

UNITED REPUBLIC OF TANZANIA

BASELINE STUDY FOR THE PROPOSED PILOT WILDLIFE MANAGEMENT AREAS (WMAS)

BASELINE DATA AND ANALYSIS FOR LOLIONDO PILOT WMA

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TABLE OF CONTENTS

	Page
TABLE OF CONTENTS.....	i
LIST OF TABLES.....	i
LIST OF FIGURES.....	ii
ACKNOWLEDGEMENTS.....	iii
BASELINE DATA AND ANALYSIS FOR LOLIONDO PILOT WMA.....	1
1. INTRODUCTION.....	1
2. SITUATION ANALYSIS.....	1
2.1 Progress Towards Implementation of WMA.....	1
2.1.1 Land Use Planning.....	3
2.1.2 Formulation of By-laws.....	3
2.1.3 Training of VGSs.....	3

LIST OF TABLES

Table 1:	Ethnic composition in the five villages in Loliondo WMA.....	7
Table 2:	Composition of the village government in Loliondo WMA.....	9
Table 3:	A summary of the number of pupils and teachers in Loliondo WMA ...	11
Table 4:	The top five diseases for the below and above five years of age in Loliondo WMA*.....	12
Table A1(a):	Ngorongoro District Sources of Income and their Proportion from Natural Resources	13
Table A1(b):	Ngorongoro District Council Annual Expenditure for 1998-2002	14
Table B1:	LOLIONDO PILOT WMA: Village Level Population Main Occupations and Other Economic Activities,.....	15
Table B2:	LOLIONDO PILOT WMA: Sources of Income and their Expenditure, 2002 (Tshs).	16
Table B3:	LOLIONDO PILOT WMA: Productivity of Economic Activities,	17
Table B4:	LOLIONDO PILOT WMA: Costs Associated with Accessing Basic Services, February 2003.....	17
Table B5(a):	LOLIONDO PILOT WMA: Village Perceptions on Wealth Status,	18
Table B6:	LOLIONDO PILOT WMA: Land Tenure Regimes, February 2003	19
Table B7:	LOLIONDO PILOT WMA: Progress in Preparation for WMA:	20
Table B8:	Existing land Use: Loliondo Pilot WMA, February 2003	20
Table B9:	Indicative Potential Economic Opportunities, February 2003.....	21
Table B10:	Livestock Size: LOLIONDO PILOT WMA, February 2003	21
Table C1:	Wildlife species and their status at Loliondo WMA.....	22
Table C2:	Bird species recorded at Loliondo WMA between 24/02 and 27/02/2003	23

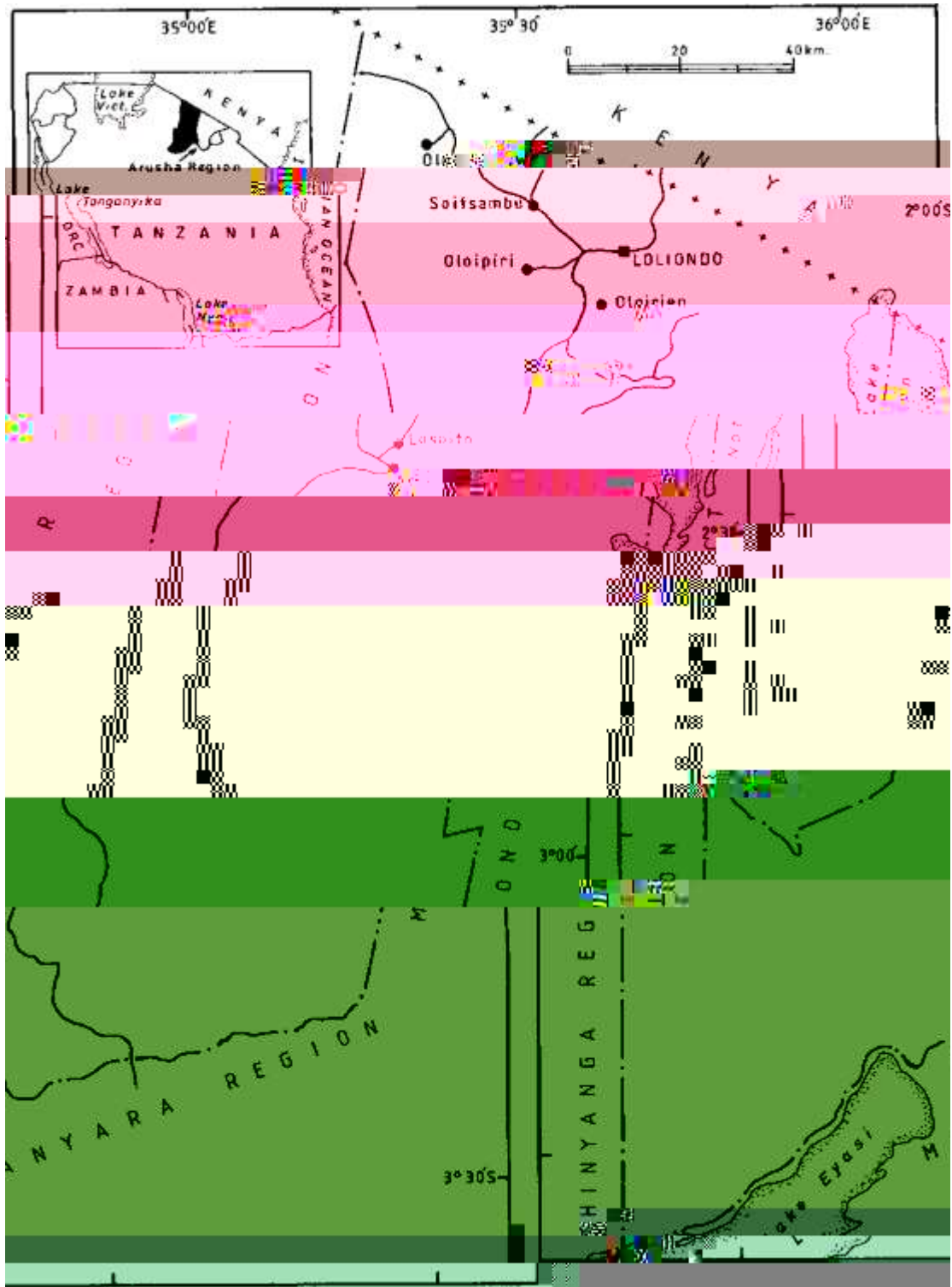
LIST OF FIGURES

Map1:	Ngorongoro District Administrative Map showing Loliondo WMA villages	2
Picture 1:	Vegetation monitoring plot at Ololosokwan village.....	24
Picture 2:	A relatively intact forest at Arash village in Loliondo WMA	24

BASELINE DATA AND ANALYSIS FOR LOLIONDO PILOT WMA

1. INTRODUCTION

Situated in Loliondo Division in Ngorongoro District the proposed Loliondo WMA, which covers an area of 4,000 Km², is currently a Game Controlled Area. Six villages, namely Arash, Losoito/Maaloni, Oloirien/Magaiduru, Soitsambu, Oloipiri and Ololosokwan form the WMA. All the villages with the exception of Oloipiri were visited during this study. The altitude at the WMA ranges between 600 and 1300 metres above sea level. Being in the semi-arid ecological zone with little and unpredictable rainfall Loliondo WMA is more suitable for livestock and wildlife grazing.



Map1: Ngorongoro District Administrative Map showing Loliondo WMA villages

2.3.2 *Vegetation*

Loliondo WMA is characterized by grassland, open woodland, closed woodland and open and thick forests in areas of altitude between 1,100 and 1,300 metres above sea level. The dominant tree species that are found in the forest vegetation type include *Podocarpus spp.*, *Olea capensis*, *Fragaropsis angolensis*, *Juniperous procera*, *Olea africana*, *Ficus cycomorus*, *Cassipourea molauana*, and *phoenix spp.* *Balanite spp.*, *Euphorbia bussei*, *Commiphora spp.*, *Acacia xanthophloea*, *Acacia seyal*, *Acacia tortilis*, and *Acacia drepanalobuim* dominate woodland vegetation type. Grasses that have been identified and found in both woodland and open grassland are *Panicum minimum*, *Sporobolus pyramidalis*, *Digitaria macroblephara*, *Themeda triandra* and *cynodon dactylon*.

Although fires are not used intensively in the manipulation of rangelands, wildfires are a natural phenomenon and they originate from honey gatherers and travelers who throw cigarette remains when passing by. The fact that no charcoal making is taking place, firewood is used in small quantities and poles from *J. procera* which are used in construction lasts over several years, deforestation is not evident in the WMA.

25-m x 25-m plots for vegetation monitoring were established at Losoito/Magaiduru and Ololosokwan villages. Plants identified in the plots are shown in Table C2.

2.3.3 *Water Resources*

Table 1: Ethnic composition in the five villages in Loliondo WMA

Name of Village	Ethnic Composition
Arash	Wamaasai (95%), Wapare, Wameru, Wachaga, Wairaqw,
Maaloni (Losoito)	Wamaasai (70%), Wasonjo, Wairaqw, Waarusha, Wangindo, Wahehe, and Wachaga
Oloirien-Magaiduru	Wamaasai (80%), Wasonjo, Wachaga, Wahehe, Wairaqw,
Soitsambu	Predominantly (98%) Wamaasai
Ololosokwan	Predominantly (98%) Wamaasai

While the Maasai may be reported as constituting one group, there are also differences within this group and these differences are a source of conflicts. The differences are largely due to origin of the respective Maasai group. There are six major groupings of the Wamaasai, namely, Purko, Laitayok, Kisongo, Loita, Salei, and Wasonjo. The Purko are dominant in Ololosokwan and Oloipir villages to the northwest and west of the WMA, while the Laitayok are to be found in Soitsambu. The Loita and Laitayok are found in Arash, Maaloni, and Oloirien while the Salei are to be found in the Salei plains, Malambo area, and around Lake Natron. Wasonjo are found to the east of Loliondo WMA. Kisongo Maasai are found in Ngorongoro, Kiteto, and Simanjiro. The implications of these divisions within the Maasai ethnic group will be explained in the conflicts section.

2.4.1.2 Migration patterns

The diversity of the Maasai ethnic group in terms of their origins is a reflection of the migration in the past. Both the Purko and Lita are reported to have come from Kenya and maintain a close relationship with the Maasai in Kenya. The Loita are reported to

villages where full interviews were conducted, they all explain that since there are no suitable hills to be used as ritual sites, they often use their own “bomas” for rituals.

On taboos, there also much fewer taboos mentioned here compared to the Makami, Enduimet and Burunge WMAs. Taboos include the Morani not being permitted to eat with women, no eating of vegetables as this is said to be depriving cattle of their fodder. The Morani are also not permitted to eat meat alone

2.4.2.2 Modern institutions

As discussed earlier under Enduimet, Makami, and Burunge WMAs, modern institutions in the context of this report include the political institutions currently in force and represent the existing government structure. These institutions include village governments, community based organizations, Authorized Associations, courts, police, among others. All these are in one way or another involved in natural resource use and conservation.

2.4.3 Village Governments

There are well established village governments in Loliondo. These village governments are responsible for regulating the use of natural resources by using appropriate committees. With the exception of Soitsambu, the rest of the five villages had relatively good village government offices. All of them have been partially funded by other donors such as TANAPA. Table 2 shows the composition of the village governments in the Loliondo WMA

Table 2: Composition of the village government in Loliondo WMA

Name of village	Male members	Female members	Total
Arash	18	7	25
Maaloni (Losoito)	20	5	25
Oloirien	20	5	25
Soitsambu*	-	-	-
Ololosokwan*	-	-	-
Total	58	17	75

Ololosokwan. For the other villages, at first there was an element of hostility and mistrust but after explaining and clearing some of the suspicions, the residents became cooperative. The best reception was at Oloirien.

2.4.6 Conflict Resolution Mechanisms

So far, it appears the village government, the traditional authority, and political leaders particularly the Members of Parliament, Ward Councilors, and the District Commissioner, resolve many of the conflicts. The “Mabaraza ya Usuluhishi ya Kata” courts are not active in the villages and the former are said to have been temporarily suspended.

2.4.7. Social Facilities

For purposes of gauging the level of development of each village, again efforts were made to establish the level of infrastructure development in Loliondo WMA. This involved obtaining data on educational and medical facilities, water supply, and any other facilities such as village government offices, police post, etc. None of the five villages visited had a court building or a police post.

2.4.7.1 Education Facilities

For educational facilities, information was obtained on the number primary and secondary schools, the student enrollment, number of teachers, desks, classrooms, and an indication of pass rates as an indicator of the quality of the school. . For this reason, data was collected from either the village officials or the head teacher of the respective primary school. Table 3 gives a summary of the number of pupils and teachers by gender from primary and the secondary school in Loliondo WMA

Table 3: A summary of the number of pupils and teachers in Loliondo WMA

Name of School	Number of Pupils			Number of Teachers		
	Boys	Girls	Total	Men	Women	Total
Arash	464	191	665	4	2	6
Maaloni	231	155	386	3	-	3
Oloirien	189	157	346	4	1	5
Soitsambu	269	153	422	3	4	7
Ololosokwan*	-	-	-	-	-	-

* The village government did not cooperate.

In general, school enrollment is not bad but there are reports of high truancy for some of the schools. Although the number of pupils is relatively high, some basic facilities and staff are largely inadequate. For the schools visited, there was always a deficit in the number of classrooms, teachers’ houses and school desks.

2.4.7.2 Facilities

3. BASELINE DATA FOR LOLIONDO PILOT WMA

3.1 Economic Baseline Data

S e c t i o n B

Table B1: LOLIONDO PILOT WMA: Village Level Population Main Occupations and Other Economic Activities, February 2003

VILLAGE	Population Size			Main Occupations				Type Of Business						
	No. of House- holds	Total Popul. bodied (labour supply)	Able persons	Agric.	Livestock	Busi- ness	Civil Servants	Shops	Kiosks	Butchers	Tailors	Black- Smith	Photo	Hunting

Table B2: LOLIONDO PILOT WMA: Sources of Income and their Expenditure, 2002 (Tshs).

2.

VILLAGE	Major Sources of Income						Annual Village Expenditures Activities					
	Tax Retention	Agriculture	Tourism		Villagers contribution	Others	Total	Construction			School Fees	Other
			Hunting	Photo				Schools	Water	Road		
1. OLOIPIRI ¹												
2. ARASH	-	-	3,000,000	-	-	-	3,000,000					

Table B3:

Table B6: LOLIONDO PILOT WMA: Land Tenure Regimes, February 2003

VILLAGE	TENURE REGIME & COST								
	<i>Customary</i>	<i>Cost/Acre</i>	<i>Village Govt Allocation</i>	<i>Cost/Acre</i>	<i>Private Property Mkt transaction</i>	<i>Cost/Acre</i>	<i>Rent</i>	<i>Cost/Acre</i>	<i>Borrow</i>
1. OLOIPIRI	-	-	-						

**Table B7: LOLIONDO PILOT WMA: Progress in Preparation for WMA:
February 2003**

VILLAGE	Land Use Plans	By-law enactment	Training of Village Game Scouts (number)	Establishment of AA
1. OLOIPIRI	-	-	-	-
2. ARASH			-	-
3. OLOLOSOKWAN	-	-	-	-
4. SOITSAMBU	-	-	-	-
5. OLORIEN ¹	-	-	-	-
6. LOSOITO ²	-	-	-	-

¹ Sensitization done.

² Not yet.

Table B8: Existing land Use: Loliondo Pilot WMA, February 2003

VILLAGE	AGRIC.	LIVESTOCK	SETTLEMENT	WILDLIFE	FISHING
1. OLOIPIRI ¹	-	-	-	-	

Table B9: Indicative Potential Economic Opportunities, February 2003
VILLAGEVILLAGE

VILLAGE	FARMING TOURISM						
	<i>Food</i>	<i>Cash</i>	<i>Photography</i>	<i>Hunting</i>	<i>Cultural</i>	<i>Handcrafts</i>	<i>Others</i>
	<i>Crops</i>	<i>Crops</i>			<i>Bomas</i>		

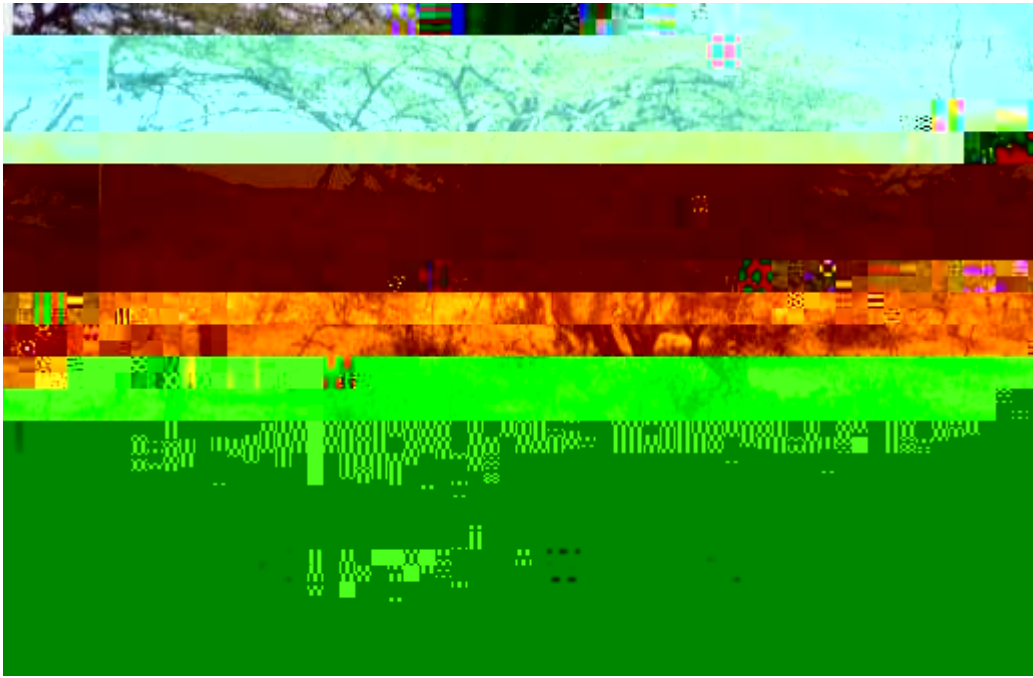
3.2 Ecological Baseline Data

Table C1: Wildlife species and their status at Loliondo WMA

Table C2:

APPENDICES

Appendix 1: Photographs Showing Vegetation Plots for Monitoring



Picture 1: Vegetation monitoring plot at Ololosokwan village



Picture 2: A relatively intact forest at Arash village in Loliondo WMA

Appendix 2: People Consulted

A. SCHEDULE OF WORK

DATE	ACTIVITY	PLACE
24-31/01/2003		

DATE	ACTIVITY	PLACE
25/02/2003	Interviews/discussions/field work	Olorien/Magaiduru
26/02/2003	Interviews/discussions/field work	Soitsambu
27/02/2003	Interviews/discussions/field work Travel Seronera	Ololosokwan/Seronera
28/02/2003	Discussions at Frankfurt Zoological Society (Dr Bonner) Discussions with Chief Veterinary Officer of Serengeti National Park Travel to Mugumu, Serengeti District - Meet District Executive Director, District Natural Resources Officer, Game officer, Planning Officer, and Lands Officers - Set up appointments with villages	Ngorongoro-Serengeti
1/03/2003	Interviews/discussions/field work	Robanda
2/03/2003	Interviews/discussions/field work	Nyichoka
3/03/2003	Interviews/discussions/field work	Nyak