIP
2. DODOMA	KONDOA (R)	Baura Songoro	
3. IRINGA	IRINGA (R)	Nzihi, Ilula Magubike Ilambiloto	
4. KILIMANJARO	MWANGA SAME	Lang'ata Bora Mng'ende	JICA, SAIPRO, IP TCRS, SMECAO, GOMATA & WOMEN GROUP
5. LINDI	NACHINGWEA	Chiola Namatula	MUUNGANO
6. MBEYA	RUJEW Mbozi chunya	Tingalalhefu Ivuna Mkola	
7. MOROGORO	MOROGORO R0	Mlali Doma	
8. MTWARA	MASASI	Chawambo Mkomaido Lupaso	UVUTE
9. MARA	MUSOMA (R)	Chumwi	VI, CRC
10. MWANZA	MISUNGWI KWIMBA	Lubaga Kijida	MCHP, TAHEA, HIFADHI MAZINGIRA.
11. SINGIDA	SINGIDA (R)	Msange Matiuku	
12. SHINYANGA	MEATU	Chambala Malwilo	OXFAM, DWSP, AIC, YADEC, GSA
13. TABORA	NZEGA IGUNGA	Mwamashiga	FRMP

APPENDIX 4: ZONES FOR CONSULTATIVE WORKSHOPS SHOWING ZONAL PARTICIPANTS

ZONE	WORKSHOP CENTRE	REGION	DISTRICT	REPRESENTATIVE
1. CENTRAL	DODOMA	Dodoma Arusha Kilimanjaro Singida Morogoro	Dodoma (R&U) Mpwapwa Kondoa Hanang Arumeru Same Mwanga Iramba Singida (R&U) Morogoro Kilosa	DED, DCC, DALDO, DPLO, DWE, DNRO, DFO, RNRO, DLNREO, RAO, CDO, DLDO <ul style="list-style-type: none"> • 39 participants 21 coming from the Zone attended the workshop.
2. SOUTHERN	IRINGA	Iringa Mbeya Rukwa Lindi Mtwara	Iringa (R&U) Mbozi Chunya Rujewa Mpanda Sumbawanga Nachingwea Newala	RNRO, RLA, DPO, DNRO, DEAD, DLDO, DCDO, DCAO, DCC, RPLO, DMMO. <ul style="list-style-type: none"> • The workshop was attended by 36 participants 25 coming from the Zone
3. LAKE	MWANZA	Mwanza Tabora Mara Kagera	Mwanza (R&U) Misungwi Kwimba Meatu Bariadi Nzega Ugunga Musoma Bunda Biharamulo	DCDO, RCDO, DALDO, DPLO, RIO, RCCO, DCC, DED, ZCO, DWE, DNRO, RNRO, RALDO. <ul style="list-style-type: none"> • This workshop had the highest attendance of 66 participants 57 being from the Zone.

(1) **Attendance in numbers by title**

Title	IRINGA	DODOMA	MWANZA	TOTAL
DCC	3	3	7	13
DED	2	4	5	11
RNRO	1	1	1	3
DNRO	3	3	4	10
DFO	3	3	4	3
RALDO	1	-	-	1
DALDO	2	4	4	10
RAO	-	1	-	1
RLA	-	1	-	1
DWE	-	2	2	4
DCDO/CDO	2	1	4	7
RPLO	2	-	1	3
DPLO	2	3	7	11
DCAO	2	-	-	2
RIO	-	-	1	1
ZCS	-	-	1	1
NGO	-	-	-	1
RCDO	-	-	1	1
DLDO	1	2	1	4
DALSO	2	-	-	2
Mass Media	2	2	9	13
DMMO	1	-	-	1
DLNRE	-	1	-	1

NB:

- (i) There is a lot of confusion in the title e.g. In Hanang there is a District Lands, Natural Resources and Environmental title (as a departmental Head); most regional functional managers are now technical advisers or regional Secretariat; hence titles such as RALDO, RNROs, RAO, RLA should be no-existent.
- (ii) Note the high attendance of elect representatives (DCC) as well as their technocrats (DED & DPLO) and mass media.
- (iii) Most of the participants in the Consultative Workshop are from the areas visited by the consultative teams. This was very appropriate and proper as it enhanced the information and participation started from the grassroots.

APPENDIX 5: LIST OF REGISTERED NGOS INVOLVED IN AFFORESTATION & ENVIRONMENTAL PROTECTION IN TANZANIA.

S/N	NAME	ADDRESS	STATION
1.	TANZANIA ORGANISATION OF PERMACULTURE PROMOTERS	P.O.BOX 72371	DAR ES SALAAM
2.	INTERMEDIATE TECHNOLOGY & CONSULTANCY	P.O.BOX 20822	DAR ES SALAAM
3.	WORLD WIDE FUND FOR NATURE (WWF)	P.O.BOX 63117	DAR ES SALAAM
4.	TANZANIA MEDIA WOMEN'S ASSOCIATION	P.O.BOX 8981	DAR ES SALAAM
5.	JOURNALIST ENVIRONMENTAL ASSOCIATION OF TANZANIA (JET)	P.O.BOX 15674	DAR ES SALAAM
6.	CHAMA CHA AFYA NA MAENDELEO MWAMBAO (AMM)	P.O.BOX 6503	DAR ES SALAAM
7.	AFICARE	P.O.BOX 63187	DAR ES SALAAM
8.	TANZANIA WILDLIFE PROTECTION FUND	P.O.BOX 1994	DAR ES SALAAM
9.	KIPUNGUNI ENVIRONMENT & EDUCATION CARE	P.O.BOX 45767	DAR ES SALAAM
10.	TANZANIA ENVIRONMENTAL SOCIETY (TESO)	P.O.BOX 1309	DAR ES SALAAM
11.	TANZANIA GREENBELT FOUNDATION	P.O.BOX 70382	DAR ES SALAAM
12.	AFRICAN NGOS ENVIRONMENT NETWORK	P.O.BOX 1309	DAR ES SALAAM
13.	APPROPRIATE TECHNOLOGY AND ENVIRONMENT CONSERVATION SOCIETY (ATECOS)	P.O.BOX 22110	DAR ES SALAAM
14.	DEVELOPMENT LINKS (DELIS)	P.O.BOX 71311	DAR ES SALAAM
15.	ENVIRONMENTAL ASSOCIATION OF TANZANIA	P.O.BOX 33043	DAR ES SALAAM
16.	TANZANIA SOCIETY FOR PRESERVATION AND CARE FOR ANIMALS	P.O.BOX 1844	DAR ES SALAAM
17.	THE TANZANIA SOCIETY (TS)	P.O.BOX 1309	DAR ES SALAAM
18.	WILDLIFE CONSERVATION SOCIETY OF TANZANIA	P.O.BOX 70919	DAR ES SALAAM
19.	TANZANIA TRADITIONAL ENERGY DEVELOPMENT ORGANISATION	P.O.BOX 15535	DAR ES SALAAM
20.	AGENDA FOR ENVIRONMENTAL AND RESPONSIBLE DEVELOPMENT	P.O.BOX 77266	DAR ES SALAAM
21.	KAGERA ENVIRONMENTAL FOUNDATION (KEF)	P.O.BOX 2314	DAR ES SALAAM

22.	ENVIRONMENTAL ENGINEERING AND POLLUTION CONTROL (EEPCO)	P.O.BOX 31533	DAR ES SALAAM
23.	GRASSROOTS FEMALE COMMUNICATORS ASSOCIATION (GRAFCA)	P.O.BOX 72422	DAR ES SALAAM
24.	DEVELOPMENT SERVICES FOUNDATION (DSF)	P.O.BOX 71439	DAR ES SALAAM
25.	DYNAMIC HEALTH CYCLE	P.O.BOX 21520	DAR ES SALAAM
26.	KIPATIMU DEVELOPMENT ASSOCIATION	P.O.BOX 3353	DAR ES SALAAM
27.	WATANZANIA TUBORESHE MAZINGIRA	P.O.BOX 9583	DAR ES SALAAM
28.	TANZANIA ENVIRONMENTAL ACTION MOVEMENT (TEAM)	P.O.BOX 14644	DAR ES SALAAM
29.	HORTICULTURAL YOUTH PROJECT (HOPCO)	P.O.BOX 3633	DAR ES SALAAM
30.	TANZANIA NATURAL STREAM AND OASIS SOURCES CARE (TANASSO)	P.O.BOX 45082	DAR ES SALAAM
31.	BUGURUNI DEVELOPMENT TRUST FUND (BUGUDETFFU)	P.O.BOX 15241	DAR ES SALAAM
32.	KISIMA ENVIRONMENT GROUP	P.O.BOX 12254	DAR ES SALAAM
33.	FOREST TREE AND PEOPLES PROGRAMME TANZANIA (FTPP)	P.O.BOX 3151	DAR ES SALAAM
34.	JANE GOODALL INSTITUTE	P.O.BOX 727	DAR ES SALAAM
35.	KAWA DEVELOPMENT FOUNDATION TRUST (KDF)	P.O.BOX 40652	DAR ES SALAAM
36.	KIGAMBONI WARD DEVELOPMENT ASSOCIATION (KIWADEA)	P.O.BOX 36629	DAR ES SALAAM
37.	KIJITONYAMA DEVELOPMENT COMMUNITY (KIJICO)	P.O.BOX 10879	DAR ES SALAAM
38.	LUDEWA DEVELOPMENT FOUNDATION	P.O.BOX 776883	DAR ES SALAAM
39.	MARINE AND URBAN ENVIRONMENTAL LEGAL PROTECTION ASSOCIATION (MVELPA)	P.O.BOX 12929	DAR ES SALAAM
40.	MARA ENVIRONMENTAL AND SUSTAINABLE DEVELOPMENT ORGANIZATION	P.O.BOX 10660	DAR ES SALAAM
41.	MBUTU AGRICULTURE SOCIETY (MAS)	P.O.BOX 45736	DAR ES SALAAM
42.	MKAMBA DEVELOPMENT ASSOCIATION (MDEA)	P.O.BOX 50056	DAR ES SALAAM

43.	MKAMBALISHANO TRUST FUND (MTF)	P.O.BOX 4336 MANSFIELD ST. JOESPH CATHERAL	DAR ES SALAAM
44.	MSEWE BARUTI DEVELOPMENT ASSOCIATION (MBDA)	P.O.BOX 10424	DAR ES SALAAM
45.	RORYA DEVELOPMENT ASSOCIATION	P.O.BOX 600672	DAR ES SALAAM
46.	RURAL DEVELOPMENT INITIATIVE (RUDI)	P.O.BOX 4928	DAR ES SALAAM
47.	SINZA ENVIRONMENTAL ASSOCIATION (SEA)	P.O.BOX 4928	DAR ES SALAAM
48.	SOUTH MARGINAL ENVIRONMENTAL CONSERVATION GROUP (SMEL)	P.O.BOX 6388	DAR ES SALAAM
49.	SWISSAID TANZANIA	P.O.BOX 60744	DAR ES SALAAM
50.	TABATA DEVELOPMENT FUND	P.O.BOX 40979	DAR ES SALAAM
51.	TANZANIA – INDIA FRIENDSHIP ASSOCIATION (TIFA)	P.O.BOX 15643	DAR ES SALAAM
52.	THE BROTHERHOOD FOR COMMUNITY SERVICES RELIEF AND DEVELOPMENT	P.O.BOX 33190	DAR ES SALAAM
53.	UMOJA WA MAENDELEO YA KIUCHUMI NA KIJAMII YA WATU WA KATA YA MOA (UMIKIKIMO)	P.O. BOX 47906 M/NYAMALA	DAR ES SALAAM
54.	USAMBARA MOUNTAINS WOMEN DEVELOPMENT ASSOCIATION (UMWEDA)	P.O. BOX 15371 MAZENGO ROAD/UPANGA	DAR ES SALAAM
55.	CENTRE FOR ENERGY, ENVIRONMENTAL SCIENCES AND TECHNOLOGY (CEEST)	P.O. BOX 5511	DAR ES SALAAM
56.	ORGANISATION FOR COMMUNITY RELIEF AND DEVELOPMENT SERVICES (COOMUREDES)	P.O. BOX 7662 TEMEKE	DAR ES SALAAM
57.	ENVIRONMENTAL HUMAN RIGHTS CARE ASSOCIATION (ENVIROCARE)	P.O. BOX 36042	DAR ES SALAAM
58.	EPCON-BIOTEC, ENVIRONMENTAL PLAN BIODIVERSITY CONSERVATION AND BIO TECH TANZANIA	P.O. BOX 35065	DAR ES SALAAM
59.	HUMAN SETTLEMENTS OF TANZANIA (HUSETA)	P.O. BOX 22671	DAR ES SALAAM
60.	RUAHA SOCIETY, FRIENDS OF RUAHA SOCIETY	P.O. BOX 7589	DAR ES SALAAM
61.	SOCIETY ENVIRONMENT PROTECTION OYSTERBAY (SEPO)	P.O. BOX 3462	DAR ES SALAAM

62.	MUUNGANO WA VIJANA TANZANIA	P.O. BOX 7206 ILALA	DAR ES SALAAM
63.	TANZANIA ASSOCIATION OF YOUTH FARMERS CLUBS	P.O.BOX	DAR ES SALAAM
64.	TUKOLENE YOUT GROUP	P.O.BOX 199972	DAR ES SALAAM
65.	OKOA MAZINGIRA TANZANIA (OMATA)	P.O.BOX 3300	DAR ES SALAAM
66.	YOUTH AGAINST POVERTY TRUST FUND (YAP TRUST FUND)	P.O.BOX 78108	DAR ES SALAAM
67.	HYDRO ENVIRONMENT AND SANITATION ORGANIZATION (HESO)	P.O.BOX 35059	DAR ES SALAAM
68.	MOROGORO ENVIRONMENTAL AND DEVELOPMENT FOUNDATION (MODEFO)	P.O.BOX 401	MOROGORO
69.	KILAKALA WORKERS ENVIRONMENTAL PROGRAMME (KWECOP)	P.O.BOX 1977	MOROGORO
70.	MOROGORO TRAINING, EDUCATIONAL SOCIAL AND COMMUNITY DEVELOPMENT (MOTERESCO TRUST FUND)	P.O.BOX 681	MOROGORO
71.	MTIMBIRA DEVELOPMENT ASSOCIATION (MBDA)	P.O.BOX 10425	MOROGORO
72.	FOUNDATION FOR SUSTAINABLE RURAL DEVELOPMENT (SUREDE)	P.O.BOX 3987	MOROGORO
73.	MOROGORO ENVIRONMENTAL CONSERVATION ORGANISATION (MOECO)	P.O.BOX 2033	MOROGORO
74.	MECA-GROUP (MOROGORO) ENVIRONMENTAL CONSERVATION ACTION)	P.O.BOX 1686	MOROGORO
75.	KILOMBERO INTEGRATED PEOPLE'S ORIENTED TO CONSERVATION	P.O.BOX 636	MOROGORO
76.	TECHNOLOGY ENVIRONMENT, GENDER AND DEVELOPMENT (TECHNOGAD)	P.O.BOX 3289	MOROGORO
77.	TANZANIA SCOUTS ASSOCIATION – MOROGORO REGION	P.O.BOX 1933	MOROGORO
78.	MOROGORO WOMEN FOCUSED AFFORESTATION PROJECT (MWAP)	P.O.BOX 1020	MOROGORO
79.	TUNGI WOMEN DEVELOPMENT FOUNDATION	P.O.BOX 1018 TUNGI	MOROGORO
80.	TANZANIA ENVIRONMENTAL AND SANITATION CONSERVATORS (TESCO)	P.O.BOX 1374	MOROGORO

81.	HOMBOZA CORRIDOR ENVIRONMENT AND DEVELOPMENT PROMOTION SOCIETY (HOCEDSO)	P.O.BOX 1880	MOROGORO
82.	UKAYA TRUST FUND	P.O.BOX 168	MOROGORO
83.	KAEGESA ENVIRONMENTAL CONSERVATION SOCIETY (KAESO)	P.O.BOX 294	RUKWA
84.	RUKWA ASSOCIATION OF NO-GOVERNMENTA ORGANISATIONS (RANGO)	P.O.BOX 748	RUKWA
85.	SUMBAWANGA SOCIAL DEVELOPMENT ASSOCIATION (SUSDA)	P.O.BOX 243	RUKWA
86.	SUMBAWANGA DEVELOPMENT TRUST	P.O.BOX 229	RUKWA
87.	JAMAICA INDUSTRIAL CO-OPERATIVE SOCIETY LTD	P.O.BOX 84	RUKWA
88.	LAKE RUKWA BASIN BIO-ENVIRONMENTAL ORGANISATION	P.O.BOX 568	RUKWA
89.	RUKWA ENVIRONMENTAL MANAGEMENT SOCIETY (RECOSO)	P.O.BOX 355	RUKWA
90.	RUKWA ENVIRONMENTAL MANAGEMENT SOCIETY (REMSO)	P.O.BOX 573	RUKWA
91.	MISSUNGWI YOUTH HOUSING GROUP	P.O.BOX 2745	MWANZA
92.	MWANZA ENVIRONMENTAL & CONSERVATION OF NATURE	P.O.BOX 10530	MWANZA
93.	LAKE NYANZA ENVIRONMENTAL SANITATION ORGANISATION (LANESO)	P.O.BOX 10016	MWANZA
94.	LAKE VICTORIA BASIN ENVIRONMENT CARE ORGANIZATION (LABECO)	P.O.BOX 2292	MWANZA
95.	THE LITTLE YANE	P.O.BOX 1869	MWANZA
96.	TANZANIA HOME ECONOMICS ASSOCIATION	P.O.BOX 1400	MWANZA
97.	LAKE VICTORIA ENVIRONMENT NETWORK (LAVEN)	P.O.BOX 793	MWANZA
98.	FORUM FOR CONSERVATION OF NATURE (FOCONA)	P.O.BOX 476	MTWARA
99.	WORLD VISION	P.O.BOX 6070	ARUSHA
100.	ARUSHA POVERTY ALLEVIATION NETWORK (APAN)	P.O.BOX 3022	ARUSHA

101.	MAENGO MINERALS DEVELOPMENT ORGANISATION (MAMIDEO)	P.O.BOX 14952	ARUSHA
102.	THE MULTI-ENVIRONMENTAL SOCIETY (MESO)	P.O.BOX 8224	ARUSHA
103.	MALIHAI CLUBS OF TANZANIA	P.O.BOX 1541	ARUSHA
104.	BULGALDA SUSTAINABLE DEVELOPMENT ORGANISATION	P.O.BOX 146	ARUSHA
105.	ENVIRONMENTAL PRESS FOUNDATION	P.O.BOX 241	ARUSHA
106.	KORONGORO INTEGRATED PEOPLE ORIENTED TO CONSERVATION	P.O.BOX 94 LOLIONDO	ARUSHA
107.	AFRIKAN HERITAGED CULTURE AND ENVIRONMENT IMPROVEMENT	P.O.BOX 2257	ARUSHA
108.	ARUSHA BEEKEEPERS ASSOCIATION (ABA)	P.O.BOX 2005	ARUSHA
109.	MAA PASTORALISTS DEVELOPMENT ORGANISATION INYAAT e-MAA	P.O.BOX 2720	ARUSHA
110.	KINNAPA DEVELOPMENT PROGRAMME	P.O.BOX 83 KIBAYA KITETO	ARUSHA
111.	LARAMATAK DEVELOPMENT PROGRAMME (LADO)	P.O.BOX 72 NUARWA- NGORONGORO	ARUSHA
112.	CHAMA CHA WAFUGAJI KILUVYA – MPIJI	P.O.BOX 30052	PWANI
113.	CHAMA CHA HIFADHI YA MAZINGIRA NA USAFI PWANI (HIMAUPWA)	P.O.BOX 30103 KIBAHA	PWANI
114.	TANZANIA CULTURAL AND ENVIRONMENT REHABILITATION SOCIETY	P.O.BOX 414 MBOZI	MBEYA
115.	FARMERS AND ENVIRONMENTALISTS ASSOCIATION (FEA)	P.O.BOX 87 CHUNYA	MBEYA
116.	TANZANIA ASSOCIATION OF FORESTERS (TAF)	P.O.BOX	MBEYA
117.	THE UTENGULE FARMERS AND ENVIRONMENTAL CARE ASSOCIATION (UFAECA)	P.O.BOX 2556	MBEYA
118.	CENTRE FOR YOUTH SUSTAINABLE GROWTH AND DEVELOPMENT	P.O.BOX 267	MBEYA
119.	YOUTH ENVIRONMENTAL ASSOCIATION (YEA)	P.O.BOX 2324	MBEYA

120.	KAGERA DEVELOPMENT AND CREDIT REVOLVING TRUST FUND (KADETFU)	P.O.BOX 466	KAGERA
121.	NGARA DISTRICT DEVELOPMENT ORGANISATION	P.O.BOX 61 RULENGE NGARA	KAGERA
122.	KATOMA DEVELOPMENT ASSOCIATION	P.O.BOX 765	KAGERA
123.	KAGERA DEVELOPMENT TRUST	P.O.BOX 692 BUKOBA	KAGERA
124.	KAGERA DEVELOPMENT AND RELIEF SERVICES (KADERES)	P.O.BOX 191 KAYANGA KARAGWE	KAGERA
125.	LAKE TANGANYIKA CATCHMENT REFORESTATION AND EDUCATION (TACARE)	P.O.BOX 1182	KIGOMA
126.	EXPLOIT NAURE AND HELP NATURE (EHENA)	P.O.BOX 29 UVINZA	KIGOMA
127.	TANZANIA TREE PLANTING FOUNDATION	P.O.BOX 164 MKATA HANDENI	TANGA
128.	TANZANIA 4H ORGANISATION	P.O.BOX 5599	TANGA
129.	TANGA ENVIRONMENT AND DEVELOPMENT WATCH (TENDWA)	P.O.BOX 427	TANGA
130.	EAST USAMBARA FOREST CATCHMENT PROJECT	P.O.BOX 5096	TANGA
131.	ANGLO AFRICA RELIEF FOUNDATION (ANAREF)	P.O.BOX 2067	TANGA
132.	ASSOCIATION FOR RURAL DEVELOPMENT PROMOTION (ARDEP)	P.O.BOX 814	TANGA
133.	CHAMA CHA KUPANDA MITI NA KUHIFADHI MAZINGIRA (CKMKM)	P.O.BOX 424 KOROGWE	TANGA
134.	EARTH GREENERY ACTIVITIES JAPAN (EGAJ)	P.O.BOX 3091	DODOMA
135.	DODOMA ENVIRONMENTAL NETWORK (DONET)	P.O.BOX 840	DODOMA
136.	TANZANIA MANAGEMENT OF ENVIRONMENTAL RESOURCES TRUST (TARMERT)	P.O.BOX 2509	DODOMA
137.	DODOMA DEVELOPMENT ASSOCIATION (DODEA)	P.O.BOX 3625	DODOMA
138.	LIVESTOCK AND ENVIRONMENTAL ORGANISATION OF TANZANIA (LEOT)	P.O.BOX 2014	DODOMA
139.	MATALA AGROFORESTRY DEVELOPMENT PROJECT (MADEP)	P.O.BOX 13	KILIMANJARO

140.	TANZANIA ENVIRONMENTAL ACTION ASSOCIATION	P.O.BOX 8098 MOSHI	KILIMANJARO
141.	KILIMANJARO ENVIRONMENTAL DEVELOPMENT ASSOCIATION	P.O.BOX 13 HIMO-MOSHI	KILIMANJARO
142.	WILDLIFE INFORMATION CENTRE	P.O.BOX 9658 MOSHI	KILIMANJARO
143.	KILIMANJARO REGION CONSERVATION ASSOCIATION (KIRECA)	P.O.BOX 974 MOSHI	KILIMANJARO
144.	GREEN SHINYANGA GROUP	C/O HASHI P.O.BOX 797	SHINYANGA
145.	MAARIFA DEVELOPMENT GROUP (MADEGROUP)	P.O.BOX 899	SHINYANGA
146.	HUDUMA ZA JAMII VIJIJINI (HUJAVI)	P.O.BOX 14 MALAMPAKA MASWA	SHINYANGA
147.	HUDUMA ZA INJILI NA MAENDELEO YA WAFUGAJI (HIMWA)	P.O.BOX 1705	IRINGA
148.	IRINGA COMMUNITY DEVELOPMENT ORGANISATION (ICDO)	P.O.BOX1636	IRINGA
149.	IRINGA LANDSCAPING AND ENVIRONMENTAL DEVELOPMENT ASSOCIATION	P.O.BOX 307	IRINGA
150.	SOUTHERN HIGHLANDS FARMERS ASSOCIATION	P.O.BOX 1432	IRINGA
151.	TANZANIA RESEARCH, EDUCATION AND ENVIRONMENT CARE ASSOCIATION (TREECA)	P.O.BOX 211	IRINGA
152.	TANZANIA FARMERS DEVELOPMENT FOUNDATION	P.O.BOX 43	IRINGA
153.	SONGEA ENVIRONMENT IMPROVEMENT PROGRAMME (SEIP)	P.O.BOX 189 SONGEA	RUVUMA
154.	LINDI DEVELOPMENT FUND (LDEF)	P.O.BOX 1054	LINDI
155.	CHRISTIAN ASSOCIATION FOR DEVELOPMENT AND AID (CADA)	P.O.BOX 256 KENNEDY STR. MUSOMA	MARA
156.	VI-TREE PLANTING PROJECT	P.O.BOX 1315	MARA
157.	MARA ENVIRONMENTAL AND SUSTAINABLE DEVELOPMENT ORGANISATION	P.O.BOX 10660 MUSOMA	MARA
158.	CO-OPERATIVE EDUCATION CENTRE	P.O.BOX 54 WETE	ZANZIBAR
159.	ZANZIBAR WOMEN CO-OPERATIVE (ZAWCO)	P.O.BOX 2462 OR 3358	ZANZIBAR

