



ZIMBABWE

MINISTRY OF ENVIRONMENT AND TOURISM

**ZIMBABWE'S THIRD NATIONAL REPORT OF THE
NATIONAL ACTION PROGRAM (NAP) PROCESS IN THE
CONTEXT OF THE UNITED NATIONS CONVENTION TO
COMBAT DESERTIFICATION (UNCCD): 2004**

**Produced by the National Task Force on Desertification for the implementation of the UNCCD
for the Ministry of Environment and Tourism**

December 2004

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List of Acronyms

ARP	Agrarian Reform Programme
AUSAID	Australian Agency for International Development
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
CASST	Centre for Applied Social Sciences Trust
CBD	Convention on Biological Diversity
CBO	Community Based Organisation
CBT	Community Based Tourism
CCD	Convention to Combat Desertification
CIDA	Canadian International Development Agency
DANIDA	Danish International Development Agency
DEAP	District Environmental Action Planning
DFID	Department For International Development (United Kingdom)
DNR	Department of Natural Resources
EIA	Environmental Impact Assessment
ESAP	Economic Structural Adjustment Programme
ESSP	Environmental Sector Support Programme
FTLRP	Fast Track Land Reform Programme
GEF	Global Environment Facility
GTZ	German Agency for International Development
IES	Institute of Environment Studies
ITK	Indigenous Technical Knowledge
JPI	Johannesburg Plan of Implementation
MEAs	Multilateral Environmental Agreements
MET	Ministry of Environment and Tourism
MERP	Millennium Economic recovery Programme
NERP	National Economic Recovery Programme
MGD	Millennium Development Goals
NAP	National Action Program
NEP	National Environmental Policy
NEPAD	New Partnership for Africa's Development
NC	National Coordinator
NFP	National Focal Point
NCS	National Conservation Strategy
NCB	National Coordinating Body
NGO	Non Governmental Organization
NORAD	Norwegian Agency for International Development
NSC	National Steering Committee
NUST	National University of Science and Technology
OP	Operational Programme
PAAP	Poverty Alleviation Action Programme
SCARP	Save Catchment Area Rehabilitation Programme
SGP	Small Grants Programme
SIDA	Swedish International Development Agency
UNCED	United Nations Conference on Environment and Development
UNDP	United National Development Programme
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
UZ	University of Zimbabwe
WB	World Bank
ZTA	Zimbabwe Tourism Authority
ZIMPREST	Zimbabwe Programme for Economic and Social Transformation

CHAPTER 1: SUMMARY

FOCAL POINT INSTITUTION

Name of focal point	MUTSA CHASI [Mrs]
Address of institution	Department of Natural Resources Ministry of Environment and Tourism Makombe Complex Block 1 Corner Harare Street/Herbert Chitepo Box CY 385, Causeway, HARARE ZIMBABWE E-mail: zpn143@mweb.co.zw
Country specific websites relating to desertification	None

2. STATUS OF NAP

Date of validation: June 2001	Institution/Government level which validated the NAP: National Task Force and Ministry of Environment and Tourism
NAP Review(s)	None
NAP has been integrated into the poverty reduction strategy (PRSP)	PRSP not yet f***
NAP has been integrated into the national development strategy	No
NAP implementation has started with or without the conclusions of partnership agreements	No partnership agreement
Expected NAP validation	Month/year: N/A
Final DRAFT of a NAP exists	N/A
Formulation of a draft NAP is under way	N/A
Basic guidelines for a NAP have been established	N/A
Process has only been initiated	N/A
Process has not yet started	N/A

3. Member of SRAP

Name of subregional and/or regional cooperation framework	Involvement specifically in topics such as water harvesting techniques, soil erosion etc.
1. SADC (ELMS)	Erosion hazard mapping
2. SADC Food Agriculture and Natural Resources Sector (HUB)	Capacity building: Establishment of a pilot District Desertification Committee and subcommittee in Shurugwi

4. **Composition of the NCB** (indicate whether it is a Government or civil society Organization, and provide information on the representative's gender):

Name of Institution	Gvt	NGO	Male	Female
Environmental Forum of Zimbabwe		X	X	
District Development Fund	X		X	
Department of Natural Resources	X		XX	X
Animal Science, University of Zimbabwe	X			X
GEF/SGP/Africa 2000+		X		X
World Agroforestry Centre (ICRAF)		X	X	
Climate Change Office		X	X	
Ministry of Water Resources and Infrastructure Development	X		X	
WSSD/MET		X	X	
ZERO		X	X	
Ministry of Environment and Tourism	X		X	
Ministry of Energy and Power Development	X		X	
Ministry of Agricultural and Rural Dev.	X			X
WWF Southern Africa Regional Programme Office		X	X	
Forestry Commission	X		X	
SAFIRE		X	X	
Institute of Environmental Science, University of Zimbabwe	X			X
Zimbabwe Women's Bureau		X		X
Zimbabwe Women's bureau – Agriculture and Nutrition Office		X	X	
Ministry of Environment and Tourism – Traditional Medicinal Plant	X		X	
Parks and Wildlife Authority	X		X	X
Africa Resources Trust		X	X	
UNDP		X	X	X
IUCN		X	X	
Food and Agricultural Organisation (FAO)		X	X	
Agricultural Research Council			X	X
Ministry of Finance	X			X
Ministry of Public Service	X			X
Association of RDCs	X		X	
Department of Agricultural Engineering	X		X	
Drought Monitoring Centre	X		X	
TOTAL	16	14	25	10

5. **Total number of NGOs accredited to the process: 14**

Total number of NGOs accredited to process:	14
Has an NGO National Coordinating Committee on desertification been established?	NO but an NGO focal point exists

6. Total number of acts and laws passed relating to the UNCCD: 5

Name up to five most relevant acts and laws and/or regulations.

Title of the law	Date of adoption
1. EMA	2003
2. Parks Authority	2002
3. Land Acquisition Act	1992
4. Traditional Leaders Act	2000
5. Rural Electrification Act	2003

7. The Consultative process

Number of partnership agreements that have been concluded and/or are being initiated within the framework of the UNCCD (please provide information where appropriate):

Official title of partnership		Donor(s), international organization(s), and/or agencies of the UN system involved	Date of (expected) conclusion
1.	Youth Pilot Programme	African Union (US\$100,000)	2004
2.	UNCCD Awareness and Capacity Building	Global Mechanism (US\$19,000)	2004

Name of consultative meeting		Date	Donor countries involved	International organizations or agencies of the UN system involved
1.	UNDP Donor Round Table Dialogue	2002	Jica, World Bank, Italy	UNDP
2.		2001	EU	UNCCD
3.	Meeting UNDP GEF	2002/3	N/A	UNDP, GEF

Name of country which has taken over the role of *Chef de file*: not known/not available

8. Name up to 10 projects currently under implementation which are directly or indirectly related to the UNCCD.

Name of Project	Project implemented within the framework of the NAP/SRAP/RAP? (Yes/No)	Project implemented within the framework of.....	Timeframe	Partners involved	Overall budget (for Gvt projects allocation for the financial year)
1. Muposhi Catchment (Shurugwi)	SRAP	Catchment Management, Water harvesting, food security, land rehabilitation	2004-2005	Community, traditional leaders, local authority AREX, DNR, GM, SADC Hub.	US\$19 000
2. Munamati Wetland Mashonaland East	NAP	Wetland rehabilitation, use of alternative energy, sustainable livelihoods consolidated garden	2004-2005	Gvt, Community, Local authority, DNR, AREX, UNDP	Z\$8 000 000
3. Bidi gully Matebeleland South	NAP	Woodlot gully reclamation	2003-2005	Gvt, Community, Local authority, DNR	Z\$21 000 000
4. Rubatso Water Harvesting project Manicaland	NAP	Water Harvesting, food security, Garden, Poverty alleviation.	2004	Gvt, NGO, Community, Local authority, DNR, AREX, Department of Engineering	Z\$2 000 000
5. Chimuriwo wetland Rushinga, Mashonaland Central	NAP	Wetland rehabilitation, consolidated garden, drought mitigation, poverty alleviation.	2003-2005	Community, GoZ, RDC, AREX, DNR	Z\$2 000 000
6. Lusvingo Ecotourism Bulilima Matebeleland South	NAP	Sustainable natural resource utilisation, Development of game park and chalets, rehabilitation of monuments, poverty alleviation, water harvesting	2004-2006	GoZ, RDC, Community,	Z\$59 000 000
7. Sustainable Energy programme	GEF small grants projects	Sustainable livelihoods and environment and development	Oct 2003 – Nov. 2004	Ministry of Energy, Jekesa Pfungwa/ Vulingqondo (JPV) Chipinge Rural District Council funded under Africa 2000 Plus Network	US\$90 000

Name of Project		Project implemented within the framework of the NAP/SRAP/RAP? (Yes/No)	Project implemented within the framework of.....	Timeframe	Partners involved	Overall budget (for Gvt projects allocation for the financial year)
8.	Dufuya Integrated Wetland Management project	GEF small grants projects	Addresses focal area of biodiversity and climate change mitigation	Oct. 2003 – Dec. 2005	Heifer Project International (HPI), DNR, Forestry Commission, AREX under GEFSGP Funding.	US\$28 975
9.	Gariya Integrated Ecosystem Management and San Integration Project	GEF small grants projects	Addresses focal area of biodiversity, land degradation and international waters	2004 – 2005	Africa 2000 Plus Network, DNR, AREX, Tsholotsho RDC, Gariya Development Association, GEFSGP funded.	US\$41 681
10.	Tongwe Integrated Catchment Management and Biodiversity Conservation Program	GEF small grants projects	Focussing on biodiversity, climate change international waters and land degradation focal areas.	2004 – 2005	Africa 2000, DNR, Veterinary Services, AREX, Tongwe RDC, HPI, GEFSGP Funded.	US\$31 130

CHAPTER 3: STRATEGIES AND PRIORITIES ESTABLISHED WITHIN THE FRAMEWORK OF SUSTAINABLE DEVELOPMENT PLANS AND/OR POLICIES

3.1 Introduction

Following the abandonment of the Economic Structural Adjustment Programme (ESAP) in 1997, Zimbabwe has been pursuing homegrown national development programmes, which have been periodically reviewed under different names as informed by the prevailing macro economic and political situation. The first homegrown national development program was the Zimbabwe Program for Economic and Social Transformation (ZIMPREST) adopted in 1998 but was undermined by the lack of resources. The Millennium Recovery Program that replaced ZIMPREST in 2001 was also rendered ineffective due to lack of donor support following negative perception on the Fast Track Land Reform Programme (FTLRP) initiated in the year 2000. The current national development framework launched in 2003 is contained in the National Economic Revival Programme (NERP): Measures to address the Current Challenges. Unlike the preceding development frameworks, NERP recognises the major challenges that have caused the decline in national economic performance and the deteriorating social conditions and tries to focus specifically on these. As a consequence, NERP tackles a broad range of issues, making it more able to address sustainable development. Previous to NERP, the national development planning was mainly focused on supporting economic growth. However, due to the multitude of problems in the economic, social and environmental sectors, decision makers have had to adopt measures that have multiplier effects that address challenges in the three sectors.

During the period 2003 to 2004, several initiatives and processes with a bearing on sustainable development and the UNCCD in particular were initiated some originating nationally whilst others were a result of international policy making. Having participated at the World Summit on Sustainable Development in 2002, various stakeholders were engaged in consultations and drafting of national response programmes to the Johannesburg Plan of Implementation (JPI) facilitated from the Ministry of Environment and Tourism (MET). At another level, the Ministry of Public Service and Social Welfare was leading the national process of developing national targets and indicators for the Millennium Development Goals (MDG). Government's engagement in the New Partnership for Africa's Development (NEPAD) processes was rather limited but with more activity in this regard through Civil Society particularly regarding awareness and advocacy. At the national level, the period saw the conclusion of the Fast Track Land Reform Program and the start of the Agrarian Reform Program. The promulgation of the Environmental Management Act Chapter 27 (EMA) in 2002 required concerted efforts from MET, beginning in 2003, to establish an institutional operating framework as well as building capacity of various stakeholders. The Ministry of Environment and Tourism also facilitated the formulation of a National Environmental Policy (NEP) to complement EMA.

Other national initiatives with relevance to the UNCCD include the implementation of Multilateral Environmental Agreements (MEAs) such as the Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC), the Montreal Protocol on Substances that Deplete the Ozone layer and Convention on International Trade in Endangered Species (CITES).

It is important, at this juncture to reflect on the level of coordination of these efforts as well as the extent to which synergy was building. Generally sustainable development initiatives still remain fragmented despite some improvements in the conceptualisation of the planning frameworks. It would appear that policy makers are aware of the need to mainstream challenges emerging in other sectors and have tried to reflect these in their plans with limited capacity to implement. Most of the development processes and initiatives propose different institutional frameworks that have poor communication systems and fail to draw linkages either vertically or horizontally with others sectors. The result is a sustainable development process with too little resources and much that remains undone at the implementation level.

3.2 National Plans And Strategies Available In Other Social And Economic Areas

The following section will review various national plans and strategies within the framework of sustainable development and the extent to which they take into account the National Action Plan (NAP) provisions and the UNCCD (Box 1¹).

Box1: Eight Priorities for CCD Action Programmes

1. Promotion of alternative livelihoods and improvements of national economic environment with a view to strengthening programmes aimed at eradicating poverty and **promoting** food security
2. Demographic dynamics
3. Achieving sustainable management of natural resources
4. **Promoting** sustainable agricultural practices
5. **Promoting** the development and efficient use of various energy sources
6. **Establishing** Institutional and legal frameworks **that promote NAP implementation**
7. Strengthening of capacity for assessment and systematic observation, including hydrological and meteorological services and
8. **Promoting** capacity building, education and public awareness

3.2.1 Zimbabwe's NAP: A Snapshot

Zimbabwe ratified the UNCCD in 1997 with the intention of addressing issues relating to land degradation and drought evidently the major environmental challenges in rural areas. Consistent with the obligations under the convention, Zimbabwe initiated the process to develop the NAP that was finalised in 2001. The NAP focuses on energy, land use planning and soil conservation, water resources management, education public awareness and capacity building, provision of alternative livelihoods and poverty alleviation, land tenure systems, policy, legal and institutional arrangements and research support. Four programmes were developed on energy management, land management, water management and information systems however these have not been fully implemented due to lack of financial resources. NAP proposed using the Land and Environment Subcommittee of the Provincial Development Committee right down to the Village Development Committee Level for project implementation and management. Geographic focus of NAP has been in regions IV and V, which are characterised by fragile soils, low and erratic rainfall and are prone to frequent droughts and land degradation. Four specific sub-programmes were formulated under the NAP these include: Water management; Energy management; Land management and Information systems.

3.2.2 Economic Development Policy Frameworks

Vision 2020

Vision 2020 is the long-term socio-economic vision, framework and broad development strategy that guides medium/short-term development, polices and plans in Zimbabwe. Vision 2020 encompasses national aspiration and strategies for sustainable management of natural resources and the national environment. It provides for land use and conservation in communal lands and resettlement areas to reduce land degradation and mismanagement of the environment. Some of the objectives relevant to NAP include: protection and sustainable use of natural resources, monitoring of country's natural resources, community participation in natural resources and environmental management by applying indigenous knowledge, elimination of poverty, targeted investment on the poor to reduce poverty, drought mitigation and management, agricultural development, energy sector development and water development and management.

National Economic Revival Program

The National Economic Revival Program (NERP) draws from Vision 2020 and was conceived at a time when Zimbabwe was facing a number of economic and social challenges including: worsening export performance due to the high cost of production and below capacity operation of industry, high inflation of 425 %; decline in export by 35 % cumulatively from 2000-2003; external debt areas of US1, 4 billion; shortage of foreign currency and distortion in the foreign exchange market; decline in manufacturing from 25 % of GDP in 1998 to 15 % of GDP, worsening poverty; drought and food shortages and HIV/AIDS prevalence of 26 % of the population².

The NERP proposes a host of measures to encourage economic growth and reduce poverty. It pays particular attention to the agricultural sector which contributes 16,5% of GDP; 33,5% of foreign exchange and 25,6% of employment (NERP 2003). This is consistent with the observation of the UNCCD Annex for Africa, Articles 3 (f), and 4, paragraph 2 (b) which recognise the dependency of the majority of the population on natural resources, including land, for survival. The NERP proposes guaranteed land ownership that encourage meaningful investment and therefore calls for more secure forms of land tenure. The land management programme of NAP also observes that land degradation is worsened by condition of insecure tenure and calls for a review of land tenure systems. The NERP provisions for supporting improved agricultural production include other aspects such as the revision of farm sizes to ensure efficient utilisation of land, the timely supply of agricultural inputs, incentives such as producer pricing, support for irrigation development in the dry regions of the county and the creation of the land bank. These provisions are clearly in harmony with one of the UNCCD founding principle that reversing land degradation and combating desertification must be integrated in other development programme framework. The land management proposal of NAP alludes to the need to support smallholder farmers through extension, input supply and finance. To date some of the proposed measures are in place including the Land Bank that is providing soft loans to newly resettled farmers.

Although the NERP is clear on supporting agriculture production, it remains silent on the need to preserve the land base on which agriculture takes place. Measures to promote sustainable agriculture and sustainable land management are therefore not included. The NERP also contains measures that will be undertaken in the event of a drought. The measures include both mitigation and reduction of vulnerability through mainly mobilising private sector for the importation and distribution of food. It is however silent on the role of civil society and the affected communities in procurement of food.

The NERP notes that Zimbabwe is an energy deficient country and has indicated the policy provisions that encourage efficient utilisation of energy and fuel conservation. NERP fails to draw linkages with the NAP energy program, which calls for investment in alternative energy sources and the research and development of renewable energy technologies.

Science and technology is regarded important, but more so in providing the needs of industry. Emphasis is also placed on formal science and little is mentioned on harnessing indigenous knowledge to enhance productivity and sustainable management of natural resources. It is commendable that a Ministry of Science and Technology has been created under the Presidents Office. NERP intervention towards poverty reduction, which according to the UNCCD is a major cause of land degradation, is through empowerment of vulnerable groups, as well as through supporting small to medium enterprises to generate employment and foreign currency. The NAP recognises the need to create alternative livelihoods that remove dependency on the natural resource base as well as generating income. In this regard the NERP has commitment to support an agrarian reform that will encourage wealth creation and economic empowerment of the peasantry through among other measures and agro-based industrialisation as a bid to diversify the livelihood base of rural households.

3.2.3 Poverty Alleviation Policy Frameworks and Programmes

Zimbabwe launched the Poverty Alleviation Action Program (PAAP) in 1995 and is currently finalising the second poverty assessment study, which will provide valuable information and data for the Poverty Reduction Strategy Paper (PRSP). PAAP is ongoing through systematic monitoring and analysis. Its focus during 2003 to 2004 was building of capacity of communities to generate income and the broadening of the people's base for sustenance by improving income-generating capacity through the Community Action Programs (CAP). This is complementary to the NAP cross cutting theme of poverty reduction and the creation of alternative means of livelihoods. The program has managed to develop poverty alleviation strategies at the community level through the Community Action Programs. In Community Action Programs pilot areas, activities included aspects of land rehabilitation including gully reclamation, erosion control and afforestation among other poverty alleviation interventions. In implementing CAP, the Ministry of Labour Public Service and Social Welfare went into partnership with the Ministry of Environment and Tourism in a bid to optimise the use of human and financial resources for effective poverty reduction. In addition CAP applied the District Environmental Action Planning (DEAP) participatory approach to facilitate the development of community based poverty alleviation action plans

which enhanced sustainable and effective use of natural resources. Some of the community natural resource management projects were funded through the CAP funds. The Enhanced Social Protection Program is a component of PAAP, which aims to support vulnerable households in four main areas namely: basic assistance for education and health care; social mobilisation to identify children in difficult circumstances, income transfer such as the public works program and health fee subsidy.

Of particular relevance to the UNCCD and NAP is the public works program. The public works program targets food deficient areas in conjunction with early warning. Some of the activities of the public works program assist in reversing land degradation and promoting food security e.g. contour ridging, reforestation through seedling propagation and planting of trees. Improvement of food security is through the construction of small dams to harness and store water for irrigation. CARE international implemented such a program in Masvingo and Midlands Provinces. Aspects of the program included rehabilitation and protection of catchments, dry land farming practices and research trials, establishment of irrigated gardens and marketing of garden produce

3.2.4 Millennium Development Goals and Johannesburg Plan of Implementation

National response processes to the Millennium Development Goals and the Johannesburg Plan of Implementation took place at a time when UN funding for the formulation of the NAP had ended with the resultant closure of the UNCCD office located in The Department of Natural Resources (DNR). This was to have impact in the way the Department of Natural Resources –focal point for the NCCD was to function in terms of NAP implementation and mobilisation of extra resources given the limited in-flow of funds from donors. UNCCD work had to be mainstreamed in the day-to-day operations of DNR. The coming on board the World Summit on Sustainable Development complimented the efforts of DNR, which found it prudent to integrate NAP initiatives in the national response to the Johannesburg Plan of Implementation (JPI).

With support from the UNDP, the Ministry of Environment and Tourism set up an office to facilitate Zimbabwe's participation at the WSSD as well as to steer the national response to the outcomes of the summit and other international environmental agreements. Specifically, the office had to achieve the following:

- Encourage the participation of government, civil society and private sector in the preparation of WSSD;
- To develop a website to promote awareness on MEAS and to encourage debate and discussion on the progress of implementation of agenda 21;
- Establish a national vision on sustainable development structures at local level to facilitate participation of rural communities without access to communication tools; and
- To assess the project on the extent to which they met principles of Agenda 21.

The above-stated objectives complement UNCCD particularly the need for stakeholder participation and the creation of awareness that would profile the UNCCD as one of the MEAs key to achieving sustainable development.

The period preceding WSSD saw the setting up of a multi-stakeholder committee which provided support to the Ministry of Environment and Tourism in a number of initiatives including the compilation of the national report on implementation of Agenda 21, media publicity, compilation of case studies on best practice, national competitions on projects in line with agenda 21 and the determination of national progression targets. The setting up of the committee provided a channel for the active participation of stakeholders from different sectors including government, corporate and civil society. Whilst a similar structure had been put in place after United Nations Conference on Environment and Development, its tenure was short-lived.

The preparatory process therefore created momentum for collective visioning on sustainable development. The assessment on the extent of implementing Agenda 21 included a review of UNCCD amongst other MEAs. Awareness-raising also highlighted the place of MEAs in sustainable development. Civil society played an active role in stakeholder consultations through several theme-based workshops on poverty and

wealth creation, renewable energy, land and sustainable agriculture, forestry and biodiversity taking centre stage. Whether done deliberately and/or systematically or otherwise, what is clear is that the national preparatory process complimented the NAP. It is also clear that aside from the national competitions, the preparatory processes did not adequately involve stakeholders at the sub-national level such as the districts, wards and villages, raising doubts on the extent to which grassroots communities made input to the issues that Zimbabwe presented at WSSD. This in direct contradiction to the UNCCD that places communities at the centre of processes and actions aimed at reversing land degradation and combating desertification. Retrospectively, the setting of targets under the national progressions could have specifically included aspects of NAP simultaneously making tracking of progress on UNCCD much easier.

Parallel to the WSSD preparatory process was the MDG target setting process, spearheaded by a different Ministry altogether i.e. the Ministry of Public Service and Social Welfare carrying out a separate consultative process. To compound the problem was the general lack of awareness at the national level on the intent of the MDG process particularly during the initial stages of consultations. Whilst it is commendable that national targets and indicators were formulated through a consultative process, the lack of clear and systematic synergy with the WSSD process during the formative stages was unfortunate. Goal 1 and 7 of the MDGs are directly relevant to the UNCCD. The challenges for achieving goal 1 in Zimbabwe include³

- Support for the Land Reform Program
- Reduce dependence on rain-fed agriculture, increase productivity
- Establish food and nutrition surveillance system
- Develop land information and natural resources data base
- Design a poverty-monitoring database

Challenges identified for achieving Goal 7 include⁴:

- Addressing poverty induced natural resource degradation;
- Provision of decent housing, safe water and sanitation;
- Establishing waste management policies to combat air and water pollution;
- Implementation of the provisions of the newly enacted Environmental Management Act;
- Implementation of multilateral environmental agreements and
- Energy provisions and environmental awareness

Post-WSSD initiatives included feedback and consultations on possible responses to the JPI. This period was marked by greater awareness on centrality of the MDGs to achieving sustainable development. Unlike the preparatory process, this phase was characterised by a bottom up process where sub-national structures provided their reaction to the JPI in the form of provincial and district action plans. The level of commitment and participation of sub-national structures in the post WSSD processes is a positive indicator that sustainable development is likely to be achieved in Zimbabwe as emphasis was placed on developing targets and indicators for achievement of sustainable development parameters at all levels. Stakeholders at district and provincial levels formulated action plans that included all the MDGs as well as priority issues in line with NAP provisions including the following:

- Development of environmental profiles, natural resource inventories and mapping. This is complementary to the fourth program area of NAP which relates to the need for information systems;
- Water catchments rehabilitation and management including water harvesting supporting NAP program on water management;
- Renewable energy technologies and research, which supports the energy management program of NAP;
- Reducing poverty through value addition, sustainable commercialisation of natural resources and opening up of markets for agricultural products. This clearly links with the UNCCD observation that reversing land degradation will depend on the extent to which poverty is alleviated; and
- Provinces located in the drier parts of the country proposed the development of drought management and coping strategies and promotion of food security. This will contribute directly to the attainment of Article 2, objectives 1 and 2 of the UNCCD.

The national response to JPI draw insights from the post-WSSD provincial and district action plans and also links well with the NAP and the MDGs in so far as the overall goals are concerned. Although categorised according to the three pillars of sustainable development i.e. environment, social and economic, common threads complementary to NAP can be identified. Firstly is the recurrent theme of poverty reduction directly or indirectly through measures such as commercialisation and sustainable use of natural resources, provision of social security and decentralisation of ownership, access and control of resources and decentralised systems for accessing and distributing financial resources. Secondly is the need to manage natural resources as the base for economic and social prosperity. The national response to JPI also includes the piloting of projects in the following areas: integrated land use and management, rehabilitation of irrigation systems, wetland conservation, and provision of social services to newly resettled areas, development of environmental profiles, natural resources inventories and environmental awareness training to newly resettled farmers.

3.2.5 Environmental Management Act

The Environmental Management Act (Chapter 20: 27 No 13/2002) (EMA) enacted in 2004 provides for a holistic approach to environmental management. This is an important piece of legislation that has corrected a situation where environmental legislation was fragmented and uncoordinated. EMA was developed over a protracted period, which has enabled the inclusion of new developments such as the broader definition of the environment to include biophysical, economic, social, technological and political aspects. By taking this broad view of the environment, EMA is well suited to supporting the achievement of sustainable development. In particular principle 1 of EMA gives priority to sensitive, vulnerable and highly dynamic and stressed ecosystems which is consistent with UNCCD principle of giving attention to implementation of preventative measures to ecosystems that are vulnerable to desertification and drought. EMA calls for the establishment of an Environment Fund, which will integrate land degradation. Targeted areas consistent with NAP include rehabilitation of degraded environment, transfer of environmental management services technology and promotion of public awareness of environmental management issues (part II of EMA Section 4 paragraph 2, sub paragraphs (g) and (i) refers).

EMA also calls for the formulation of environmental management plans at all levels. These plans must contain strategies and measures for management, protection, restoration and rehabilitation of the environment. Part X, section 88 paragraph (e) of EMA calls specifically for the implementation of international conventions to which Zimbabwe is signatory. Of particular relevance to the UNCCD is Section XII that provides for the setting aside, through Presidential Decree, lands for conservation works such as water conservation, mitigation or prevention of soil erosion preservation and protection of river beds and banks and disposal of irrigation water. Cumulatively this has the potential to reverse land degradation. EMA regards wetlands as ecologically sensitive ecosystems requiring the special protection by the Minister of Environment and Tourism where necessary. Whilst EMA accords special recognition to the CBD through paragraph 116, the UNCCD is not given special mention. This is a serious omission given that land degradation and drought are among the major environmental challenges facing the country. However, measures included in paragraph 109-115 will promote the implementation of the UNCCD in general and NAP in particular. Furthermore, part XV paragraph 132(3) of EMA obliges the Minister of Environment and Tourism to ensure the implementation of MEAs including the UNCCD.

EMA does not specifically address the issue of sustainable land management yet the land reform program can result in negative impacts on land and natural resources. In this regard, the Ministry of Environment and Tourism (MET) put in place the Integrated Conservation Plan for the Fast Track Land Reform Program that focuses on promoting optimum land use options in order to achieve improved productivity and sustainability. The plan is premised on the observation that Zimbabwe's ecological regions (I-V) are suited to different kinds of land uses, e.g. natural region V is more suitable for extensive livestock and game ranching whilst natural region I is suitable for intensive crop farming including horticulture. For optimal yield to occur, it is important that these appropriate land uses are adhered to. The Integrated Conservation Plan complements the UNCCD in so far as it prescribes natural resource management strategies, forestry management strategies, and wildlife management strategies. The plan also uses the bottom up approach by allowing the formation of conservation committees consisting of local community, government officers and NGOs to assist communities in their conservation efforts. It also calls for massive education and awareness on the need for sustainable management and use of resources, the need for collecting baseline information

on natural resources and production of natural resource maps and inventories thus supporting NAP sub-program on information systems.

3.2.6 National Environmental Policy

During the period 2002 to 2004 MET was leading a consultative process of formulating a National Environment Policy which has now been finalised. The National Environment Policy (NEP) supports Zimbabwe's national policy objective of alleviating poverty and improving the quality of life of the people of Zimbabwe through strategic measures that are aimed at **“sustaining the long-term ability of natural resources to meet the basic needs of people, enhance food security, reduce poverty and improve the standard of living of Zimbabweans through long-term economic growth and the creation of employment”**.⁵

A careful analysis of this policy objective indicates complementarities with the UNCCD founding principles and Zimbabwe's NAP in particular. Common elements include the need to enhance food security, reducing poverty, and sustaining natural resources so that they continue meeting the basic need of people. With respect to water management, guiding principle 5, under section 4.2, states that “optimal water resource development requires integrated management of both water and land resources at catchments level” thus clearly supporting NAP program on water management. Both recognize the need for integrated and multi-sectoral decentralised planning for water management that takes into account land use systems within the catchments as well as other human activities. Principle 6 of the NEP specifically calls for participatory approaches, involving policy makers, planners and users at all levels. This is fundamental to sustainable management of natural resources and lays the foundation for reversing land degradation as required by the UNCCD. Unlike EMA, the NEP recognises that land degradation, inequitable distribution of land and insecure tenure are key issues affecting the environment. This is consistent with the results of a survey conducted by MET in 1992 on “Defining Sustainable Development in Zimbabwe”, which ranked these issues second and fifth respectively.

NEP goes further to express concern on the fate of natural resources in areas occupied under the resettlement program. This same concern is raised in the NAP land management program. To address these problems the policy calls for sustainable use of land, integrated land-use planning and the provision of secure tenure, which may encourage communities to invest in the sustainable management of land. Reducing deforestation is considered critical given that the majority of people living in rural areas depend on forest-based products for their livelihood. If the NEP provisions contained in guiding principles 8 and 9 are implemented on the ground rather than remain on paper, Zimbabwe may be on the right path in terms of reversing land degradation.

As regard NAP crosscutting issue of poverty alleviation, NEP looks at poverty as a social issue whose reduction is based on four main principles (24-27) namely:

- Principle 24: Reducing poverty requires securing and enhancing the assets of the poor, especially the environmental assets from which many derive their livelihoods
- Principle 25: Allowing people more participation and control over the local affairs enables them to tackle greater responsibility for their environment
- Principle 26: The livelihoods of the poor need to be secured and strengthened by preventing, mitigating or remedying the negative impacts on their rights to a clean environment
- Principle 27: A sustained reduction in poverty requires coordinated actions locally, national and internationally

Although the policy does not specifically bring out the intricate relationship between poverty and land degradation, it goes a long way in unravelling the root causes of poverty and ultimately brings out the same strategies as the UNCCD to address poverty. The NEP supports MEAs particularly the CBD on Indigenous Knowledge Systems (Section 5.9) and borrows some of the measures from the provisions of the CBD. The UNCCD considers Indigenous Knowledge Systems critical to managing drought and reducing vulnerability.

3.2.7 Agrarian Reform Program

Following the experiences and lessons derived from implementation of The Fast Track Land Reform Program (FTLRP) as informed by the results of the 2002 Land Audit and the 2003 Presidential Land Review Commission, Zimbabwe is currently implementing an Agrarian Reform Programme (ARP). The above reviews opened the way for greater consultations on the way forward with respect to the promotion of agricultural productivity. Although the ARP is shrouded with controversy with many donors adopting a negative and at times hostile attitude, it is important to stress that this program is considered key to alleviating poverty and stimulating national economic growth. Regardless of the perceived inadequacies inherent from the FTLRP, the ARP provides the basis for improving the long-term prospects of rural economies as required by the UNCCD. This is supported by the fact that the rural poor, former farm workers and urban poor comprise 87 % of the beneficiaries having access to 67 % of the land made available for resettlement (S. Moyo and C. Sukume 2004). Access to land is therefore a potentially economically empowering tool if the necessary support for investment and production is provided. The above report also observed that generally resettled households have access to more land for grazing and tilling as compared to those in communal land. This translates to a situation where there is less pressure on the land creating conditions that are favourable to preventing land degradation.

Currently the ARP is exploring ways of improving tenure arrangements to correct the problems that arose from insecure tenure under the FTLRP. According to the Presidential Land Review Committee (2004) beneficiaries settled under the FTLRP in both A1 and A2 schemes expressed concern on lack of secure tenure that made it difficult for beneficiaries to secure loans for agriculture inputs, machinery and related infrastructure development.

The proposed measures under the ARP regarding tenure include issuing of 99-year lease to A2 farmers that will encourage investments as well as sustainable land management. For A1 farmers, government is considering issuing permits. These measures will provide better security to new settlers and instil a sense of ownership and commitment to the land and natural resources. This may alleviate the problems of natural resource destruction that has been reported to be occurring in many newly resettled areas. The FTLRP was characterised by the singular use of land for agriculture purposes, which increased the country's vulnerability to drought. ARP has integrated options for the use of land for wildlife and tourism particularly in regions IV and V as the basis of the wildlife based land resettlement policy developed by MET. The wildlife based land reform policy seeks to promote wildlife ranching as a viable land use option in agriculturally marginal areas, thus reducing degradation. This model is also meant to integrate communities in communal lands that live near wildlife areas and allow them to engage in wildlife ranching through conservancies or CAMPFIRE projects. This will reduce conflicts if the proposed institutional arrangements are followed.

The ARP is placing emphasis on diversifying and expanding agriculture in the newly resettled areas through a number of measures including concessionary loans from Agribank, input support schemes and contract farming arrangements. This complements the UNCCD article 8, section 3 (a) (i) of the Annex for Africa. Other support measures include input market interventions particularly the stabilisation of prices, producer market intervention to create incentives for production and distribution controls for strategic crops such as maize and wheat

Cognisant of the central role that water plays in agriculture, the government is also supporting the rehabilitation of irrigation systems by providing financial support to newly resettled farmer to procure new irrigation implements. The Irrigation Rehabilitation Fund, established under the Ministry of Land Agriculture and Rural Resettlement with technical support from the Agriculture and Rural Development Authority (ARDA), has the potential to increase irrigated land and enhance productivity. There is need, however, for the government to invest more in the development of new irrigation systems. Combined efforts through the Zimbabwe National Water Authority (ZINWA) and District Development Fund to develop micro irrigation systems are commendable. The review of the water rights, as well as the institutional arrangements for managing and distributing water facilitated by ZINWA has provided for fair and equitable distribution of water. The institutional mechanism provided under ZINWA, which provides for catchments-based management of water, is an attempt to address the social, environmental and

economic parameters that affect the availability and supply of water. This decentralised planning and management supports NAP program on water management

The agrarian reform still needs to address the following challenges that make the realisation of UNCCD and NAP particularly difficult:

- Weak information systems on land-use, production etc;
- Limited support for extension and marketing;
- Lack of financial resources to exploit available water and lack of Co-management arrangements for water in resettled areas;
- Poor technology generation and transfer;
- Need for enforcement of environmental impact assessment and management
- Need to encourage indigenous systems in land management; this includes traditional land husbandry practices such as multi-cropping, traditional water conservation, biodiversity products and sustainable farming practices; and
- Supporting the diversification of the communal areas by providing alternatives.

3.2.8 National Drought Management Policy

The policy is premised on the concept of sustainable livelihoods that are critical to adapting to drought situations. The goals from the drought management policy relevant to the UNCCD include the need to ensure that drought management programmes are linked and integrated with other developmental programmes and goals and that participation implies community commitment, collective decision-making, individual and collective innovativeness, local resource generation and contribution by communities themselves in reducing and minimising the impact of drought. These support the UNCCD principle of integrating initiatives in ongoing programs and the need for genuine stakeholder participation in development. Specific policy goals that lend support to NAP and the UNCCD are: the need to develop water resources, the need to develop irrigation schemes, improving agriculture productivity, diversifying the economic base through non-agricultural activities, promoting more effective food security policies, population dynamics and promotion of programmes that monitor the degradation of the environment⁶. Natural resources management is regarded as one of the strategic issues that the policy will address amongst others such as rural industrialisation, indigenisation, resettlement and land reform, promotion of indigenous knowledge in early warning, storage and adaptive strategies. These strategies are very sound but, in reality, drought management has tended to concentrate on ensuring food availability. Another constraint relates to the emphasis on adaptation rather than mitigation, which may explain why the Drought Management Committee is mainly active during drought years hence failing to focus strategic thinking on mitigation options.

3.2.9 Reforms in the Energy Sector

EMA observes that Zimbabwe is an energy deficient country requiring the importation of energy for urban domestic consumption, industrial and agricultural production. The main form of energy for the majority of rural households is biomass placing a heavy strain on forest resources, causing deforestation and land degradation. Zimbabwe NAP has a sub-program on energy management with the overall objective of promoting the development and use of renewable energy sources. This stems from the realisation that the high costs of electricity in terms of generation and supply as well as the escalating deforestation in rural and peri-urban areas resulting from the collection of firewood is not sustainable. Zimbabwe also generates its electricity from burning coal, whose by-products cause global warming and climate change

NAP's intervention in the energy sector was meant to increase the productive base of the rural people by providing alternative energy sources that allow for farm mechanisation, agro processing, irrigation and other cottage industries. The Ministry of Energy and Power Development has supported the provision of electricity to rural areas through the Rural Electrification Agency (REA). REA is currently in the process of implementing the Accelerated Rural Electrification Program, which involves the electrification of rural education, health institutions, business centres, chiefs' homesteads as well as households located near the grid systems. Particular emphasis is also being placed on providing electricity for irrigation systems as an effort to encourage food production in the newly resettled areas. This program is likely, in the long-term to see a reduction in the cutting down of trees for fuel, particularly if more households are linked to the grid.

The impact on household firewood consumption is likely to be limited due to the high connection fees, which will limit access by rural communities.

The Renewable Energy Technologies (RET) policy guides the development and use of renewable energy options. A variety of renewable technologies have been developed and applied with varying degrees of success. These initiatives continue to be supported by NGOs through the GEF-Small Grants Program (GEF-SGP). Research institutions such as the Scientific and Industrial Research Development Centre (SIRDC) have been instrumental in designing some of the technologies. The uptake of such technologies to levels which may provide impact on reversing land degradation still remains limited due to a number of reasons including: the lack of knowledge on the use, the failure to widely disseminate and market such technology, the high costs involved in adopting the technologies and the lack of incentives to switch to these new technologies. The RET hold a lot of promise for a country like Zimbabwe which is facing problems of importation of fuel and may provide the energy needs for rural communities to diversify their subsistence base. There is need for more resources in research on renewables to facilitate innovation and technological development.

3.2.10 Multilateral Environmental Agreements

This section will focus on the review of progress made in implementing the CBD and the UNFCCC, which are considered to have greater linkages with the UNCCD. Following the conclusion of the National Biodiversity Strategy and Action Plan (BSAP) in 1998, not much action has taken place in fulfilling the unmet needs as detailed in the BSAP. The priority unmet needs identified in the BASP include: developing an inventory of biodiversity, monitoring of biodiversity loss, provision of alternatives for human survival beyond the existing natural resource base, development of appropriate research and extension and documentation of indigenous knowledge systems, incorporation of biodiversity conservation in land use planning and provision of alternative energy sources in rural areas are complementary to addressing problems associated with combating desertification and reversing land degradation. Project proposals to address some of the unmet needs were developed for Global Environment Facility (GEF) funding by MET in partnership with NGOs but with limited success. In the year 2003 two projects were approved for funding namely:

1. The Southern Africa Biodiversity Support Programme which focuses on promoting conservation and sustainable use of biodiversity in Southern Africa by strengthening regional biodiversity planning, interstate co-operation and information exchange and
2. Conservation and Sustainable Use of Medicinal Plants, which focuses on promoting the conservation and sustainable use of endangered medicinal plants.

Although there was limited funding to implement the BSAP, several initiatives in the area of biodiversity conservation are on-going through the expansion of the Communal Area Management Program for Indigenous Resources (CAMPFIRE) into newly resettled areas. Africa Resources Trust, a regional NGO conducted studies on assessing the capacity of communities to undertake assessments and inventories as well as capacity building needs for communities to influence policy making for sustainable biodiversity management and conversation. Results from such studies will direct capacity building efforts directed at communities. Other initiatives are linked to trans-frontier natural resource management agreements, which will be explained in subsequent chapters of this report.

With regards the Forestry Biodiversity Programme area under the CBD, the Forestry Commission has adopted the shared forest management approach in gazetted areas in a bid to reduce conflicts between state forest officials and neighbouring communities. This approach allows for the sustainable use of forest products by the communities hence reducing over-exploitation. Resource sharing projects include: bee keeping, harvesting of thatch and broom grass and collection of mushrooms and edible fruits. Institutional support from the Forest Extension Department include the formation and/or strengthening of resource management committees at the local level through training on leadership and community mobilisation, resource management and harvesting, formulation of by-laws on conservation and sustainable use of natural resources and processing of products. The commercialisation of natural products has provided alternative means of income to rural communities and has the potential to reduce poverty. NGOs such as SAFIRE and ITDG have been involved in such endeavours, which have seen beverages and jams from wild fruits as well as indigenous vegetable varieties competing at the national and international markets.

However, cases of exploitation, over prices and individuals hi-jacking community projects limit the benefits that accrue to communities.

The Climate Change Office, within MET has been directly and indirectly involved in programs and projects that complement the UNCCD. Although the office has limited program linkages with the NAP, the Coordinator has been co-opted into membership of the national taskforce on the UNCCD. In his capacity as the chairperson of the GEF-SGP national selection committee, the Coordinator has influenced the extent to which the portfolio of projects addresses land degradation and climate change. In 2003, the Climate Change Office facilitated a study on the vulnerability and adaptability of maize production to climate change in Zimbabwe. The rationale for the study is the dependency of the country on maize as a staple food as well as the limited technology that make Zimbabwe vulnerable to climate change. The overall objectives of the study were to quantify the possible impacts of climate change on maize production and make policy recommendations on adaptation. This supports the NAP program on the need to develop information systems for drought management. The study results also provide information critical to improving food security. The generation of data from such studies improves the understanding of climate change impacts thereby improving the drought coping strategies. The office facilitated the study on climate change mitigation aimed mainly at promoting energy efficiency technologies in Zimbabwe's industrial sector. The study is however of little direct relevance to the UNCCD since it did not focus on mitigation options for reducing biomass based energy, which is one of the leading causes of deforestation in the rural and peri-urban areas of Zimbabwe. The Climate Office also facilitated a project aimed at making meteorological data easily accessible to farmers. This project resulted in the deployment of meteorological extension officers to provinces who work closely with AREX officials in giving advice to farmers on climate and weather conditions relevant to agriculture.

3.2.11 Other Programs

Some civil society organisations and research institutions have projects and programs that support the UNCCD. Notable examples are the GEF-SGP which is coordinated by Africa 2000 + Network. With the adoption of land degradation as an additional GEF focal area, some communities in Zimbabwe have collectively designed and implemented projects aimed at rehabilitating ecosystems and improving water availability Chapter 1 table 8 above lists a few examples. The Homestead Development Program initiated by the Zimbabwe Women's Bureau is an integrated approach to managing natural resources within and surrounding homesteads and includes conservation farming, sustainable energy use, agro-forestry and sustainable use of natural resources. The Consultative Group on International Agriculture Research affiliated International Centre for Research in Agriculture and Forestry (ICRAF) and International Centre for Research in Semi-arid Tropics (ICRISAT) are providing research and development relevant to the UNCCD as will be explained in chapter 9.

CHAPTER 4: INSTITUTIONAL MEASURES TAKEN TO IMPLEMENT THE CONVENTION

4.1 NAP a Part of National Economic, Social Development and Environment Plans

Generally there is coherence of NAP with other national and social development and environmental plans. This is evident in the similarities of objectives of NAP and those of the district, provincial and national action plans in response to the JPI, the national economic revival program, land and agrarian reform, the MDGs, EMA and the DNEP. What is not clear however is whether this picture has emerged due to deliberate and careful planning or is merely by coincidence. Nonetheless complementarities on paper amount to nothing if the implementation on the ground is not coordinated and harmonised. Chapter 3 has already tried to unravel some of these complementarities at the design level. This chapter will concentrate mainly on the institutional arrangements for implementation.

4.1.1 NAP as Strategic Framework for Action

The failure to accord the NAP national prominence as one of the key strategies for achieving poverty reduction and sustainable development has, in some way, affected the extent to which it is regarded by and integrated in other national policies, programs and strategies. The absence of a NAP implementation framework that provides financial resources for programme implementation at the national level may also have compounded the problem. Generally NAP is considered a strategic framework but operating as a sub-component of the National Economic Revival Program and the National Action Plan on JPI. This is in no way implying that the programs and actions detailed in the NAP are not strategic. Rather it is important to emphasise that MEAs cannot be expected to drive national process but must be conceptualised to meet the national aspirations and needs. The development of the subprograms of NAP was informed by the results of a gap analysis. The gap analysis was found necessary in order to avoid duplication of existing initiatives and ensure that NAP has a value-adding role. Accordingly NAP has attempted to focus on those issues that have not or have been inadequately addressed. To this end therefore, the NAP has performed reasonably well in catalysing particular processes as has already been indicated in chapter 3. It is insightful to mention that the enactment of EMA and the formulation of the National Environmental Policy are partly as a result of the recommendations from the NAP process, which observed the constraints imposed by the absence of enabling policy and legislative framework.

4.1.2 Institutional Constraints to Integrating NAP in Other Strategies

To date there is no single institutional process responsible for sustainable development planning in Zimbabwe. The Prime Minister' Directive of 1992 supported by the Rural District Council Act of 1998 set four levels of planning from the province right down to the village. The Provincial Development Committee (PDC) chaired by the Provincial Administrator is responsible for coordinating planning at the provincial level, the District Development Committee (DDC), chaired by the District Administrator coordinates at the district level. Further down are the Ward Development Committee (WDC) and the Village Development Committee (VDC) at the village level. Whilst these structures provide the entry point for engaging communities at the sub-national levels they have rarely been used to their full potential due to a number of reasons. Conflicts arose between the elected local government institutional structures and the traditional leadership structures resulting in problems of accountability. This problem was resolved through enactment of the Traditional Leaders Act which gives chiefs overall responsibility of chairing the Ward Assembly which is the policy making body of the WDC.

Various subcommittees of the DDC are responsible for implementing and managing projects depending on their nature e.g. subcommittee on natural resources, on health, on transport and communication etc. The critical issues is the extent to which the policy making bodies of the ward assembly and the village assemblies are used to generate the policy framework that direct actions at those levels. This is important considering the fact that the ward and village assemblies are the platforms for collective decision making by all members of the community. Regardless of the existence of these structures, some development practitioners/ facilitators such as NGOs and donors have tended to create new community structures particularly at the community level, in the form of Community Trusts, alleging the need for more democratic processes. These trusts provide a legal way of decentralising beyond the RDC. For example community trusts have been established under CAMPFIRE to give "legal persona" to community institutions which is not given by other forms of law. However in some instances it has tended to create a

multiplicity of community structures that are answerable to several players with resultant duplication and sub-optimal use of resources.

The other legitimate reason often cited by development practitioners is the fact that there are no legal entities at the ward and village level hence the need to create legally registered entities or to channel resources through the Rural District Councils some of which have been accused of financial impropriety. Furthermore the internal bureaucracy of local authorities delays timeous channelling of resources to target groups. In addition ward and village assemblies still require capacity to interpret the Traditional Leaders Act and the community organisations also need capacity to manage finances. Instances of inadequate consultation of communities has resulted in development plans not being fully representative of the community needs.

The District Environmental Action Planning (DEAP) initiated in 2000 is the sub national level institutional arrangement for the implementation of NAP projects. DEAP process is a participatory approach to project identification, prioritisation, development and implementation by the communities. This process involves the setting up of District Strategy Teams comprising government extension officers, representatives from civil society and community representatives at that level. The teams are responsible for developing implementation plans for projects that the communities will have prioritised with facilitation from the same teams. The same process is emulated at the ward and village level.

At the national level, overall development planning is through the Ministry of Finance, Economic Planning and Development. Other ministries are responsible for developing sector specific plans. It is imperative that such sector-based programs and plans complement and support the overall national development plan, such as in the National Economic Revival Program. As already explained in chapter 3, NAP is consistent with the national and other programs such as the NERP, ARP, the Poverty Alleviation Action Plan and many others. What is critical however is the extent to which implementation is coordinated. Implementation processes for various action plans including those derived from MEAs generally involve the setting up of multi-stakeholder committees at the national level with poor representation of stakeholders found at the sub-national level. In the case of NAP, implementation of its objectives is inherently affected by the nature of the focal ministry i.e. MET. In terms of national budget allocation the environment is not considered strategic and hence often receives inadequate funding. Marketing NAP to create sufficient levels of awareness in other sector ministries was inadequate.

Although MEAs, and the national action plans in response to JPI are coordinated by MET, different sections, which are yet to fully harmonise their systems, handle these initiatives. Stakeholder forums formed to manage the implementation of MEAs have attempted to broaden the participation of stakeholders in decision-making, but many of the forums have tended to react to issues brought by MET rather than being proactive. An attempt has been made to create a unified framework for co-ordinating these initiatives and is being finalised in under the UNDP country framework. The current fragmented approach to implementing the MEAs fails to optimally use human as well as technical resources resulting in little action being done in relation to project implementation. However the fact that all MEAs fall under MET is a potential advantage for coordination and synergies.

The absence of a full time coordinator for the UNCCD and the CBD are a cause for concern given the limited staff levels in the MET. It is hoped that the creation of the Environmental Agency through EMA will create conditions favourable for better coordination of MEAs as well as the opportunity to restructure the current arrangements including the hiring of additional manpower where necessary. It is absolutely imperative that Environmental Agency becomes operational as a matter of urgency. In addition there should be concerted efforts at building capacity for effective UNCCD implementation including:

- Strengthening the ability to apply modern technology and networking to improve communication;
- Capacity to collect, analyse and disseminate timely information on desertification at various levels in society;
- Strengthen the ability to establish more effective regulatory frameworks including economic incentives and instruments related to desertification;
- Improving capacity of extension workers and NGOs for improved technology transfer to rural areas including renewable energy, drought resistant varieties etc and

- Improved systems for capturing and sharing indigenous knowledge.

These gaps are also incorporated in the current national capacity needs self-assessment project funded through UNEP.

4.1.3 Private Sector Support and Involvement

NAP has consistently argued for scientific research to provide new knowledge on adaptation to drought and reducing vulnerabilities. In this respect, SIRDC has been instrumental in generating new renewable energy technologies. Government established the Department of Science and Technology in 2002 whose main focus has been technological and scientific interventions that support development and the empowerment of small and medium enterprises. The ministry developed a policy on Science and Technology however there is need for incentives for generating such innovations particularly for the private sector. NGOs such as the Intermediate Technology Development Group (ITDG), SAFIRE and ICRAF have also been involved in developing scientific knowledge and technology in areas related to improving food security, water harvesting and storage, food processing and farm equipment suitable for the smallholder sector. Whilst others such as Community Technology Development Trust (CTDT), Agriculture Research and Extension Services and the University of Zimbabwe Crop Science Department have ventured into the area of biotechnology including the creation of seed banks and development of drought-tolerant seed varieties. The use of ITK is still limited although increasingly some government extension departments are becoming more and more aware of the need to integrate it in formal scientific approaches. Policy measures under the Macro Policy Framework of 2004 to 2006 gives guidelines that will strengthen the Public-Private sector partnerships with regards technological and scientific cooperation. NAP would have to be revised to incorporate these guidelines in its programs.

4.2 Linkages Achieved With Sub-Regional And Regional Action Programs (SRAPS And RAPS)

The SADC region has diverse ecosystems that contain a variety of natural resources such as wildlife, vegetation, rivers, mountain and landscapes. Some of the ecosystems in the form of protected areas tend to cross national borders and hence requiring transboundary management. Transboundary management of natural resources is governed by policies and protocols. Some of the SADC protocols with relevance to the UNCCD include, Protocol on Shared Watercourses Systems; Revised Protocol on Shared Watercourses, Protocol on Wildlife Conservation and Law Enforcement, Protocol on the Development of Tourism, Forestry Protocol and the Proposed Environmental Protocol.

4.2.1 Transfrontier Conservation Areas

In recognition of the problems associated with the management of trans-frontier natural resources such as conflicting legislation and regulations and unclear institutional arrangement, the region has adopted a transboundary perspective to management of these resources using the ecosystem approach. The following are some of the trans-frontier initiative currently in place in the Southern African region:

1. Great Limpopo Transfrontier Park involving Mozambique, South Africa and Zimbabwe
2. Limpopo-Shashe Transfrontier Conservation area involving Botswana, South Africa and Zimbabwe and
3. ZIMOZA involving Zimbabwe, Mozambique and Zambia
4. Okavango-Zambezi Transfrontier involving Zimbabwe, Zambia, Angola and Mozambique
5. The Miombo Woodlands involving Zimbabwe, Zambia, Malawi, Mozambique and Tanzania
6. Limpopo Project – Sustainable Land Use Planning for Integrated Land and Water Management for Disaster Preparedness and Vulnerability Reduction in the Lower Limpopo Basin involving Zimbabwe, Mozambique and South Africa.
7. The Africa Land and Water Management Initiative (ALWMI) in the Limpopo River Basin in Southern Africa involving Zimbabwe, Mozambique, South Africa and Botswana.

In addition to these are the Spatial Development Initiatives in the form of large-scale development corridors linked to “sea-to-sea” transport and the co-management of international river basins. The policy objectives for trans-frontier parks and conservation areas are complementary to the UNCCD, SRAP and RAP as well as other MEAs such as the CBD and Convention on Trade in Endangered Species (CITES). These international instruments propose to improve collaboration and cooperation through joint policy formulation and management of shared resources across borders.

International instruments also allow for strategic alliances and partnerships of actors from government, private sector, local communities and NGOs in the management of natural resources, and lastly they offer opportunities for improved livelihoods of communities in these areas through the strengthening of the economic base through tourism. The above provisions recognise that ecological process and functions often transcend national borders and hence allowing the disturbance of such processes in one country may have negative ripple effects in the neighbouring country. It is also acknowledged that the political boundaries established during colonial times divided communities who had the same cultural and social ties and shared natural resources, which previously were not subject to the political divide. By re-establishing these relationships, the trans-frontier conservation initiatives offer the opportunity to reduce conflicts through harmonisation and the strengthening of local institutions.

Considering that the trans-frontier parks are occurring in areas rich in wildlife but surrounded by land with marginal agriculture potential, they offer the opportunity for alternative livelihoods for such communities as well as lessening the dependence on the land base thereby improving the prospects for reversing land degradation. However, whilst the perceived benefits appear to be many, it still remains unclear how issues of tenure over resources, the equitable sharing of benefits and genuine participation of communities will be addressed. The Great Limpopo Transfrontier Park is a pilot case programme involving Zimbabwe Mozambique and South Africa which will result in surrounding communities benefiting from relaxed customs and immigration formalities, eco-tourism and social infrastructure development.

4.2.2 Spatial Development Initiatives

Zimbabwe views Limpopo, Maputo and Beira Spatial Development Initiatives (SDI) as offering the opportunities for economic growth and prosperity and has taken measures to create Export Processing Zones (EPZ) in these areas. EEP status offers investors the benefit of tax concessions and other incentives such as reduced tariffs on imported raw materials. The SDI are potentially a poverty reduction mechanism as they hope to engage local populations in formal employment as well as other economic benefits derived from partnerships with the local community.

4.2.3 International River Basin Management

Regional cooperation on the management of international river basins such as the Limpopo, Save and the Zambezi is particularly important for Zimbabwe. All of the river basin systems lie in the semi-arid ecological regions IV and V with low mean annual rainfall. These regions also tend to have the bulk of the protected areas such as the Gonarezhou National Park and the Hwange national park. In addition communal lands, some with very high population densities are also found in the same location. Sustainable management of these river basins is therefore strategic for the reversal of land degradation.

The SADC protocol on shared watercourses seeks amongst other objectives, to develop strategies for the judicious and coordinated sustainable utilisation of resources of shared water resources and to coordinate environmentally sound development these resources in support of socio-economic development⁷. These objectives include the need to address both the environmental as well as the economic dimensions of water management. The SADC Wetlands Conservation Program has been instrumental in promoting basin-wide programs such as the Zambezi Basin Sustainable Utilisation of Biodiversity Program facilitated by IUCN-Rosa and the SADC Community Based Natural Resources Management program, funded by USAID and the Zambezi Basin Agro forestry Project for Southern Africa funded by the Canadian International Development Agency (CIDA). These initiatives are premised on the need to provide incentives for utilising resources whilst creating opportunities for alleviating poverty, which is the main cause of land degradation in the river catchments.

4.2.4 The Sub-Regional Action Program (SRAP) on the UNCCD

The sub-region produced a sub-regional action programme (SRAP) mentioned in the previous reports. Components included in the Sub-Regional Action Program (SRAP) of the UNCCD include capacity building and research. Whilst the Regional Action Program (RAP) on Africa has prioritised research and development, monitoring, assessment and capacity building as important measures for reversing land degradation. The SRAP also has a component for strengthened, networking, capacity building and research. To this extent several sector-based networks are in place e.g. the Southern Africa Network on Indigenous Knowledge Systems, the Southern African Land Rights Network, and the Southern African Network on

CBNRM etc. These networks seek to improve information sharing, knowledge exchange and collective policy influence. However the major weakness has been the lack of implementation of the SRAP in the sub-region due to inadequate institutional capacity with SADC Environmental Directorate.

4.2.5 Other Regional Initiatives

Participation of technical and scientific bodies in regional initiatives is also sector based. Of relevance to the UNCCD are the SADC Early Warning Systems, and the SADC Drought Monitoring Centre. Other initiatives include agro-forestry programmes by ICRAF and development of drought resistant crop and livestock varieties by ICRISAT.

Other initiatives of a regional nature include the Desert Margin Program (DMP). The DMP focuses its research on sites harbouring globally significant ecosystems and threatened biodiversity. Its ultimate aim is to reduce land degradation and loss of biodiversity. In Zimbabwe it focuses on the dry land areas targeted by NAP and hopes to develop replicable models on sustainable dry land management and food security. It also aims to develop information systems at the sub regional level to harmonise databases and to strengthen human capacity development at the grassroots level.

4.3 Established and Functional National Coordination Body (NCB)

4.3.1 Legal Status

Zimbabwe is party to the UNCCD and this gives legal status to the Task Force. The Environmental Management Act under part XV, section 132 on International Obligations and Commitments paragraph (3) and (4) gives legal mandate to the National Task Force as specified in subparagraph 4(a) to (f). The multi-sectoral Task Force reports to and is accountable to the Minister of Environment through the National Focal Point (NFP), currently the Director of the Department of Natural Resources. The National Focal Point is autonomous to a limited extent regards with respect to routine UNCCD operations. The institutional framework and provisions within which the NFP operates provides an enabling environment for effective and efficient decision making processes, however very few decision have been effected in the absence of adequate resources for implementation of UNCCD. The challenge from this institutional arrangement is the promotion of synergistic developments for sustainable land management with related programme frameworks housed in other sectors. In addition there is no dedicated fulltime secretariat for the UNCCD. DNR staff is assigned to undertake secretarial services for the NCB. This has in some way impacted on the communication systems given the fact that DNR is currently understaffed, nonetheless this provides DNR the opportunity to integrate and streamline NAP processes and programmes in the institution.

The task force is influential particularly in environmental legislation and policy to which the taskforce institutions have contributed as individuals or collectively. Linkages with the government departments responsible for development partners are satisfactory. Contributions and requests to partners are submitted through established forums, institutional arrangements and procedures. Despite the above limitations NAP has promoted synergistic development for sustainable land management with related programme frameworks. For example the national taskforce⁸ members submit development programmes under the NAP for implementation in sectoral ministries e.g. in the land, water, energy and agricultural sectors. The role of the task force is to review and monitor progress. As new relevant programmes are initiated implementing institutions are incorporated into the National Task force e.g. the Agricultural Research Council that is coordinating the Dry Area Margins Programme. Taskforce members are given the opportunity to contribute to such programmes that foster linkages with the NAP.

The financial mechanisms for the taskforce are through special programmes and budgetary allocations through DNR, which has a mechanism to grant provisions to every local authority for the functions of district environmental committees. The DNR has a PSIP budget line dedicated for direct investment in NAP community projects. Under EMA, each local authority has to constitute an environmental committee and subcommittees at community level, these are composed of community representatives, traditional leaders, technical experts from public institutions, NGOs and the private sector. During the period 2003-2004 DNR implemented the Pilot District Capacity Building and awareness programme under the auspices of SRAP. This program is operational in Shurugwi District and is aimed at streamlining implementation of

EMA with the district action program of NAP through the creation of local institutional arrangements in conformity with EMA. To this effect six environmental committees have been set up throughout Shurugwi District and formulated local programmes to combat land degradation, mitigate drought and improve livelihoods. However, budgetary constraints and human resource shortages are experienced at all levels. There is need for capacity building of the decentralised institutional arrangements of EMA.

4.3.2 Resources

The status of resources for effective delivery of the National Task force operations and project implementation in the NAP context still remains at very low levels despite some increase in PSIP funding. For example in the year 2003 the Government of Zimbabwe allocated \$10 million, whilst 2004 Z\$190 million was allocated in 2004 and a bid for Z\$578 million was submitted for 2005. There has been minimal contribution from development partners with only US\$145,000 mobilised from the UNCCD Secretariat. However DNR and MET have tried to integrate NAP related projects in other ongoing initiatives e.g the national response to JPI.

The national taskforce has a broad base of expertise representing various disciplines. The taskforce members were catalytic in the formulation of the NAP by leading stakeholder collection of information and the drafting of the NAP framework document. Taskforce members have participated in the implementation of the NAP and its first evaluation. However the only constraint is time as well as incentives for the National Taskforce Members' contributions in the absence of tangible results from their planning efforts.

Lack of transport and equipment has hampered implementation and monitoring of community projects. The National Task force also need capacity in developing program and project monitoring frameworks as well as skills to develop scientific indicators and benchmarks for assessing the extent of land degradation. The development of a website and other information communication technology systems is an area that can assist the Task force in delivering its functions more effectively.

4.3.3 Cross cutting and Multidisciplinary Nature

There has been agreement to broaden the Taskforce to include members from the academic, scientific and international organisations specialising in work areas related to the UNCCD. Accordingly, the University of Zimbabwe's Department of Animal science, ICRAF, WWF are new members of the Task force. It was found necessary to incorporate coordinators of other MEAs such as the Convention on Biological Diversity, the United Nations Framework Convention on Change Convention and the Montreal Protocol into the National Task Force. These new additions have increased the expertise and diversity of membership hence allowing for closer programmatic collaboration. The National Task force encourages project proposals that have collaborative arrangements with the private sector. For example SAFIRE is facilitating the commercialisation of medicinal plants found in the semi-arid regions of Zimbabwe and will explore possibilities of private sector partnership for processing and marketing.

4.3.4 Composition, mode of operation and participation of NGOs and communities

In Zimbabwe the NCB is known as the National Task force for the Implementation of the UNCCD. The composition of the Task force has already been alluded to in chapter 1 paragraph 1. The coordinating role, strategic planning, monitoring, information dissemination functions of the Task force in the implementation of the UNCCD through the NAP and its apparent success and institutional capacity is detailed in the proceeding two reports and pilot project terminal evaluation. Although there is no stand alone budget for the task force, it has managed to function due to the will and commitment of its members who contribute their time on a voluntary basis to undertake some of the more urgent assignments.

The Ministry of Environment and Tourism adopted the NAP in 1998, but it remains unimplemented as the holistic and integrated programme as envisaged. The most critical capacity need is to strengthen and empower the Task force through provision of financial resources to facilitate implementation of the programme. No specific budget has been allocated for the implementation of the NAP in its entirety. However since NAP has been streamlined into the operations of NDR which houses the secretariat, some of the NAP activities and initiatives have been implemented through Government funding under a NAP budget line in the Public Sector Investment Programme (PSIP). The level of participation of NGOs, CBOs, communities and beneficiaries is curtailed since there is a lack of implementation activities on the ground.

Nonetheless the level of stakeholder involvement in the UNCCD process improved due to the catalytic effect of the WSSD process, which provided for more awareness raising on aspects of the UNCCD therefore generating stakeholder interest. In addition the WSSD provided for a more formal institutional coordination mechanism in the form of the National Committee on Sustainable Development which brings together members from sector-based forums such as the national taskforce on desertification, the national committee on the biodiversity convention etc. Information communication systems are not fully developed. Communication between the NFP and the National Task Force members is normally through ordinary mail. The dissemination of information through the email and internet is largely ineffective due to problems of downloading and lack of hard and software particularly in DNR and other institutions.

The nomination of members to the National Task Force is transparent since the NFP presents proposal to the National Task force for approval. In other cases the National Task force members can suggest additional names for discussion and adoption. The National Task force also encouraged members of civil society to hold their own selection with regard to who will represent them at the National Task force. NAP beneficiary communities participate in National Task force activities by providing information and experiences lessons learnt from project implementation.

4.3.4 Status of Information

Information on the UNCCD is collected by both MET and DNR using its national, provincial and district personnel. It is stored in hard and soft copies. A section dedicated to UNCCD documentation exists in the DNR library. The collection, documentation and storage and retrieval of information on NAP by the National Task force still need improvement particularly in terms of the quality and update of information. Given the fact that there is no website in the NFP for the posting of information on the NAP, much information still remains undocumented. Where information has been collected from the Districts and Provinces, there has been no systematic analysis and consolidation of the information to improve the decision making by communities. Communication and information sharing between the NFP and the NCB is unsatisfactory because of the different capacities an access of organisations to internet based communication and information systems

4.4 Institutional Framework for Coherent and Functional Legal and Regulatory Framework.

4.4.1 Measures Adopted to Strengthen Institutional Framework at the National Level

Prior to the Environmental Management Act Chapter (Cap.20: 27) the environment sector was managed in a fragmented and uncoordinated manner. Responsibility for management and coordination of environmental sectors such as water pollution, air pollution and pest management were assigned to different ministries with little liaison with MET. The promulgation of the Act has reduced the number of statutes governing the environment as it has repealed the Natural Resources Act (Cap.20: 13), the Atmospheric Pollution Prevention Act (Cap.20:03), the Hazardous Substances and Articles Act (Cap.15:05) the Noxious Weeds Act (Cap. 19:07). Certain sections of the Water Act were repealed in a bid to improve environmental management. EMA has provided for general coordination of actors in the environment sector ranging from government departments, civil society and private sector.

The supreme body in terms of overall policy guidance and implementation of EMA is the National Environmental Council (Part III section 7) which consists of Permanent Secretariats of relevant government ministries such as (Agriculture, education, energy, environment, forestry, mining finance, health, industry, water resources, justice, local government and tourism) representative from universities, specialised research institutions, business community, local non-governmental organisations and any other members as co-opted by the council with approval of the Minister..

The Environmental Agency is responsible for overall management of the environment in its totality. It performs this through the formulation, and monitoring of quality standards as well as other general functions as specified in sub- paragraph 1b of section 10 of EMA (Cap 20:27). The legal requirements for environmental planning, environmental assessments, monitoring and reporting on the state of the environment are an improvement from the provision which were not legally provided for. The agency has

an adequate provision to undertake inspectorate, monitoring, investigating and law enforcement functions. The agency is controlled and managed by an autonomous Environmental Management Board. Since EMA has superseding power over other ACTs, the Board has the same powers as magistrates courts to summon witness and take evidence. The coming on board of EMA has brought changes in environmental management in the country. For example whilst the Natural Resources Act (Chapter 150) was more concerned with the green issues, EMA now incorporates brown issues in so far as it requires local authorities to institute environment action plans (LEAPS). It provides for legal institutional mechanisms for environmental management by local community institutions of the natural resource users. The broad representation within the Environmental Council in terms of sectoral ministries, private sector and civil society at large provides for a synergistic approach to environmental management thereby instilling national commitment. The fact that environmental impact assessment and state of the environment reporting are now mandatory provides a legal framework for tracking changes with respect to land degradation and desertification.

4.4.2 Measures Adopted To Strengthen Institutions at Local Levels

Decentralised planning is provided for by the formulation of environmental plans at the local authority level. Local authority environmental plans are formulated in consultation with the Minister of Local Government, Public Works and National Housing who is responsible for the administration of the Urban Councils Act and Rural District Council Act. These Acts prescribe how communities can plan for development and environmental management in the areas under jurisdiction of each local authority. Through this process communities take part in the development of annual and five- year development plans

The Water Act of 2000 also introduced a decentralised system for the management of water through the creation of Catchments Management Boards. The planning and management of water through the catchments approach allows for the consideration of problems and solutions within a wider spatial context thereby providing room for addressing symptomatic causes of land degradation and water pollution. This in turn gives scope for the implementation of measures that are holistic and long-term in nature. This decentralised system to designing, planning and implementing projects ensures the participation of local communities. The inclusion of the traditional leadership structures through the Traditional Leadership ACT has reduced conflicts of authority between the elected structures of the RDC and the traditional system. In summary, the Traditional Leadership Act has created policy-making forums at the village and ward through the establishment of the village and ward assemblies that seek to include all adult members of the population in the village and ward. Technical committees such as the Natural Resource Committee, now the Environment Committee, according to EMA will be sub-committees of the said assemblies. Through the various development sub-committees, local authorities can enact by-laws. For example, the Environment Committee could develop by-laws that promote sustainable use and conservation of natural resources.

Despite the existence of decentralised systems for development there are many challenges that reduce their effectiveness. The most critical area relates to the limited capacity of the Village Development Committee (VIDCO) and the Ward Development Committees (WIDCO) in terms of inadequate financial and technical resources. In addition these structures do not have a legal status making it difficult for them to mobilise resources independently. This problem is evident in CAMPFIRE, which is considered as one of the more successful approaches to community involvement in the management of natural resources. Despite some of its successes, CAMPFIRE has failed to reach full potential due to the fact that local communities do not constitute legal entities and hence their ability to enter into contractual arrangements is still limited. Generally the local authorities also raise the concern that they do not have total control over resources made available by central government and hence their hands are tied with regard to where the resources should go. The government of Zimbabwe is currently looking at how decentralisation can be accelerated.

The UNCCD rightfully observed that land degradation is influenced to a large extent by land tenure and property rights. The NAP sub-program on land management also highlights the need for secure forms of tenure in resettlement areas. Chapter 3 has gone in some detail to explain the progress made on the Land Reform Program in Zimbabwe. Some stakeholders were of the view that tenure arrangements in the newly resettled areas are insecure and may have to a large extent caused accelerated land degradation. The tenure and property rights situation in the resettled areas have resulted in competing claims over land use and poor

incentives for the new settlers to invest in sustainable use of natural resources. Cognisant of these problems, the government has taken steps to address them through the provision of permits in the A1 schemes and 99-year leases in the A2 schemes. In addition, other initiatives such as wildlife based land reform models and integrated conservation plan are some of the measures undertaken to reduce natural resource degradation. The challenge in securing rights relates to the need for delimitation of boundaries given the limited staff capacity in the Surveyor General's Office. The granting of 99-year leases implies extra paper work particularly when these have to be registered.

4.4.2.1 Legal and Regulatory Frameworks

The enforcement of environmental legislation is still unsatisfactory at the national as well as sub-national levels. Whilst it is acknowledged that the coming into force of EMA and operation of the Environmental Council and the Environmental Agency might reduce conflicts in law enforcement, a potential challenge in this regard is the limited human and technical resources available to undertake effective surveillance as indicated in Section 36 –37 of EMA⁹. Education and awareness on environmental legislation and policy are critical for instilling a sense of conservation among communities thereby making law enforcement easier and cost effective. Hence there is need for massive awareness and education on the new policy and legislative provisions of the NEP and EMA respectively. Other legal aspects of interest to communities relate to the protection of Intellectual Property especially with respect to medicinal plant species. In this regard MET is implementing a project on the conservation of traditional medicinal plants in partnership with National Herbarium Institute and SAFIRE. Efforts are also underway to develop *sui generis* legislation.

CHAPTER 5: PARTICIPATORY PROCESS IN SUPPORT OF PREPARATION AND IMPLEMENTATION OF ACTION PROGRAMS

5.1 Participation of Local Actors in Defining National Priorities

The participation of stakeholders in the formulation and implementation of policies, programs and action plans takes many forms ranging from mere information dissemination to consultation and involvement. To this extent many government departments, civil society and the private sector institutions have formed multi-stakeholder forums for a variety of reasons. For many programmes in Zimbabwe including the NAP the reason for formulating the stakeholder forums is mainly prescriptive given that the policy framework e.g. the UNCCD requires the existence of such structures as a means of collecting, sharing information, creating transparency, instilling ownership and ensuring sustainability. In Chapter 4 it was mentioned that several multi-stakeholder forums facilitate several programs including MEAs.

The process of formulating the National Action Program for Zimbabwe involved a series of consultation of a broad range of stakeholders with National task force spearheading the process. Prior to the drafting of NAP, the National Task Force commissioned three studies on (i) Programs and strategies with relevance to the reversal of land degradation, (ii) Participation and capacity building needs processes and (ii) Education and Awareness creation on the UNCCD. These studies produced information that became the building blocks for the NAP. Provincial consultations, provided more detailed information which was shared among the key stakeholders including NGOs, private sector, media, research and academic institutions at the first national consultative work shop on the UNCCD. The national task force maintained contacts with this group of stakeholders by establishing a mailing list through which information on UNCCD developments was channelled. A second national consultative workshop reviewed and adopted the Draft NAP. Complementing the government led consultative processes was the NGO process spearheaded by the NGO focal point. This process was meant to raise awareness and instil commitment to the NAP. The NGO focal point occupied a strategic position in the taskforce being the liaison point between the government and NGOs and hence playing a leading role in channelling information either way.

5.2.1 Provision and Sharing of information

The consultative process is not entirely smooth as there are cases of apathy stemming from the failure to mainstream UNCCD in most of the organisations. Commitment to UNCCD continues to be personality driven in the sense that members of the Taskforce fail to disseminate the information back to their respective constituencies so that there is organisational buy-in. This is compounded by the fact the some members of the taskforce do not hold decision making positions in their organisations hence they fail to drive changes that support the UNCCD. Interviews with some of the taskforce members have revealed that key institutions have delayed in providing information or reviewing and validating reports that emanate from the taskforce. Stakeholders also cited the failure by the taskforce to provide simplified information that is relevant to each of the stakeholder needs. Communication channels have not been efficient, particularly the use of e-mail to disseminate bulk reports. In many instances stakeholders have reported not having received the documents or failing to download information. Effective participation by taskforce members has been curtailed by the absence of UNCCD dedicated desk in the Department of Natural Resources for a more efficient service delivery system.

5.2.2 Development of Appropriate Technologies

Efforts to arrest land degradation and improve the productive capacity of land depend to some extent on the application of appropriate technology. Government has through the Department of Agriculture Research and Extension (AREX) developed crop varieties suitable for cultivation in the semi- arid regions of Zimbabwe. The Department of Agriculture of the University of Zimbabwe is spearheading efforts to develop appropriate livestock fodder for the semi arid regions. Civil society has also contributed to the development and application of appropriate technology. The Intermediate Technology Development Group (ITDG) in collaboration with government agricultural research stations has developed technologies for the semi-arid areas. The technologies include, improved tillage equipment and practices, water harvesting and conservation, animal drought power equipment and suitable dry land crop varieties.

The Zimbabwe Women's Bureau (ZWB), in its Homestead Development Program also promotes the use of organic fertilisers and permaculture. These technologies have improved food security in these regions. Fambidzanai organic Training Centre offers training on organic farming and has recently incorporated herbal gardening in a bid to fight the HIV/AIDs pandemic. HIFER-HPI international offers support for livestock re-stocking particularly during drought recovery periods.

Alluvial gold panning is considered by many poor households to be a source of income and livelihood. However this practice has caused massive destruction of riverbanks and surrounding environments. To this end the Department of Mining Engineering at the University of Zimbabwe has developed technology for environmentally friendly gold panning and rehabilitation. This technology still needs to be widely disseminated.

5.2.3 Capacity Needs for Effective Stakeholder Involvement

It has already been indicated in preceding sections that capacity needed to strengthen the involvement of stakeholders in the implementation of the UNCCD include:

- (i) Need for motivated staff in coordinating departments
- (ii) Clear stakeholder coordination mechanisms
- (iii) Development of information and communication strategies
- (iv) Effective networking within government and civil society
- (v) Decentralised information dissemination channels

5.3 Representation of Various actors

There is no officially documented criterion for representation but informally the following considerations are taken into account:

- (i) Relevance of organisation to subject area
- (ii) Capacity to influence change and catalyse action
- (iii) Capacity to network and interface with others
- (iv) Expertise in subject area
- (v) Commitment to cause
- (vi) Past experience of working together
- (vii) Representation of relevant stakeholders and key sectors

These criteria may not address equal representation since it is usually the coordinating agency that selects members to the task force and not the stakeholder constituency that appoints representatives. There is however ample flexibility to the extent that the Taskforce can recommend appointment of representatives as the need arises.

5.4 Nature and Scope of Information, Education and Communication.

Generally there is limited use of traditional knowledge systems in information exchange circulation, transfer and dissemination. The prominence now attached to the Traditional Leadership Act and role of traditional leadership is an attempt to revive traditional knowledge systems. Traditional knowledge information systems applied in desertification control include word of mouth circulated within the community through traditional gatherings often by the community elders. Much of the information may be based on cultural and traditional beliefs including myths and taboos. A case in point is the successful restoration of a wetland in Masvingo (Maplan Wetland Project and Chitenderano Project) using traditional knowledge and information systems. As well as a drought coping strategy and water harvesting project implemented by communities in Zvishavane. NAP considers traditional knowledge important in water management, sustainable agriculture as well as in monitoring and assessing drought.

The Ministry of Environment and Tourism has close links with the Environmental Liaison Forum, which was instrumental in supporting the Ministry of Education to formulate an environmental education policy. The national environmental policy also recognises the value of environmental education. There are various initiatives facilitated by government as well as NGOs aimed at integrating schools in environmental conservation. The tree planting and tree care programme; the trees for Africa programme and environmental expos (led by the Environmental Liaison Forum) are ongoing initiative targeting schools and include aspects of desertification control. Some environmental education centres such as Mukuvisi

Environmental Education Centres have specifically been established to educate school children on environmental conservation.

In a bid to improve the flow of information from government departments, civil society and the private sector, MET has established a national website on sustainable development where current information on sustainable development initiatives are posted. The website provides links with private sector, NGOs and other government departments. However there is the need to strengthen information systems in organisations such as improving the ability to document, package and running efficient email systems.

Various networks and committees exist in a variety of areas relevant to the UNCCD these include

- The national committee on drought and drought management that has conducted workshops on drought management and early warning systems.
- Poverty Reduction Forum that was instrumental in facilitating the implementation of poverty reduction policies and strategies. Through the Community Action Plans, communities were provided a forum to understand underlying causes and effects of poverty and to collectively design solutions.
- Awareness Campaigns on the Integrated Conservation Plan and Television documentaries on the negative impacts of land degradation have provided a channel for educating stakeholders on preventing land degradation
- The JPI provincial responses will be ongoing processes aimed at implementing and assessing progress on sustainable development.
- The annual national ZIMFLOW competition allows for profiling of lessons learnt and best practice on sustainable development, through provincial and district field days.
- The environment and energy committee of the Confederation of Zimbabwe Industries has led efforts in promoting cleaner production and energy efficiency in the private sector. Whilst there have been limited efforts at advocating for the use of renewable energy, the committee has encouraged large corporate entities such as Border Timbers and PG to be involved in afforestation programmes hence contributing towards reducing deforestation a leading cause for land degradation in Zimbabwe.
- Zimbabwe was one of the countries to implement a GEF pilot project on photovoltaic for lighting in rural areas. This program resulted in the formation of private sector and civil society networks to facilitate the procurement and installation of solar panels. The networks expanded and peaked in 1996 when Zimbabwe hosted World Solar Summit. These networks continue operating and have successfully lobbied for a renewable energy policy. Provision of renewable energy is regarded by Nap as one measure to reduce dependency on firewood as well as fossil fuels.
- The Rural Traders Association of Zimbabwe continue to press for subsidies on solar panels and electricity to expand their business in the rural areas. The GEF- SGP has been instrumental in incorporating the private sector in developing renewable energy technologies.

Extent of Uptake of Local Concerns

The adoption of the Phase 2- Land Reform Program in 1998 resulted in the formation of a number of consultative forums in the NGO, government, academic and research sectors. The Women and Land Lobby group was formed to ensure that the land reform process fully integrated gender particularly in the allocation and ownership arrangements. The group has successfully lobbied for the allocation of land to single and widowed females. The inclusion of environmental management in the land reform process resulting in the adoption of the Integrated Conservation Plan for the Fast Track Land Reform Program was a government initiative which was supported by a vibrant informal civil society network conscious of environmental issues. Concern by new farmers and other stakeholders over the increase in land degradation particularly in the ecologically fragile regions, has resulted government formulating wildlife based land reform policy. This policy has improved the prospects for preservation of wildlife particularly within and in areas surrounding national parks through the establishment of conservancies in which local communities share benefits. With the amendment of the Water Act, decentralised water catchments management structures are in place to plan, design, implement and manage water systems at various levels. Water catchments management committees are gender balanced and seek to ensure that water supply and development is equitable and takes into account environmental aspects.

CHAPTER 6: CONSULTATIVE PROCESSES, PARTNERSHIP AGREEMENTS AND MOBILISATION OF RESOURCES

In this reporting period, Zimbabwe encountered constraints in establishing partnership agreements with developed country parties that support implementation of the NAP. Other entities, particularly multilaterals whose mandate is to facilitate mobilisation and coordination of both domestic and international resources have failed to assist in resource mobilisation. The UNDP office convened a donor's round table in 2002 where the NAP was presented in order to establish partnerships but with negative responses to date.

6.1 Support From International Donors.

The degree of participation of international partners has been minimal with respect to mobilisation of resources for NAP implementation. Multilaterals particularly the UNDP local office participated in local activities, consultations, meetings and has pledged to facilitate the proposed strategic planning workshop of the national taskforce whose objective is to re-craft the NAP and improve impetus for implementation in the context of the above challenges. Nonetheless the convention failed to secure cooperation with potential implementation partners such as FAO despite their initial participation during NAP formulation. Although Zimbabwe was invited to participate in the launching of the Drylands Development Centre in Nairobi the country has been excluded in the implementation programmes of the Regional Dryland Development Centre programmes of the UNDP set up in South Africa. In 2004 WWF, ICRAF and IUCN were invited to contribute as members of the National Taskforce. They have pledged their support at that level through technical support, information sharing and explore further areas of cooperation within the confines of the National Taskforce mandate.

6.2 Mobilisation of External Resources

Government of Zimbabwe procedures and institutional framework for external resources mobilisation particularly those established with the UNDP supports dialogue platforms for framework development programmes through the Zimbabwe United Nations Development Framework (ZUNDAF), Zimbabwe Country Assessment, the Millennium Development Goals and the country's response to the Johannesburg Plan of Implementation which have relevance to mobilisation of resources for NAP implementation. The framework involves consultations and negotiations which enable development partners to commit external resources. These processes have failed to yield external resources for implementation despite inclusion of NAP projects in the framework programme plans. Within the context of national consultative mechanisms there has been an absence of support from bilateral organisations; as such there are no partnership agreements in place or under negotiation with a dearth of such opportunities in the pipeline. Although bilateral support is currently not forthcoming, past experience has demonstrated that this traditional facility is more effective and yields more resources for investment in programmes such as NAPs.

6.2.1 Global Mechanism

Since the last reporting period Zimbabwe submitted at least 13 small community based NAP related projects for communities in which NAP-UNCCD awareness programmes had been completed. Each project proposal for consideration through the Global Mechanism requested for less than US\$200, 000; however none of the projects have been accepted for funding. The details of some of the project proposals submitted are listed in table 6.1 below.

Table 6.1: Project Proposals submitted to Global Mechanisms (GM) for funding

Project Title	Amount requested US\$	Date submitted to GM	Comment
1. Development of Community based monitoring and evaluation indicators	153,000	22 November 2002	No formal response or acknowledgement received from GM.
2. Community based Eco-tourism Development as a strategy for Land degradation control	180,000	22 November 2002	No formal response or acknowledgement received from GM.
3. Community level land Resources management	176,000	22 November 2002	No formal response or acknowledgement received from GM.

4. Drought mitigation through Water Development, Catchment and wetland Rehabilitation and Management	175,000	22 November 2002	No formal response or acknowledgement received from GM.
5. Integrated community based catchment management	182,000	22 November 2002	No formal response or acknowledgement received from GM.
6. Support for Development of Synergies among the Three Rio Conventions in Zimbabwe	135,000	22 November 2002	No formal response or acknowledgement received from GM.

The Global Mechanism is yet to commit its willingness to mobilise new resources or windows of potential opportunities or direct the country towards existing financial resources or financial mechanisms, which might help to implement the NAP.

6.2.2 Global Environmental Facility (GEF)

National Projects

Zimbabwe welcomes the operationalisation of Operational Programme 15 for the UNCCD and has submitted several national projects for funding through this facility (refer to 6.2 for details). To date, no funding has been secured for any of the Zimbabwe national project proposals. UNEP-GEF organised a training workshop to which the Zimbabwe GEF Focal point and the UNCCD focal point have been invited. It is anticipated that this will facilitate access to GEF funding through capacity building.

Sub-Regional projects

Zimbabwe and Mozambique submitted a transboundary project proposal for GEF funding: The Save River Catchment Integrated Transboundary project that has been considered and further developed by GEF-UNEP. Governments have since endorsed the project and are awaiting final decision since March 2004. The Transboundary Limpopo Project Sustainable Land Use Planning project for Integrated Land and Water Management for Disaster Preparedness and Vulnerability Reduction has been approved and will soon be commissioned.

The African Union

The African Union has granted Zimbabwe US\$100 000 to implement a Youth Environment Management and Education Programme in the context of implementing the NAP which will commence by the end of 2004. The programme seeks to improve the livelihoods of youth and communities through the creation of an enabling environment for the beneficiaries to control environmental degradation and desertification processes. This will be done through direct involvement of youths and their communities in land rehabilitation conservation, protection measures and sustainable use of natural resources whilst creating employment opportunities through these activities.

Table: 6.2 Projects Proposal submitted to GEF funding through the UNEP implementing agency

Name of project	Amount Requested	Date submitted to UNEP	Comments
1. Community Based Environmental Resource Assessment for Natural Resources Conservation and Management in Dry Areas of Zimbabwe	US\$1 million	16 September 2003	No response or acknowledgement of receipt of project proposal
2. Capacity Building and Institutional strengthening for the implementation of the UNCCD	US\$1 million	1 October 2003	No response or acknowledgement of request
3. Land and Water Resources Management programme	US\$1 million	2004	No response or acknowledgement of request
4. Catchment Rehabilitation	US\$15	March 2003	No response or acknowledgement of

and management of drylands in Zimbabwe under the NAP	million		request
5. <u>Regional Project:</u> Zimbabwe Mozambique and Integrated Management of the Save River Catchment Areas	US\$1 million	2002	Communication between UNEP, Zimbabwe and Mozambique established and the countries were requested to revise project document, provide information and government submitted endorsement and commitment for the GEF Save project proposal in October 2003, however there has been no further communication or feedback on status of the proposal.

Remarks

The above analysis shows that Zimbabwe has not benefited from development partnerships with regard to financial mobilisation for the implementation of the NAP as specified in article 6, article 7 and article 20 on financial resources of the UNCCD. Therefore the NAP has remained unimplemented due to a major deficit in international support. The NAP has not been implemented as an integrated programme as envisaged but fragmented community initiatives have been supported through national initiatives as explained in chapter 3 and chapter 8. Zimbabwe has, through its National Taskforce drawn up a programme of action refocusing and re-strategising to reconsider the NAP in view of the obstacles highlighted above and to draw up a strategic plan.

Government resources are the traditional sources of finance through the Public Sector Investment Programme (PSIP) in the absence of traditional donor funds. The main obstacle of PSIP funding is that it is not possible to fund the NAP as an integrated programme due to the sectoral nature of budgeting and financial disbursement. Nonetheless resources are scarce and thinly spread over a large community base to a level that the impact of intervention remains very localised and of minimal effect in combating desertification or mitigating the effects of drought on a national scale to an extent which the added value of implementation of the UNCCD can be ascertained.

Chef de file

There is no country which has agreed to become *chef de file* of the consultative process, and there is no calendar to ensure continuous process monitoring since there are not activities taking place.

6.3 Relations with Other Partner Countries

There are formal and informal consultative mechanisms among partner countries particularly at sub regional levels through the SADC Environment Directorate. SADC countries communicate directly or through the Directorate. Since formation of the SADC Environment Directorate in Gaborone, a sub-regional meeting has yet to be convened, the last meeting was in July 2002. Attendance at SADC member country strategic planning and monitoring meetings in the context of SRAP is normally satisfactory since the majority of the countries participate when such forums are convened.

Distribution of Roles and Tasks

The establishment of 6 centres of excellence in the different countries of the sub-region ensured roles and responsibilities of thematic areas were assigned to technically competent institutions with the capacity to spearhead implementation of the SRAP components in their area of expertise. For example, the Department of Animal Science in the faculty of Agriculture at the University of Zimbabwe was designated the centre of excellence for rangeland management for the implementation of the UNCCD in the sub-region. The Desert Research Foundation of Namibia was designated the centre of excellence in research, whilst Tanzania was designated the energy centre of excellence. The Regional Directorate should coordinate implementation of the SRAPs in the various thematic areas. Each country contributes towards the implementation and steering of the SRAP activities. Nonetheless most of the centres of excellence have not accessed funding to enable the implementation of this component of the sub-regional action programme. The SADC Environment Directorate has faced capacity and resource constraints and

unsuccessfully attempted to inherit some functions carried out by the SADC ELMS in Maseru to the extent that the Pilot Phase activities of the Africa Land and Water Management Initiative in the Limpopo River Basin failed to take off, although a grant had been allocated. This suggests that the Directorate should assign and delegate its programme responsibility to established sub-regional institutions and remain with less demanding supervisory or monitoring functions until capacity is strengthened to a level where the Directorate can co-ordinate such activities. The NEPAD environment objectives are consistent with the implementation of the UNCCD but there is need to implement activities which contribute to the achievement of SRAPs and NAPs.

Participation of National Focal Points and National Taskforce.

The National Taskforce focuses on strategic planning, priorities and contextualised national needs that contribute to the implementation of the UNCCD through the NAP and SRAPs. National Focal Points and members of National Taskforce have participated in sub-regional, Regional or international meetings. However participation rates of Zimbabwean NGOs have been minimal in the relevant NGO fora at sub-regional, regional and conference of parties and there is need to strengthen the linkages and provide resources for such participation.

Capacity needs of internal consultations and information exchange

Whilst the Focal Point institution has mainstreamed NAP project activities as a key result area with its own budget line, there is need for institutional strengthening to facilitate the consultative and information exchange capacity of the institution with participating organisations and lead institutions in the various thematic areas. There is need for effective and efficient information exchange linkages between national taskforce members and provincial, district and community levels. Improved electronic communication with sub-regional, regional, the Secretariat including Global Mechanism enables and enhances better communication on resource mobilisation and information exchange from all levels. The focal point institution is currently using hard copies for communication. There is therefore need for a database of lead agencies in the various thematic areas to be linked to the focal point institution and be brought to a clearinghouse on NAP, which updates the digital and electronic information. Stakeholders should be connected by e-mail and internet to support information generation and sharing. The country profile shows the relevant sources of information but the difficult process encountered during this exercise in accessing and collating the information through hard copy illustrates the gaps and shortfalls in current information systems. There is need for a functional library to service the whole NAP process.

Convocation of Consultative process

The UNCCD secretariat and the Global Mechanism can facilitate the convocation of the consultative process by brokering for countries in difficult circumstances to leverage international and multilateral funding. There is need to strengthen the capacity of lead agencies, centres of excellence and sub-regional institutions through resources mobilisation and technical cooperation: the brokering/facilitation role would also enhance the chances to success. Weak sub-regional and regional programmes reduces the impact of SRAPs which have the potential to achieve UNCCD objectives at a higher scale.

Communication between operational GEF Focal Point, implementing agencies of GEF and the NFP

The operational GEF Focal Point for Zimbabwe is the Secretary for the Ministry of Environment and Tourism. As such the NFP has the maximum support from that office in terms of communication, guidance, technical support in project preparation and processing for GEF submission. Comprehensive support from the local UNDP implementing agency is in terms of communication and information sharing and participating in national forums and consultative processes. The UNEP office in Kenya has communicated by e-mail and they have organised a regional workshop, however feed back in terms of submitted projects and in terms of acknowledgement would be appreciated. The UNEP office has facilitated the formulation and approval of a Capacity Needs Assessment project for the three conventions: the UNCCD, Climate Change and Convention on Biological Diversity. An application for the GEF operational focal point support programme which was approved in 2004 will strengthen the office to support NAP activities although US\$8000, is inadequate to accomplish the planned activities and meet the objective.

Access to GEF funds: The Constraints

The following problems have been encountered in an attempt to access GEF funds:

- Table 6.2 shows Zimbabwe has submitted several project proposals emanating from the NAP dating back to November 2003 through the GEF desk in UNEP Nairobi. However, there has been no official acknowledgement of receipt of the project proposals or comments on the technical acceptability or shortcomings of the proposal despite several e-mail enquiries
- The long gestation period before consideration and disbursement of funds is of concern
- There is need to put in place institutional mechanisms for medium and large grants similar to the national committee on the GEF/SGP. Stakeholders are of the notion that GEF has complex project formulation process and format.
- There is need for capacity building of national stakeholders to develop, manage and review local programmes. Medium and large project proposals are bureaucratic as a result; NGOs have not been able to access this fund but the small grants with simpler processes which are less bureaucratic.
- The need for co-financing presents a hurdle particularly where developing countries are experiencing resource constraints. Accounting for co-financing in sectoral programmes is a complex process in itself.
- There are limitations in the scope of funding particularly for capitalisation that may be essential or a prerequisite for execution of the proposed programmes.
- There is complexity in understanding the concept of incremental costs.
- The funds in OP15 for UNCCD have been exhausted and parties have to wait for the next round. Implying that it is very difficult to get an allocation from GEF, since funds are exhausted before projects are considered.

CHAPTER 7: MEASURES UNDERTAKEN OR PLANNED WITHIN THE FRAMEWORK OF NAP

7.1 Diagnosis of Past Experience

The momentum generated by the WSSD paved way for assessments of the country's progress in achieving sustainable development. Beginning in 2003, MET facilitated a bottom up approach to reviewing the actions and initiatives by various stakeholders in relation to the Johannesburg Plan of Implementation, and the determination of gaps that would culminate in the drawing up of action plans for the economic, social and environmental sectors. Reviews were done at district and provincial workshops attended by a cross section of stakeholders and yielded information that is valuable to NAP and facilitates progress towards sustainable development including activities that will reverse land degradation. Firstly the reviews provided a list of ongoing initiatives on sustainable development inclusive of those specifically aimed at reducing land degradation. Secondly the reviews resulted in specific recommendations on actions that various stakeholders should take to address constraints to achieving sustainable development. An analysis of the proposed actions has been alluded to in Chapter 2. Lastly the proposed programs and projects will inform the relevance of NAP. Generally the proposed actions complement the NAP but there are new developments such as the Agrarian Reform program that call for the revision of the NAP.

Information on the country profile was derived from secondary data sources including published reports and documents from various stakeholder institutions including government, research and academic institutions and NGOs. Whereas there were sufficient resources for regular inventory, monitoring and documentation in the past, this is no longer the case particularly beginning in 2000 when international relation with Zimbabwe began to deteriorate over the Land Reform Program. This has resulted in the suspension of assessment programs resulting in not much new data being generated on a systematic basis. Collection, synthesis and analysis of data are a technically complex area that requires the appropriate technology such as Geographic Information Systems (GIS) and skilled staff. The brain drain has resulted in some key government departments such as the Central Statistical Office and the Surveyor Generals Office losing skilled manpower. In other instances the information collection systems are poorly developed. Lack of standardisation of information collection systems results in conflicting data on the same parameter eg soil erosion figures depending on the method applied. Another challenge relates to the processing of raw data. Whilst surveys may be carried out to generate raw data, this process can only prove useful when the raw data is processed to generate information that can inform decisions making.

7.2 Technical Programmes and Functional Integrated Projects to Combat Desertification

This section will review very briefly some of the projects underway in natural resources management and desertification control and their relevance to the UNCCD and NAP in particular. The review will be according to the thematic priority areas of Declaration (8/COP4)

7.2.1 Renewable sources of Energy

Complementary to the NAP energy program and the UNCCD article 8, section 3(b) (iii) the government, NGOs and the Private sector have supported and facilitated the implementation of a variety of renewable energy projects. Renewable energy projects that are ongoing include:

- Use of biogas for cooking and lighting, notable examples include the GEF SGP funded Insiza biogas project which has resulted in the construction of biogas digester which yield enough gas to provide fuel for the whole ward.
- Improved wood stove technologies, such as improved mud stoves developed by the SIRDC and "tsotso" stoves. These are widely marketed by some small to medium scale companies in a bid to reduce the use of large volumes of firewood when cooking.
- The piloting of GEC fuels and bio diesel from trees such as Jatropha by the Biomass users network in the Uzumba-Maramba Pfungwe area.
- Solar pumping and drying technologies by ITDG. The solar drying technologies are helping to extend the shelf life fruits, and vegetable thereby improving the marketing potential.
- Eco-fuel Blocks from saw dust waste as source of cooking fuel in selected household in Chimanimani and Chipinge by Envirotech.

These renewable energy projects seek to address problems of over-dependence on firewood as a source of fuel. Most of the renewable energy projects include awareness on associated problems emanating from deforestation and hence build the community knowledge on desertification. They seek to build the capacity of local stakeholder to apply the technologies at the household as well as community level. Developing appropriate institutions to manage the community initiatives to ensure that community members contribute in all aspects of design and implementation and that there is equitable sharing of accrued benefits has preceded application at community level. Renewable energy project also contribute to income generation for example the installation of mini-hydro is often accompanied with the establishment of irrigation schemes using electrical pumping systems. Solar drying technologies have also expanded the income base beyond the period when the fruits and vegetables mature.

7.2.2 Sustainable Land Use Management

An increasing number of communities are applying an integrated approach to land management in which land management comprises water management, soil conservation, soil fertility improvement and improvement in vegetation cover for example:

- NGOs such as SAFIRE, ITDG, World Vision, Catholic Development Commission, Africa 2000 + Network and government departments including DNR, District Development Fund and AREX are promoting community water management in semi-arid regions of Zimbabwe. Various techniques and strategies are applied including (i) rehabilitation of catchments through tree planting and gully reclamation, management of wooded areas and slope stabilisation using vertiver grass (ii) rehabilitation of wetlands accompanied by the establishment of nutritional gardens(e.g. the Rusike Integrated Project in Wedza) (iii) drilling of boreholes and various water harvesting management systems such as mulching, infiltration pits, tied ridges, and construction of weirs and small dams.
- Sustainable land management projects aim at reducing the application of chemical fertilisers and the maximum use of water and land space. To this end many NGOs and government department are encouraging, intercropping, organic farming, zero tillage in water stressed situations, and agro forestry practices. Sustainable land use management projects often include measures for improving the livelihood and food security (e.g. the Chivi Food Security Project facilitated by ITDG) as well as the economic conditions of communities by supporting the commercialisation of land produce and the establishment of markets. In addition organic farming has assumed new dimensions due the need to provide appropriate nutrition for HIV/AIDs patient. Inter-cropping with herbal and trees with medicinal values an emerging practice that is often linked to community-based health care programmes. Fambidzanai is leading such initiatives in many parts of the country.

7.2.3 Mountain Ecosystem Preservation

Mountain ecosystems play an important role in the livelihoods of Zimbabwean communities. They provide economic, social as well as environmental services. In conditions where most of the land is degraded, mountains become the only source for firewood, fodder, thatching grass, food, water, medicines as well as fulfilling spiritual and cultural needs. In this context the Department of Natural Resources, in consultation with local communities have declared a number of mountains protected e.g. Mapembe and Wedza mountains. Through this process communities and Community Based Organisations are involved in various efforts to regulate the use of mountain-based resources including the promotion of Eco-tourism as income generating venture that benefits communities at large. Sustainable use of mountain resources is promoted by the formulation of by- laws facilitated by village environment committees. Where the mountains yield products of high economic value, such as the guano-fertiliser, CAMPFIRE arrangements are being encouraged to ensure that outsiders do not exploit the communities.

7.2.4 Forest and Rangeland Management

Due to the wide spread nature of deforestation in the semi-arid communal lands of Zimbabwe, many NGO and government supported projects include aspects of forest management. The Social Forestry and Co-management programs developed by the Forestry Extension Departments are meant to ensure the participation of communities in managing forest resources. The Forestry Extension Department has facilitated the formation of forest management committees and have developed their capacity to manage

and utilise them. The challenge still remains of ensuring collective community visioning and ownership of these resources. Other initiatives include:

- The Forest Extension Department of the Forestry Commission, through the ongoing reforestation programme continues to encourage the planting of trees and the management and sustainable use of existing woodland and forest areas. Various strategies are applied including (i) the development of drought resistant tree species through hybridisation and domestication of wild indigenous tree varieties (ii) rehabilitation of degraded sites e.g., reclamation of mining dumps (iii) awareness campaigns and education programmes on forest conservation (iv) establishment of forest plantation using exotic tree varieties (v) forest co-management arrangement especially for protected forest reserves e.g. Mapfungautsi Indigenous Forest Reserve in Midlands Province. Measures to improve the livelihoods of local communities include the incorporation bee-keeping and small-scale saw milling particularly through out grower schemes.
- The Africa 2000 + coordinated GEF-SGP continues to support community based forest management projects aimed mainly at reducing soil erosion and providing sources for firewood and construction materials. NGOs such as Environment Africa, Zimbabwe Conservation and Zimbabwe Wildlife Society encourage the planting of trees at community level by conducting awareness through schools. Environment Africa has embarked on the ambitious tree for Africa project that envisions the whole of Africa being reforested by planting a tree for each baby that is born.
- Other initiatives are linked to fully utilising the commercial value of trees. SAFIRE has embarked on research in 9 Districts, the majority of which are in the semi-arid regions of Zimbabwe to establish tree species that have commercial value such as the extraction of edible and non-edible oils as well as the processing of wild fruits. Currently seeds from such species as *Sclerocarya birrea* and *Adansonia Digitata* (baobab) are yielding oils of commercial value. Further support to communities is given in terms of developing markets for the fruits and oils. ICRAF is specialising in providing training on agro-forestry and development. Various communities in several district have received skills in the growing of trees that improve soil fertility, trees that provide fodder, trees that can be used as green fences and those that yield fruits and other products. The Forestry Commission is also working on adding value to natural products through beneficiation of wild fruits in making jams and snacks

7.2.4 Specific Projects Aimed at Promoting UNCCD

(i) Mutubuki Chitenderano Integrated Project- Masvingo District

Located in the semi-arid region of Masvingo District in Gutu East ward 36, the project is a multifaceted local initiative comprising: wetland protection and rehabilitation, water harvesting through weir construction, a consolidated garden, livestock management, woodlot establishment and management, establishment of irrigation, electrification and construction of a clinic. The project began in 1996 with the compilation of an environmental district profile, which provided environmental data in terms of natural resources availability and the environment problems encountered. This was followed by the formulation of a District Conservation Strategy earmarking environmental extension and education, community mobilisation and empowerment, integrated project planning. Ward 36 in Gutu East expressed interest to implement some aspects of the strategy and hence started establishing local project management structures as well as identifying partners such as Africare, Heifer International, the Red Cross and the Zimbabwe Environmental Lawyers Association to implement specific components of the project as indicated above.

(ii) Shurugwi District Pilot Project on the UNCCD

Following the enactment of EMA in 2003, DNR selected Shurugwi District a pilot demonstration project on strengthening community institutional structures in line with stipulation in EMA as well as linking these to the implementation of the UNCCD. The process included harmonisation of existing natural resources committees which tended to overlap in terms of areas of operation. Other problems related to unfair allocation of resources from the local authorities and the fact that some of the committees were not yet legally incorporated in terms of EMA. DNR therefore facilitated a process of integration and rationalisation, which began, with the delineation of the environmental committees areas of operation covering the whole district and the environmental sub-committees operating at ward level. Six environmental sub-committees were established and each committee has oversight over an average four

wards. The amalgamation of wards was based on their proximity as well as their aerial extent. The pilot project also includes community initiatives at ward level which will be managed by the specific community and representatives from the environmental sub-committee. In particular the Muposhi project in ward 8 has established apiaries, a plantation and has successfully reclaimed one gully and a water harvesting project based on sand abstraction and gardening project.

Although there are no specific measures generated recently to combat desertification, more emphasis is now placed on integrating livelihood needs in environmental conservation projects. This has arisen out of the need to take care of the social and economic needs of communities given the prevailing economic environment.

7.2.4 Measures to Strengthen Capacity to Combat Desertification at Local Level

Government departments and NGOs are implementing various capacity building initiatives, in the areas of food security and drought management, institutional strengthening, project management, management of natural resources and marketing of agricultural and natural resource based products. Whereas previously, government departments and NGOs have developed and led the techniques, skills and approaches needed for desertification control, the trend is now on participatory approaches as well as intra-community exchange. More and more, communities are focusing on the real problems as perceived by each member as well providing homegrown solutions. Community exchange visits and farmer-to-farmer training is another way that knowledge on reversing land degradation is being spread within and across communities. Technical and scientific capacity is mainly through field trials and pilot demonstration projects particularly with regard to renewable energy technologies, drought resistant seed varieties, fodder crops and biological measures for pest control and soil erosion control.

Capacity building at the national level has been limited to awareness raising and information dissemination. Numerous stakeholder workshops aimed at building awareness on the extent of land degradation and related problems have been conducted as part of other events and process e.g. the national tree planting day, the environment day, world desertification day and JPI implementation. Experts have presented various topics on radio and television during these events. Exposure visits have been organised for decision makers to see for themselves the extent of the problems and what communities are doing to address these. There has been limited direct institutional support to key stakeholder organisations to build their capacity to understand the technical complexities of implementing the UNCCD particularly in the area of monitoring, assessments and the compilation of base line information. Capacity Building is regarded as a cross cutting issue of the NAP and is a component of the four NAP focus areas. In essence, water management, energy management, land management and information system program have to include elements of capacity building such as institutional strengthening at the local level and skills for managing projects

7.2.5 Capacity Building Measures needed for the Implementation of UNCCD at Local level

Given the fact that successful implementation of the UNCCD relies heavily on bottom-up approaches, there is need to build the capacity of local actors in various aspects relating to project design, group dynamics, project implementation and monitoring. Other specific capacity building needs at local level include:

- (i) Skills to manage natural resources
- (ii) Skills for natural resource assessment, mapping and monitoring techniques
- (iii) Development of local indicators for changes in the local environment
- (iv) Drought preparedness and management skills
- (v) Development of local regulations and enforcement
- (vi) Skills for integrated project planning, management and implementation
- (vii) Ability to conduct needs assessments
- (viii) Technology adaptation skills to suit local needs
- (ix) Communications and public awareness
- (x) Resource mobilisation

Most of these have been indicated in the four-sub-programs of the NAP. Successful implementation of capacity building initiatives has been limited by the shortage of financial and technical capacity and the failure to streamline capacity building initiatives from government and civil society institutions.

7.2.6 Capacity Building Requirement of the National Taskforce and the NFP

The overall goal of capacity building and strengthening of the National Taskforce and NFP is “effective participation and contribution to the NAP process implementation in order to combat desertification, arrest land degradation and enhance sustainable livelihoods for the poor”. The following components are envisaged:

- Institutional strengthening of the UNCCD focal point unit and the National Taskforce to build institutional capacity capable of coordinating, supervising and be the lead agencies which facilitates implementation of the NAP, setting, monitoring and evaluation of indicators.
- Information systems, knowledge sharing and communication capacities of the National Taskforce and NFP.
- Awareness raising, empowerment, skills development for land user communities and project beneficiaries to implement the local NAP initiatives.
- Capacity building of NGOs, CBOs, traditional institutions and other stakeholders for effective participation, contribution to NAP implementation with particular emphasis on their capacity to reach and service grassroots level.
- Facilitating capacity building and training the relevant service providers and extension institutions in both public and non government sector for more effective service delivery in NAP implementation and support in appropriate strategies e.g. catchments management, reclamation, efficient use of water and handling problems related to dry land management.
- Building the capacity of land users and natural resource custodians in dry land management, increased awareness for efficient use of water, reclamation including providing relevant information, education and training where necessary, project planning, implementation, monitoring, local institutional capacity building for communities through short-term courses, workshop-s and seminars targeted at the different stakeholders are needed.
- Identification of alternative appropriate and sustainable livelihoods to eliminate poverty in dry and drought prone environment.

Capacity building activities will focus on empowering communities to manage their resources to meet their environmental and socio-economic needs. Capacity building will be demand driven as it will be determined by the skills communities need to solve their problems or to successfully implement their innovations and initiatives related to the key programmes and processes as outlined in the NAP sub-sector programmes. Training will also be tailor made to address crosscutting issues such as the needs of the different special community groups such as women, youth, the marginalized etc.

The NAP implementation itself is part of capacity building for all the stakeholders. In this regard capacity building programmes are designed and tailor made to meet the requirements of projects under implementation. Capacity building is better achieved through practical work in the actual implementation of projects.

CHAPTER 8: FINANCIAL ALLOCATIONS FROM NATIONAL BUDGETS IN SUPPORT OF IMPLEMENTATION PROCESS

8.1 Financial Mechanisms Adopted

Zimbabwe has dedicated a budget line for the implementation of the NAP under the Public Sector Investment Programme (PSIP) of the fiscus. This has been in place since 2002. In addition the PSIP has other NAP related budget lines for:

- i) Integrated Catchment rehabilitation
- ii) Save Catchment Area Rehabilitation Programme
- iii) Conservation works for the fast track Land Resettlement programmes and
- iv) Wetland Protection and utilisation.

The PSIP NAP community projects were allocated: Z\$10 million in 2003, Z\$190 million in 2004 and a request for Z\$578 million has been submitted in the 2005 budget. Budget lines for PSIP programmes are institutionalised through Parliament and can be considered as permanent and sustained through the fiscus. The whole allocation is dedicated to investments in communities whilst recurrent costs are drawn from global budgets.

8.1.1 Measures to facilitate access of local actors to existing sources of funding

Access to PSIP by communities is through the budget line item of the specified community project. This implies communities that submit project proposals for the NAP budget facility are funded the following financial year. There is a small grant facility that is allocated to all local authorities for environmental activities which can also be used for NAP processes. The small grants programme GEF programme has successfully funded various community initiatives directly, through NGOs or through CBOs. Although these measures are in place communities need the capacity to formulate proposals that are approved for funding. To this extent, some NGOs such as Africa 2000 Network Plus are training communities on proposal writing as well as encouraging partnership between communities, CBOs and NGOs in submitting joint proposals.

8.1.2 New Methods for Mobilising Resources.

The Environmental Fund

The Environmental Management Act (2003) gives statutory provisions for the creation of an environmental fund. Zimbabwe has already compiled the documentation and proposal for institutionalisation of a National Fund to Combat Desertification (NFCDD) which is ready for capitalisation. NFCDD will be a window or sub-account of the environment fund through the EMA legal provisions. The fund can be capitalised through levies, fines, penalties for breaching the Act and contributions from the private sector, NGOs and local Government.

Local authorities are allocated modest grants on an annual basis through the fiscus to ensure they can initiate and sustain their institutional arrangements for environmental management. Statutory provisions ensure that districts and local communities can access the environment fund (or the NFCDD). It is envisaged that CBOs and NGOs who have the capacity to participate in environmental management activities or implementation of the NAP will access financial resources of the NFCDD. The Ministry of Environment and Tourism and its Departments have a track record and policy of vibrant partnership arrangements with competent environmental NGO who have contributed to and participated in environmental programmes, policies and legislative issues. The current participation of NGOs and CBOs in the task force will ensure that the NFCDD is accessible to the sector. International partners have not supported the financial mechanisms under the environment fund or the NFCDD and as outlined in section 6 the Global Mechanism has failed to mobilise resources for NAP implementation in Zimbabwe.

Public – Private Sector Partnership

The private sector of Zimbabwe has set up provisions under the Environmental Forum of Zimbabwe (EFZ) through which the private sector channels resources into environmental initiatives. The magnitudes of resources channelled through this window have not been ascertained. The EFZ is urban based and has not benefited UNCCD activities.

8.1.3 Analysis of Investment Flow in Dry Land Development

The most popular environmentally sound and economically profitable investments for sustainable development in dry lands include: tourism, eco-tourism, irrigation development, processing and marketing of rangeland products including indigenous timber. In the tourism sector there are two approaches dependent on tenure. Wildlife industry and tourism on private land includes the following production systems: intensive single species; semi-extensive multi-species and extensive multi-species. Parallel to investment and development to the core wildlife production systems secondary industries are developed to service the sector. The Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) expanded in the period 1982 – 2001, the programme relies on wildlife-based activities which are dominated by selling hunting quotas to individuals and corporate entities through safari operators. However CAMPFIRE relies on a vibrant tourism industry which has declined in the last 3 years. National Parks and Wildlife Authority recognises that one of the key interventions to reduce dependence on the natural resources is alleviation of poverty. Resource sharing is one of the principal means of alleviating poverty by engaging in sustainable natural resources utilisation. Community based natural resources management and wildlife-based land reform are the principal instruments used to foster better land management on lands that are agriculturally marginal and are prone to desertification if exposed to conventional agricultural practices. To date, 33 out of a total of 55 districts have been granted “appropriate authority status” to sustainably utilize wildlife resources in their areas and generate revenue to communities who live with wildlife. On the former alienated land, particularly in semi-arid and arid parts of the country wildlife utilization is being encouraged for adoption by the new farmers as a way to engage in alternative livelihoods based on land management which is drought prone and which is less deleterious to the environment compared to conventional agriculture. In pursuance of these objective hunting quotas were approved to the new landowners in each of the country’s eight rural provinces:

Matabeleland South	183	Matabeleland North	64
Masvingo	76	Mashonaland West	68
Mashonaland Central	5	Mashonaland East	7
Manicaland	6	Midlands	24
This gives a total of	433		

The Traditional Medicines project under implementation by the Ministry of Environment and Tourism aims at conserving traditional medicinal plants through incentive measures that include commercialisation and identifying marketing options. This initiative is implemented through the Convention on Biological Diversity. Investments through NGO initiatives such as SAFIRE and parastatals such as the Zimbabwe Tourism Authority (ZTA) have expanded opportunities for communities in semi-arid areas. In the last three years Zimbabwe Tourism Authority started to coordinate efforts of CAMPFIRE and SAFIRE and other NGOs in Community Based Tourism (CBT). Community Based Tourism players were identified and ZTA together with these collaborators organised and facilitated capacity building workshops in October 2003 and in March 2004. Through co-ordination by ZTA, SAFIRE, CAMPFIRE and UNDP, CBT enterprises formed the Zimbabwe Association of Community Based Enterprises (ZACOBTE) that was officially launched by the Honourable Minister of Environment and Tourism in August 2004. The overwhelming interest in CBT projects by people throughout the country gave rise to the need for an association to champion their cause and promote the sustainable management and use of natural and cultural resources in communities. ZTA has continued to aggressively market the country to both the traditional and emerging markets. Although the tourism sector has faced challenges over the past five years, ZTA has continued with its marketing efforts. This is a move expected to positively influence the performance of the tourism sector and the country’s economy at large. The authority has also initiated efforts to market CBT products. The CBT operators with assistance from ZTA have started to exhibit their products for the first time at this year’s Zimbabwe International Travel Expo.

SAFIRE has through commercialisation of natural forest products explored alternative ways of working with rural communities to strengthen their institutional capacity in stimulating economic growth. The programme develops and promotes the establishment of viable community managed enterprise based on sustainable natural resource use and management. The project is located in areas where agricultural production is marginal focussing on disadvantaged households. The crafts production and marketing programmes promotes product development, and sustainable utilization of forest resources as well as

identifying viable market linkages locally, regionally and internationally. Investments have generated socio-economic benefits for multiple stakeholders where the resource base potential is appropriate and entrepreneurial skills; management and markets have been well developed.

8.2 NAP Financing

Government attaches importance to initiatives and programmes that address poverty, drought mitigation, land degradation and vulnerability of communities in marginal areas. Development plans such as Vision 2020, Millennium Development Goals, the Macroeconomic Policy Framework for 2004-2006 states the importance of poverty alleviation, soil and water conservation, food security, water development and energy issues in dry areas. The main NAP PSIP budget line funding has gradually increased since 2002. Institutional and resource limitations such as equipment, limited human resources, transport etc constrain NAP implementation. There are limitations in the level of funding that can be secured through the fiscus due to budgetary constraints at national level and current controls of public expenditure policies.

CHAPTER 9: REVIEW OF BENCHMARKS AND INDICATORS TO MEASURE PROGRESS

9.1 Operational Mechanisms for Monitoring and Evaluation

There is a Department of Monitoring in the Office of the President and Cabinet which is responsible for overall Government Policy implementation. In the environment sector the national environmental monitoring and observation capacity has been improved by the formulation of the National Environmental Policy and the Environmental Management Act. These policy and legal instruments clearly indicate the areas to be monitored, the responsibilities for monitoring and production of state of the environment reports etc. In addition they stipulate the formulation of environmental management plans that will provide ongoing baseline information for monitoring. It is however not clear how effective the monitoring mechanism at sub-national level will be given the limited staff capacity in existing institutions. There is also a capacity gap between the national institutions and district, ward and village level institutions in terms of their capacity to develop indicators and apply these to monitor environmental changes.

9.1.2 Measures to Assess Rate of Resource Degradation

Relevant government departments such as the Department of Natural Resources, Forestry Commission, National Parks and Wildlife Authority and the Surveyor General's Office have GIS capacity that form the basis for collecting and analysing information relating to resource degradation. However some of these systems are no longer functional due a number of reasons including, the lack of financial resources to service equipment, failure to replace worn out parts and the limited staff complement. Furthermore there is lack of updated topographical maps. International NGOs such as the World Wide Fund for Nature (WWF) and International Conservation Union (IUCN) have conducted natural resource assessments but these tend to be limited in their scope. The University of Zimbabwe's Geography and Geology Departments have GIS but this is mainly applied for research and teaching purposes. There is scope for sub-contracting the universities and other institutions such as the SIRDC to provide information on resource degradation.

At the local level, government extension departments (DNR, Forestry Commission and AREX) endeavour to assess and monitor resource degradation using proxy indicators as well as physical measurements. The information included in the country profile on extent of degradation has been obtained through such techniques. Monitoring of land degradation on the ground is through the natural resource committees (soon to be Environmental Committees), which operate from the village right up the provincial level. Natural resource officers from DNR working with AREX provide the expertise for assessing the rate of land degradation.

There is no adequate information to determine the rate of resource degradation that can be attributed to drought and climate change due to two main reasons. Firstly there is no sufficient data on extent to which the climate has changed due to absence of systematic observation of the climate system. Secondly there is limited technical and financial capacity to monitor changes in natural resources during drought periods. There is need to strengthen collaboration between climate and drought information providers and resource monitors as well as building synergies across various resource monitors.

The Ministry of Agriculture coordinates Zimbabwe's early warning system, which is fully functional. Technical data for early warning is provided by the Department of Meteorology through seasonal and periodic weather forecast. The data has informed decision makers on seasons for which sub-normal rainfall is expected as well as the extent and severity of drought. However there has been limited use of the information generated because of failure to segregate it and communicate it to various user needs. Accordingly the capacity to analyse the information is critical for each user to derive maximum benefit. Decision makers have generally lacked the capacity to proactively analyse the data to help in drought preparedness. However the information generated by the national early warning systems has indicated a trend toward aridity and frequency of droughts. This has resulted in the formulation of the drought management policy as already explained in chapter 4. The drought management policy emphasises sustainable livelihoods as a means of coping with and recovering from shocks and stresses either natural or social.

There is limited exchange of information on the results of resource monitoring and evaluation. Efforts are underway to carry out environmental profiles at district levels, which will be published and disseminated

through the Department of Natural Resources. These will be updated on a regular basis and are likely to provide the basis for tracking changes. The Surveyor Generals' office is developing a land information system that will be accessible to the public and will be used by decision makers for planning purposes. There is scope however for harmonisation of information systems existing in relevant government departments such as the Forestry Commission, AREX, DNR and National Parks. Exchange of information on results of the analysis is limited by the lack of technical capacity to interpret raw data and to scientifically process it into a usable form.

There is no systematic monitoring to assess and evaluate the impact of NAP. However because few community projects have been funded, DNR has through its institutional mechanisms tracked progress and impact of NAP projects. The national taskforce has however recommended that this should be one of its main functions and hence the need to build the capacity of the national task force members to effectively undertake this role when NAP implementation is on stream.

9.2 Scientific and Technical Desertification Control Activities.

9.2.1 Scientific and Technical Activities Compliant with UNCCD

Zimbabwe's NAP includes the scientific and technical activities such as research and development of technologies relating to water management, energy management and sustainable land use. In addition the fourth program on information systems requires the scientific collection of data and information related to the monitoring of the extent and trend in resources degradation as well as the establishment of indicators for monitoring changes in the ecosystems. These activities conform to the Convention and were determined based on stakeholder consultations as well as the gap analysis, which highlighted the challenges to reversing land degradation.

The scientific and technical community is therefore an important stakeholder in the fight against land degradation and have been included in the NCB as has already been explained. As well, they participate in as in many other networks and forums related to sustainable development. The National Taskforce has sought the assistance of the scientific community in the development of project proposals that test new technologies as well as research project that can yield information that will assist in developing indicators and benchmarks for resource degradation however the proposals have not received funding. In their own interest, a number of scientific institutions such as the ICRAF, ICRISTAT, AREX, SIRDC and the Agriculture Research Trust are piloting projects such as drought resistance crop varieties, renewable energy and water harvesting technologies, agro forestry, integration of legumes in rangelands and conservation and tillage techniques.

Although NAP is clear on the scientific activities necessary for reversing desertification there is still limited financial and technical capacity to implement scientific and technical measures stipulated in the NAP. Nonetheless some of the results of the scientific research are already being applied. For example, the research in drought tolerant crops has resulted in field trials for these varieties in the semi-arid regions of Zimbabwe. Studies conducted with support from the Climate Change office have contributed to the formulation of a national policy on drought management. Indigenous seed banks are in place in some communities through the support from the Community Technology Development Trust, a locally registered NGO.

9.3 Implementation of the Recommendations of the Committee on Science and Technology

9.3.1 Benchmarks and Indicators

There has been no formal development of benchmarks and indicators for adoption by Zimbabwe. This assignment will put on the agenda in due course. However as indicated in earlier section, scientific and research organisations are developing indicators in a number of filed including, species monitoring, wildlife assessments, rangeland degradation and vegetation monitoring. The relevant institutions such as Parks and Wildlife Authority, Forestry Commission, AREX, ZINWA and DNR have in-house benchmarks and indicators which can be augmented to fit into the requirements of the UNCCD.

9.3.2 Traditional knowledge

There are various initiatives in the area of traditional knowledge. The Ministry of Environment and Tourism is implementing a project on Traditional Medicinal Plants whose objective is to promote the conservation and sustainable utilisation of plant and tree species with potential medicinal value. Project activities include inventory of plants with medicinal value, the classification of the plants and their uses and the promotion of sustainable utilisation as well as commercialisation for the benefit of producer communities. MET is also leading the formulation of sui generis legislation.

Many water management projects are including traditional water harvesting techniques following two best-case examples the Maplan project in Masvingo and the Zvishavane water project that have been widely publicised through community exchange visits.

Through a project entitled linking “Indigenous Knowledge Systems”-LINKS which aimed at promoting the integration of traditional knowledge in agriculture and food security a network of NGOs working in this area was established and strengthened. Community Technology Development Trust, one of the network members is leading efforts to promote the consumption of indigenous wild plant varieties as relish to promote food and nutrition in HIV/AIDs infected people.

The government has widely encouraged and promoted the traditional approach to ensuring food security at the community level through the practice of the Zunde raMambo (chiefs granary). This practice allows communities to contribute to the chief’s granary by working collectively in his field or donating maize grain, which will be used to feed the vulnerable during periods of drought.

AZTREC has uses traditional knowledge, culture and instillation in its environmental initiatives. It is concerned with conservation of traditional crops and biodiversity cultural sites etc.

9.3.3 Early Warning System

Zimbabwe has a comprehensive early warning system that feeds into the regional system. Although there is regular collection of rainfall data and regular forecasting, there is need to improve the way decision makers make use of the information generated from early warning systems. The information generated by early warning systems is regularly disseminated to newsletters and bulletins but is however too complex and is in many cases not processed for the use of decision makers, particularly the farmers. There is need therefore to build the capacity of decision makers to analyse the information generated by the early warning systems as well their capacity to proactively plan for drought situations. In many cases drought management remains reactive despite indications of pending drought situation by early warning systems. The fact that droughts in the SADC region affect more than one country requires capacity for collaborative drought management especially in the area of food importation, distribution and reduction of post harvest losses and water harvesting.

9.3.4 Training and field studies to identify pilot sites

Zimbabwe is participating in the Dry Margins Area Programme implemented by the Agricultural Research Council that has identified four districts in semi-arid areas to carryout research and studies to enhance information and data in semi arid areas. Two of the lead institutions in the programme implementation are Taskforce members whilst the NFP is a member of the steering committee of the programme. The Regional programme coordinating institution (ICRAF) has been incorporated into the national taskforce.

Due to the lack of funds for implementing projects reviewed and approved by the national task force, there has been no use made of the experts from the roster of independent experts drawn up by the secretariat

¹ Derived from “Background and working document by G.R Milne for the Workshop on Capacity Building and Promotion of Enabling Environment in the Context of the Regional Action Plan to Combat Desertification in Africa”

² National Economic Revival (2003): Measures to address the Current Challenges

³ Zimbabwe Millennium Development Goals: 2003 Progress Report

⁴ Zimbabwe Millennium Development Goals 2003 Progress Report

⁵ National Environmental Policy: Government of Zimbabwe; Ministry of Environment and Tourism
Second Draft September 2003

⁶ National policy on Drought Management

⁷ Buzzard C.H (2001) Policy Environment Governing the Great Limpopo Transfrontier Park Conservation Area: A review of relevant international agreements, SADC protocols and national policies

⁸ “National taskforce” is used interchangeably with the “national coordinating body (NCB)”

⁹ 36 Monitoring functions of Director-General, Inspectors and other officers; 37 Powers of officer and inspectors

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ZIMBABWE

MINISTRY OF ENVIRONMENT AND TOURISM

**ZIMBABWE'S THIRD NATIONAL REPORT OF
THE NATIONAL ACTION PROGRAM (NAP)
PROCESS IN THE CONTEXT OF THE UNITED
NATIONS CONVENTION TO COMBAT
DESERTIFICATION (UNCCD): 2004**

COUNTRY PROFILE (Appendix 1)

**Produced by the National Task Force on Desertification for the implementation of the UNCCD
for the Ministry of Environment and Tourism**

December 2004

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COUNTRY PROFILE: ZIMBABWE

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Country Profile: Biophysical indicators of desertification and drought.

1. Climate

1.1	Index of aridity ¹	0.49
1.2	Normal rainfall	702.1mm
1.3	Rainfall standard deviation	185.7mm

¹ Evaporation figure was used. The evaporation is 1986.119mm (21 stations were used). Reference: Climate Handbook of Zimbabwe, Rainfall averages have been calculated using data from 1900 up to 2000.

1.2 Precipitation/Rainfall

Rainfall Season:

Table 1.2 Precipitation/Rainfall: Monthly average rainfall. Coordinates latitude/longitude of station (1960 – 2003)

Station	Latitude	Longitude	Mean Rainfall
Banket	-17.4	30.38	1007.228
Beatrice	-18.25	30.85	629.5904
Beitbridge	-22.22	30	298.6876
Bindura	-17.3	31.32	798.8449
Binga	-17.62	27.33	666.7465
Buhera	-19.32	31.43	719.385
Bamo	-21.02	28.62	523.2864
B_ Geotz	-20.15	28.62	528.5205
Chegutu	-18.13	30.13	707.45
Chimanimani	-19.8	32.97	904.5798
Chinhoyi	-17.22	30.12	749.4477
Chipinge	-20.12	32.37	956.2045
Chisengu	-19.88	32.88	1261.789
Chisumbanje	-20.8	32.23	552.3795
Chivhu	-19	30.55	685.9046
Concession	-17.4	30.95	808.7
Fort Rixon	-20.02	29.25	521.0659
Glendale	-17.35	31.05	731.8269
Gokwe	-18.22	28.93	721.3273
Guruve	-19.45	29.85	627.3932
Harare A	-17.92	31.01	745.0773

Table 1.2 continued

Station	Latitude	Longitude	Mean Rainfall
Harare B	-17.83	31.02	790.8909
Headlands	-17.28	32.05	681.5711
Hwange	-18.37	26.48	534.3068
Kadoma	-18.32	29.88	691.775
Karoi	-16.83	29.62	760.9955
Kezi	-20.92	28.45	469.8455
Khami	-21.27	28.45	469.8446
Kwekwe	-18.93	29.83	604.6409
Lupane	-18.95	27.8	544.1946
Makoholi	-19.83	30.78	613.725
Makuti	-16.32	29.23	751.9655
Marondera	-18.18	31.47	790.9705
Masvingo	-20.07	30.87	585.55
Mayo	-17.87	32.28	667.407
Mberengwa	-20.48	29.92	464.9798
Mhondoro	-18.32	30.6	694.7727
Mt Darwin	-16.78	31.58	751.6682
Mukandi	-18.68	32.82	1441.932
Murehwa	-17.65	31.78	844.169
Mutare	-18.98	32.67	740.8364
Mutoko	-17.42	32.22	672.5636
Mvuma	-19.28	30.52	625.582
Mvurwi	-17.03	30.85	834.6349
Nkayi	-19	28.9	628.8603
Norton	-17.88	30.68	711.3035
Nyanga	-18.28	32.75	1032.82
Nyazura	-18.72	32.17	693.5651
Plumtree	-20.48	27.82	551.8477
Rusape	-18.53	32.13	715.9909
Shamva	-17.3	31.55	776.7744
Victoria Falls	-18.1	25.85	619.2047
Wedza	-18.62	31.57	720.3434
W_Nic	-21.05	29.37	437.3047
Zaka	-20.37	31.47	662.386
Zvishavane	-20.32	30.07	514.348
National mean of the stations above		702.0877	
Standard deviation (SD) of the stations above		185.738	

Table 1.3 Climatic Zones

Sub-national areas (Agro-ecological Regions or Natural Regions)	Average mm	Range mm	PET Annual
1. Agroecological Region I	1025	-	1241.5
2. Agroecological Region IIa	787.41		1359.75
3. Agroecological Region II	727.47	725 – 790	1454.667
4. Agroecological Region III	676	600 - 750	1474.143
5. Agroecological Region IV	565.1	450 - 650	1469.9
6. Agroecological Region V	492	-	1540.25

2: **Vegetation and land use**

Table 2: Vegetation and Land use

Land use	1990-1999 (000 ha)	2000-2003
Cultivated land	10 738.1	11 038.1
Wooded grassland	1 893.9	1 879.1
Forest and woodland	25 938.7	24 849.3
Other land	519.3	1 323.5

Source: Forestry Commission, Research Department (2003)

Table 2.1: Land Utilization and Land Tenure (1996/ 2004)

Land Tenure	Total Area In hectares (1996)	Total Area In hectares (2004)
National Parks	5045490	5045490
Forest Land	1335157	1335157
State Land	205255	205255
Communal Land	15445686	15445686
Resettlement Area	3958276	5343126*
Small Scale Commercial Farming Area (SSCFA)	1122781	1122781
Large Scale Commercial Farming Area (LSCFA)	11893668	10508418*
Town	99077	99077
Total	39 105 390	39 105 390

**Source: Agritex, unpublished (1996)
Ministry of lands (2004)*

Table 2.2a Vegetation cover - (Data from the VegRIS Project 1992-96) Satellite data taken in 1992: Forestry Commission

District	Plantation Ha	%	Woodland Ha	%	Grassland Ha	%	Cultivation Ha	%	Other Ha	%	Total Ha
BEITBRIDGE	0	0.00	1,134,434	88.36	1,087	0.08	147,787	11.51	555	0.04	1283863.00
BIKITA	0	0.00	329,781	63.22	0	0.00	190,995	36.62	842	0.16	521618.00
BINDURA	82	0.04	124,563	54.91	520	0.23	97,705	43.07	3992	1.76	226862.00
BINGA	0	0.00	1,110,878	83.43	6,018	0.45	120,461	9.05	94175	7.07	1331532.00
BUBI	0	0.00	500,199	89.31	898	0.16	58,584	10.46	401	0.07	560082.00
BUHERA	190	0.04	157,545	29.33	206	0.04	378,088	70.40	1028	0.19	537057.00
BULAWAYO	0	0.00	10,797	23.14	0	0.00	2,514	5.39	33,349	71.47	46660.00
BULILIMA	0	0.00	896,030	72.52	1,941	0.16	333,520	26.99	4,027	0.33	1235518.00
CHEGUTU	952	0.18	325,956	60.18	9,302	1.72	202,411	37.37	3,046	0.56	541667.00
CHIKOMBA	0	0.00	387,415	59.53	75,382	11.58	188,000	28.89	31	0.00	650828.00
CHIMANIMANI	65,615	19.57	191,161	57.01	9,210	2.75	64,182	19.14	5160	1.54	335328.00
CHIPINGE	6,478	1.24	257,866	49.45	9,612	1.84	247,147	47.39	361	0.07	521464.00
CHIREDDZI	1,049	0.06	1,541,382	88.09	525	0.03	205,766	11.76	1114	0.06	1749836.00
CHIRUMAN	4,321	0.92	286,787	60.78	54,221	11.49	126,012	26.71	467	0.10	471808.00
CHIVI	0	0.00	119,639	34.62	0	0.00	223,828	64.77	2116	0.61	345583.00
GOKWE NORTH	0	0.00	415,232	58.52	311	0.04	294,068	41.44	0	0.00	709611.00
GOKWE SOUTH	41	0.00	630,313	55.53	17,542	1.55	486,724	42.88	409	0.04	1135029.00
GOROMONZI	521	0.21	131,991	52.96	3,200	1.28	111,000	44.54	2497	1.00	249209.00
GURUVE	1,282	0.17	561,242	73.30	10,386	1.36	192,686	25.16	111	0.01	765707.00
GUTU	0	0.00	264,673	37.38	66,609	9.41	363,740	51.38	12987	1.83	708009.00
GWANDA	0	0.00	788,372	73.46	0	0.00	281,794	26.26	2964	0.28	1073130.00
GWERU	138	0.02	386,476	64.48	114,478	19.10	90,571	15.11	7,691	1.28	599354.00
HARARE	409	0.46	19,345	21.89	3,552	4.02	21,385	24.20	43,694	49.43	88385.00

Table 2.2a Continued

District	Plantation Ha	%	Woodland Ha	%	Grassland Ha	%	Cultivation Ha	%	Other Ha	%	Total Ha
HURUNGWE	60	0.00	1,638,721	82.20	6,017	0.30	346,338	17.37	2421	0.12	1993557.00
HWANGE	0	0.00	2,834,207	95.44	36,536	1.23	87,627	2.95	11,276	0.38	2969646.00
INSIZA	0	0.00	619,464	74.92	3,406	0.41	200,962	24.30	3,036	0.37	826868.00
KADOMA	35	0.00	727,071	77.91	2,661	0.29	200,739	21.51	2,746	0.29	933252.00
KARIBA	0	0.00	606,167	73.98	4,409	0.54	34,619	4.22	174,197	21.26	819392.00
KWEKWE	0	0.00	621,275	70.05	8,722	0.98	249,416	28.12	7,546	0.85	886959.00
LUPANE	101	0.01	551,784	71.16	7,732	1.00	214,377	27.65	1407	0.18	775401.00
MAKONDE	173	0.02	649,285	73.25	15,139	1.71	217,679	24.56	4,072	0.46	886348.00
MAKONI	360	0.05	363,526	46.42	33,035	4.22	372,812	47.61	13319	1.70	783052.00
MARONDERA	582	0.17	179,520	51.30	21,566	6.16	144,497	41.29	3,776	1.08	349941.00
MASVINGO	0	0.00	498,206	72.18	648	0.09	185,081	26.81	6,315	0.91	690250.00
MATOBO	0	0.00	532,291	73.52	221	0.03	188,431	26.03	3050	0.42	723993.00
MAZOWE	3,058	0.68	237,581	53.10	16,302	3.64	187,616	41.94	2,840	0.63	447397.00
MBERENG	0	0.00	230,373	46.52	503	0.10	261,006	52.71	3301	0.67	495183.00
MT DARWIN	0	0.00	239,009	53.44	84	0.02	208,132	46.54	0	0.00	447225.00
MUDZI	0	0.00	252,903	61.12	0	0.00	160,572	38.80	326	0.08	413801.00
MUREHWA	58	0.02	132,922	37.77	13,008	3.70	196,267	55.77	9694	2.75	351949.00
MUTARE	3,890	0.68	290,463	50.98	297	0.05	268,773	47.17	6,370	1.12	569793.00
MUTASA	26,448	10.29	119,147	46.35	2,523	0.98	106,450	41.41	2470	0.96	257038.00
MUTOKO	0	0.00	219,214	53.78	0	0.00	184,950	45.37	3442	0.84	407606.00
MWENEZI	7	0.00	1,145,310	86.16	256	0.02	181,664	13.67	2040	0.15	1329277.00
MZARABANI	0	0.00	299,017	70.62	13,919	3.29	110,496	26.10	0	0.00	423432.00
NKAYI	0	0.00	255,928	47.93	4,317	0.81	273,452	51.21	272	0.05	533969.00
NYANGA	37,837	6.54	326,375	56.44	57,485	9.94	152,904	26.44	3701	0.64	578302.00
RUSHINGA	0	0.00	159,248	67.62	0	0.00	76,180	32.35	75	0.03	235503.00

Table 2.2a continued

District	Plantation Ha	%	Woodland Ha	%	Grassland Ha	%	Cultivation Ha	%	Other Ha	%	Total Ha
SEKE	0	0.00	172,048	64.85	13,896	5.24	78,908	29.74	457	0.17	265309.00
SHAMVA	0	0.00	174,680	64.26	0	0.00	96,905	35.65	266	0.10	271851.00
SHURUGWI	789	0.21	212,303	57.42	9,217	2.49	145,765	39.43	1632	0.44	369706.00
TSHOLOTSHO	0	0.00	574,540	74.12	5,086	0.66	195,099	25.17	455	0.06	775180.00
UMGUZA	208	0.03	547,579	89.21	729	0.12	59,585	9.71	5,729	0.93	613830.00
UMZINGWA	0	0.00	191,361	68.99	0	0.00	83,116	29.96	2902	1.05	277379.00
UZUMBA	0	0.00	143,220	53.71	0	0.00	119,930	44.98	3495	1.31	266645.00
WEDZA	0	0.00	141,456	55.20	5,356	2.09	108,463	42.32	996	0.39	256271.00
ZAKA	0	0.00	100,994	32.37	25	0.01	208,661	66.89	2281	0.73	311961.00
ZVIMBA	1,171	0.19	269,407	44.81	19,474	3.24	299,943	49.89	11,208	1.86	601203.00
ZVISHAVANE	0	0.00	159,183	60.53	1,635	0.62	101,695	38.67	453	0.17	262966.00
Total	155,853	0.40	26,987,851	69.04	689,208	1.76	10,738,077	27.47	518,586	1.33	39089575.00

Table 2.2b Vegetation cover - 2000-2003 (% Calculated based on total district area; Woodland 10years later calculated using 1992 data in table 2.2a above the deforestation rate of 1.6% per annum over 10years; Cleared hectarage added to cultivation. **Note: No data available on loss of land to dam construction and urbanization (Source, Forestry Commission Research Department):**

District	Forest Plantation (Ha)	%	Woodland (Ha)	%	Grassland (Ha)	%	Cultivation(Ha)	%	Others (ha)	%	Total (ha)
B/Bridge	0	0.00	952924.56	74.2	1087	0.08	329296.44	25.65	555	0.04	1283863
Bikita	0	0.00	277016.04	53.1	0	0.00	243759.96	46.73	842	0.16	521618
Bindura	82	0.04	104632.92	46.1	520	0.23	117635.08	51.85	3992	1.76	226862
Binga	0	0.00	933137.52	70.1	6018	0.45	298201.48	22.40	94175	7.07	1331532
Bubi	0	0.00	420167.16	75.0	898	0.16	138615.84	24.75	401	0.07	560082
Buhera	190	0.04	132337.8	24.6	206	0.04	403295.2	75.09	1028	0.19	537057

Table 2.2b Continued

District	Forest Plantation (Ha)	%	Woodland (Ha)	%	Grassland (Ha)	%	Cultivation(H a)	%	Others (ha)	%	Total (ha)
Bulawayo	0	0.00	9069.48	19.4	0	0.00	4241.52	9.0	33349	71.47	46660
Bulilima	0	0.00	752665.2	60.9	1941	0.16	476884.8	38.60	4027	0.33	1235518
Chegutu	952	0.18	273803.04	50.5	9302	1.72	254563.96	47.00	3046	0.56	541667
Chikomba	0	0.00	325428.6	50.0	75382	11.58	249986.4	38.41	31	0.00	650828
Chimani	65615	19.57	160575.24	47.9	9210	2.75	94767.76	28.26	5160	1.54	335328
Chipinge	6478	1.24	216607.44	41.5	9612	1.84	288405.56	55.31	361	0.07	521464
Chiredzi	1049	0.06	1294760.88	74.0	525	0.03	452387.12	25.85	1114	0.06	1749836
Chirumanzi	4321	0.92	240901.08	51.1	54221	11.49	171897.92	36.43	467	0.10	471808
Chivi	0	0.00	100496.76	29.1	0	0.00	242970.24	70.31	2116	0.61	345583
Gokwe_N	0	0.00	348794.88	49.2	311	0.04	360505.12	50.80	0	0.00	709611
Gokwe_S	41	0.00	529462.92	46.6	17542	1.55	587574.08	51.77	409	0.04	1135029
Goromonzi	521	0.21	110872.44	44.5	3200	1.28	132118.56	53.02	2497	1.00	249209
Guruve	1282	0.17	471443.28	61.6	10386	1.36	282484.72	36.89	111	0.01	765707
Gutu	0	0.00	222325.32	31.4	66609	9.41	406087.68	57.36	12987	1.83	708009
Gwanda	0	0.00	662232.48	61.7	0	0.00	407933.52	38.01	2964	0.28	1073130
Gweru	138	0.02	324639.84	54.2	114478	19.10	152407.16	25.43	7691	1.28	599354

Table 2.2b Continued

District	Forest Plantation (Ha)	%	Woodland (Ha)	%	Grassland (Ha)		Cultivation(Ha)		Others (ha)	%	Total (ha)
Harare	409	0.46	16249.8	18.4	3552	4.02	24480.2	27.70	43694	49.44	88385
Hurungwe	60	0.00	1376525.64	69.0	6017	0.30	608533.36	30.53	2421	0.12	1993557
Hwange	0	0.00	2380733.88	80.2	36536	1.23	541100.12	18.22	11276	0.38	2969646
Insiza	0	0.00	520349.76	62.9	3406	0.41	300076.24	36.29	3036	0.37	826868
Kadoma	35	0.00	610739.64	65.4	2661	0.29	317070.36	33.97	2746	0.29	933252
Kariba	0	0.00	509180.28	62.1	4409	0.54	131605.72	16.06	174197	21.26	819392
Kwekwe	0	0.00	521871	58.8	8722	0.98	348820	39.33	7546	0.85	886959
Lupane	101	0.01	463498.56	59.8	7732	1.00	302662.44	39.03	1407	0.18	775401
Makonde	173	0.02	545399.4	61.5	15139	1.71	321564.6	36.28	4072	0.46	886348
Makoni	360	0.05	305361.84	39.0	33035	4.22	430976.16	55.04	13319	1.70	783052
Marondera	582	0.17	150796.8	43.1	21566	6.16	173220.2	49.50	3776	1.08	349941
Masvingo	0	0.00	418493.04	60.6	648	0.09	264793.96	38.36	6315	0.91	690250
Matobo	0	0.00	447124.44	61.8	221	0.03	273597.56	37.79	3050	0.42	723993
Mazowe	3058	0.68	199568.04	44.6	16302	3.64	225628.96	50.43	2840	0.63	447397
Mberengwa	0	0.00	193513.32	39.1	503	0.10	297865.68	60.15	3301	0.67	495183
Mt.Darwin	0	0.00	200765.88	44.9	84	0.02	246373.12	55.09	0	0.00	447223

Table 2.2b Continued

District	Forest Plantation (Ha)	%	Woodland (Ha)	%	Grassland (Ha)	%	Cultivation (Ha)	%	Others (ha)	%	Total (ha)
Mudzi	0	0.00	212438.52	51.3	0	0.00	201036.48	48.58	326	0.08	413801
Murehwa	58	0.02	111654.48	31.7	13008	3.70	217534.52	61.81	9694	2.75	351949
Mutare	3890	0.68	243988.92	42.8	297	0.05	315247.08	55.33	6370	1.12	569793
Mutasa	26448	10.29	100083.48	38.9	2523	0.98	125513.52	48.83	2470	0.96	257038
Mutoko	0	0.00	184139.76	45.2	0	0.00	220024.24	53.98	3442	0.84	407606
Mwenezi	7	0.00	962060.4	72.4	256	0.02	364913.6	27.45	2040	0.15	1329277
Muzarabani	0	0.00	251174.28	59.3	13919	3.29	158338.72	37.39	0	0.00	423432
Nkayi	0	0.00	214979.52	40.3	4317	0.81	314400.48	58.88	272	0.05	533969
Nyanga	37837	6.54	274155	47.4	57485	9.94	205124	35.47	3701	0.64	578302
Rushinga	0	0.00	133768.32	56.8	0	0.00	101659.68	43.17	75	0.03	235503
Seke	0	0.00	144520.32	54.5	13896	5.24	106435.68	40.12	457	0.17	265309
Shamva	0	0.00	146731.2	54.0	0	0.00	124853.8	45.93	266	0.10	271851
Shurugwi	789	0.21	178334.52	48.2	9217	2.49	179733.48	48.62	1632	0.44	369706
Tsholotsho	0	0.00	482613.6	62.3	5086	0.66	287025.4	37.03	455	0.06	775180
Umguza	208	0.03	459966.36	74.9	729	0.12	147197.64	23.98	5729	0.93	613830
Umzingwane	0	0.00	160743.24	58.0	0	0.00	113733.76	41.00	2902	1.05	277379

Table 2.2b Continued

District	Forest Plantation (Ha)	%	Woodland (Ha)	%	Grassland (Ha)		Cultivation(H a)		Others (ha)	%	Total (ha)
Uzumba	0	0.00	120304.8	45.1	0	0.00	142845.2	53. 57	3495	1.31	266645
Hwedza	0	0.00	118823.04	46.4	5356	2.09	131095.96	51. 16	996	0.39	256271
Zaka	0	0.00	84834.96	27.2	25	0.01	224820.04	72. 07	2281	0.73	311961
Zvimba	1171	0.19	226301.88	37.6	19474	3.24	343048.12	57. 06	11208	1.86	601203
Zvishavane	0	0.00	133713.72	50.8	1635	0.62	127164.28	48. 36	453	0.17	262966
Total	155855	0.4	22669796.52	58.0	689204	1.8	15056134.5	38.56	518583	1.3	39089573
%	0.4		58.0		1.8		38.5		1.3		100.0

COMMENTS

The last vegetation cover mapping was carried out in 1993-96. There is need for a similar mapping exercise 10years later in order to come up with a more up to date picture on the distribution of land use and vegetation resources of the country especially with the ongoing land reform programme. Satellite remote sensing and GIS technologies are recommended tools for this work. The Dept of Natural Resources, National Parks Authority, Dept of Lands and Resettlement, the Surveyor General collaborate with the Forestry Commission to generate up to date and reliable data and information on vegetation resources and current land use and land cover.

3.	Water Resources²		
3.1	Fresh water availability (million m ³)	Potential fresh water availability	8.5x10 ⁹ m ³
3.2	Total Renewable freshwater available		20cukm/year
3.3	Per capita water availability in 2000		1483cum ^{***}
3.4	Potential available fresh water resources per capita (m ³) optimum storage		700m ³
3.5	Freshwater withdrawal by sector in year 2000		
	Domestic	-	13%
	Industrial	-	6%
	Agricultural	-	71%
3.6	Amount of water generated as runoff		20x10 ⁹ m ³
3.7	Freshwater withdrawal in 2000 cum/person/year ^{***}		90

(^{***} after Hirt et al 2002)

² Department of Water – Chief Planning Engineer (Water Resources Database)

4. Energy

Consumption

4.1	Energy use per capita (kg oil equivalent)	769.03 (2001)
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Table 4.1 National energy contribution of liquid fuel (%)

<u>Year</u>	<u>Liquid fuels</u>
1991	14.8
1992	15.2
1993	16.5
1994	13.9
1995	13.1
1996	12.3
1997	17.5
1998	22.3
1999	20.6
2000	14.6

Source: Department of Energy

4.2	Agricultural energy use per hectare (millions of BTU)	6.733 BTU (2004)
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Table 4.2: Electricity energy source and its contribution (%) to national energy

<u>Year</u>	<u>Electricity</u>
1991	12.5
1992	11.9
1993	11.7
1994	12.5
1995	12.5
1996	11.8
1997	11.8
1998	12.4
1999	11.3
2000	14.3

Source: Department of Energy

5. Land Degradation

A national erosion survey commissioned by the Department of Natural Resources carried out in 1988 (Whitlow) gives an overview of land degradation in Zimbabwe at the time estimated at 1,848,000 ha the problem has continued unabated particularly in communal lands where population growth has resulted in overgrazing, deforestation, land use pressure as well as inappropriate farming technologies. There are no national surveys carried out since 1988 therefore the 1988 data is given and current case studies from Provincial surveys as indicated below:

Table 5.1: ESTIMATED EROSION (1,000'S HA) IN CROPLANDS AND NON-CROPLANDS ACCORDING TO TENURE AND NATURAL REGIONS (Total Area of Zimbabwe 390731000ha)

	Natural Regions					Total Area degraded	% degraded
	I	II	III	IV	V		
Communal Lands:							
Cropland	2.0	102,9	175,0	321,8	166,6	768,2	91%
Non-cropland	3,9	123,4	156,0	303,0	174,0	760,3	76.6%
Commercial Agric Sector							
Cropland	1,1	24,3	20,3	16,1	4,1	65,9	7.8%
Non-cropland	6,1	46,2	58,7	18,4	18,4	205,2	20%
Non-Agricultural Lands:							
Cropland	0,0	3,7	3,3	1,1	0,2	8,3	1.0%
Non-cropland	0,0	2,1	3,9	9,9	11,0	26,9	2.7%
Total eroded land						1834,8	46.96%

Table 5.2a : Deforestation and other types of land degradation in five provinces

Province	Type of degradation	1990-1999 (ha)	% of the total area	2000-2003 (ha)	% of the total area
Manicaland	Soil erosion Gully, sheet and rill	1 400	0.038	1 331	0.036
	Deforestation	780 000	21.39	965 000	26.47
	River bank erosion/siltation wetland depletion	320 105	8.78	355 133	9.74
	Gold panning open pits Mine dumps	65	0.0018	112	0.003
Matebeleland North	Soil erosion Gully, sheet and rill	402 343.4	7.94	687 199.09	13.57
	Deforestation	950 426	18.77	820 675	16.21
	River bank erosion/siltation Wetland depletion	-	-	34	0.0007
	Alien invasive species	44 098	0.87	110 244	2.18

Table 5.2b Land degradation in Shurugwi district

Type of degradation	1990-1999 (ha)	% of the total area	2000-2003 (ha)	% of the total area
River bank erosion/ siltation wetland depletion	-	-	8800	2.4
Gold panning – open pits, mine dumps	-	-	11650	3.1

Source:

Mashonaland Central Source of information: DEAP profile, Resource Inventory, Inspection reports

Masvingo Source of information: Resource Inventory, DEAP profiles

Midlands Source of information: DEAP profile, Resource Inventories, Forestry Commission

Matebeleland South Sources of information: AREX, Resource Inventory

Matebeleland North Source of information: AREX, DNR

5.1 FOREST FIRES

The Forestry Commission only keeps fire records for gazetted forest areas listed below.

For more information on fires in Zimbabwe visit: <http://maps.geog.umd.edu/> then click on Zimbabwe

Table 5.3: Forest fires reported in 2003 (Source: Forestry Commission)

2003 FOREST FIRE REPORTS					
FOREST AREA	FIRE No	AREA BURNT (Ha)	CAUSES	MAP SHEET	DATE
Mbembesi	1	1600	Poachers	1928A3	26/06/03
Mbembesi	2	800	Poachers	1928A3	20/07/03
Mbembesi	3	700	Poachers	1928A3	29/08/03
Mbembesi	4	800	Poachers	1928A3	10/9/2003
Mbembesi	5	700	Poachers	1928A3	20/09/03
Mbembesi	6	1300	Poachers	1928A3	16/10/03
Mbembesi	7	3200	Poachers	1928A3	25/10/03
Total Mbembesi		9100			
Gwampa	1	500	Poachers	1928B1	28/08/2003
Gwampa	2	400	Poachers	1928B1	29/08/2003
Gwampa	3	25	Poachers	1928B1	4/9/2003
Gwampa	4	200	Poachers/Bee Smokers	1928B1	10/9/2003
Gwampa	5	1200	Poachers	1928A2	Not Recorded
Gwampa	6	200	Poachers	1928A2	30/09/2003
Gwampa	7	300	Smoking/Incendiarism	1928B1	Unkwon
Gwampa	8	1000	Incendiarism	1928B1	15/10/2003
Gwampa	9	1475	Unknown	1928A2	Not Recorded
Gwampa	10	1475	Unknown	1928A2	Not Recorded
Total Gwampa		6775			
Gwayi	1	4500	Bee Smokers	1928A3	Not Recorded
Gwayi	2	502	Herd boys	1927B2/1928A1	Not Recorded
Gwayi	3	700	Unknown	1927B2	Not Recorded
Gwayi	4	1200	Poachers	1927B2/1927B4	Not Recorded
Gwayi	5	12400	Poachers	1927B2/1927B4	Not Recorded
Gwayi	6	11600	Poachers	1927B4	Not Recorded
Gwayi	7	4200	Bee Smokers	1827D4/1927B2	Not Recorded
Gwayi	8	600	Passer by	1827D4	Not Recorded
Gwayi	9	3650	Smokers	1927B2	Not Recorded
Gwayi	10	650	Smokers	1927B2	Not Recorded
Total Gwayi		40002			
Umguza	1	400	Not Recorded	1928C1	Not Recorded
Umguza	2	300	Not Recorded	1927B4	Not Recorded
Umguza	3	1500	Not Recorded	1927B4	Not Recorded
Umguza	4	900	Not Recorded	1927B4	Not Recorded
Umguza	5	600	Not Recorded	1928C1	Not Recorded
Total Umguza		3700			
Mzola	1	200	Bee Smokers		1/6/2003

TABLE 5.3 Continued

FOREST AREA	FIRE NO.	AREA BURNT (Ha)	CAUSES	MAP SHEET	DATE
Mzola	2	10000	Poachers		12/6/2003
Mzola	3	4400	Poachers		16/07/03
Mzola	4	400	Unknown		15/08/03
Mzola	5	3000	Poachers		3/9/2003
Mzola Total		18000			
SUMMARY					
Forest Area	No. of Fires	Burnt Area			
Mbembesi	7	9100			
Gwampa	10	6775			
Gwayi	10	40002			
Umguza	5	3700			
Mzola	5	18000			
TOTAL	37	77577			

6: Rehabilitation

Information for the requested tables: Table 6.2, Table 6.3 and Table 6.4 given in a composite table below

Table 6.2, 6.3 and 6.4: Arable land restoration, Rehabilitation of degraded lands and rehabilitation of degraded forests (hectares) in five provinces of Zimbabwe**

Province	1990-1999 (ha rehabilitated)			2000-2003 (ha rehabilitated)		
	Cropland	Rangeland	Forest	Cropland	Rangeland	Forest
Masvingo	77.83	31 285	199	152	13 696	70
Midlands	110	23 623	25	240	25 652	45
Matebeleland South	-	3 248	-	-	350	-
Matebeleland North	569	2136.14	2	223	10	5
Mashonaland Central	-	200	100	100	210	100
Total	757	60 492	326	715	40 518	220

** These figures are not all inclusive but incorporate data from Government programmes that have been quantified.

Table 6.5: Rehabilitation of degraded landscape through tree planting by Provinces in year 1998; 2003 and the eight year period (1990 to 1998)

Province	1998 Trees Planted (millions)	2003* Trees Planted (millions)	**Period 1990 to 1998 Total trees planted millions
Masvingo	0.508	0.108	5.04
Mashonaland East	1.485	0.131	3.3
Mashonaland Central	2.071	0.128	7.72
Mashonaland West	0.440	0.103	3.07
Manicaland	0.373	0.252	2.96
Midlands	0.203	0.100	1.49
Matabeleland North	0.034	0.012	0.42
Matabeleland South	0.053	0.006	0.13
Total	5.167	0.846	24.18

* Under reporting constraints noted in the reporting period

Source: Forestry Extension Services of the Forestry Commission Annual reports 1998 and 2003.

**Source: Period 1990 to 1998 Total Trees Planted - Shumba (2000)

7. People and economy

7.1 Population (total) 11 634,663

- Population: urban (percent of total) 33%
- Population: rural (percent of total) 67%

Table 7.1: Population

Province	Urban	Rural	Total
Manicaland	148 896	1 317 993	1 566 889
Mashonaland Central	82 637	915 628	998 265
Mashonaland West	301 217	921 366	1 222 583
Matabeleland North	77 403	623 956	701 359
Matabeleland South	63 195	591 684	654 879
Midlands	342 755	1 123 576	1 466 331
Masvingo	110 609	1 208 096	1 318 705
Harare	1 882 200	23 310	1 903 510
Bulawayo	676 787	-	676 787
Mashonaland East	116 644	1 008 711	1 125 355

Source: Computed from preliminary census results summary 2003.

7.2 Population growth (1992 to 2002, annual %) 1.1%
(CSO Preliminary Census Results, 2002)

7.3 Life expectancy at birth (years)

Zimbabwe Males:40.4 Females 35.9

Province	Male	female
Bulawayo	44.4	37.9
Harare	42.4	36.2
Matabeleland South	38.9	36
Matabeleland North	39.2	35.3
Midlands	38.1	35.2
Mashonaland East	37.4	34.9
Mashonaland West	38.5	34.9
Manicaland	34.6	33.8
Masvingo	36.3	33.8
Mashonaland Central	36.3	33.8

Source: Zimbabwe Human Development Report (2003)

7.4	Infant mortality rate in 1999 (per 1,000 live births)	102 deaths <i>Source: Millenium Development goals progress Report (2003)</i>
7.5	GDP (US\$ per capita in 2002)	US\$639 <i>Source: Human Development Report (2004)</i>
7.6	GDP in 2001	US\$8.3 billion <i>Source: Human Development Report (2004)</i>
7.7	GNP per capita (current US\$)	Not available
7.8	National poverty rate (% of population)	68% <i>Source: Poverty Assessment Study 1;1995</i>

7.7 Very poor – refers to persons whose total income is below the Food Poverty Line.

Poor – persons whose income is above Food Poverty Line but below Total Consumption Poverty Line.

Table 7.7: Household Percent Geographical Distribution of poverty by Province, Rural, urban and district.

Province / Districts	Very poor %	Poor %
Manicaland Province	60	14
Rural	65	13
Urban	37	16
Buhera district	74	15
Chimanimani “	62	10
Makoni “	63	13
Chipinga “	68	13
Mutare “	52	16
Mutasa “	50	18
Nyanga “	55	9
Mashonaland Central Province	48	19
Rural	53	20
Urban	27	18
Bindura district	35	19
Centenary “	51	29
Guruve “	51	20
Mazowe “	40	25
Mount Darwin “	60	16
Rushinga “	73	7
Shamva “	49	16
Mashonaland East Province	61	15
Rural	64	14
Urban	27	20
Chikomba district	62	13
Goromonzi “	50	19
Wedza “	57	18
Marondera “	44	17
Mudzi “	82	7
Murehwa “	69	15
Mutoko “	78	10
Seke “	55	17
Pfungwe (UMP) “	69	10
Mashonaland West Province	48	20
Rural	57	19
Urban	22	22
Chegutu district	39	21
Hurungwe “	61	17

Kadoma	“	42	20
Kariba	“	67	10
Makonde	“	43	21
Zvimba	“	44	25
Matabeleland North Province		56	13
	Rural	61	11
	Urban	27	23
Binga district		85	7
Bubi	“	63	11
Hwange	“	50	17
Lupane	“	69	13
Table 7.7 cont’			
Nkayi	“	65	10
Tsholotsho	“	60	16
Umguzha	“	29	12
Matabeleland South Province		43	18
	Rural	51	17
	Urban	20	19
Beitbridge district		33	18
Bulilimamangwe	“	49	18
Gwanda	“	46	21
Insiza	“	50	15
Matobo	“	54	14
Umzingwane	“	33	19
Midlands Province		44	17
	Rural	56	16
	Urban	20	19
Chirumanzi district		34	24
Gokwe	“	54	16
Gweru	“	31	20
Kwekwe	“	34	17
Mberengwa	“	60	19
Shurugwi	“	39	14
Zvishavane	“	46	15
Masvingo Province		59	11
	Rural	67	11
	Urban	22	14
Bikita district		78	11
Chiredzi	“	33	13
Chivi	“	72	10
Gutu	“	72	11
Masvingo	“	47	13
Mwenezi	“	81	4
Zaka	“	66	12
Harare Province		18	17
	Urban		
	Chitungwiza	26	18
	Urban		
	Harare	16	17
Bulawayo Province (All urban)		19	18

(Source: Zimbabwe PASS 1995)

7.9	Crop production (metric tons)in 2003:	Maize	1 058 786
		Wheat	103 000
		Sorghum	71 257

Source: CSO Agricultural Section, unpublished

7.10	Livestock production in 2000:		
	National Head: Numbers of livestock held:	Cattle	5 908 000
		Sheep	340 000
		Pigs	270 000
		Goats	4 248 000

Source: CSO Agricultural section , unpublished

8. Human development

8.1 Primary education rate of primary school age group (5-14 year olds) that are in school 96%.

Table 8.1a : Literacy Rates by age Group in 1999

Age group	Literacy Rate	% never attended school
15-19	98.1	
20-24	98.0	1.0
24-29	97.1	1.9
30-34	94.2	3.7
35-39	85.9	8.6
40-44	82.4	12.6
45-49	79.5	14.2
50-54	74.0	17.5
55-59	68.9	30.3
60-64	61.8	
65-69	49.7	
70+	37.2	

Source: CSO, 1999

Table 8.1b: Literacy rate by Province in 1999

Province	Male	Female	Both sexes
Manicaland	91	82.5	80.4
Mashonaland Central	86	71.1	78.4
Mashonaland East	91	83.1	86.7
Mashonaland West	88	79.9	83.9
Matabeleland North	85	76.7	80.5
Matabeleland South	89	80.8	84.5
Masvingo	88	81.3	84.5
Harare	98	96.3	97.2
Bulawayo	96	96.0	96.4
Midlands	91	84.1	87.2
Total	91	84	

Source: CSO 1999

Table 8.1a, 8.1b, attempts to give data which will assist to information on literacy rates, primary education rates by age group by 2nd administrative level. This information as requested does not exist in this format. The formal school going age is 7 years and primary education extends for 7 years (7 – 14 years).

8.2 Number of rural women (total number) 4 021 133

8.3 Unemployment (% of total) (structural unemployment) 50%

Source: Human Development Report(2004)

Table 8.4: Youth unemployment rate (age 15-24):

Year	% Youth unemployed
1990	27.0%
1992	44.3%
1994	62.1%

after ILO (2000)

Tables 8,5; 8,6 and 8,7 Illiteracy rates, average years of schooling by gender

ZIMBABWE: Illiterate men 8.3% illiterate women : 15.6%

Province	Adult illiteracy rate (%) 2001		Average Illiteracy % male & female	Average years of schooling 2001	
	Male	Female		Male	Female
Bulawayo	2.2	3.9	3.1	8.8	8.6
Harare	2.0	3.4	2.7	9.4	8.9
Matabeleland South	10.5	17.4	14.0	6.5	6.5
Matabeleland North	13.4	20.2	16.8	6.6	6.6
Midlands	7.9	16.2	12.1	7.1	6.8
Mashonaland East	8.8	16.3	12.6	7.0	6.6
Mashonaland West	9.1	17.8	13.4	7.5	6.8
Manicaland	7.0	16.6	11.8	7.1	6.5
Masvingo	11.6	19.5	15.6	6.9	6.5
Mashonaland Central	12.8	25.7	19.8	6.8	6.4
Zimbabwe	8.3	15.6	12.0	7.4	7.0

Source: Zimbabwe Human Development Report (2003)

9. Science and Technology

Total number of scientific institutions working on desertification related issues: 30

Table 9.1: Number of scientific institutions working on themes which have implications on desertification and land degradation issues.

Name of Institution	Thematic area of interest
Chisumbanje	Water harvesting crop stations.
Coffee Research Station	Coffe production
Kutsaga Harare	Tobacco National Research
Henderson reseach station	Beekeeping research, fish farming research, livestock
Kadoma cotton research	Cotton production research in all zones
Makoholi research station	Semi arid environment, soil and water conservation, livestock, grazing, fodder
Marondera/Grasslands	Soil fertility, horticulture, livestock, grazing, fodder, silage
Matopos research station	Semi arid environment, small grains varieties, livestock, small ruminants
Matopos sand veld	Sandveld
Middle Save	Chiredzi
Chiredzi R.S	Soil moisture, soil fertility, semi-arid farming systems, water harvesting.
Ratraty Anorld R.S	Commercial
Triangle R.S	Zimbabwe sugar Cane production in semi-arid irrigated environment
Agricultural Research Council	National research institution e.g. wetland utilisation, drymargins research programme.
Africa University	Academic (broad based with relevant research themes)
University of Zimbabwe	Academic (broad based with relevant research themes)
National University of Science & Technology	Academic (broad based with relevant research themes)
Midlands State University	Academic (broad based with relevant research themes)
Bindura State University	Academic (broad based with relevant research themes)
Domboshava farm	Trials and research in Agroforestry.
Hatcliffe Engineering Institute	Engineering, testing centre. Soil erosion work, irrigation research

Kariba Research Station Department of Parks and Wildlife	Fisheries, dry area wildlife production Ecosystem, ecological research etc.
Private sector research not included but important	
Ministry of Science and Technology	Policy on Research science and technology
Research Council of Zimbabwe	Policy
Institute of Water and Sanitation Development	• Rainwater harvesting, Use of wetland in drought prone areas, Integrated Water Resource Management
Scientific Industries & Development Centre SADC	Biotechnology, new technologies
PanMuir	Agronomy
Inyanga	Fruit
Forestry Commission	Woodlands, wood resources
Department of Agricultural Research and Extension	All Agricultural
Department of Livestock Research & Technical Services	Livestock and veterinary
CIMMYT	CIGAR institution
ICRAF	CIGAR institution
ICRISAT	CIGAR institution
CIFOR	CIGAR institution
WWF	Wildlife, ecosystems, sustainable utilisation

Table 10.1a: 2nd Administrative levels, Provinces, wards, area and population

Province	No. of Districts/ Local authorities	No. of wards	Area in sq km	Total Population	% of Total Population
Bulawayo	1	29	479	676 787	5.82
Harare	4	80	872	1 903 510	16.36
Matabeleland South	8	139	54 172	654 879	5.63
Matabeleland North	-	-	75 025	701 359	6.03
Midlands	13	258	49 166	1 466 331	12.6
Mashonaland East	11	222	32 230	1 125 355	9.67
Mashonaland West	-	-	57 441	1 222 583	10.51
Manicaland	9	239	36 459	1 566 889	13.6
Masvingo	8	206	56 566	1 318 705	11.33
Mashonaland Central	8	178	28 347	998 265	8.58

(Source: CSO 2002)

Table 10.1(b): 3rd Administrative levels local authorities, wards and population.

Masvingo Province

<u>Districts</u>	<u>No. of Wards</u>	<u>Population</u>
Mwenezi	16	125 711
Chiredzi	24	232 616
Zaka	30	184 814
Chivi	30	155 442
Gutu	36	198 130
Bikita	30	156 820
Masvingo (rural)	30	195 179
Masvingo (urban)	10	69 993

Harare Province

<u>Districts</u>	<u>No. of Wards</u>	<u>Population</u>
Harare urban	49	1 444 534
Chitungwiza	24	321 782
Epworth	6	113 884
Harare rural	1	23 310
Total	80	

Manicaland Province

<u>Districts</u>	<u>No of Wards</u>	<u>Population</u>
Buhera	32	218 575
Chimanimani	23	115 250
Chipinge	30	283 671
Makoni	35	247 524
Mutare rural	31	219 882
Mutasa	27	167 462
Nyanga	31	119 370
Mutare urban	18	170 106
Rusape	12	25 054
Total	239	

Mashonaland Central Province

<u>Districts</u>	<u>No of Wards</u>	<u>Population</u>
Bindura rural	18	108 396
Bindura urban	10	33 630
Centenary	16	107 718
Guruve	32	184 828
Mazowe	29	199 408
Mount Darwin	30	199 105
Rushinga	19	67 134
Shamva	24	98 046
Total	178	

Mashonaland East Province

<u>Districts</u>	<u>No. of Wards</u>	<u>Population</u>
Chikomba	30	120 747
Goromonzi	25	1556 189
Hwedza	14	70 604
Marondera	22	102 869
Mudzi	17	130 514
Murehwa	30	162 660
Mutoko	28	124 410
Seke	21	77 840
Uzumba Maramba Pfungwe	15	105 201

Table 10 Cont'

Marondera urban	11	52 283
Ruwa	9	22 038
Total	222	
<u>Bulawayo Province</u>	29	676 787
<u>Mashonaland West Province</u>		
<u>Districts</u>	<u>No. of Wards</u>	<u>Population</u>
Chegutu rural	30	181 630
Hurungwe	17	308 019
Makonde	18	123 580
Zvimba	29	220 595
Chegutu urban rural	11	181 630
Kariba urban	9	24 210
Kadoma rural		159 358
Kariba rural		34 654
Chirundu		1 802
Chinhoyi urban		49 603
Chegutu urban		42 959
<u>Matabeleland South Province</u>		
<u>Districts</u>	<u>No. of Wards</u>	<u>Population</u>
Beitbridge	14	104 212
Bulilimangwe North	19	94 361
Bulilimangwe South	12	78 427
Gwanda	23	119 744
Insiza	18	86 307
Matobo	25	99 836
Umzingwane	18	58 569
Gwanda urban	10	13 423
Total	139	
<u>Midlands Province</u>		
<u>Districts</u>	<u>No. of Wards</u>	<u>Population</u>
Chirumanzi	19	70 441
Gokwe North	30	214 652
Gokwe South	32	294 627
Gweru rural	16	84 075
Kwekwe rural	28	160 621
Mberengwa	33	183 712
Shurugwi rural	23	71 573
Zvishavane rural	18	67 857
Gweru urban	17	141 260
Kwekwe urban	12	93 072
Redcliff	7	32 346
Zvishavane urban	10	35 299
Shurugwi urban	13	16 866
Total	258	

Table 10 Cont'

Matebeleland North Province

<u>Districts</u>	<u>No. of Wards</u>	<u>Population</u>
Binga	21	118 824
Lupane	26	98 985
Nkayi	26	111 118
Tsholotsho	20	119 221
Umguza	18	73 314
Hwange urban	14	35 025
Victoria falls	11	31 375
Bubi	-	47 712
Hwange rural	-	65 785

Source: CSO 2002

**Table 10.2(c): Localities: Major Urban Areas by Population size –Zimbabwe 2002
Census**

Name of Urban Area	Population	No. of Wards
Harare	1 444 534	49
Bulawayo	676,787	29
Chitungwiza	321 782	24
Mutare	170 106	18
Gweru	141 260	17
Epworth	113 884	6
Kwekwe	93 072	12
Kadoma	76 173	16
Masvingo	69 993	10
Chinhoyi	56 794	13
Marondera	52 283	11
Norton	44 054	12
Chegutu	42 959	11
Zvishavane	35 229	10
Hwange	35 025	14
Bindura	33 630	10
Refcliff	32 346	7
Victoria falls	31 375	11
Chiredzi	26 129	8
Rusape (incl. Tsanzaguru)	25 054	12
Kariba	24 210	9
Beitbridge	22 387	4
Karoi	22 293	9
Ruwa (incl. Zimrepark)	22 038	9
Chipinge	17 458	8
Shurugwi	16 866	13
Gwanda	13 423	10
Chirundu	1 802	1
Total	3 662 946	363

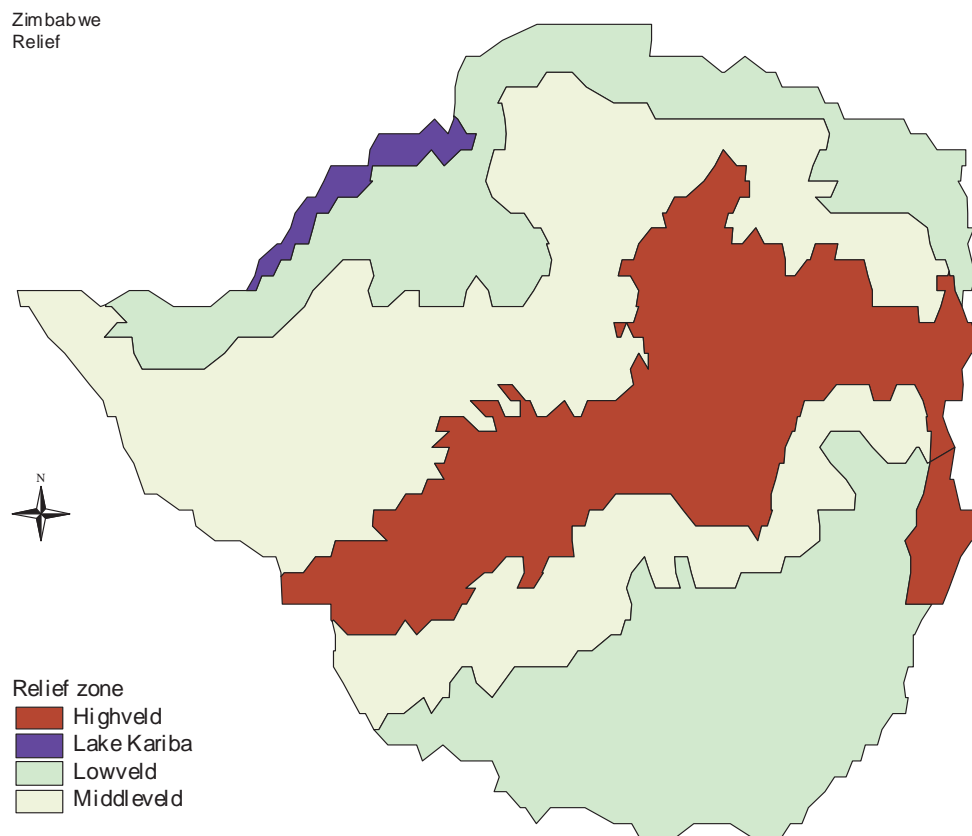
Table 10.2d: Localities: Other urban areas by Population size – Zimbabwe

Name of urban area	Population
Gokwe Centre	17 633
Mashava Mines	12 976
Chivhu	10 466
Shamva (incl. Mine)	10 220
Banket	9 814
Glendale	9 790
Mutoko Centre	9 089
Murehwa Centre	8 398
Mvurwi	7 988
Penhalonga	7 591
Chakari	6 354
Mt Darwin	6 313
Trojan Mine	6 168
Mhangura	5 747
Concession	4 994
Nyanga	4 924
Shamva Mine	4 715
Mvuma	4 443
Alaska mine	4 396
Vubachikwe	4 030
Binga	3 973
Kotwa	3 918
Mupandawana	3 912
Shangani	3 745
Renco Mine	3 599
Macheke	3 573
Patchway	3 529
Acturus Mine	3 485
Hauna	3 378
Murambinda	3 300
How Mine	3 113
Centenary	3 013
Dete	2 980
Raffingora	1 992
Inyathi mine	1 957
Nyamapanda	1 764
Sanyati Arda	2 865
Birchenough bridge	2 732
Chimanimani	2 706
Brompton Mine	2 631
Colleen Bawn	2 502
Lupine Centre	2 482
Esigodine (inc Habane)	2 295
Tsangaguru	2 273
Nyazura	2 032
Raffingora	1 992
Inyathi mine	1 957
Nyamapanda	1 764
Filabusi	1 715
Headlands	1 664
Dorowa	1 635

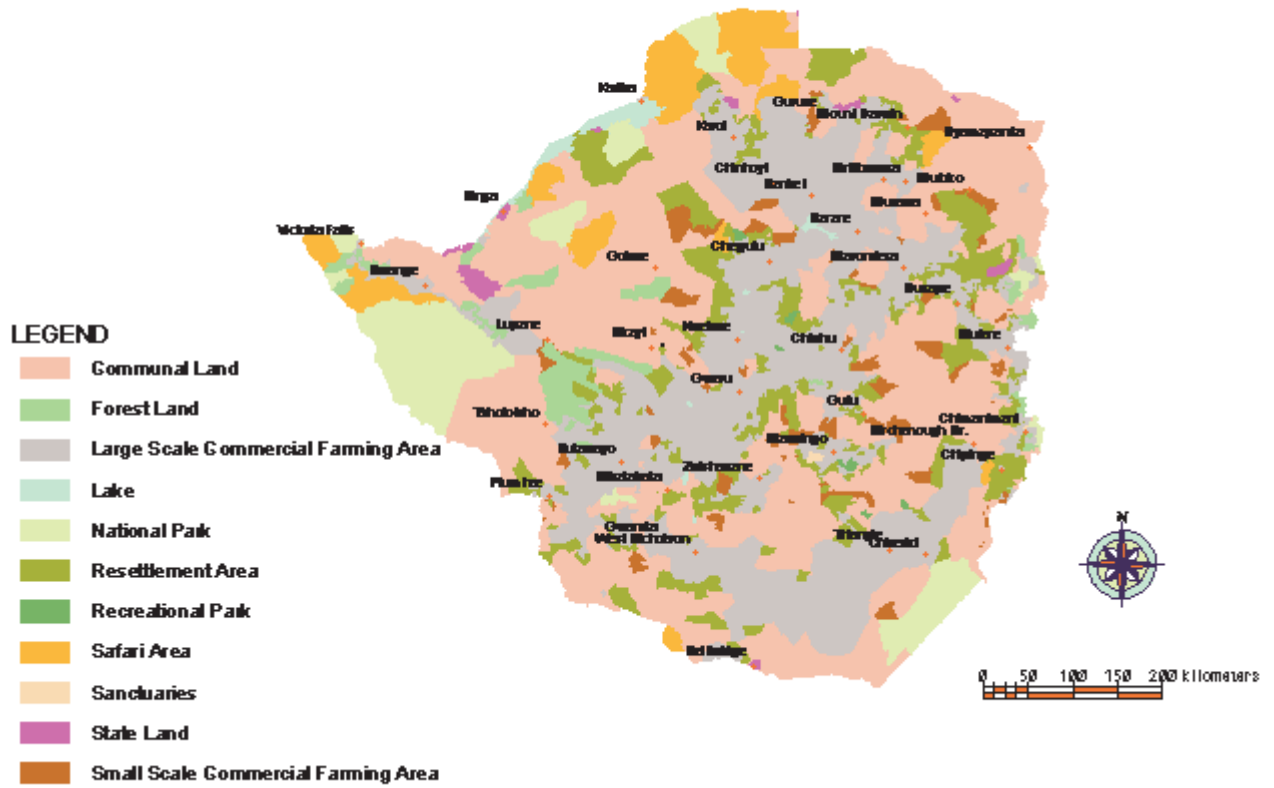
Table 10.2(d) Cont'	
Beatrice	1 630
Kamativi	1 568
Lalapanzi	1 393
Mutasa DC	874
Madziwa Mine	522
Buchwa mine	513

Source: CSO, 2002

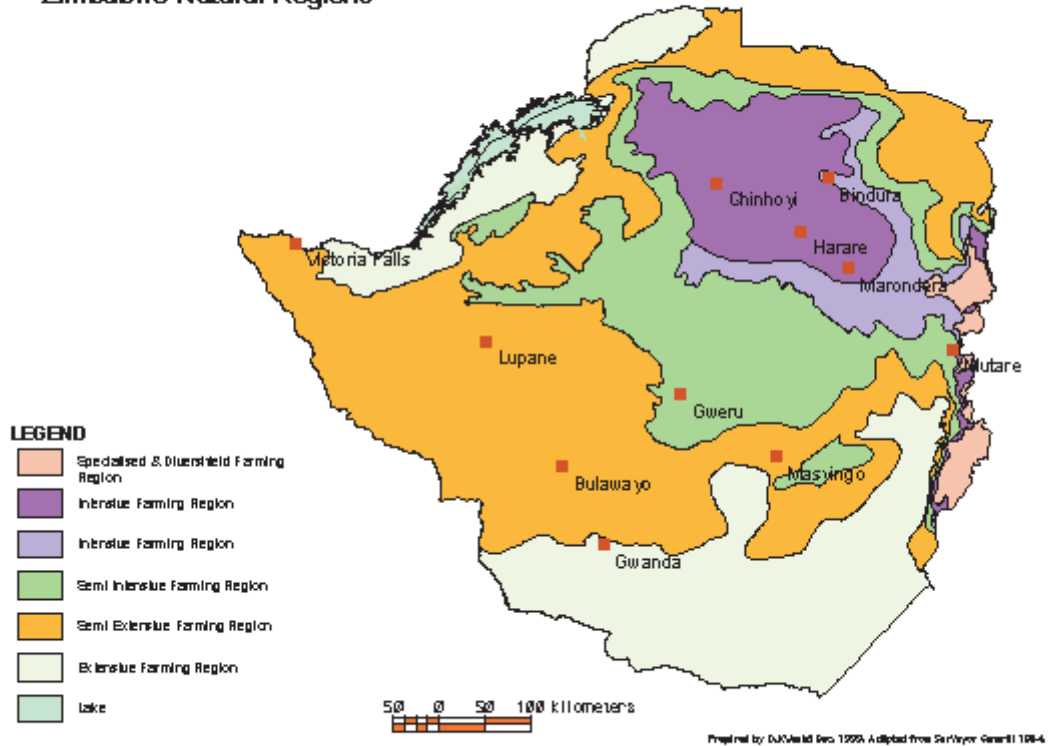
Republic of Zimbabwe Relief Map



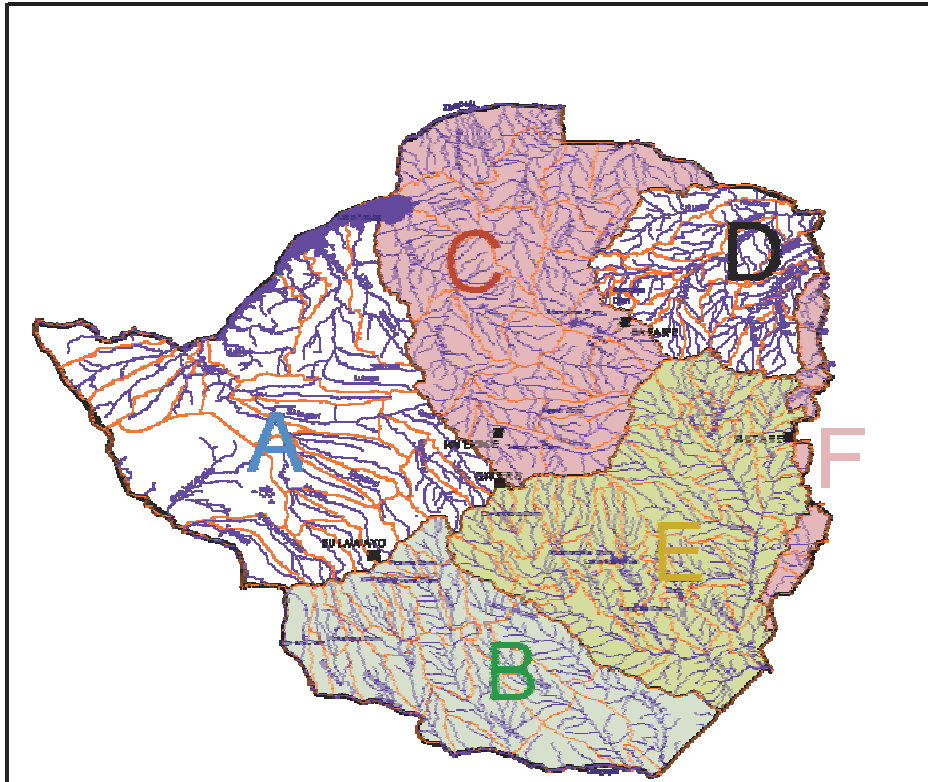
ZIMBABWE LAND TENURE MAP



Zimbabwe Natural Regions



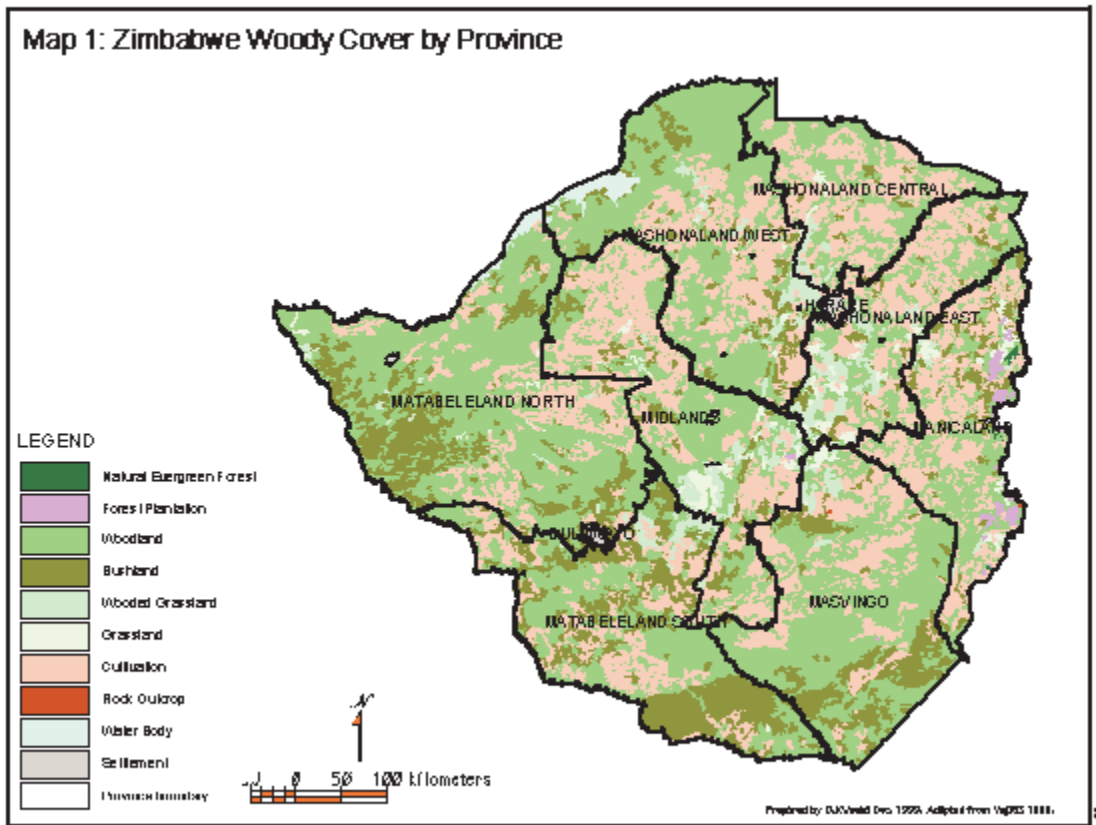
Water resources: Hydrological and wetland zones



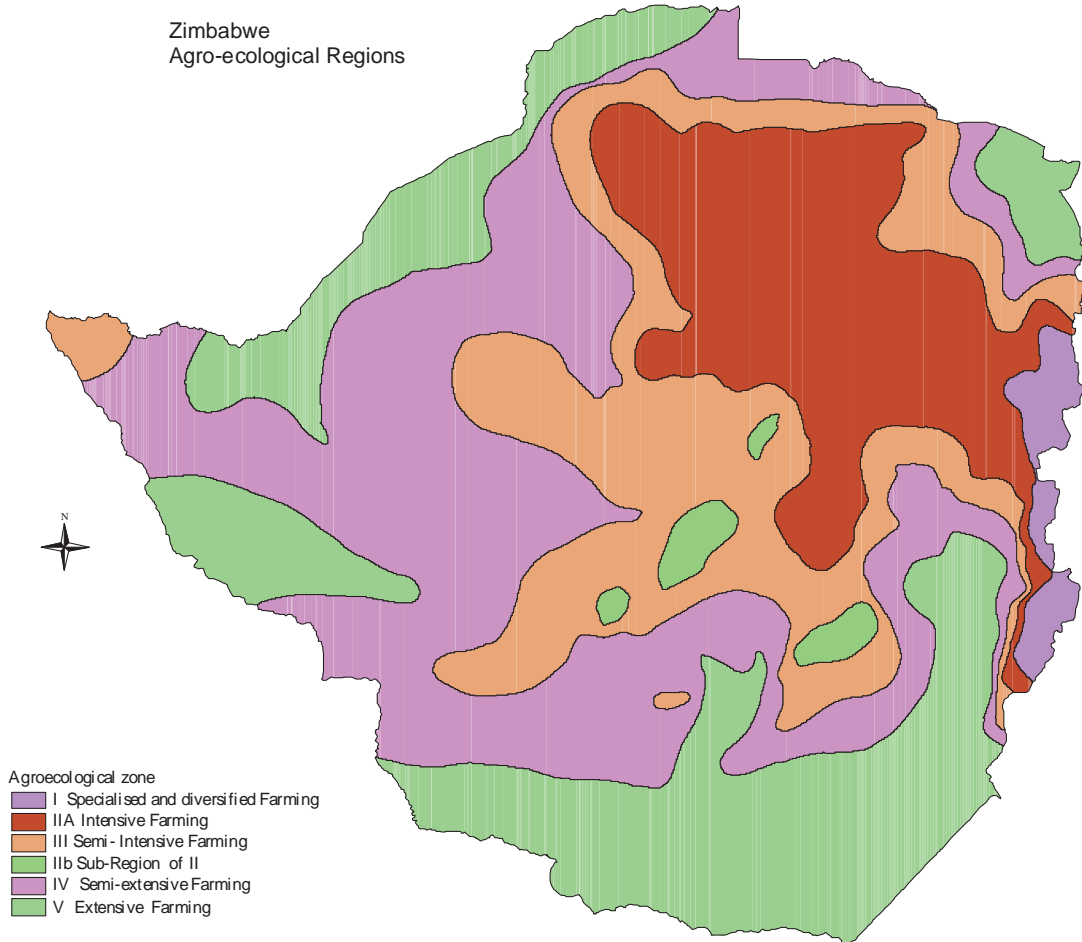
Legend

(A) Gwayi, Sengwa, Sesami (B) Shashi, Tuli, Mzingwane, Mwenezi, Bubi (C) Mupfure, Munyati, Sanyati, Musengezi, Manyame (D) Mazowe, Nyadiri, Ruenya, Gairezi (E) Save, Runde (F) Pungwe, Buzi Rivers)

Map 1: Zimbabwe Woody Cover by Province



Zimbabwe farming areas by sectors



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- CSO Agricultural Section
- Department of Water
- Department of Agricultural, Technical & Extension Services (AGRITEX)
- The Forestry Commission

Department of Natural Resources programmes:

- *Mashonaland Central Source of information: DEAP profile, Resource Inventory, Inspection reports*
- *Masvingo Source of information: Resource Inventory, DEAP profiles*
- *Midlands Source of information: DEAP profile, Resource Inventories, Forestry Commission*
- *Matebeleland South Sources of information: AREX, Resource Inventory*
- *Matebeleland North Source of information: AREX, DNR*