THE UNITED REPUBLIC OF TANZANIA

MBOZI DISTRICT
SOCIO-ECONOMIC PROFILE

Joint Publication by:
THE PLANNING COMMISSION
DAR ES SALAAM
and
MBOZI DISTRRICT COUNCIL
MBEYA

TABLE OF CONTENTS

Page

FOREWORD

1.0 *In the Fiscal Year 1996/97 the Government started to implement its decision of restructuring regional administration and putting in place Local Authorities which are well performing in the way of championing development and delivering of economic and social services to the people. Hitherto (July 1997), the Local Authorities in the country are fragmented, not clear about their mission and as a matter of fact lack skilled manpower, financial resources and basic working equipment.*

2.0 *Thus, the government move is in the right direction, aimed at bringing closer to the people the decision making process which entails genuine participation, democracy and self governance as well as the implementation of various development programmes. This is a major shift from the traditional approach of regional focus to current the district focus planning and implementation with final goal of devolving powers to ward and village levels.*

3.0 *In order to ensure an effective devolution of power, the Local Authorities have to be provided with well trained and qualified staff and the necessary support needed at that level. Staffed with the competent personnel, the Local Authorities are expected as hinted above to prepare and implement their own development plans, which by and large will make use of the existing, locally available resources.*

4.0 The availability of reliable, adequate, qualitative and relevant data and information at district level is a prerequite for the success of the Local Authorities in their new role of formulating, planning, implementing, monitoring and evaluating their development programmes.

The publication of District Socio- Profiles Series by the Planning Commission in close collaboration with relevant Local Authorities should be viewed as modest attempt towards finding solutions to the existing problem of data and information gap at local levels.

5.0 I would like to take this opportunity to acknowledge with thanks, the financial support of the Royal Danish Embassy which facilitated the preparation of Mbozi District Socio-Economic Profile. I would also like to thank both the Planning Commission and Mbozi Council staff who devoted a lot of effort into ensuring the successful completion of this assignment.

Nassoro W. Malocho (MP)
MINISTER OF STATE
PLANNING AND PARASTATAL SECTOR REFORM

September, 1997

Dar es Salaam

SECTION I

1.0 LAND, PEOPLE, CLIMATE AND AGRO-ECONOMIC ZONES

1.1 Geographical Location

Mbozi district is located in the South Western corner of Mbeya Region, between Latitudes 8^{o} and 9^{o} 12 South of the Equator and Longitudes 32^{o} 7' 30" and 33^{o} 2' 0" East of Greenwich Meridian.

To the South the district is borded by Ileje district, to the East by Mbeya Rural district at the mark of Songwe river, to the North, Mbozi district extends to Lake Rukwa where it is bordered by Chunya district, whereas to the West it shares borders with Rukwa Region and the Republic of Zambia.

1.2 Land Area

The district occupies a total area of 9679 Square Kms. which is about 967,900 ha. generally classified as:

Arable land	766,640 ha.
Forest Reserves	93,738 ha.
Settlements and other uses	78,322 ha. and
Area covered by water	29,200 ha.
Total	**967,900 ha.**

Fig. 1: Land Use Planning for Mbozi District

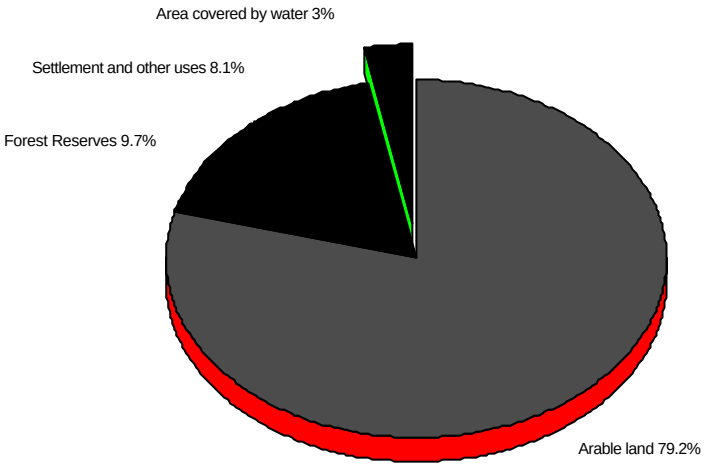


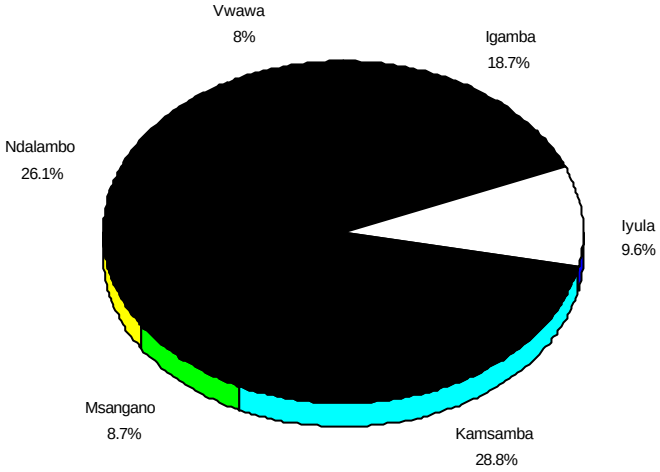
Table 1 shows distribution of land area by division.

TABLE 1: DISTRIBUTION OF LAND BY DIVISION:

Division	Area in Sq. km.		Total
	Land	Water	
Igamba	1,754		1,754
Iyula	900		900
Kamsamba	2,708	292	3000
Msangano	821		821
Ndalambo	2,454		2,454
Vwawa	750		
Total	9,387	292	9,679

Source: Mbozi District Executive Director's Office.

Fig. 2: Distribution of Land by Division in Mbozi District



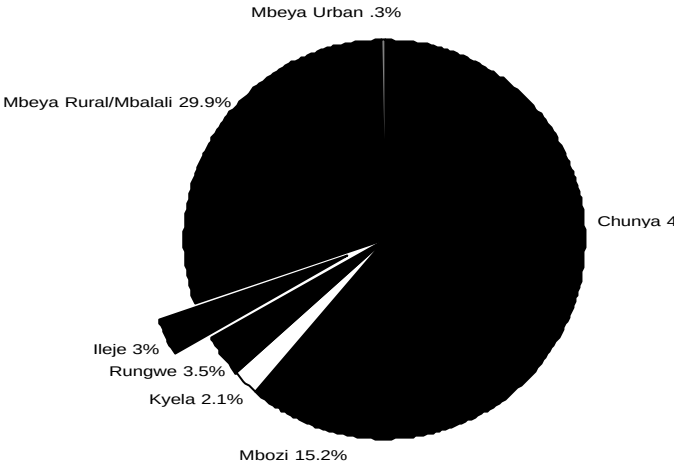
Mbozi district is among the largest districts in Mbeya Region occupying 15% of the region's total land area as Table 2 indicates.

TABLE 2: DISTRICTS OF MBEYA REGION AND THEIR SIZE

DISTRICT	AREA IN SQ KM	REGIONAL SHARE %
Chunya	29219	46.0
Mbozi	9679	15.2
Kyela	1322	2.0
Rungwe	2211	3.5
Ileje	1908	3.0
Mbeya Rural/Mbarali	19093	30.0
Mbeya Urban	185	0.3
TOTAL	63617	100.0

Source: Regional Planning - Mbeya - 1996.

Fig. 3: Districts of Mbeya Region and their size



1.3 Administrative Units

Administratively, Mbozi district is divided into 6 divisions, 26 wards, and 152 villages as Table 3 shows.

TABLE 3: NUMBER OF WARDS AND VILLAGES BY DIVISION

Division	Number of Wards	Number of Villages
Igamba	6	44
Iyula	4	25
Kamsamba	3	20
Msangano	2	7
Ndalambo	6	28
Vwawa	5	28
TOTAL	**26**	**152**

Source: Mbozi District Planning Office.

1.4 POPULATION

1.4.1 Ethnic groups

The major ethnic groups in terms of their numbers are Wanyiha and Wanyamwanga. Wanyamwanga are the main ethnic group in the lowlands areas, which include Kamsamba, Msangano and Ndalambo divisions. They account for 30% of the total population. The Wanyiha is the dominant ethnic group in the highland areas, which cover Igamba, Iyula and Vwawa divisions. The Wanyiha account for 50% of the total population. The other ethnic groups are Wawanda, Wanyakyusa, Wandali, Walambya, Wamalila and Wasafwa. However, in recent years, the immigration of the pastoralists like Wamasai and Wasukuma into the district has been observed.

1.4.2 Population Size and Growth

According to the 1988 Census, Mbozi district had a population of 330,282 of which 157,325 were males and 172,957 females comprising 59,674 households. Using the 1978 - 1988 annual average growth rate of 3.4 percent the population for the district in the year 2000 is projected at 493576 people.

The population size and growth by district in Mbeya Region is shown in Table 4. It is observed in the Table that Mbozi district experienced a very high growth rate between 1957 and 1967 and between 1967 and 1978 compared to both regional and national growth rate averages. With the relatively low growth rate of 3.4% registered between 1978 - 1988, Mbozi

district still has the highest growth rate of all districts in the region. It has been observed that between 1967 - 1978 and 1978 - 1988, when the country's population was growing at an average rate of 3.3% and 2.8% respectively, Mbozi district population grew at the rate of 4.3% and 3.4 respectively.

Table 4: POPULATION SIZE AND GROWTH RATE BY DISTRICT 1967 - 1988

	Population			Annual Growth Rate		
District	**1967**	**1978**	**1988**	**1957/67**	**1967/78**	**1978/88**
Mbozi	**147,490**	**235,440**	**330,282**	**4.1**	**4.3**	**3.4**
Mbeya (R)	180,210	256,470 114,640	332,430 135,645	3.7	3.3	2.6 1.7
Kyela, Rungwe, Ileje	360,000	234,510 71,230	272,008 88,436	2.9	1.4	1.4 2.2
Chunya	53,620	89,120	164,554	3.4	4.7	2.4
Mbeya (U)	12,480	78,110	152,844	6.1	18.1	3.2
Total Region	753,760	1,079,520	1,476,199	3.4	3.3	3.1

Source: National Population Census of 1967, 1978 and 1988.

Table 5 shows that Mbozi district has more population compared to other districts in the region. However, it ranks fourth as the most densely populated district after Rungwe, Kyela and Ileje districts.

TABLE 5: POPULATION DISTRIBUTION AND DENSITY BY DISTRICT

DISTRICT	AREA (SQ KM)	POPULATION 1988	POPULATION DENSITY	POPULATION 1996	POPULATION DENSITY
Ileje	1,908	88,582	55	103,328	54
Mbeya Rural/Mbarali	19,093	332,430	19	339,379	21
Mbeya Urban	185	152,844	879	190,005	1,027
Chunya	29,219	168,554	6	194,495	7
Mbozi	**9,679**	**330,282**	**34**	**420,771**	**43**
Kyela	1,322	135,645	109	152,022	115
Rungwe	2,211	272,003	131	299,379	135
TOTAL	**63622**	**1,476,345**	**25**	**1,759,814**	**28**

Source: Mbeya Regional Socio Economic Profile.

1.4.3 **Population Distribution**

The population distribution pattern in the district is by and large influenced by land fertility and climatic conditions. This explains the reason for the concentration of people particulary at Igamba and Iyula divisions and South - Western part of Vwawa division. Table 6 and Table 7 indicate population distribution by division and ward in the district.

Fig. 4: Population Distribution (Thousands) by Division 1978 and 1988 Census

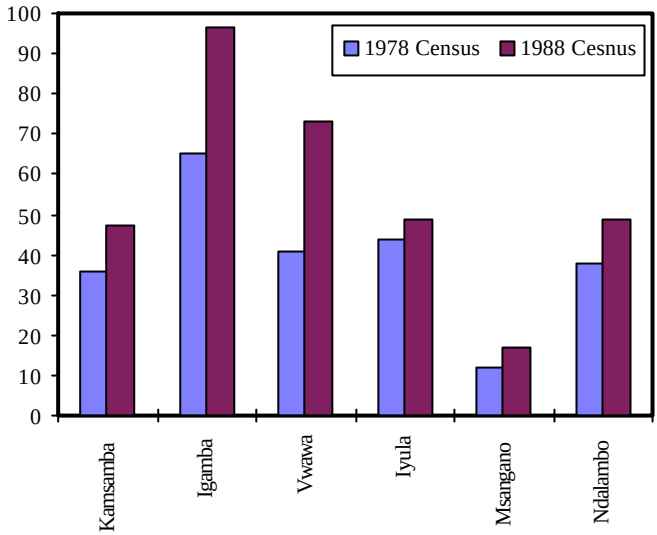


TABLE 6: POPULATION DISTRIBUTION BY DIVISION 1978 AND 1988 CENSUS

Division	1978 Census			1988 Census		
	Male	Female	Total	Male	Female	Total
Kamsamba	16872	18742	35614	23129	24129	47258
Igamba	31455	33967	65422	45937	50746	96683
Vwawa	19387	21533	40920	34647	38377	73024
Iyula	20697	23100	43797	23228	25704	48932
Msangano	5680	6319	11999	83114	8486	16800
Ndalambo	17726	19918	37644	23017	25505	48522
Total Production	111817	123509	235444	158272	173382	330282

Source: 1978 and 1988 Population Census.

TABLE 7: POPULATION DISTRIBUTION BY WARD

Ward	Population 1978	Population 1988	Population Projection	
			1996	2000
Kamsamba	10,503	10,843	14168	16195
Chilulumo	8,899	10,679	13946	15954
Ivuna	8,808	14,901	19470	22262
Nambinzo	7,473	10,324	13483	15424
Igamba	14,214	20,198	23378	30175
Isansa	13,729	21,415	25181	31994
Msiya	13,555	17,473	22819	26104
Itaka	23,904	21,808}	25481	32581
Halungu	-	15,925}	20412	23791
Vwawa	11,715	19,864	24798	29676
Nsala	8,800	13,212	17258	19738
Ihanda	12,232	17,006	21806	25406
Isandula	8,173	10,582	13820	15809
Iyula	7,130	15,387	20095	22988
Nyimbili	13,133	12,260	16011	18316
Ruanda	17,830	13,871}	18115	20723
Myovizi	-	9,298}	12143	13891
Mlangali	5,703	10,376	13551	15501
Msangano	11,999	7,199}	9401	10755
Chitete	-	9,139}	11935	13653
Ndalambo	9,283	9,333	12188	13943
Miyunga	9,118	11,644	15209	17396
Kapele	3,665	4,577	5977	6838
Tunduma	15,578	16,100}	21026	24053
Chiwezi	-	6,968}	9100	10410

TOTAL:	235,444	330,282	420771	493576

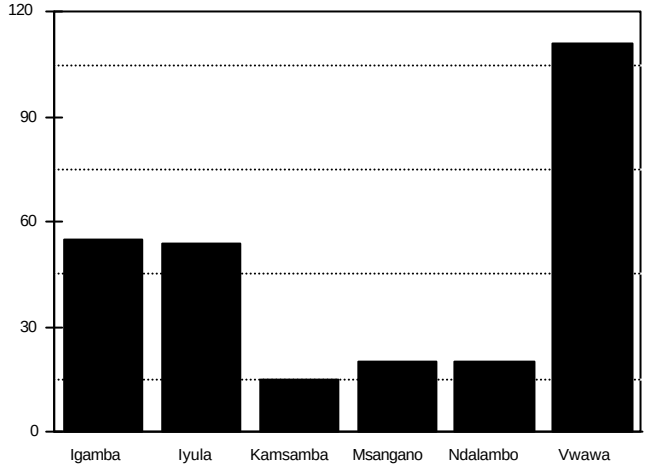
It is observed that about 65 per cents or so of the district total population is concentrated in Unyiha highlands (coffee growing area). These highlands are very fertile with more arable land and reliable rainfall which is suitable for crop production. Crops grown include coffee, sunflower, maize, beans and groundnuts. As noted above, Igamba, Iyula and Vwawa divisions are the most densely populated areas while; Msangano, Kamsamba and Ndalambo divisions have low population density. Some parts of these divisions are covered with water and natural forests. The soils are sandy and rains are unreliable.

TABLE 8: POPULATION DENSITY BY DIVISION AS PER 1988 CENSUS

DIVISION	Population 1988	Population Density per Sq. Km.	Population Projection 1996	Population Density Estimates
Igamba	96,683	55	123,174	70
Iyula	48,932	54	62,339	68
Kamsamba	46,321	15	59,012	19
Msangano	16,800	20	21,403	26
Ndalambo	48,622	20	61,944	25
Vwawa	72,924	111	92,905	140
District Total:	**330,282**	**35**	**420,771**	**43**

Source: Mbozi District Council Office.

Fig. 5(8): Population Density per Sq. Km By Division in Mbozi District



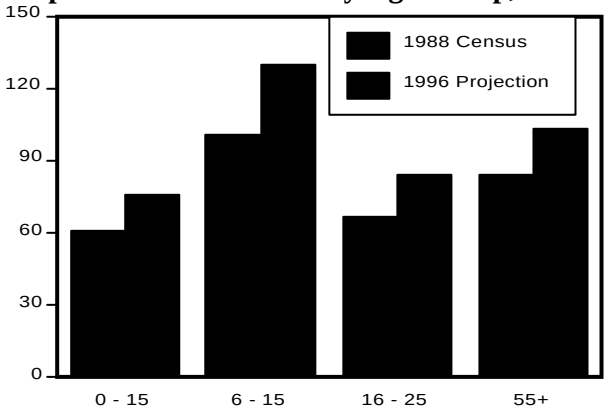
The district's population exhibits youthful characteristics. It has a potential for natural increase. The population distribution by age group as it is depicted in Table 9 forms the basis for demand for employment. The age group between 0 - 15 years in 1978 and 1988 consituted 49 and 48 per cent respectively as compared to the national propotion of 51% in 1988. The labour force age brackets of 16-55 years forms 44%. The oldest cohort of 55 years and above, makes up approximately 7% of the district population. This situation suggests a district age dependancy ratio of 0:75:1. Given the high rate of unemployment and low income, the economic dependancy ratio may be high, thus putting many constraints on investment caused by low level of marginal propensity to save.

TABLE 9: POPULATION DISTRIBUTION BY BROAD AGE GROUP

1978 Age Group	Population	%	1988 Age Group	%	1996 Projection
0 - 15	47663	20	60815	18	75738
6 - 15	70365	30	101413	31	130439
16 - 25	42003	18	66784	20	84154
55+	61132	26	83542	25	103192
Total	14276	6	17728	6	27248

Source: Mbeya Region Population Census 1978 & 1988

Fig. 6: Population Distribution by Age Group, Mbozi District



PERCENTAGE DISTRIBUTION BY AGE GROUP

Age group	Percentage
0-15	49.8
16-55	43
56+	7

1.5 Migration

Migration is another factor which affects both population growth and density. In the case of Mbozi District the trading centres such as Tunduma, Vwawa and Mlowo do experience immigration. It has an impact also on the whole division of Iyula. As of late the district experienced an influx of pastoralists searching for green pastures for their Liverstock. However, in Kamsamba and Msongano divisions outmigration occours owing to frequent food shortages or droughts. Livestock keepers pastoralist mainly, from Mwanza and Shinyanga who have invaded the district with large numbers of livestock have aggravated the Soil erosion problem, thereby causing land degradation which in turn has lead to low productivity.

1.6 Climatic Conditions

i) **Rainfall:**

The District has tropical type of climate with clearly distinguished rainy and dry seasons. It receives adequate and reliable rains which ranges between 1350 mm. and 1550 mm. The rainy season usually starts in October and ends in May.

ii) **Temperature:**

The climate condition is moderately hot during the months of August, September, October, November and December. The district experiences cold wheather in June and July. The remaining period which covers the months of January, February, March, April and May is on average warm.

1.7 Topography/General Morphology

Mbozi district lies at an altitude ranging from 900-2750 metres above sea level. The district land area can be divided into two distinct zones as follows:-

i) The Lowland or the Rift Valley covering Msangano and Kamsamba divisions which lies between 900-1400 metres above sea level, characterized by deep-well drained volcanic soil

ii) The highlands rising between 1400-2750 metres comprising Iyula, Vwawa Igamba and Ndalambo divisions. The highlands are characterised by loam and redish soil with less of natural fertility regeneration.

SECTION II

2.1 PRIMARY EDUCATION

2.1.1 Introduction

Despite its great economic development potential, the performance of the education sector in the district is not satisfactory. The district, for example, in 1990 had the highest number of school drop-outs in the region. Currently (1996) it is estimated that only 70.5% of the available places in the district's 187 primary schools are being effectively utilized. Between 1994 and 1995 the annual average Form I selection rate, which stoodd at .4.2%..was low compared to other relatively developed district in the country.

2.1.2 Expansion of Primary Education:

Mbozi district has at present (1996) a total of 187 primary schools distributed by division and ward as Table 10 indicates. It is observed in the table that Vwawa and Igamba Divisions have more primary schools than the other four divisions in the district, namely; Ndalambo, Iyula, Msangano and Kamsamba put together. To-date, (1997) each of the 152 villages in the district has been provided with a primary school.

TABLE 10: PRIMARY SCHOOL DISTRIBUTION BY DIVISION AND WARD 1996

Division	Name of Ward	Number of Schools	No Pupils
	Vwawa	9	5157
Vwawa	Ihanda	11	3682
	Isandula	8	2361
	Nyimbili	12	3101
	Mlowo	4	2046
Division Total		44	15347
	Tunduma	5	3174
Ndalambo	Ndalambo	5	1554
	Myunga	10	2167
	Kapele	7	1079
	Chiwezi	5	1479
	Nkangamo	4	1054
Division Total		36	9769
	Msangano	4	1208
Msangano	Chitete	5	1130
Division Total		9	2338
	Kamsamba	7	1535
Kamsamba	Ivuna	6	1410
	Chilulumo867	8	1505
Division Total		21	4450

	Ruanda	8	3105
Iyula	Myovizi	7	2374
	Mlangali	6	2141
	Iyula	7	3351
Division Total		28	9971
	Nambinzo	5	2017
	Msiya	7	3660
	Itaka	11	4752
Igamba	Isansa	12	4087
	Igamba	8	4794
	Halungu	6	3437
Division Total		49	21747
Total Ward	26	186	63622

Prior to independence the district is said to have had only 25 schools comprising Primary Schools Std I-IV, Extended Primary schools STD V-VI and Middle Schools. These schools had a capacity of enrolling a total of about 4,410 pupils.

The number of primary schools in the last three decades or so has significantly increased from 66 in 1964 to 187 schools in 1996, and enrolment has also increased from about 7,920 pupils in 1964 to 63,622 pupils in 1996. The Universal Primary Education Policy launched by the government in 1974 is viewed by many as the main force behind progress made by almost all districts in the country in the provision of primary

education. Table 11 indicates the expansion in the provision of primary school in the district.

TABLE 11: PRIMARY SCHOOLS EXPANSION IN MBOZI DISTRICT (1994-1996)

Year	No. of Schools	No. of Streams	No. of Pupils
1964	66	198	7,920
1974	114	288	12652
1985	178	398	49308
1996	186	1772	63622

Source: Planning Commission Compiled Data Based on:
(i) Mbeya Region Socio-Economic Profile
(ii) Ministry of Education Secondary Data.

Fig. 7: Distribution of Number of Schools Expansion in Mbozi District 1964 - 1996

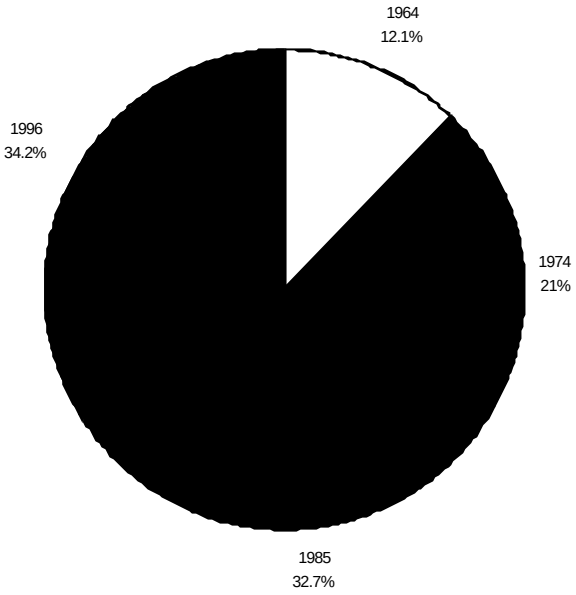


Fig. 8: Distribution of Number of Streams Expansion in Mbozi District 1964 - 1996

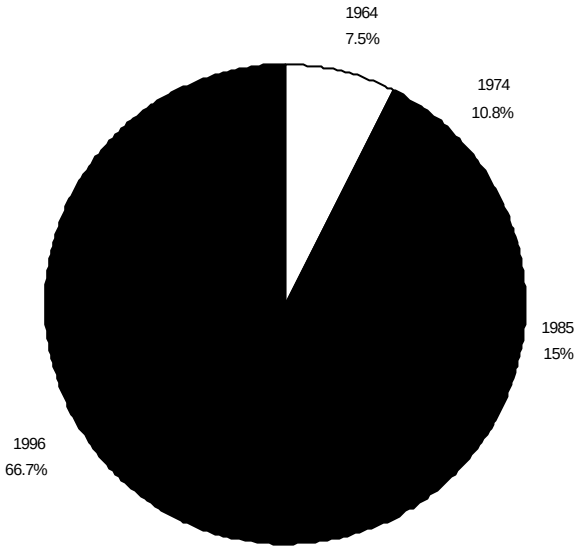
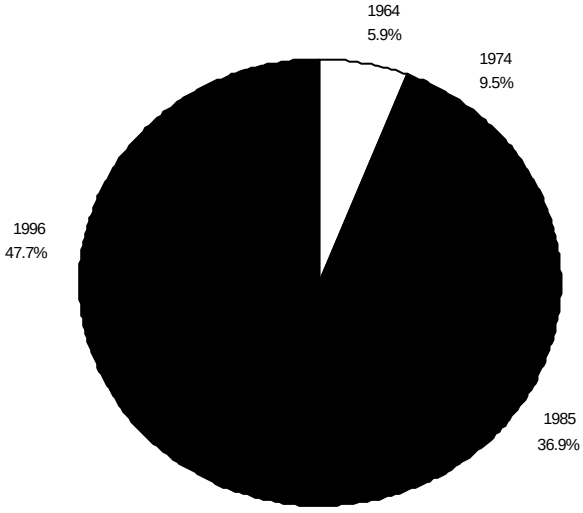


Fig. 9: Distribution of Number of Pupils in Mbozi District 1964 - 1996



2.1.3 **GROSS ENROLMENT RATE**

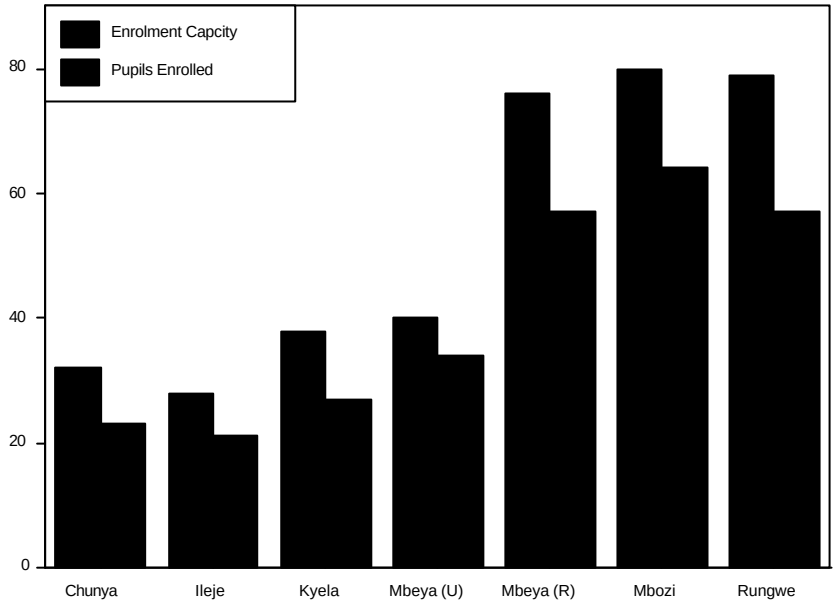
Table 12 indicates that Mbozi district with its 187 primary schools, comprising 1772 streams has a capacity of enrolling an annual average of 79,740 against the actual enrolment of 63,622 pupils in 1996. Thus, only 80% of the available places in the primary school is being effectively utilised.

TABLE 12: PRIMARY SCHOOL CAPACITY UTILIZATION RATES BY DISTRICT IN MBEYA REGION 1995

District	No. of Schools	Streams	Enrolment Capacity	Pupils Enrolled	Utilization %
Chunya	71	720	32,400	23,135	71.4
Ileje	74	630	28,350	20,836	70.5
Kyela	91	845	38,010	27,100	71.3
Mbeya (U)	44	880	39,600	34,244	86.5
Mbeya (R)	179	1,680	75,600	57,271	75.8
Mbozi	**187**	**1,772**	**79,740**	**63,622**	**80**
Rungwe	190	1,748	78,660	56,652	81
Total	835	8,275	372,375	282,860	76.6

Source: Planning Commission compiled based on Data from Regional Education Office - Mbeya.

Fig. 8: Primary School Enrolment Capacity and Pupils Enrolled By District in Mbeya Region 1995



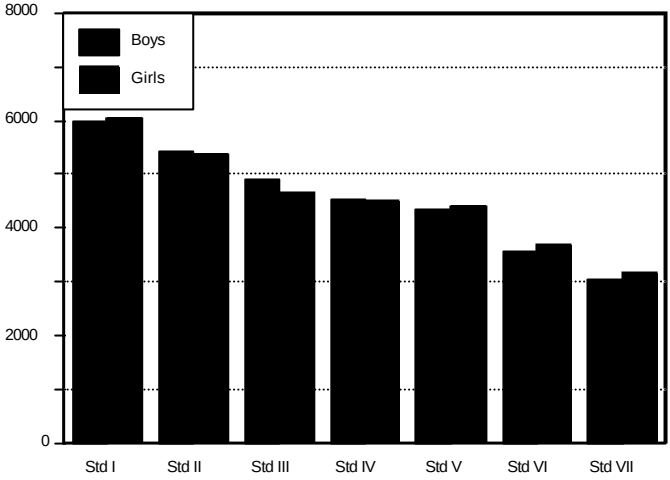
It is estimated that about 81,566 (91996) children in the district are eligible for primary school education, however, only 63,622 pupils were in 1996 actually registered in the district's 186 primary schools. Hence, Gross Enrolment Rate (GER) which is obtained by dividing the number of children registered in school by the number of children in the school age, works out to around 78% for Mbozi District. Due to a number of problems facing the education sector in the country, Gross Primary School Enrolment Rate for the whole country is currently (1996) thought to have declined to the level of 74%. Thus, Mbozi district Gross Primary School Enrolment Rate is slightly above the national average.

Table 13: PUBLIC PRIMARY SCHOOL ENROLMENT BY SEX 1996

CLASS/SEX	BOYS	GIRLS	TOTAL
STD I	5981	6047	12028
STD II	5426	5373	10799
STD III	4919	4657	9573
STD IV	4520	4502	9022
STD V	4346	4405	8751
STD VI	3543	3693	7236
STD VII	3050	3163	6213
TOTAL	**31785**	**31837**	**63622**

Source: District Education officer Mbozi

Fig. 9: Public Primary School Enrolment By Sex and Class 1996



2.1.4 **Standard I Enrolment**

The number of children in the school age group joining standard I in the country rose rapidly from 1974 and reached its peak in 1981 and stabilizing at that level for four years until 1984 after which total enrolment rate average started declining to its current (1996) average level of 74% (Analysis Based on Education and Training Statistics). The most affected regions with rapid decline were Shinyanga, Coast, Lindi, Iringa and Mtwara (Education Training Statistics, 1988).

On the other hand, a few regions, like Kilimanjaro, Mbeya, Kagera and Mara experienced a steady decline in their Standard I Enrolment Rates. Table 13 indicates that the number of pupils joining standard I in Mbozi district has been increasing year after year. However, as it is with other districts in the country, the district's standard I Enrolment Rate declined slightly reaching the level of 85.8% by 1996.

TABLE 14: STD - I ENROLMENT RATE (1996)

District	Registered			Eligible	Enrolment %
	Boys	Girls	Total		
Mbozi	**5,981**	**6,047**	**12,028**	**14,018**	**85.8**
Kyela	2,985	2,873	5,858	8,604	68
Ileje	1,778	1,719	3,497	5,355	65.3
Chunya	2,288	2,128	4,416	6,552	67.4
Rungwe	5,384	5,244	10,628	11,880	89.5
Mbeya Municipality	3,016	3,199	6,215	6,633	93.7
Mbeya Rural/Mbarali	5,335	5,308	10,643	14,190	76
REGION	27,433	24,830	52,563	67,232	78

Source: Planning Commission compiled Data Based:
(i) Mbeya Regional Socio-Economic Profile.
(ii) Information and Data from the District Education Office.

Fig. 10: STD - I Enrolment Rate Registered by Sex in Mbeya Districts (1996)

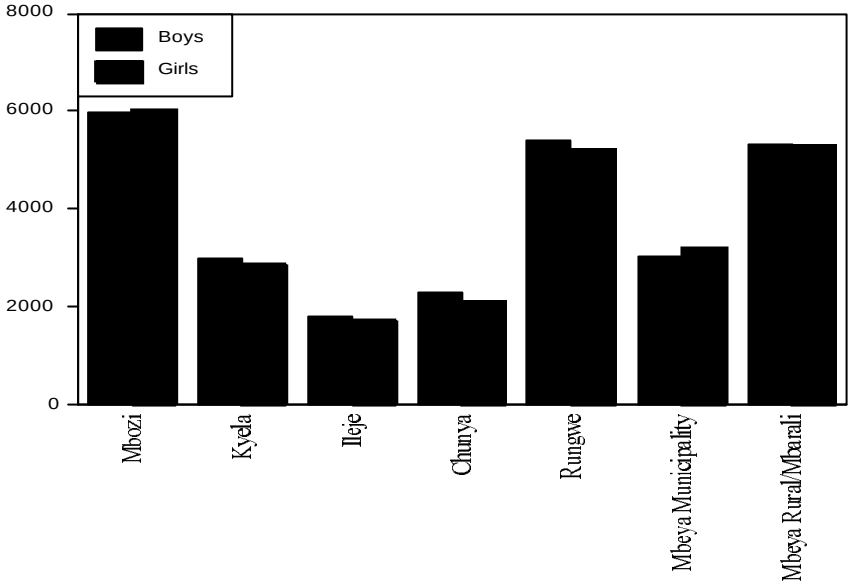
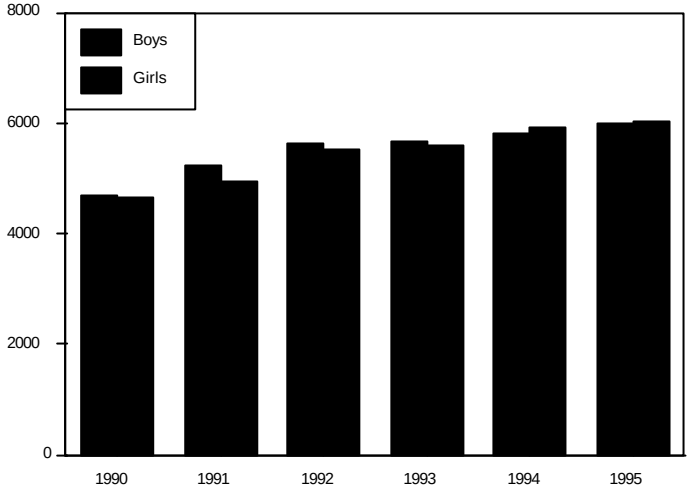


TABLE 15: PRIMARY SCHOOL STANDARD I NROLMENT 1990-1995

YEAR	BOYS	GIRLS	TOTAL
1990	4,701	4,648	9,349
1991	5,230	4,950	10,180
1992	5,631	5,545	11,176
1993	5,669	5,620	11,289
1994	5,835	5,919	11,754
1995	5,981	6,047	12,028

Source: District Education Office - Mbozi.

Fig. 11: Primary School Standard I Enrolment 1990 - 1995 by Sex



DROP-OUTS

Although both Gross Primary School and Standard I enrolment rates in Mbeya region are still relatively high compared to many other regions in the country, there are also significant drop-out rates in all districts, save for Ileje district. Mbozi district for example, in 1995, registered a drop out of 934 pupils. The situation was worse in Chunya district where 1,103 pupils dropped out in same year. Poverty at family level, truancy, pregnancy, poor health and death are the causes for primary school drop outs in the district.

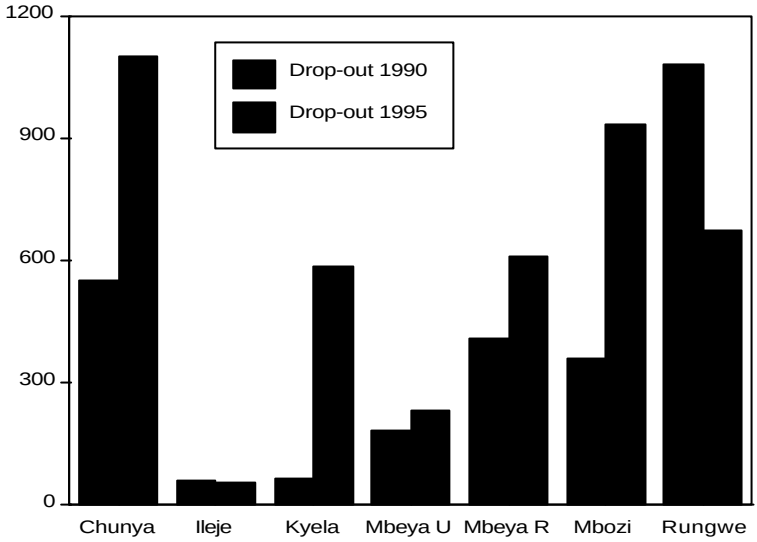
TABLE 16: DROP OUTS IN 1990 AND 1995

DISTRICT	1990	1995

	Male	Female	Total	Male	Female	Total
Chunya	309	244	553	497	606	1103
Ileje	35	25	60	30	23	53
Kyela	28	35	63	290	297	587
Mbeya Urban	98	85	183	132	101	233
Mbeya Rural	226	185	411	333	280	613
Mbozi	189	162	357	469	465	934
Rungwe	581	509	1086	350	324	674
Total	**1466**	**1245**	**2707**	**2101**	**2096**	**4197**

Source: District Education Officer - Mbozi.

Fig. 12: Drop - outs in 1990 and 1995 by District in Mbeya Region



2.1.5 **FORM I SELECTION**

Table 17 Portrays a gloomy picture of the number of the pupils joining Public Secondary Schools in the district. Between 1990 and 1995, a period of six years only 1,266 pupils joined Public Secondary Schools in the district. The average Form I selection rate for the district flactuated around 3.3% which is below the national average estimated at 4.8% in the same period. (refers to public schools only).

TABLE 17: PUPILS SELECTED TO JOIN FORM I (PUBLIC SECONDARY SCHOOLS) BETWEEN 1990-1996 BY SEX

Year	Candidate Enrolment		Selected		TOTAL	%
	Boys	Girls	Boys	Girls		
1990	2070	2094	95	65	160	3.8%
1991	3136	3610	135	94	228	3.3%
1992	3134	3304	121	88	209	3.2%
1993	2733	2634	115	78	193	3.6%
1994	2843	3852	114	105	219	1.8%
1995	2981	3100	137	120	257	4.2%

Source: District Education Officer - Mbozi.

Table 18 shows the distribution of education institutions and student gender ratio. From broad perspective the student gender ratio is 50: 48, thus giving fairness in gender balance. However, viewed in terms of students enrolled in secondary schools, there is much imbalance as far as gender is concerned. For example, in 1996 the ratio between male and female students enrolled in secondary schools was 59:40 thus showing a skewdness of gender in favour of male students. In that regard the efforts geared towards enrolling more girls in secondary schools are highly recommended.

Fig. 13: Pupils Selected to Join Form I (Public Secondary Schools) Between 1990 - 1996 by Sex

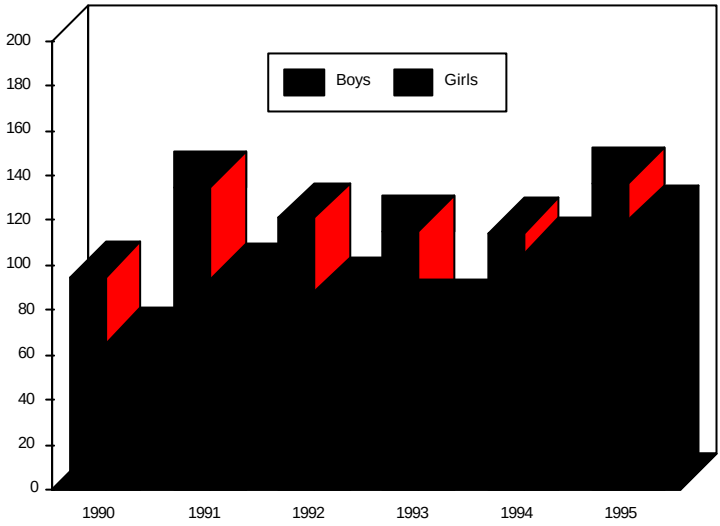
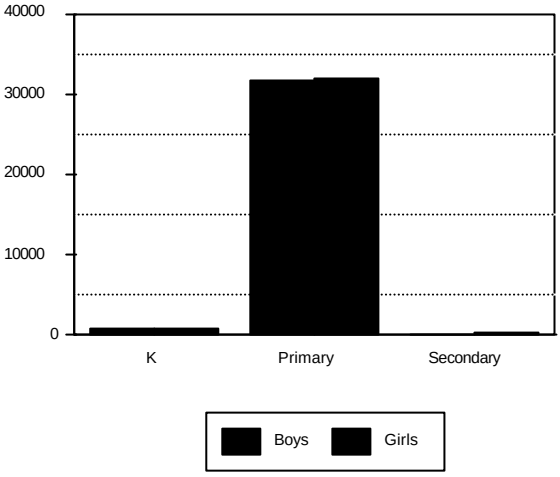


TABLE 18: DISTRIBUTION OR EDUCATION INSTITUTIONS AND STUDENT GENDER IN THE DISTRICT

Type	No of School	Boys	Girls	Total	Gender Ration
K	38	937	1013	1950	48:51
Primary	187	31785	31837	63622	50:50
Secondary	9	50	306	756	59:40
Total	196	1387	1319	2706	50:48

Fig. 14: Distribution or Education Institution and Student Gender in the District by Sex



2.1.6 **Problems facing primary schools in the district**

Dilapidated school buildings, acute shortage of desks and chairs, inadequate skilled teachers, poor sanitation facilities are reportedly common in Mbozi district. Some of the effects of poorly maintained school facilities are: deterioration of primary school education, poor performance in STD VII examinations and relatively high dropout rates. Table 19 .shows the status of basic facilities in the district.

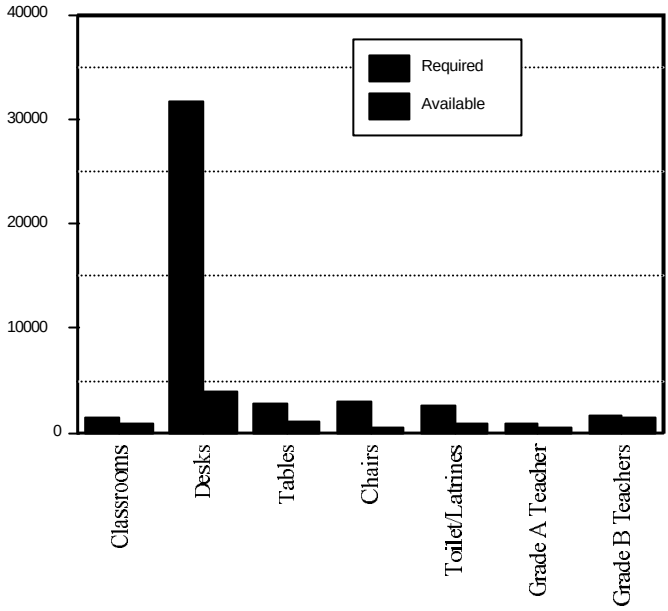
- The majority of pupils have no desks to sit on
- The required number of Grade A Teachers falls short by 37%.

- There is a shortage of 34% of the required classrooms

TABLE 19: PRIMARY FACILITIES IN MBOZI DISTRICT 1996

Type of Infrastructure	Required	Available	Shortage	% Shortage
Classrooms	1450	959	491	34
Desks	31811	4020	27791	87
Tables	2823	1000	1823	65
Chairs	2900	538	2362	81
Toilets/Latrines	2544	891	1654	65
Grade A Teachers	882	553	325	37
Grade B Teachers	1629	1481	148	9

Fig. 15: Primary Facilities Required and Available in Mbozi District 1996



2.2.0 **Secondary Education**

The district has only one Public Secondary School namely, Vwawa Day Secondary School which became operational in 1989. In addition to this Public Secondary School there are 9 privately owned secondary schools, 4 of which are at different stages of construction (1996). The buildings in most of the secondary shools in the district are not adequate and in dire need of rehabilitation. Most of the secondary schools also lack basic facilities and equipment leading to poor perfomance in the Form IV National Examination. It is worthy noting that the district has a fewer number of secondary schools compared to districts with more or less the same resource base as Table 20 indicates.

TABLE 20: NUMBER OF SECONDARY SCHOOLS IN SELECTED DISTRICTS 1995

District	Public	Private	Total
Mufindi (Iringa)	**2**		
Mbozi (Mbeya)	**1**	5	6
Bukoba Rural (Kagera)			
Rungwe (Mbeya)	2	9	11
Njombe (Iringa)	3	8	11
Mwanga (Kilimanjaro)	2	15	17
Moshi Rural (Kilimanjaro)	1	32	33
Tarime (Mara)	2	14	16

Source:

NB: There other 4 secondary schools under construction.
The public and private secondary shools in the districts are distributed by division as Table 21 indicates.

TABLE 21: SECONDARY SCHOOL DISTRIBUTION BY DIVISION 1996

Division	Government	Private	Total
Igamba	-	4	4
Iyula	-	1	1
Kamsamba	-	1	1
Msangano	-	-	-
Vwawa	1	-	1
Ndalambo	-	2	2
TOTAL	1	8	9

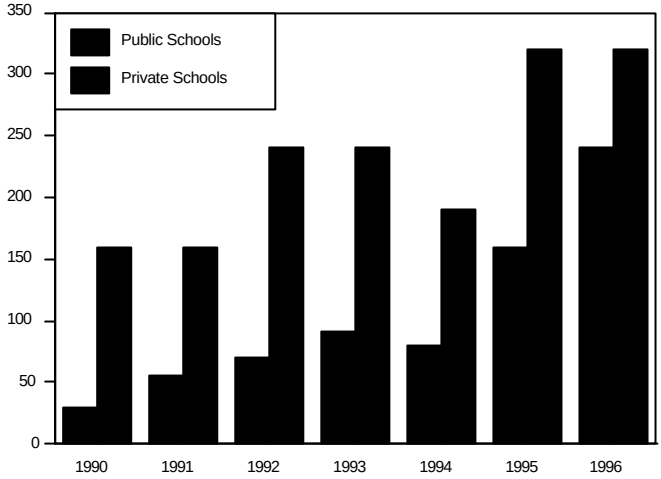
Source: Mbozi District Education Office

***NB: ENROLMENT OF PUPILS IN BOTH PRIVATE AND PUBLIC SECONDARY SHOOLS IN MBOZI DISTRICT 1990 - 1996**

Year	Public Schools			Private School Total			Grand Total
	Boys	Girls	Total	Boys	Girls	Total	
1990	20	10	30	80	80	160	190
1991	40	15	55	80	80	160	215
1992	50	20	70	120	120	240	310
1993	60	30	90	120	120	240	330
1994	60	20	80	170	120	320	320
1995	120	40	160	160	160	320	480
1996	180	60	240	160	160		560

Source: Mbozi District Education Office

Fig. 16: Enrolment of Pupils in Both Private and Public Secondary Schools in Mbozi District 1990 - 1996



2.1.5 **Adult Education:**

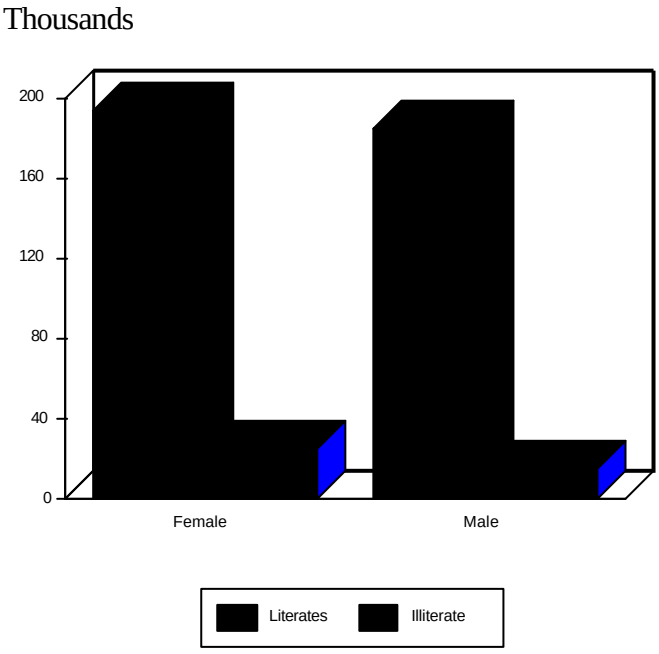
It is an indisputable fact that the literacy rate in the country is currently on the declining trend. The implementation of Universal Primary Education (1974) raised the national average literacy rate, which according to the National Population Census of 1967 and 1978 stood at 24% and 37.8% respectively to be around 85% by 1986. Thereafter, the literacy rate started falling gradually reaching an estimated level of 67.5% by 1994. This new level of literacy rate in the country is yet to be officially confirmed. The data obtained from Mbozi district depicts a high rate of literacy, (90%). This figure is suspect and the Planning Commission is of the opinion that the literacy rate in the district may be between 70% and 75%.

TABLE 22: LITERACY LEVEL IN MBOZI DISTRICT 1996

	1 9 9 6				
	Total Population	**Literates**	**%**	**Illiterate**	
Female	220,773	193,734	87.7	25,371	12.3
Male	199,998	184,569	92.3	15,429	7.7
Total	420,771	378,303	90	40,800	10

Source: District Education Office - Mbozi.

Fig. 17 Literacy Level in Mbozi District 1996



WATER SECTOR

2.2 Rural Water Supply

2.2.1 Introduction:

In order to ensure socio-economic development to the rural people, provision of clean and safe water is one of the major challenges currently facing Mbozi district authorities. The district is among the six districts in the region which have for a long time been supported by the Danish International Development Agency (DANIDA) in the provision of drinking water, mainly by constructing piped water schemes. However, in recent years, the Government and DANIDA have put more emphasis on the provision of water schemes by adopting simple technologies such as construction of shallow wells, rain water harvesting and protection of springs/wells. A few villages namely: Ihanda, Mpemba, Ruanda, Hasamba, Mbimba, Isangu, Ilembo, Ilolo, Inchenjezya, Hanseketwa, Songwe, Nanyala and Lusingo have been supplied with water from Gravity Water Supply Schemes, despite the high investment cost involved.

The guiding principle in the provision of water in the district is full involvement of the community and cost sharing.

2.2.2 Water Supply Schemes:

The district has a total of 155 water schemes consisting of 133 shallow wells fitted with hand pumps, 7 gravity schemes, 13 diesel pumped water schemes, and 2 electric run engine pumped water schemes. Thus, out of 421 water schemes existing in the region, 155 of them are located in Mbozi district as Table 23 indicates.

TABLE 23: WATER SUPPLY SCHEMES IN MBEYA REGION

Schemes	Districts/Number of Schemes							Total
	Chunya	Ilejje	Mbeya (U)	Mbeya /Mbarali	Mbozi	Rungwe	Kyela	
Gravity	5	4	4	23	7	16	7	66
Diesel Pumps	11	1	-	6	13	3	4	38
Electric Pumps	-	0	2	-	2	-	-	4
Shallow Wells fitted with pumps	40	9		128	133	-	3	313
Total	56	14	6	157	155	19	14	421

Source: Regional Water Engineer - Mbeya.

It may be observed in Table 24 that, out of the existing 155 Water Schemes in the district, 75 scheme or 48% are not functioning. This, in a nutshell, implies that the majority of district residents still get their water from unimproved and unprotected traditional sources which include rivers, Lake Rukwa, streams and springs. It appears ironical, that shortage of clean and safe water still persists in the district, despite the existence of the rivers and streams which flow throughout the year.

TABLE 24: STATUS OF WATER SCHEMES IN THE DISTRICT 1996

Technology	Number	Operating	Out of Order	Remarks
Shallow Wells	133	73	60	Cheap technology and easy to maintain
Gravity Schemes	7	3	4	Requires large investment capital, though cheap to maintain and run after construction.
Diesel Operated Water Pumps	13	3	10	Very expensive to run and maintain.
Water Pumps using electric engines	2	1	1	Costly and not feasible option for the rural people.
Rain Water Harvesting		-	-	Very ideal technology for rural people.
District Total	155	80	75	

Table 25 below describes the existing water supply schemes in the district, type of technology and the number of villages served by each water scheme.

TABLE 25: THE EXISTING WATER SUPPLY SCHEMES, TECHNOLOGY IN USE AND VILLAGES SERVED IN 1995

Name of Scheme	Type of Technology	No. of village served
Chilulumo W/S	Diesel Pump	2
Halungu W/S	Bore holes	3
Chiwezi W/S	Gravity Scheme	1
Isansa W/S	Diesel Pump	3
Itaka W/S	Diesel Pump	4
Igamba W/S	Diesel Pump and Gravity Scheme	4
Ihanda W/S	Bore holes and Gravity Scheme	3
Kamsamba W/S	Diesel Pump	1
Ivuna W/S	Bore holes	2
Mlowo W/S	Gravity and Motorised Schemes	3
Msangano W/S	Bore holes	2
Ndalambo W/S	Diesel Pump	3
Nkangamo W/S	Diesel Pump	1
Nambinzo W/S	Bore holes	4
Ruanda W/S	Bore holes	6
Vwawa W/S	Gravity and Spring Protection	6
TOTAL:		**49**

Source: District Water Engineer Office

It is observed in Table 26 that only 45.8% of the population in Mbeya region was able to obtain clean and safe water by the end of 1995. Mbozi district, with only 31% of its population accessible to clean and safe water, ranks last but one among the six districts in terms of provision of clean and safe water. The water situation in the district is worse in the Lowland Zone which covers Kamsamba and Msangano divisions where the rains are unreliable. The situation has forced the villages bordering the Republic of Zambia to obtain water for their daily use from that country. The district's rapid population growth rate, which, according to the 1978 and 1988 Population Census surpasses the regional and national growth rates, has been singled out, among others, as one of the factors which hinder the district from achieving the National Water Sector Objectives.

TABLE26: RURAL WATER SUPPLY IN MBEYA REGION 1996

District	1995 Population Estimates	Population Served	% of Population Served
Mbeya R	433,097	259,055	60
Mbozi	**420,771**	**130,439**	**31**
Chunya	199,358	121,070	61
Ileje	103,328	24,294	24
Kyela	152,022	95,685	63
Rungwe	399,379	143,776	36

TOTAL	**1,633,767**	**710,214**	**45.8**

Source: Mbeya Region Socio-Economic Profile

Fig. 18: Population Estimates 1995 and Poupulation Served in Rural Water Supply in Mbeya Region 1996

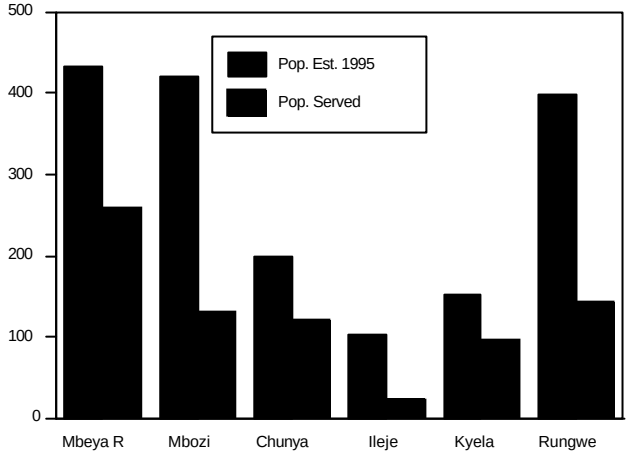


TABLE 27: DISTANCE FROM HOUSES TO RADITIONAL SOURCE

District	400m. %	400m. - 1 Km. %	1 - 2 Km. %	Over 2 Km. %
Mbozi	**32**	**38**	**18**	**12**
Kyela	61	21	9	9
Ileje	51	26	13	10
Chunya	29	32	20	19
Rungwe	46	29	15	10

Mbeya Region	31	40	17	12

Source: Mbeya Water Master Plan.

It may be observed from Table 27 that only 32% of the population get water within a distance of 400 m. compared to other districts like Kyela (61%), Ileje (51%) and Rungwe (46%). In order to achieve the national target by the year 2002, a lot of effort has to be put to ensure that all villages are supplied with water within that distance.

Table 28 below, indicates the number of villages, size and percentage of population served with clean and safe water at ward level.

The district has 155 villages of which 88 villages are served with potable water and thus making the percentage of village served to be 57%.

TABLE 28: VILLAGES AND POPULATION SERVED WITH CLEAN AND SAFE WATER BY WARD - JUNE 1997

Ward	No. of Villages	Villages Served	%	Population 1996 Est.	Population Served	%
Vwawa	7	6	87%	24798	21825	88
Ihanda	7	3	43%	22209	8328	37
Isandula	6		-	13820	12830	92
Nyimbili	7	1	14%	16011	1607	100

Mlowo/Nsala	4	2	50%	17258	5720	33
Division Total	31	13	61.9%	94096	50310	53
Tunduma	6	4	66%	21026	11978	54
Ndalambo	5	3	60%	12188	4729	39
Miyunga	7			15207	12541	82
Kapele	4			5977	1282	21
Chiwezi	5	5	-	9100	2754	30
Division Total	31	3	16%	63498	33284	52
Msangano	4		75%	9401	7199	76
Chitete	4	3	-	11935	2953	24
Division Total	8	1	38%	21336	10152	47
Kamsamba	7	2	14%	14168	2971	21
Ivuna	6	2	33.3%	19470	5457	28
Chilulumo	7	4	29%	13946	4247	30
Nambinzo	5	8	80%	13483	8697	64
Division Total	25	5	32%	59012	21372	36
Ruanda	7	1	71.4%	10011	12081	75
Myovizi	6	1	17%	12143	1109	9
Mlangali	5		20%	13551	1912	7
Iyula	6	6		20095	1830	9

Division Total	24		25%	61800	16932	27
Msia	7	4		22819	10143	44
Itaka	9	3	44%	24481	11133	39
Isansa	8	4	37.4%	28181	11279	40
Igamba	7	3	57%	26378	7559	38
Halungu	5	14	60%	20412	7736	37
Division Total	36	3	39%	126271	47850	38
District Total	155	88	57%	420,771	130,439	31%

2.2.4 **Community Participation:**

For Mbozi district to make headway in achieving the National Water Sector objectives, participation of the people in the whole process of provision of water in their areas is basic. Any village which aspires to be considered for water schemes is required to show its eargerness and readiness to accept the proposed project by forming a Village Water Committee and establishing a Village Water Fund.

Table 29: Indicates progress made in establishing Village Water Funds in the district.

Division	**No. of Villages with Established Water Funds**

	1993	1994	1995	1996
Vwawa	8	8	8	10
Kamsamba	5	5	6	6
Igamba	4	4	4	4
Iyula	3	3	3	13
Msangano	4	4	4	4
Ndalambo				
District Total	24	24	25	37

2.2.5 **Urban Water Supply**

The national water sector objective is to provide sufficient quantity of clean water for the urban population and at the same time satisfy the water requirement for the industrial sector.

Mbozi district has two urban centres, Vwawa and Tunduma. Vwawa is the district headquarters while minor settlements include: Mlowo, Igamba, Kamsamba, Iyula, Msangano and Ndalambo.

(i) **Vwawa Town**

Vwawa town and its outskirts currently, (1996) is estimated to have a population of between 20,000 and 25,000 people. Vwawa district headquarters gets its water from Vwawa Gravity Water Supply Scheme. The Gravity scheme also serves other neighbouring villages which include Hasamba, Mbimba, Isangu, Ilembo, Ilolo and Ichenjezya. It is estimated that only 11,978 people or (between 60% and 48%) of the population have access to clean and safe water. The demand for Water for Vwawa Town and surrounding villages is estimated at $3,316^3$M per day, while actual daily supply averages 1070 M^3 per day.

(ii) **Tunduma**

Tunduma with an estimated population of 21026 people is a fast growing Trading Centre in Mbozi district. The current supply of clean water has been described as extremely inadequate. Some Tunduma residents have to cross the border to Zambia to get clear water. Apparently, Tunduma town traverses accross the two countries, with the other part (Zambia) being called Chiyanga.

2.2.6 Sanitation

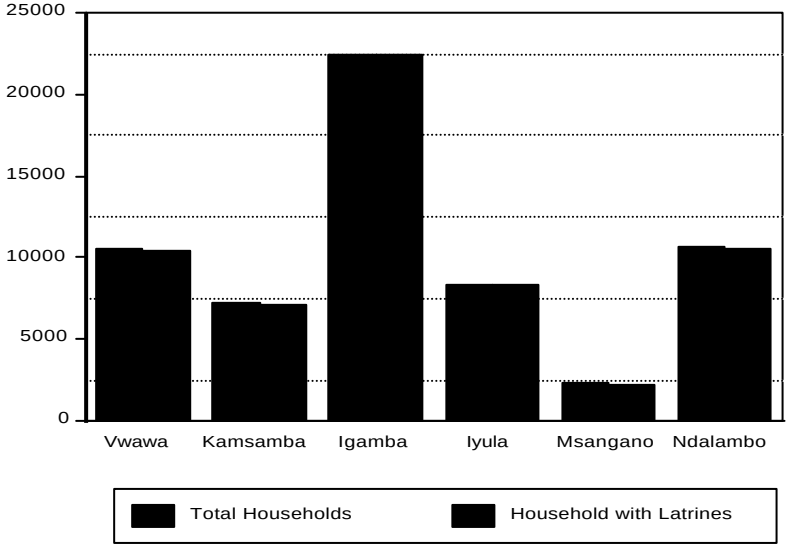
Pollution of water sources has always been a major cause of health problems giving rise to diarrhoea, typhoid and other communicable diseases. Safeguarding environmental sanitation in Mbozi district has been difficult due to cultural practices which do not encourage the use of latrines. Table 30 indicates the status of Pit latrines in the villages of Mbozi district despite impressive coverage, it is being estimated that only 40% of the population has permanent pit latrines.

TABLE 30: STATUS OF LATRINES IN THE DISTRICT, 1996

Division	Total Households	Households With latrines	Household Without latrines	Coverage %
Vwawa	10560	10472	88	99
Kamsamba	7220	7100	120	98
Igamba	22457	22390	61	99
Iyula	8400	8378	22	99
Msangano	2325	2220	105	95
Ndalambo	10627	10527	100	99
Total District	**61,589**	**61087**	**502**	99

Source: District Health Office - Mbozi

Fig. 19: Status of Latrines in the District by Division



2.3.0 **HEALTH SECTOR**

2.3.1 **Health Situation**

Despite several interventions by the government in collaboration with donors, NGOs, and village governments in the district for a number of years, the health status of Mbozi residents has improved only to a certain extent. The district still faces a high prevalence of common diseases including malaria, skin and eye diseases, diarrhoea, typhoid, anemia, sexually transmitted diseases etc. Child and maternal mortality rates are still on the higher side. Apart from the fact that the district produces abundant food crops, particularly maize and beans, severe and moderate malnutrition is still noticeable in some villages. Factors contributing to such a situation include: inadequate quality of food intake, low level of involvement of communities in basic health care and lack of awareness on critical health matters or just sheer ignorance as to what constitutes a balanced diet. Table 31 indicates occurences of ten top diseases in Mbozi District compared to the regional and national averages.

TABLE 31: OCCURANCES IN MBOZI DISTRICT COMPARED WITH THE REGIONAL AND NATIONAL AVERAGES

Disease	District Occurances	Regional Occurances	National Occurances
	Average % (1996)	Average % (1996)	Average (1994)
Malaria	29.8	25.4	31.0
URT	11.5	12.0	11.0
Diarrhoea	11.4	11.1	8.1
Pneumonia	4.3	4.8	4.4
Intestinal Worms	3.4	5.6	2.7
Anemia	0.8	1.3	1.5
Accidents	3.6	4.3	2.9
Eye Diseases	2.5	2.7	4.6
Gonorrhoea	3.7	3.3	1.5
Schistomiasis	5.0	4.5	4.5
Other Diagnosis	10.5	13.9	17.0
Symptoms and ill defined	9.1	11.1	11.2
TOTAL	100	100	100

Source: Planning Commission Compiled Data Based on:-

(i) Ministry of Health Statistics Abstract, 1995.

(ii) Report from DMO - Mbozi.

2.3.2 **The Existing Health Facilities**

Health facilities in Mbozi district are provided by the Government, NGO's and a growing number of private health units and pharmacies. There are also development programmes, such as the Child Protection Development and Survival programme supporting health services at village level.

Currently, (1996) the district has two (2) hospitals, one owned by the government and the other one by a religious voluntary agency. The district has also three (3) Rural Health Centres, 38 dispensaries, out of which 21 are owned by the government and the remaining 19 are in the private hands. The health facilities are distributed in the district by ward as indicated in Table 32

TABLE 32: DISTRIBUTION OF HEALTH FACILITIES IN THE DISTRICT BY WARD AND DIVISION 1996

Ward	Health Centres	Dispensaries	Number of Villages	Population Served
Ihanda	-	2	7	22,958
Isandula	-	1	6	14,586
Nyimbili	-	2	5	16,551
Mlowo	-	3	6	11,994
Vwawa	-	4	6	26,816
Vwawa Division	**-**	**12**	**30**	**92,905**
Tunduma	-	3	5	20,511
Ndalambo	1	-	4	11,890
Myunga	-	2	7	14,834
Kapele	-	1	3	5,831

Chiwezi	-	1	5	8,877
Nkangamo	-	1	3	-
Ndalambo Division	**1**	**8**	**27**	**61,943**
Msangano	-	1	3	9,171
Chitete	-	1	4	11,643
Msangano Division	**-**	**2**	**7**	**21,403**
Kamsamba	-	1	7	10843
Ivuna	-	1	6	14901
Chilulumo	1	1	7	10679
Kamsamba Division	**1**	**3**	**20**	
Ruanda	-	2	7	17,671
Myovizi	-	1	6	11,846
Mlangali	-	1	5	13,219
Iyula	1	2	6	19,603
Iyula Division	**1**	**6**	**24**	**62,339**
Isansa		1	8	21415
Msia	-	1	8	17473
Nambinzo	-	1	5	10324
Itaka	-	1	10	21672
Igamba	-	1	7	20198
Halungu		2	6	15925
Igamba Division		**7**	**44**	**96683**
District Total	**3**	**38**	**152**	**420,771**

Source: District Medical Office - Mbozi.

Health Units in the districts are owned by different institutions as Table 33 indicates.

TABLE 33: HEALTH UNITS BY OWNERSHIP 1996

Health Unit	Government	Private, Institutions/ Individuals	Total
Hospital	1	1	2
Health Centres	3	-	3
Dispensaries	21	17	38

Source: District Medical Office - Mbozi.

TABLE 34: DISTRIBUTION OF HEALTH SERVICES IN MBOZI DISTRICT COMPARED WITH OTHER DISTRICTS OF MBEYA REGION 1996

District	Population	Hospitals	Health Centre	Dispensaries
Mbozi	**420,771**	**2**	**3**	**38**
Kyela	152,022	1	2	21
Rungwe	299,379	4	4	44
Mbeya Rural/Mbarali	339,379	1	4	60
Chunya	194,495	1	3	30
Ileje	103,328	1	2	21
Mbeya Urban	190,005	1	3	30
TOTAL	1,759,814	11	21	238

Source: Mbeya Regional Planning Office.

TABLE 35: HEALTH FACILITY/POPULATION RATIO IN MBOZI DISTRICT COMPARED TO REGIONAL AND NATIONAL AVERAGES RATIOS

Facility	Quantity	District Ratio	Regional Ratio	National Ratio
Hospital	2	1:210,385	1:157,478	1:100,000
Hospital-Beds	280	1:1503	1:1,135	1:800
Rural Health Centre	3	1:140,257	1:87,893	1:50,000
Dispensaries	38	1:11073	1:7,890	1:10,000
Medical Doctors		1:32367	1:68,468	1:48,000

Source: Planning Commission Based Data:
(i) Mbozi District Medical Office
(ii) Ministry of Health, Health Statistics Abstract, 1995.

TABLE 35: HOSPITAL HEALTH CENTRE BEDS, ISTRIBUTION

	Government		Private		Total		NO/bed RATIO
	No	Bed	No	Beds	No	Beds	1:1405
Hospital	1	70	1	210	2	280	1:196,651
Health Centre	3	50	-	-	3	53	1:9755

2.3.3 Other Health Indicators

(i) Infant and Under 5 Mortality Rates

TABLE 36: INFANT AND UNDERFIVE MORTALITY RATES RECORDED IN MBOZI DISTRICTS COMPARED THAT OF MBEYA REGION AND NATIONAL AVERAGES 1995 (per 1000)

Year	IMR			U5MR		
	Mbozi District	Mbeya Region	National Average	Mbozi District	Mbeya Region	National Average
1975	**164**	161	137	**236**	267	231
1985	**118**	124	115	**198**	209	191
1995	**88**	96	96	**146**	163	158

Source: Planning Commission Compiled Data Based On:
(i) MOH: Health Statistics Abstract 1995.
(ii) Mbozi Medical Office.

(ii) Maternal Mortality Rate

TABLE 37: MBOZI DISTRICT MATERNAL MORTALITY RATE COMPARED WITH THE REGIONAL AND NATIONAL AVERAGE 1995

YEAR	MATERNAL MORTALITY RATE		
	Mbozi District	Mbeya Region	National Average
1993	480MMR/100,000	67	199
1994	559MMR/100,000	361	211
1995	172/MMR/100,000	211	198
1996	425/MMR 100,000	430/MMR 100,000	196

Source: Planning Commission Compiled Data Based on:
(i) MOH: Health Statistical Abstract.

(ii) DMO - Kyela.

2.3.4 **Immunization Programme**

An Immunization Programme has been coverage conducted regarding BCG, Measles, DPT1, DPT3, Polio -1, Polio - 3 and TT-1, TT-4, 1992 - 1995.

TABLE 39: STATUS OF IMMUNIZATION IN MBOZI DISTRICT (1990 - 1995)

Year	Children Immunised						TT Doses for Women		
	Target	% BCG	% DPT-3	% Polio	Measles	Target	TT1	TT2	TT3
1990	14750	34	86	92	84	9343	9	10	7
1991	13999	97	69	84	92	10182	14	8	1.2
1992	15925	110	95	101	80	19377	15	15	2.6
1993	19889	113	91	105	106	17226	17	13	12
1994	17024	105	94	98	93	19332	14	23	21
1995	16063	83.3	68	69	65	13006	13	9	12

Source: District Medical officer -Mbozi

2.3.5 **HIV - Infection and Aids Disease:**

The Aids (HIV) epidemic is having a serious adverse impact practically in all regions and districts in the country. The first six victims in Mbozi district were diagonised in 1987. Ever since,

the HIV has been spreading very fast in the district. To-date, (1997) Mbozi district is the most affected district in Mbeya region. The HIV infection and AIDS disease is serious in the district owing to the fact that the district is located along the Tanzania Zambia Highway. The exact number of victims in the district is yet to be determined because a good number of HIV infections and AIDS victims are not reported to the hospitals. However, the available data indicate that between 1987 and 1995 HIV infection and deaths resulting from AIDS disease have increased considerably as Table 40 depicts.

TABLE 40: HIV - INFECTIONS AND AIDS DISEASE

Year	Reported HIV Cases	Recorded Deaths
1987	6	1
1980	100	10
1989	238	21
1990	294	16
1991	330	11
1992	324	6
1993	524	4
1994	920	17
1995	1120	19

Source: District Medical Office - Mbozi.

2.3.6 **Nutritional Status**

Though the district is the major producer of food crops in the region, the nutritional status of children is poor and mortality rate is high.

The problem is being aggravated by the fact that most of the agricultural activities like cultivating, weeding, harvesting, fetching water and milling are done by women. Therefore, very little, time is spent on taking care of the children and family.

This, situation has played a lot to aggravate the nutritional problem since women do not get enough time to feed their children. The district is now conducting gender seminars at ward level to sensitize the community at large on the issue of reducing workload to women.

TABLE 41: RURAL MEDICAL PERSONNEL DISPOSITION 1996

Staff Category	Health Centre			Dispensaries		
	Establishment	Strength	Shortage	Establishment	Strength	Shortage
Medical Ass.	13	13	-	-	-	-
RMA	-	-	-	38	38	-
PHN	4	4	-	-	-	-
MCHA	6	6	-	36	36	-
Nurse B	30	14	16	36	-	36
Nurse A.	10	9	1	-	-	-
Pharmacy Asst.	-	-	-	-	-	-
Health Asst.	8	8		36	24	12
Lab. Asst.	3	-	3	-	-	-

Health Orderly	7	3	4	36	36	-

Source: DMO - Mbozi.

SECTION III

3.0 ECONOMIC INFRASTRUCTURE

3.1 Introduction

With the inauguration of Mbarali, formerly a division within Mbeya Rural District, as a fully fledged district towards the end of 1995, to-date (1997), Mbozi, which occupies an area of 9,679 sq.km. is the second biggest district in Mbeya Region. The district's annual contribution to the Regional Gross Domestic Product in terms of agricultural production is estimated to be around 30% and 40%. Despite the district's significant contribution in the economic development of the region, its road network is generally poor, thus hindering smooth distribution of inputs to the farmers and marketing of their farm produce. Apart from the trunk roads running from Mbeya Municipality to Tunduma, Tunduma - Sumbawanga Road, and Tunduma - Songwe Road and a few regional roads, the district's and feeder roads are barely passable during the rainy season and improve only to a small extent during the dry season. The district and feeder roads conditions are worse in Kamsamba and Msangano divisions. Some parts of the two divisions are completely cut off during the wet season. Factors contributing to the poor state of roads include:

- Insufficient funding of road rehabilitation and maintenance. The public expenditure on roads has been tremendously declining during recent years despite its importance.

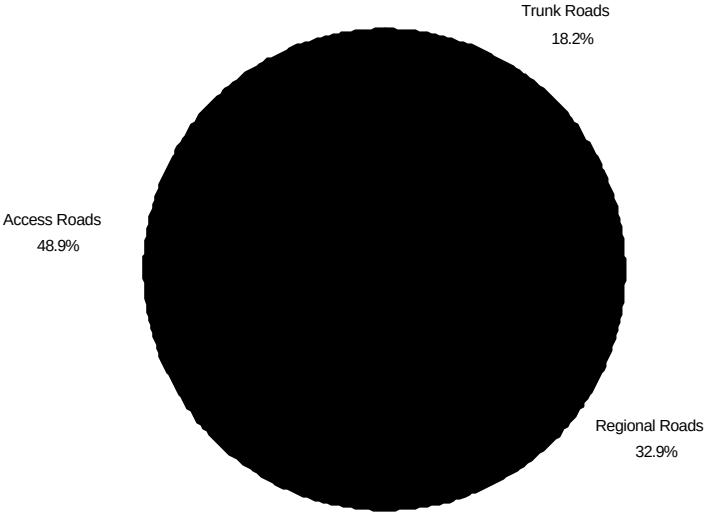
- Deterioration of Mbozi District Council in terms of personnel and equipment, hence the authorities' failure to offer the much needed technical skills and support to district and feeder roads construction and maintainance.

- Inability of local government authorities to mobilise communities to participate in the whole process of planning, construction and maintenance of feeder roads.

TABLE 42: SHARE OF MBOZI DISTRICT IN THE DISTRIBUTION OF ROAD NETWORK IN THE REGION 1996 (in Kms)

Road Categority	Mbeya Region	Mbozi District	Share of Mbozi in %
Trunk Roads	767.7	140	18.2
Regional Roads	1,376	254	18.5
District /Village Access Roads		377	
Total		771	

Fig. 21: Distribution of share of Mbozi District in the Distribution of Road Network in the Region



3.2 **Road Network**

Mbozi district has a network of 681 kms. of roads, out of which, 140 kms are Trunk roads, 254 kms are Regional roads, 377.. kms. are district/Village Access Roads. The road network is distributed as depicted in Table 43.

TABLE 43: ROAD NETWORK BY TYPE AND DIVISION

Division	Type of Roads (KM)			Total Km.
	Trunk	Regional	District	
Igamba	-	68	108	176
Iyula	-	40	100	140
Kamsamba	-	50	30	80
Msangano	-	80	40	120
Ndalambo	66	-		122
Vwawa	74	16	43	133
District Total	140	254	377	771

Source: Mbozi District Engineers Office.

TABLE 44: MBOZI DISTRICT SETTLEMENT DISTANCE MATRIX

To/From	Vwawa	Iyula	Kamsamba	Msangano	Ndalambo
Vwawa	-	46	142km	83km	78km
Iyula	46km		188km	103km	148km
Kamsamba	142km	188		255	220km
Msangano	83km	138km	255km		161km
Ndalambo	78km	138km	220km	161km	
Igamba	25	70km	197km	58	103km

Table 44 indicates the district settlement distance matrix which is a tool to study urban rural linkages. It is no doubt that the far remote areas from Vwawa such as Kamsamba and Msagano which are 142 km and 83 km respectively are characterised by low levels of production, low levels of trade, low level of farm inputs supply and low social mobility, thus suffering from high transportation cost. This situation in turn leads to low productivity. Improvement of horizontal linkages between settlements is highly recommended so as to foster ahead district development endeavours.

TABLE 45: THE STATUS OF VITAL ROADS IN THE DISTRICT 1996

Road	KM	Surface type	Condition	Future Strategies
Truck Road:				
Songwe - Tuduma	66	Tarmac	Good	
Tunduma - Sumbawanga	74	Gravel	Average	
Regional Road:				
Mlowo - Kamsamba	130	Gravel/Earth	Average/poor	Gravelling
		Earth	Poor	
Igamba - Msangano - Utambalila	90			Grading+Gravelling
Ndolezi - Vwawa				
Ruanda - Nyimbili	24	Earth	Average	Spot improvement
	10	Earth	Poor	Grading
District roads and feeder roads:				
Isangu - Msia				
Msia - Malolo				
Malolo - Halambo	14	Earth	Fair	Grading + Gravelling
Halambo - Hampangala	1.5	Earth	Poor	Grading + Culverts
Hampangala -Halungu	7.5	Earth	Poor	Grading
Vwawa - Igamba	4	Earth	Poor	Bridge, 3 culverts
Itaka - Shitungulu -	7.4	Earth	Poor	Grading
Isenzanya - Nambinzo	12	Earth	Poor	Bridge + Grading
	16	Earth	Poor	Grading + Culvert
Nkanga-Isela-Hamwale	5.5	Earth	Poor	Grading + 2 Culvert
Old Vwawa-Sumbalwela	6.1	Earth	Poor	Grading + 3 Culvert
Old Vwawa-Hantesya	13	Earth	Poor	Grading + 3 Culvert
Ihanda-Ipapa	14.6	Earth	Fair	Bridge + 3 Culvert
Ihanda-Uyole	5.5	Earth	Poor	Grading + 3 Culvert
Chimbuya-Chizumbi	12	Earth	Fair	Grading + 3 Culvert
Shaji-Mlangali	2.5	Earth	Fair	Spot improvement
Hasamba-Hezya	16.3	Earth	Poor	3 bridge + culvert
Idiwili-Ilomba	10	Earth	Poor	1 bridge + 3 culvert
Chapwa-Chindi	51	Earth	Poor	5 bridge + 3 culvert
Kakozi-Kapele	28.3	Earth	Poor	Grading + culvert
Itumbula-Samang'ombe	7	Earth	Poor	Spot improvement
Itumbula-Ivuna	7	Earth	Poor	Spot improvement
Mkulwe-Kamsamba	20.1	Earth	Poor	1 bridge + grading
Ntungwa-Mkulwe	30	Earth	Poor	2 bridge + culvert
Isangu-Mbozi-Igamba	12	Earth	Fair	Spot improvement
Isansa-Itumpi	6.7	Earth	Poor	Grading
Itumpi-Lungwa	1.5	Earth	Poor	Spot improvement
Mbozi mission-Karasha	6	Earth	Fair	Spot improvement

Source: District Road Engineer - Mbozi.

Table 45 indicates that most of the district and feeder roads are in poor condition, thus impassable during the rainy season. This means some villages are not easily accessible. Therefore, the district needs improved feeders roads to stimulate agricultural production by opening up other potential economic areas and faciliting the distribution of goods and services as well as delivery of farm inputs to farmers.

3.3 Railways

Mbozi district enjoys railways service of the Tanzania Zambia Railway (TAZARA) line commencing from Tunduma to Songwe 105 km. with the following stations:

- Tunduma
- Mpemba
- Vwawa
- Mlowo
- Senjele

Since the railway line runs parallel to the Tanzania - Zambia Trunk Road transporters prefer to transport their goods by road service, because it is faster, though expensive compared to the railway.

3.4 Communication Network

The communication network is less developed in Mbozi compared to other districts like Mbeya, Rungwe and Kyela. There is one telephone line from the district headquarters to the regional headquarters, 99 telephone lines within the district and 3 Radio Calls situated at Vwawa Police Station, Kamsamba

Police Station and ADP -Mbozi. The district has no telex and fax services.

3.5 Energy

The energy sector covers non-commercial primary energy sources (mainly wood fuels) and commercial energy (petroleum, natural gas, hydroelectricity, coal and some geothermal sources).

Sources of energy utilised in Mbozi district for both industrial and domestic use include woodfuel, hydroelectricity, biogas, and petroleum products.

- **Woodfuels**

  About 98 percent of the population of Mbozi district relies wholly or partly on woodfuels (fuelwood, charcoal and agricultural residues) for their energy needs. The rate of consumption of fuelwood greatly exceeds the rate of natural growth. There is uncontrolled exploitation of the forest cover, apart from land clearing for agricultural activities. The increasing demand for household woodfuels is leading to vast deforestation.

- **Electricity**

  Mbozi district is connected to The Zambia National Electricity Grid. Consumers of electricity are mainly

urban based households and the public sector since industrial and commercial use is limited. The towns which are served with electricity are Tunduma, Vwawa and Mlowo.

- **Biogas uses**

  At present 1997, there are 45 biogas plants in the district as shown in the table below:

TABLE 46: DISTRIBUTION OF BIOGAS BY DIVISION AND WARD 1997

Division	Ward	No. of Plants
Iyula	Ruanda Iyula Myovizi	2 1 2
Vwawa	Vwawa Nsala Mlowo Ihanda	5 3 1 1
Igamba	Igamba Isansa Msiya Itaka Halungu Nambinzo	6 13 (6 under construction) 7 2 1 1
	TOTAL:	**45**

Source:

There is a great need for the district to take drastic measures aimed at disseminating this Technology in order to protect the environment. It is no doubt that a destructed environment is accompanied by increase of drought which affects agricultural production. Some parts of Mbozi district has started to experience this pathetic situation.

- **Solar Energy**

  Electricity from solar energy is economically feasible mainly in rural areas where the cost of other energy sources is prohibitive. Simple thermal solar technologies can be used for such purposes as crop drying and heating water and would ease demand for woodfuels. In Mbozi district, solar energy is mainly used at Kamsamba, Itaka, Chiwanda, Roman Catholic centres, Ndalambo and Iyula under the Agriculture Development Programme (ADP).

3.6 Land Development

According to the agricultural policy of 1983, every village was supposed to be surveyed and finally given a certificate of registration by 1992. Urban areas need master plans to be drawn and plots surveyed to enable planned development.

The actual implementation of this policy in Mbozi district is as shown in Table 47

TABLE 47: SURVEYED PLOTS AND VILLAGES IN MBOZI DISTRICT

No. of Villages	Surveyed Villages	Villages with certificate of Reg.	No. of Plot Required	No. of Plot Surveyed	Actual Plots Offered
152	11	-	1280	1218	1218

SECTION IV

4.0 PRODUCTIVE SECTOR

4.1 District Economy

The Agriculture and Livestock sector constitutes the mainstay of the economy of Mbozi district and its population, estimated at 420,771 (1996), in providing income, employment and ensuring adequate food supplies. Only a small number of the population are engaged in commercial and industrial sectors. The latter sector is still limited to small scale enterprises which include maize mills, brick making, carpentry, and tailoring mainly found at Vwawa Town and Trading Centres of Iyula, Igamba, Tunduma, Nyimbili, Msangano, Mlowo, and Ndalambo.

Mbozi district is the granary of Mbeya Region. The district produces a substantial percentage of the total regional production of beans, maize and cassava. It also produces more than 50% of the total regional coffee production. Other crops grown include sunflower, tobacco, cotton, paddy, sorghum, finger millet, sweet potatoes and simsim.

Livestock keeping is ranked second as a vital economic activity in the district, though its actual contribution to the district economy in terms of provisions of income, employment and contribution to GDP and Per Capita Income is yet to be accurately assessed.

The level of development in the district slightly differs from one division to the other, depending on agro-ecological zones and the type of crops grown. The people living in the eastern part of the district, which include Igamba and Iyula and the South-Western part of Vwawa division are relatively better off economically compared to people residing in other divisions.

4.1.1 District GDP and Per Capita GDP

It is observed in Table 48 that Mbozi district has the highest GDP among the districts of Mbeya region. However, due to its relatively high population growth rate, which by and large, accounts for the large number of people residing in the district, the district's Per Capita GDP is lower than that of Rungwe district. The control of population growth is an important strategy in raising district per capita GDP, thereby alleviating rural Poverty.

TABLE 48: MBOZI DISTRICT GDP AND PER CAPITA (AT CURRENT PRICES) ESTIMATES COMPARED WITH OTHER RURAL DISTRICTS OF MBEYA REGION

District	GDP (T.Shs. Mill.)	Per Capita GDP
Mbozi	**31,500**	**75,000**
Ileje	5,588	53,000
Mbarali	10,911	72,000
Kyela	10,489	69,210
Mbeya Rural	10,788	72,000
Rungwe	26,944	90,000
Chunya	13,226	68,000

Source: Regional Planning Office - Mbeya.

Fig. 22a: Distribution of GDP (Current Prices) Estimates Compared with other Rural Districts of Mbeya Region

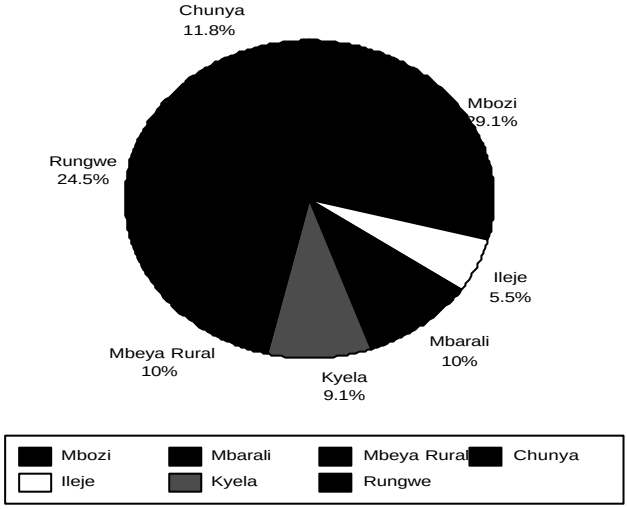
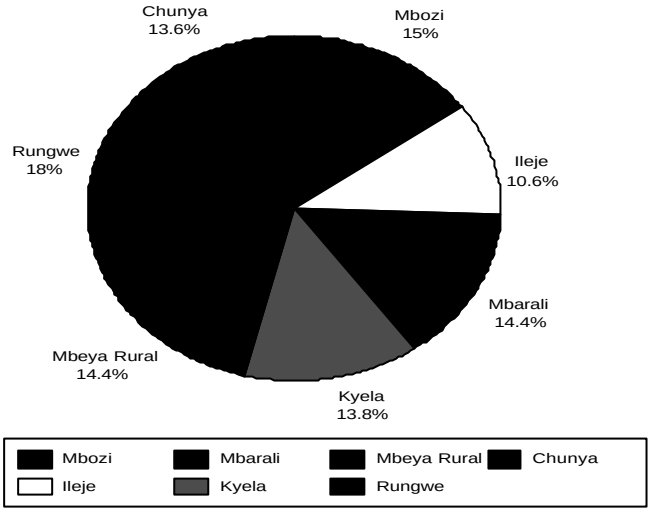


Fig. 22b: Distribution of Per Capita at Current Prices Estimates compared with other Rural Districts of Mbeya Region.



4.1.2 **Socio-Economic Indicators**

TABLE 49: **SELECTED MBOZI DISTRICT SOCIO ECONOMIC INDICATORS COMPARED TO THE REGIONAL AND NATIONAL AVERAGES 1995**

Indicator	Mbozi District	Regional Average	National Average
Population Density	35	28 person per sq.km.	26 persons
Form I Selection Rate (Public Schools)	3.7	4.2%	5.9
Primary School Gross Enrolment Rate	72	76%	74%
Life Expectancy	50	50	52
Literacy Rate	75%	78.6	67.5%
Infant Mortality Rate	46/1000	96/1000	96/1000
Under 5 Mortality Rate (U5MR)	173/1000	163/1000	158/1000

Maternal Mortality Rate (MMR)	425/100000	436/100,000	197/100,000
Physician/Population Ratio	1:32367	1:68,408	1:48,000
Hospital Bed/Population	1:1405	1:1,135	1:800

4.1.3 **Employment**

The agriculture sector is the major employer of the district's labour force, employing about 90% of the active working population. With the population estimated at 420,771 (1996), the labour force is around 202,000. A very small percentage of the labour force earns a salary. Whereas during the rainy seasons almost the entire labour force in the district could be said to be engaged in agricultural activities, in the dry season a good percentage becomes unemployed.

Thus inorder to alleviate poverty in the district, employment creation ought to be accorded high priority.

4.2 **Agriculture**

4.2.1 **Introduction**

Agriculture is the most important sector in the development of Mbozi District. The agricultural sector employs more than 90% of all residents in the district. Out of the total area of 967,000 hectares, 79.2% or 766,640 hectares are suitable for agricultural or livestock keeping activities. Presently only .....%

of the arable land is under agriculture and livestock keeping activities.

4.2.2 Agro-economic Zones

The district has three agro-economic zones based on soil and climatic conditions. The zones are discussed below:

(i) Lowlands Zone

Location

The Zone covers two divisions:

Kamsamba Division bordering Lake Rukwa, and Msangano Division.

General Features

This is a lowland area with unreliable rainfall and a high incidence of malaria and bilharzia. Population density is very low especially in Kamsamba division, such that there is plenty of unoccupied land and shifting cultivation is commonly practised.

Physical Resources

The zone forms part of the Lake Rukwa Rift Valley, Kamsamba division constitutes the shores of Lake Rukwa and Msangano and the Mfafia-Nkanka valley. It is a flat to gently

sloping area, dissected by many streams and varying in height from 840 meters. Soils vary from greyish brown sands on the higher areas to deep, dark grey silt loams and clays in the flatter parts. The average annual rainfall is between 600 and 900 mm. The natural vegetation is mainly Acacia-Combretum woodland in higher areas and hyparrhenia and sporobulus grassland elsewhere.

Land availability and tenure

Although the low lying areas are not suitable for cultivation, there is plenty of unused cultivable land. Land is claimed on an individual basis, it may be inherited and sometimes loaned, but is not sold or rented. Shifting cultivation is sometimes practiced.

Crops

The main crop are finger millet, maize, sorghum, sesame and some paddy in Msangano division. They are all grown primarily for subsistence purposes and surpluses are sold for cash.

Animal Husbandry

Cattle are of considerable importance, particularly in Kamsamba division while fishing is a major activity near Lake Rukwa.

(ii) **Coffee Zone**

Location

The zone covers the eastern part of the district, including Igamba and Iyula Divisions and all, but the South-Western part of Vwawa Division.

General Features

This is the highest, wettest and most densely populated part of the district. It resembles the adjoining Songwe zone valley of Mbeya district, especially in the East, and there is a gradual transition towards the Highlands zone of Mbeya and Rungwe in the South-East and .... of Rungwe in the South. The population density is low to medium.

Physical Resources

Much of the zone is hilly and steeply dissected. There are areas of undulating to rolling land, particularly the Mbozi Plateau around Vwawa. Altitude varies from about 1000 metres in the North to over 2000 metres in the extreme South East. Soils vary from reddish yellow to reddish brown clay loams and clays in the South to very dark brown of grey loams and clay loams in the North. They are shallow in hilly areas but deeper on more gentle slopes. The average annual rainfall varies from 800 mm. in the North to about 1500 mms. in the South-East. The dominant natural vegetation is Brachystegia-Julbernadia woodland. There is considerable unoccupied cultivable land, especially in the less fertile, North-Western part of the zone.

Crops

The main cash crop is coffee, others are phyrethrum, wheat for both cash and food. The main food crop is maize. Others are finger millet, cassava, beans, sweet potatoes and groundnut.

Animal Husbadry

Cattle, sheep and goats.

(iii) **South Western Plateau Zone**

Location

The zone includes Ndalambo Division and the South-Western part of Vwawa Division.

General Features

This area is the South-Eastern part of Ufipa Plateau. The population density is very low, especially in the North where there is plenty of unoccupied land and shifting cultivation is a common practice.

Physical Resources

Most of the zone consists of a rolling to hilly plateau, with seasonally waterlogged depressions and valleys. It is separated from the Msangano lowlands in the ease by a steep dissected hilly area. The elevation is mainly between 1400 and 1800 meters. Soils are mainly reddish brown in colour and vary from sands to sandy clay loams, except in the depressions, where there are very dark grey to black sands and loams. The average annual rainfall is about 900-1000 mms. and the dominant vegetation is Brachystegia woodland. There is plenty of unoccupied land suitable for cultivation, especially in the North part of the Zone. The shifting cultivation (chitemene) is commonly practiced.

Crops

The main crop is finger millet, which is used primarily for subsistence but surplus production is sold for cash. Most farmers also grow maize and some simsim while less important crops grown include sorghum, beans, groundnut and castor seeds.

4.2.3 Agro-Economic Zones Summary

Zones	Altitude range (M)	Rainfall	General Morphology and Soil Texture	Economic Activities
Lowlands of Lake	900 m. asl	Rainfall 600 mm - 900 mm.	Flat plains dissected by streams. Soils vary from greyish brown sands to deep, dark, grey silt loams	Crops grown are finger millet, maize sorghum, and some paddy.
Coffee Zone	1000 m - 2,000 m above sea level	Rainfall 800 mm - 2000 mm.	There are areas of undulating to rolling land. Soils vary from reddish yellow to reddish brown clay loams.	Cultivation of coffee, pyrethrum, maize, beans, sweet potatoes, groundnuts and cassava.
South Western Plateau	Lies between 1,400 and 1,800 meters	The average rainfall is about 900 - 1000 mm.	Most of the zone consists of a rolling to hilly plateau, with seasonally water logged depressions valleys.	Crops grown include maize, finger millet, sorghum, beans and groundnuts.

4.2.4 Crop Production:

The district produces a variety of both food and cash crops. The crops grown include maize, beans, cassava and millet which are basically grown as food crops but often sold as cash

crops as well while coffee, sunflower, tobacco, cotton, groundnuts and simsim are cash crops.

The district's strategy for increasing agricultural production includes the following:-:

- Expansion of land under cultivation.
- Increasing yield per unit area by promoting the use of organic manure.
- Expansion of area under irrigation.
- Popularizing the use of modern farm implements and use of draught animals.

(i) **Food Crops**

The production trend of food crops and hacters under cultivation for selected years between farming season 1985/86 and 1994/95 are shown in table 50. In general the figures do not show any significant increase of production of food crops in the district during the period.

TABLE 50: PRODUCTION OF MAJOR FOOD CROPS IN THE DISTRICT FOR SELECTED YEARS BETWEEN 1985/86 AND 1994/95

CROPS	QUANTITY	1985/86	1987/88	1989/90	1991/92	1992/93	1993/94	1994/95
Maize	MT	90,095	102,557	121,110	131,474	133,416	112,878	135,788
	Ha.	(60,063)	(63,307)	(55,050)	(64,193)	(56,708)	(48,750)	(63,750)
Beans	MT	8,198	10,045	15,675	9,653	10,340	8,780	8,992
	Ha.	(13,664)	(14,500)	(19,900)	(13,790)	(14,925)	14,630	(16,200)
Sorghum	MT	19,154	13,210	22,240	13,740	20,120	12,375	14,625
	Ha.	(12,769)	(9,214)	(13,900)	(9,164)	(13,510)	(8,310)	(9,600)
Cassava	MT	-	14,850	14,500	14,430	13,370	16,460	17,100
	Ha.	-	(1,650)	(1,700)	(1,650)	(1,600)	(1,850)	2,240
Sweet Potatoes	MT	12,100	8,320	12,750	13,120	11,470	8,400	9,750

Source: Planning Commission Compiled Data Based on:-
(i) Agricultural Production Report - Mbozi District.
(ii) Mbeya Region Socio-Economic Profile.

(ii) Cash Crop

Mbozi district produces between 45% and 55% of the annual coffee production in Mbeya Region. Likewise it produces on average 20% and 15% of the regional annual production of tobacco and cotton respectively. Other important cash crops grown include pyrethrum, sunflower, simsim and groundnuts. Table 51 indicates production of a few cash crops in the district for selected years between 1990/91 and 1994/95.

Fig. 23: Production of Major Food Crops in the District for Selected years betweeen 1992/93 and 1994/95

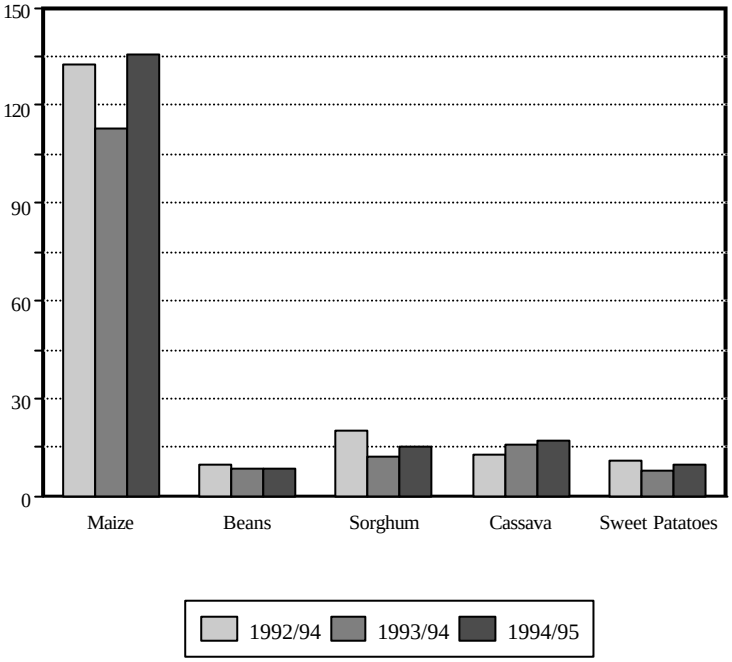


TABLE 51: PRODUCTION OF MAJOR CASH CROPSS IN THE DISTRICT

CROP/YEAR	1990/91 (MT)	1991/92 (MT)	1992/93 (MT)	1993/94 (MT)	1994/95 (MT)
Coffee	6,400	7,572	4,267	7,140	4,200
Tobacco	120	324	335	330	350
Cotton (Bales)	380	657	1,613	1,690	1,650
Sunflower	74	70	74	234	378
Groundnuts	245	4253	3765	2338	4200

Source: Planning Commission Compiled Data Based on:
(i) Mbeya Regional Socio-Economic Profile.
(ii) Agricultural Production Data from Mbozi District.

Mbozi district leads other districts of Mbeya region in the annual production of maize, beans, cassava, and coffee as Table 52 indicates. The table vividly indicates the key role played by Mbozi district in the agricultural production in the region.

TABLE 52: CONTRIBUTION OF MBOZI DISTRICT TO THE REGIONAL ANNUAL AGRICULTURAL PRODUCTION

Crop	Mbeya Region (MT)	Mbozi (MT)	%	Mbeya Region (MT)	Mbozi (MT)	%	Mbeya Region (MT)	Mbozi (MT)	%	Mbeya Region (MT)	Mbozi (MT)	%	Mbeya Region (MT)	Mbozi (MT)	%
Maize	430200	134000	31	451290	131474	29	436000	133416	30.6	425111	112878	27	501455	135788	27
Beans	36400	9512	26	34630	9653	27.8	35836	10340	29	30725	8780	29	30909	8992	29
Sorghum	37969	14480	38	28404	13740	48	30436	10120	33	32474	12375	38	30350	14625	48
Cassava	58300	13850	23.7	55500	14430	26	48977	13370	27	63838	16460	26	65400	17100	26
Coffee	12640	6400	50.6	11629	6279	54	8287	4267	51	9354	5140	55	9409	4200	45
Tobacco	800	120	15	1620	324	20	1800	335	18.6	1617	330	20	1650	350	21

Source: Planning Commission Compiled Data Based on:

(i) Mbeya Region Socio-Economic Profile.
(ii) Mbozi District Agriculture Annual Report.

Fig. 23a: Contribution of Mbozi District to the Regional Annual Agricultural Production 1990/91

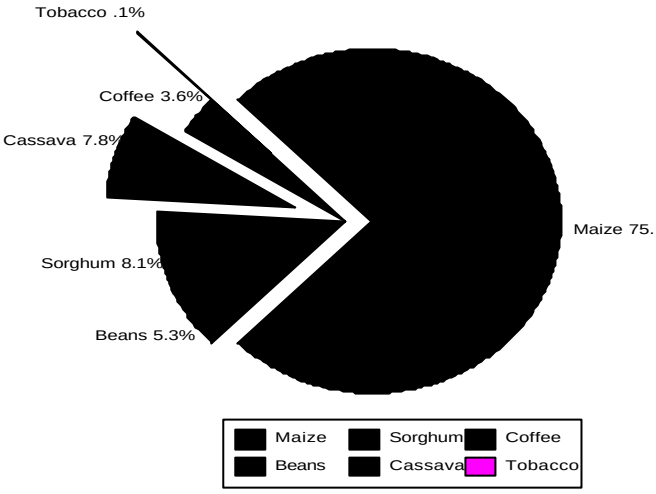


Fig. 23b: Contribution of Mbozi District to the Regional Annual Agricultural Production 1991/92

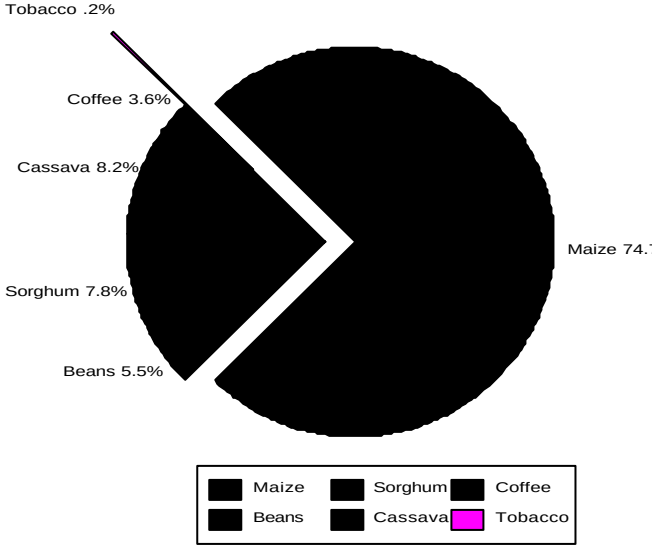


Fig. 23c: Contribution of Mbozi District to the Regional Annual Agricultural Production 1992/93

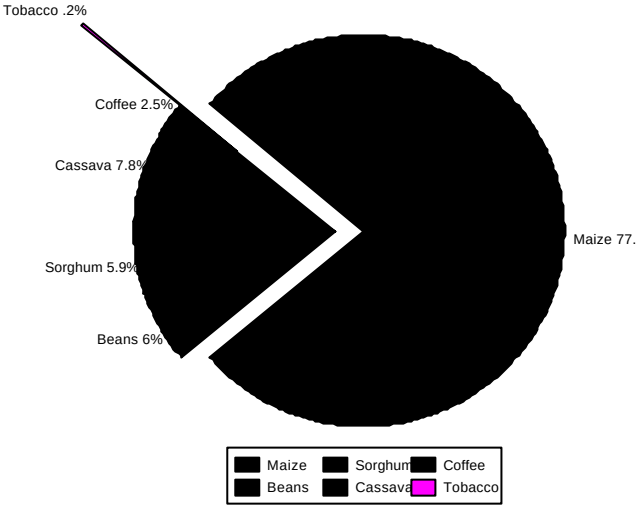


Fig. 24d: Contribution of Mbozi District to the Regional Annual Agricultural Production 1993/94

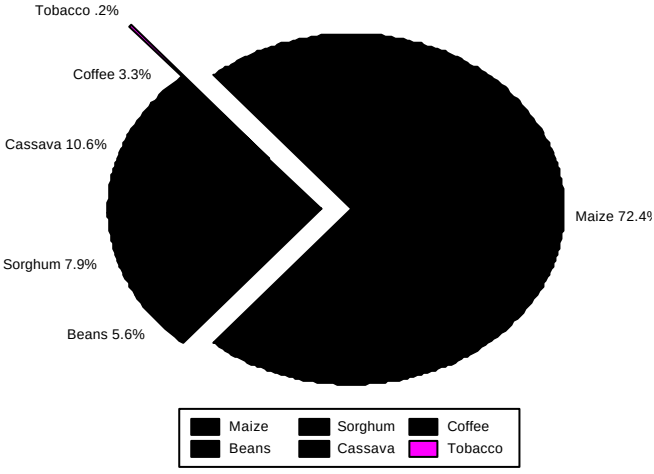
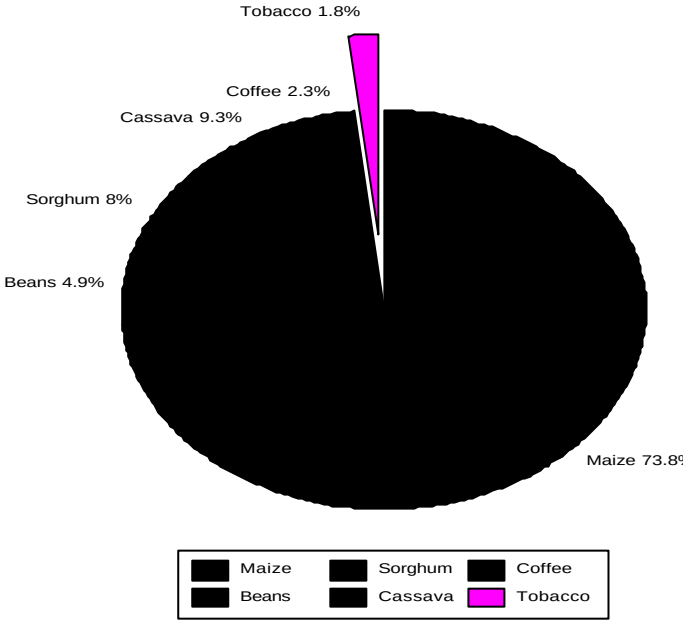


Fig. 24e: Contribution of Mbozi District to the Regional Annual Agricultural Production 1994/95



4.2.5 **Food Adequacy**

The district produces adequate food to feed its population and dispose off surplus. According data obtained from the district, in good years, it produces about 24,500 tons of protein and 225,900 carbohydrate foods, while the total annual requirements of protein and carbohydrate food are estimated at 19,500 and 117,000 tons respectively.

4.2.6 **Farm Implements**

The district has a total of 11,800 oxen ploughs, 80 oxen ridges, 56 harrows, 8500 ox cart and 90 tractors distributed in the district as shown in Table 53 Despite the existence of various farm implements in the district, the majority of the farmers still depend on hand hoes for cultivation. The implication of this situation is the inability of the district to increase agricultural production so as to increase per capita income siginificantly and meet food demand for the fast district growing population.

TABLE 53: FARM IMPLEMENTS 1995/96 SEASON BY DIVISION

Division	Ploughs	Ridges	Harrows	Ox-Carts	Tractor	Harvesters	Tractors Ploughs
Vwawa	940	20	12	1020	20	-	18
Iyula	1180	10	8	1275	13	-	11
Igamba	2950	32	18	2125	30	3	28
Kamsamba	3540	6	6	2550	10	-	9
Msangano	1770	4	5	850	4	-	3
Ndalambo	1420	8	7	680	13	-	12
District Total	11800	80	56	8500	90	3	81

Source: District Agriculture Office - Mbozi.

4.2.7 **Farm Inputs**

(i) **Fertilizers**

The supply of fertilizers in Mbozi district is sufficient to meet its demand. it is shown in Table 54 that the demand for NPK for instance in 1992/93 was 149 tones, in 1993/94 period the demand dropped to 47 tones and it was slightly lower in 1995/96 seasons. Weighing the supply side against the requirement as determined by the district agricultural office, reveals larger discrepancies. For example, the requirement of Urea in 1993/94 period was estimated at 3400 tones, while supply was 5458 tones and the actual tonnage utilized by farmer in that year reached 1521 tonnes, thus making supply of urea to be higher than the actual demand. The implication of this trend for district development is obviously a general decline in agricultural productivity.

TABLE 54: FERTILIZER DEMAND, SUPPLY AND SHORTFALLS IN MBOZI DISTRICT

Fertilizers (In Tonnes)	1992/93			1993/94			1994/95			1995/96		
	R	S	D	R	S	D	R	S	D	R	S	D
NPK	NA	149	NA	79	79	47	27	27	-	-	-	-
UREA	3400	2674	1244	3400	5458	1525	3400	3217	1919	3400	1640	1618
TSP	2500	1262	1262	2500	358	294	2000	1212	23.3	2000	547	106
CAN	9000	1831	850	900	2313	1288	900	843	632	9000	2047	1972
SA	200	665	663	200	1277	334	-	961	263	200	572	494
DAP	-	947	17	-	118	507	500	673	509	500	925	891

Source: District Agriculture office.

Key: R = Requirement, S = Supply, D = Demand.

NB Requirement is determined by the district agricultural office while supply of the Fertilizer is determined both by the private dealers and cooperative societies.

(ii) **Improved Seeds**

The improved seeds commonly used in Mbozi district are of different maize varieties. The varieties ranges from H.614, H.632 to Gargil. The comonly used type of maize in the district is H.614 whose demand has been relatively stable between 1990/91 and 1994/95.

It is surprising to note that, despite the effort put by the district agricultural office to promote usage of improved seeds, little rersponse has been observed. It is observed in Table 55 that the District planned the requirement for all types of improved maize seed to be 300 tonne per annum. However, the supply had never reached the target. For example, the supply of improved maize seeds in 1990/91 was 54 tonne, it increased to 111 tones in 1991/92 and ever since it has been dropping reaching an average of 48.2 tonnes per annum between the period 1992/93 and 1994/95.

Given that trend, the need for educating people on the usage of improved seeds is recommended.

TABLE 55: DEMAND AND SUPPLY OF IMPROVED SEEDS IN THE DISTRICT

Type	1990/91			1991/92			1992/93			1993/94			1994/95		
	R	S	D	R	S	D	R	S	D	R	S	D	R	S	D
Maize H.614	200	41-	41	200	72	65	41	41	41	200	36	29	200	40	36
H.632	20	5	5	20	8	8	5	5	5	20	23	2	3	0.4	0.4
H.6302	50	5	1	50	26	24	5	5	-	50	5	4	50	0.7	0.7
UCA	30	3	0.2	30	4	-	3	3	2-	30	0.5	0.3	300	0.4	0.4
CARCIL	-	-	-	-	1	-	-	-	-	-	0.7	0.6	-	1.4	1.2
TOTAL	300	54	48.2	300	111	97	48.2	48.2	48.2	3000	42.2	35.9	283	48.9	38.7

Source: District Agriculture Office Mbozi

Key: R = Requirement, S = Supply, D = Demand

4.2.8 **Storage Facilities**

The district has a total of 108 godowns with a total capacity of 42,120 tones. The utilization capacity is about 92 percent of the total capacity. These godowns are used for various purposes ranging from storage of crops such as maize, coffee and paddy as well as storage of farm inputs. More than 80% of these godowns which are owned by villages and cooperative societies are hired by private dealers.Table 56 shows the distribution of these godown by division.

TABLE 56: STORAGE FACILITIES IN THE DISTRICT BY DIVISION 1997

Division	Number of Godowns	Capacity	Utilised Capacity	Usage %
Vwawa	26	18020	18020	100
Iyula	30	2000	8000	100
Igamba	33	11550	11500	100
Kamsamba	5	950	200	21
Msangano	3	800	400	50
Ndalambo	11	2800	800	28
TOTAL	108	42120	38970	92

Source: District Agriculture Office - Mbozi

4.2.8 **Irrigation**

The district has a potential for developing irrigation farming. it is estimated that about 486 ha. are suitable for ririgation. The potential crops which can be grown include paddy, maize, beans and vegetables. Currently 215 ha. are under irrigation providing employment to 4224 farmers. The plan is underway to develop further irrigation system at Naminglongo and Msangano Valley by the Ministry of Agriculture.

4.3.0 **Livestock**

4.3.1 **Introduction**

The district in 1966 had an estimated 204,184 indigeneous cattle and about 2000 dairy cattle. Cattle population accounts for about 20% of the regional cattle herd and it ranks second to (old) Mbeya Rural district which included Mbarali in terms of livestock numbers. Between the National Livestock Census undertaken in 1984 and 1996, there has been a significant increase in the number of livestock in the district, partly due to immigration of nomadic pastoralists with their livestock into the area. The district is also estimated to have 42,096 goats and 18,900 sheep. Sheep throughout the country are relatively unimportant, thus their numbers are always small.

Currently, 1997, livestock units are concentrated in Kamsamba, Msangano and Ndalambo divisions. Table 57 indicates the growth of livestock units in the district.

TABLE 57: LIVESTOCK GROWTH IN MBOZI DISTRICT (1984 - 1996)

Livestock Unit	1984	1988	1996
Cattle	171,627	188,882	204,184
Goats	38,389	37,489	42,096
Sheep	17,301	16,083	18,921
Chicken	224,199	278,361	238,819

Source: District Livestock Office - Mbozi.

Fig. 24a: Livestock Growth (Cattle) in Mbozi District (1984 - 1996)

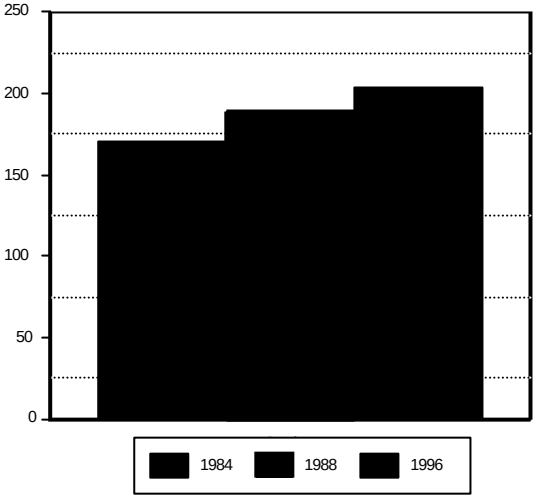


Fig. 24b: Livestock Growth (Goats) in Mbozi District (1984 - 1996)

Fig. 24c: Livestock Growth (Sheep) in Mbozi District (1984 - 1996)

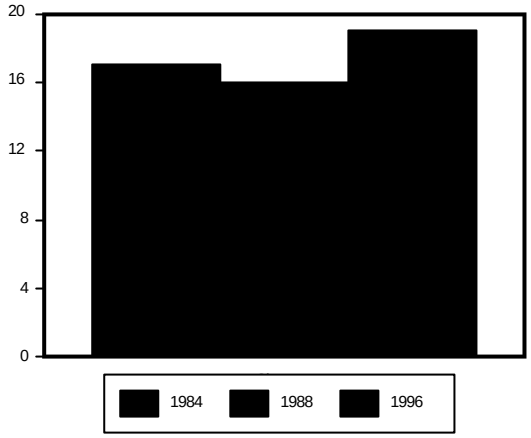
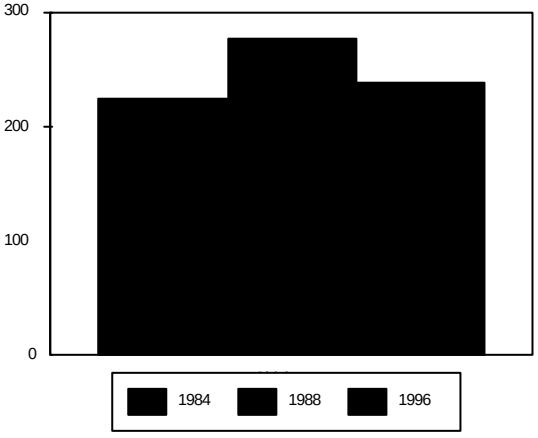


Fig. 24d: Livestock Growth (Chicken) in Mbozi District (1984 - 1996)



4.3.2 **Ownership**

Ownership of cattle and goats in the country is concentrated in a few households. This distribution pattern of livestock units also pertains in Mbozi District. It is estimated that only between 25% and 30% of the 80,000 or so households in the district own cattle. The average size of cattle herd is around ....6.... If distributed evenly in the district each household would possess on average 2% and - 3%.

4.3.3 **Livestock Development Indicators**

Research is urgently needed to determine calving, weaving, offtake and mortality rates of cattle in the district. However, it is generally believed that calving and weaning rates are very low. Adult cattle mortality rate is believed to be between 25% and 35%. The main causes of high cattle mortality rates are frequent occurences of common cattle diseases which include:-

- Anthrax
- Rindepest
- East Coast Fever
- Trypanosomiasis
- Tick borne diseases
- Worms
- Babesiosis
- Fluke
- Food and Mouth diseases.

4.3.4 **Livestock Infrastructure and Disease Control**

As observed above the district is faced with a number of livestock diseases. Therfore, in order to increase livestock productivity, both the district authorities and farmers need to take drastic measures aimed at controlling diseases. This calls for the construction and rehabilitation of depiladated livestock infrastructures such as: dips, verterinary centres, crushes etc. Strengthening of the livestock extension services and improvement of pastures should be part of the strategy designed for improving livestock productivity in the district.

To-date (1997), the district has 32 dips one veterinary clinic. Livestock infrastructure is indicated in Table 58.

TABLE 58: LIVESTOCK INFRASTRUCTURE IN THE DISTRICT

Division	Dips	Veterinary Centres	Slaughter slabs
Vwawa	12	1	-
Iyula	6	1	
	6	1	3
Kamsamba	4	1	2
Msangano	2	1	-
Ndalambo	2		1
Total	32	5	6

Source: Livestock Development Office - Mbozi.

4.3.5. **Livestock and Livestock Products Marketing**

The district has 6 primary livestock markets which are also used as markets for other commodities. The livestock markets are located in the following villages:-

- Kamsamba
- Mbao
- Chitete
- Ivuna
- Chilulumo
- Miyunga

The annual average livestock sales between (1990-1995) stood at.287 cattle.The data for goats and sheep are difficult to gather because most of the transanctions are concluded at home

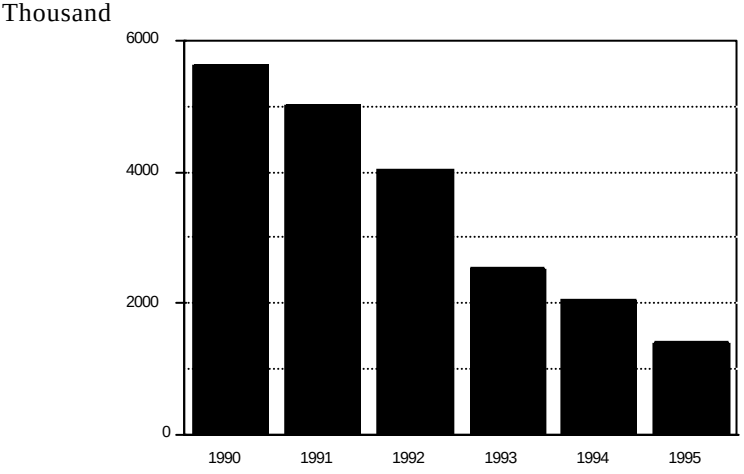
Currently the government is improving livestock marketing in the country by reviving and rehabilitating stock routes, holding grounds and marketing information systems. The number of livestock marketed in the district between 1990 and 1995 is indicated in Table 59.

TABLE 59: CATTLE MARKETED IN THE DISTRICT BETWEEN 1990 AND 1995

Year	Cattle
1990	5625
1991	5006
1992	4025
1993	2526
1994	2045
1995	1402
1996	-
Total	20638

N.B: 1996 there was no Livestock marketed due to quaranteen.

Fig. 25: Cattle Marketed in the Mbozi District Between 1990 and 1995



(ii) Livestock Slaughtered

It is noted in Table 60 that the number of cattle slaughtered in 1990 were 3047, that figure dropped to 1733 in the following year (1991). The drop is attributed to the outbreak of Foot and Mouth Disease which errupted in 1991 and 1994 which consequently led to the closure of livestock markets. The data for slaughtered Livestock units particularly goats and sheep are not realistic due to the fact that an insignificant number of livestock units are slaughtered at home.

TABLE 60: NUMBER OF LIVESTOCK SLAUGHTERED FROM 1990-1995

Year	Cattle	Goats	Sheep
1990	3.047	932	32
1991	1.733	445	13
1992	2.314	615	10
1993	3.115	501	21
1994	1,918	416	14
1995	2,128	715	8
Total	14,255	3,624	101

Source: District Livestock Development Office-Mbozi due to outbreak of Foot and Mouth.

Fig. 26a: Number of Livestock Slaughtered (Cattle) from 1990 - 1995

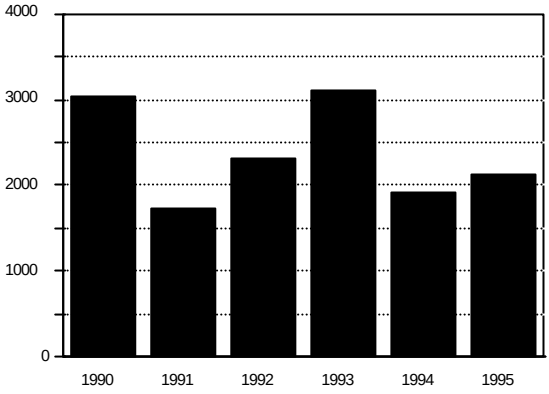


Fig. 26b: Number of Livestock Slaughtered (Goats) from 1990 - 1995

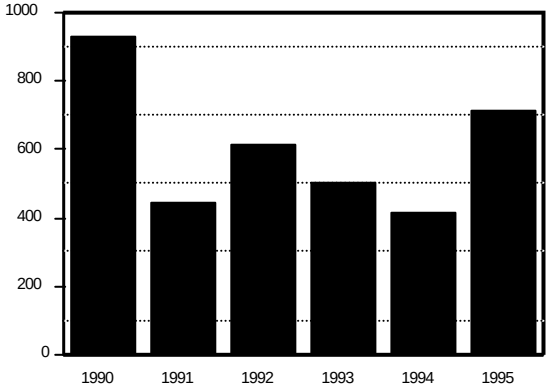
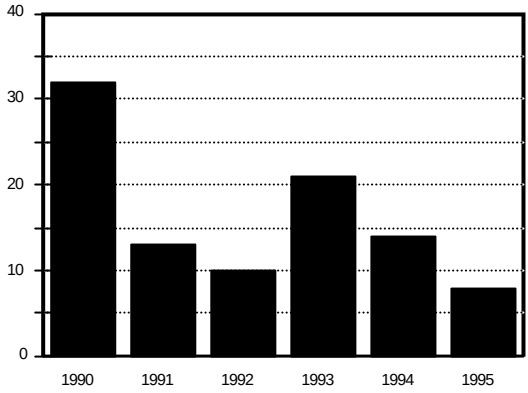


Fig. 26c: Number of Livestock Slaughtered (Sheep) from 1990 - 1995



(iii) Hides Skins Marketed in Mbozi District

Livestock/Year	1990/91	1991/92	1992/93	1993/94	1994/95
Cattle PCS	3372	3399	3370	2670	3102
Goats PCS	2115	1587	1315	1383	1882
Sheep PCS	-	-	-	-	-
Total	5487	4986	4685	4053	4984

4.4.0 **Natural Resources**

This sector comprises forests, beekeeping, fisheries and game.

4.4.1 **Forest**

Forests distribution - Mbozi district is well endowed with abundant forests covering an area of 10% of the district area. The district also has earmarked some of these forests as new forest reserves so as to maintain the ecological system. The reserved forests include the following:-

- Lungwa Forest..... 2,500 ha.
- Vwawa Group Water Catchment..... 1,000 ha.
- Senjele Reserve ..... 3,000 ha.

TOTAL: ..... **6,500 ha.**

These new forest reserves to be added to the existing former reserves are as follows:-

- Ivuna North Forest Reserve ..... 19,000 ha.
- Ivuna South Forest Reserve ..... 5,489 ha.
- Isalalo Forest Reserve ..... 28,547 ha.
- Chumwa Forest Reserve ..... 31,500 ha.
- Longsote Forest Reserve ..... 1,041 ha.
- Fonera Forest Reserve ..... 111 ha.
- Mtanzu Forest Reserve ..... 1,550 ha.

TOTAL: 87,243 ha.

Apart from other activities, the district through individuals, public institutions, schools and the district council has embarked on tree planting in all water catchment areas, slopes and open spaces under the agro-forest project assisted by EEC.

Demand for Forest Products

The annual demand for forest products particularly fuel-wood and timber is estimated at 164,000 M^3, while the regular annual supply is 69,000 M^3. Thus the demand for forest products in the district is higher than the actual supply. This situation tends to perpetuate encroachment and destruction of forest reserves. The estimated forestry products harvested between 1985 and 1995 are indicated in Table 61.

TABLE 61: FORESTRY PRODUCTS HARVESTED BETWEEN 1985 - 1995

Year/Output	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95
1 .Fuel wood Round wood (M^3)	50,000 (M^3)	55,000 (M^3)	24,000 (M^3)	70,000 (M^3)	100,000 (M^3)	100,000 (M^3)	164,000 (M^3)	110,000 (M^3)	115,000 (M^3)	117,000 (M^3)
2. Stacked (M^1)	768 (M^1)	1,200 (M^1)	3,000 (M^1)	1,500 (M^1)	1,600 (M^1)	2,000 (M^1)	2,500 (M^1)	2,000 (M^1)	3,500 (M^1)	2,400 (M^1)
3. Poles in Numbers	6,600	7,200	5,400	2,000	1,500	6,700	3,400	6,900	8,200	3,600
4.Timber production (hard wood and soft wood roduction in M^3)	1470 (M^3)	1590 (M^3)	1200 (M^3)	900 (M^3)	920 (M^3)	870 (M^3)	735 (M^3)	780 (M^3)	750 (M^3)	600 (M^3)

Source: Forest Department - Mbozi

Tree Planting and Afforestation Programme

In the past, tree planting in the district largely depended on the government efforts. The Government assumed responsibility for establishing tree nurseries where seedlings are raised and distributed free of charge to interested individuals and institutions. However, the district authorities report that the tree survival rate has been very low due to lack of care. The current district policy is to hive off raising of tree seedlings and the establishment of tree planntations and wood lots to private organisations, institutions and individuals to ensure sustainability.

In Mbozi district individuals, public institutions, schools and district council have jointly embarked on tree planting in order to protect water catchment areas, slopes and opens spaces under the Agro-Forest project assisted by the EEC.

(ii) **Beekeeping**

Mbozi district is well endowed with natural forest resources which are ideal for bee keeping. Thus Bee-keeping is one of the economic activities carried out by a number of households, using traditional equipment and techniques. The leading divisions in bee keeping are Kamsamba, Msangano and Ndalambo divisions. In the more forested areas in those divisions there is still an abundancy of flowering trees and shrubs, thus yields and bee-hive numbers could probably be increased considerably, particularly if appropriate modern apiary techniques were employed by the bee keepers. Currently, (1977) the district has a total of 1850 beehives, out

of which 191 are modern beehives. The beehives are distributed as Table 62 indicates.

TABLE 62: DISTRIBUTION OF TRADITIONAL AND MODERN BEEHIVES IN MBOZI DISTRICT (1996)

Division	Traditional Beehives	Modern Beehives	Total
Vwawa	300	51	351
Iyula	224	40	264
Igamba	180	40	220
Kamsamba	150	-	150
Msangano	345	40	385
Ndalambo	460	20	480
Total	1659	191	1850

Source: District Natural Resources Office - Mbozi.

TABLE 63: HONEY AND BEEWAX PRODUCTION IN THE DISTRICT

Year	Honey (Kgs)	Value in T.shs.	Beewax (Kgs)	Value in T.shs.
1990	13272	3971600	885	530880
1991	13272	3971600	885	530880
1992	19493	7797200	1299	779400
1993	19593	7837200	1306	783600
1994	19600	1176000	1306	130600
1995	20885	12531000	1392	139200

Source: District Natural Resources Office - Mbozi.

Fig. 27a: Honey Production in Mbozi District from 1990 - 1995

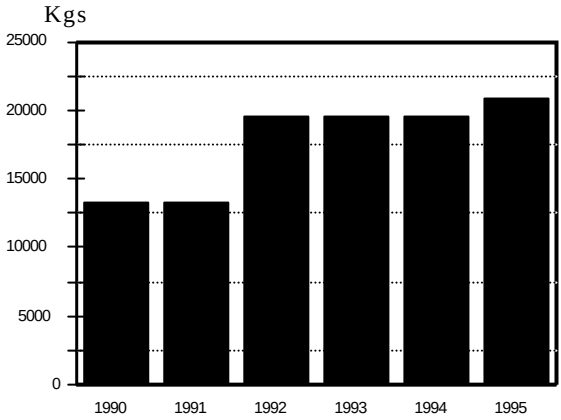
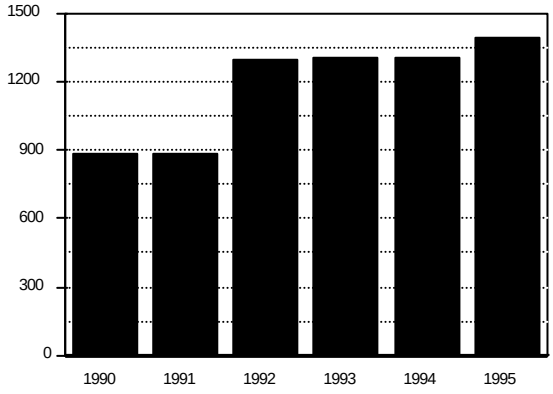


Fig. 27b: Beewax Production in Mbozi District from 1990 - 1995



(iii) **Fisheries**

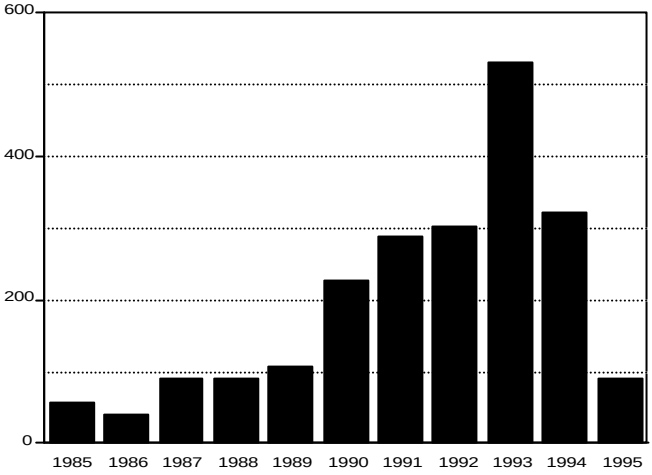
Fishing is one source of income for a few people residing in Kamsamba division, along the shore of Lake Rukwa. Lake Rukwa Shores cover about 48km. suitable for fishing. Fishing in the Lake is confined to shallow water because the fishing equipment so far used are dug out canoes from plunks of trees. These small vessels can't balance on open and deep part of the Lake from great waves and water turbulence when the lake gets rough. Mechanized vessels are needed for fishing in the open and deep parts of the lake.

TABLE 64: INDICATES THE FISH PRODUCTION IN THE DISTRICT BETWEEN 1985 AND 1995

Year	Tonnes	Value (Tshs)
1985	57	2263930
1986	40	1416210
1987	90	80531470
1988	90	8238350
1989	106	13955040
1990	227	8746430
1991	183	25646720
1991	290	36021950
1992	301	63099730
1993	531	770794750
1994	232	40430375
1995	91	274269550

Source: District Natural Resources Office - Mbozi.

Fig. 28: **Fish Production in Tonnes in the Mbozi District Between 1985 and 1985**



SECTION V

5.0 OTHER DEVELOPMENT ISSUES

5.1 Co-operative Development

There are 53 Co-operative Societies in the district. These societies can be grouped into 8 different categories as follows:-

(i) **Secondary or Co-operative Unions:**

There are two co-operative Unions namely:-

- Mbozi Co-operative Union Ltd. (MBOCU Ltd.)
- Isansa - Iyula Cooperative Union Ltd. (ISAYULA Ltd.)

(ii) **Primary Co-operative Societies:**

There are 32 primary societies, there are 19 primary societies affiliated to MBOCU Ltd., 8 primary societies affiliated to ISAYULA Ltd. And 5 independent primary societies in the district.

(iii) **Savings and Credit Co-operative Societies (SACCOS):**

There are 5 saving and credit cooperative societies, out of these 5 SACCOS, 3 are Urban situated and 2 are rural savings and credit socities.

(iv) **Fisheries Co-operative Societies**

There are three fisheries co-operative societies situated at Mlowo, Vwawa and Tunduma township.

(v) **Livestock Co-operative Societies**

There are 6 livestock Cooperative Societies situated both in rural and urban areas.

(vi) **Housing Primary Co-operative Society**

This is an urban based society designed to deal with building construction and housing programmes for members (situated at Vwawa town).

(vii) **Industrial Co-operative Society**

This is also an urban based society, situated at Vwawa township, dealing with tailoring, grain-milling and metal works.

(viii) **Consumers Co-operative Society**

It is an urban based society situated at Vwawa town, dealing with wholesale and retail business.

5.2 **Financial Institution**

There are several financing bodies in the district which finance different activities. These include NBC, Mbozi District Council, IFAD, ADP-Mbozi and Co-operative Societies.

	Financing Agency	**Type of Activities Supported**
1.	NBC Mbozi Branch	Business, small scale industries farm implement
2.	MDC (Mbozi District Council)	Women and Youth Development Project
3.	IFAD	Agricultural Inputs and means of transport
4.	ADP-Mbozi	Agricultural inputs, business farm implement
5.	Co-operative Societies	Coffee markets, agricultural inputs, coffee promotion and development (coffee nursery)

5.3 **NGO'S/DONORS SUPPORTING VARIOUS PROGRAMMES IN THE DISTRICT**

	NGO	Type of Project	Activities Undertaken
1.	COOPIBO ADP-MBOZI	Agriculture and Economic	Agriculture Development Programme: - Village godown construction - Agricultural knowledge using 5 farm service centres - Training in the promotion of Resource Efficient Agriculture (REA methods) - Training in the methodology of participatory research and extension PRE - Cheap roofing materials (sisal cement tiles) - Cheap transport facilities (ox-carts, donkey carts etc.) - Hiring out transport services - Culverts construction in villages
2.	EEC	Agriculture and Natural Resources	- Village godown construction - Coffee quality improvement - Agro-forest programme expansion
3.	FAO	Agriculture	- Village godown construction - Demonstration on the use of various type of fertilizers
4.	IFAD	Agriculture	- Extension and Rural financing services
5.	DANISH	Livestock	- Small scale dairy development programme
6.	SASAKAWA GLOBAL 2000	Agriculture	- Agricultural inputs to households at grassnots level
7.	IDA	Social Education	- Primary school rehabilitation 8th IDA project

8.	PEP (DANIDA)	Education	Primary Education Programme: - Primary school rehabilitation - Teachers education centres
9.	NORAD	Economic (roads	- Rural road maintenance

SECTION VI

6.0 POTENTIAL AREAS FOR INVESTMENT

6.1 Agriculture

Generally the district is well endowed with abundant land potentials suitable for agricultural development. Areas such as the lowlands which form Kamsamba and Msangano divisions are suitable for both crop production as well as livestock development. Crop suitable include paddy, finger millet, maize, groundnuts, sunflower, millet, simsim, palm, tobacco cassava and beekeeping.

In the highland areas which include Iyula, Igamba, Ndalambo and Vwawa, potentials available include crop production dairy keeping and afforestation. Suitable crops include maize, sunflower, coffee, wheat, pyrethrum and Irish potatoes.

The district has utilized only some of these potentials by growing traditional crops, such as maize, beans, finger millet, cassava as food crops and coffee as cash crops.

6.2 Industry

Since the district has high potential for agricultural activities, food processing industries, such as seed-oil extraction, fruit-canning, grain-milling etc. Constitute potential areas for investment. Salt-making and wood processing industries, especially in Tunduma, Mlowo and Vwawa, can also be undertaken on a commercial scale.

6.4 Education

Both primary and secondary Education is now highly demanded by the district due to economic changes in the country. Indigenous people and foreigners are encouraged to open private primary and secondary schools, so as to meet the actual demand of education as existing schools owned by government are not enough to meet this demand. Right now there is one person (indigenous) who has applied to open a primary school and one NGO with the same purpose. Apart from opening primary and secondary schools, the district is also encouraging people to open vocational schools, and technical colleges if possible.

6.5 Health

As stated before the district is in great need of health facilities, since there are only 45 health facilities which are not enough for the district. Following liberalization in the country, private people are being encouraged to open private health facilities in order to meet the existing demand for such facilities. Right now there are 14 private health facilities out of the existing 45 health facilities in the whole district.

6.6 Natural Resources: Forestry, Beekeeping, Fishing

Investment potentials are tremendous in the Natural Resources Sector in the district. Wood processing industries, been-keeping and fishing are some of the major economic activities that can be undertaken on a commercial scale. Afforestation projects can also be undertaken in Iyula, Vwawa, Igamba and

Komsamba Divisions by establishing raising tree-seedlings that can be sold to the people.

ANNEX

1.0 GENERAL INFORMATION ABOUT TANZANIA

Location: (29_0E-41^0; 1^0S - 12^0S)

Land Frontiers:

To the North:	Kenya and Uganda
To West:	Burundi, Rwanda and Zaire
To South:	Zambia, Malawi and Mozambique
To East:	Indian Ocean

AREA OF MAINLAND

Land area	881,289 Sq.Km.
Water area (Inland)	61,495 Sq.Km.
Tanzania area	942,784 Sq.Km.

TANZANIA MAINLAND AREA BY REGIONS (SQ KM)

Total	**942,784**		
Arusha	84,567	Morogoro	70,799
Coast	32,407	Mwanza	35,248
Dodoma	41,311	Lindi	66,046
Iringa	58,936	D'Salaam	1,393
Kigoma	45,066	Rukwa	75,240
Kagera	39,627	Ruvuma	66,477
Kilimanjaro	13,309	Shinyanga	50,781

Mara	30,150	Singida	49,341
Mbeya	62,420	Tabora	76,151
Mtwara	16,707	Tanga	26,808

Population

TOTAL POPULATION AND LIFE EXPECTANCY FOR TANZANIA - BY REGIONS, 1967, 1978, 1988, 1996.

REGION	TOTAL POPULATION				LIFE EXP. 1988	
	1967 (No.)	1978 (No.)	1988 ('000)	1996** ('000)	M Yrs	W Yrs
Dodoma	709,380	972,005	1,234.9	1,472.5	57	58
Arusha	610,474	926,223	1,348.4	1,784.0	46	51
Kilimanjaro	652,722	902,437	1,106.0	1,703.5	50	50
Tanga	771,060	1,037,767	1,307.3	1,521.8	45	47
Morogoro	682,700	939,264	1,254.0	1,519.4	44	47
Coast	428,041	516,586	636.5	740.9	44	45
Dar es Salaam	356,286	843,090	1,357.6	1,945.7	47	49
Lindi	419,853	527,624	645.0	744.8	57	62
Mtwara	621,293	771,818	887.4	976.7	46	48
Ruvuma	395,447	561,575	781.4	1,001.3	46	48
Iringa	689,905	925,044	1,206.0	1,472.9	45	48
Mbeya	753,765	1,079,864	1,472.7	1,857.0	45	48
Singida	457,938	613,949	789.9	949.4	44	48
Tabora	502,068	817,907	1,033.8	1,232.6	46	50
Rukwa	276,091	451,897	693.3	954.7	44	47
Kigoma	473,443	648,941	857.8	1,047.6	48	50
Shinyanga	899,468	1,323,535	1,768.6	2,194.83	48	51
Kagera	658,712	1,009,767	1,358.8	1,659.5	54	55
Mwanza	1,055,883	1,443,379	1,874.4	2,270.9	53	54
Mara	544,125	723,827	968.6	1,202.0	48	51
Tanzania Mainland	11,958,654	17,036,499	22,582.4	28,252.2	49	51
Zanzibar North	56,360	77,017	97.1	119.0	46	47
Zanzibar South	39,087	51,749	70.2	91.8	45	50
Zanzibar Urban	95,047	142,041	208.4	290.4	46	52
Pemba	72,015	106,290	137.4	172.6	46	48
Pemba	92,306	99,014	127.7	160.4	45	50
Zanzibal Is.	354,815	476,111	640.7	834.2	46	49

Tanzania United Rep.	12,313,469	17,512,610	23,223.1	29,086.4	47	50

Note: The projections are based on the national Population Census of 1988, and the calculated growth rates since the 1978 census.

Source: Bureau of Statistics.

Land Use

	(Ha (millions)	Proportion
Small holder cultivation	4.1	5%
Large scale agriculture	1.1	1%
Grazing Land	35.0	39%
Forest and Wood Lands	44.0	50%
Other Lands	4.4	5%
Total	88.6	100%

Arable Land

Arable Land (Ha)	3,634,000

Lakes

Victoria	34,850 sq km
Tanganyika	13,350 sq km
Nyasa	5,600 sq km
Rukwa	2,850 sq km
Eyasi	1,050 sq km
Natron	900 sq km
Manyara	320 sq km

Mountain summits (metres above sea level)

Kilimanjaro	5,895
Meru	4,566

Climate

(a) Rainfall

Main rain season on the coast is between March and May and the second season is between October and December. Rainfall is well distributed throughout the year but there is a peak during March and May.

Average maximum temperature (degrees centigrade)

	Jan.	Apr.	July	October
Dar es Salaam	31.6	30.1	28.6	31.3
Arusha	28.9	25.3	21.1	27.3
Dodoma	31.4	28.4	26.0	30.2

Average manimum tempereture (degrees centigrade)

	Jan.	Apr.	July	October
Dar es Salaam	23.3	22.9	18.3	31.3
Arusha	12.2	16.9	12.6	27.3
Dodoma	19.2	13.5	16.2	30.2

Gross Domestic Product at factor cost (billion Shs.) 1992.

At current price	688.0
At constant prices	32.2
GDP growth rate at 1976 prices 1985-92	3.69%
Per capita	27,355
At current price	27,355
At constant price	1,280

1.2 SOCIAL SERVICES

HEALTH FACILITIES

YEAR	HOSPITALS	RHC	DISPENSARIES
1960	98	22	975
1980	149	239	2,600
1990	173	276	3,014

Education: Enrolment rates 1990 compared with other east Africa countries

COUNTRY	GROSS ENROLLMENT	
	PRIMARY	SECONDARY
KENYA	94	23
UGANDA	76	13
TANZANIA	63	4

NATIONAL PARKS

National Parks (area in sq km)

PARK	LOCATION AND PARTICULARS
(i) SERENGETI NATIONAL PARK	**LOCATION:** At the border of Arusha & Mara Region, about 32 km from Arusha town **AREA SIZE:** 14,763 square km. It is the largest and oldest Park in Tanzania having been established under the British Colony in 195l. It contains the greatest and most spectacular concentration of plain animals left any where in Africa. **MAJOR ATTRACTIONS:** Wildebeest about 1.7 million, Lions 3,000. About 35 species of animals and 500 species of birds, Buffalos, Chetah, Leopards etc.
(ii) **LAKE MANYARA NATIONAL PARK**	**LOCATION:** Some 125 Kilometres South West of Arusha town. It was officially established and gazzetted as a National Park in 1960. **AREA:** Lake Manyara National Park covers a total area of 320 square kilometres, 230 kilometres constituting Lake Manyara itself. **MAJOR ATTRACTIONS:** The Rift Valley edge on the West with the vast lake underneath. Natural forest with many natural rivers and springs. Tree-climbing lions, various species of animals plus about 360 species of birds, Elephants, Hippos, Leopards, Baboons etc.
(iii) TARANGIRE NATIONAL PARK	**LOCATION:** South of Arusha town along the Dodoma Highway. It was established in l970. **AREA:** Tarangire National Park covers some 2,600 Square kilometres. **MAJOR ATTRACTIONS:** Tree climbing pythons, zebra, kongoni, elephant, buffalo, waterbuck, gazettes and oryx.

(iv)ARUSHA NATIONAL PARK (MOMELA)	**LOCATION:** The Park is located between Mount Meru and Mount Kilimanjaro. Formally Ngudoto National Park until 1967. Was commissioned as National Park in 1960. **AREA:** The park covers some 137 square Kilometres. **MAJOR ATTRACTIONS:** Ngurdoto Crater, Lake Momella, Mount Meru and the Natural Momela Forests. There are many species of Animals and birds. The most common being African elephant, colobus and velvet monkey, hippo, duicker and a number of bird species.
(v)KILIMANJARO NATIONAL PARK	**LOCATION:** The Kilimanjaro National Park which derived its name from Mount Kilimanjaro is part and parcel of the Mountain. It was established in 1973. **AREA:** The bounderies of the Park include the natural forest under and around the Mountain. It covers some 760 square Kilometres. **MAJOR ATTRACTIONS:** Mount Kilimanjaro with its three peaks Shira (3,962 metres) Mawenzi and Kibo (5,149 and 5,895 metres respectively) above sea level form the largest part of the Park's attraction. There are also various species of Animals, plants and birds.
(vi)MIKUMI NATIONAL PARK	**LOCATION:** It is situated some 216 km along the Dar - Zambia Highway. It was established in 1964. **AREA:** Mikumi National Park which borders with Africa's largest Game reserve, the Selous is the third biggest National Park after Serengeti and Ruaha National Park and covers 3230 sq km. **MAJOR ATTRACTIONS:** The plains sorrounding River Mkata which are rich in flora and fauna are by themselves a wonderful scenarial. The common animals found in the park include zebra, buffalos, elephants, Hippos, lions and the Impalas.

(vii)UDZUNGWA NATIONAL PARK	**LOCATION:** This Park is located South of Mikumi National Park along the Mikumi-Ifakara Highway. The Park was established in 1992. **AREA:** The Park which derives its identity from the famous Udzungwa mountain has an area of 1990 square kilometres. **MAJOR ATTRACTIONS:** Its unique species of Fauna and Flora which called for its declaration as a National Park. The Udzungwa Mountains and Forests are a good source of Rivers and springs, one of them being the famous Kilombero River, which constitutes the essential part of the multi-hactoral its total Kilombero Sugar Plantations. Additional attractions: Lions, Buffalos, Giraffes etc.
(viii)RUAHA NATIONAL PARK	LOCATION: The name Ruaha, is derived from the Hehe word "Luvaha" meaning a river. **AREA:** Park covers an area of 12,950 square kilometres, the second largest in the country. Ruaha National Park which was established in 1964 is situated some 130 km west of Iringa town. **MAJOR ATTRACTIONS:** The Ruaha River by itself is an attraction, leave alone some hundreds of species of Flora which sorround it. Besides there are a lot of Crocodiles, Hippos, Elephants etc.
(ix) KATAVI NATIONAL PARK*	**LOCATION:** It is located in Mpanda District, Rukwa Region. It was established in 1974. **AREA:** The Katavi National Park which is about 40 kilometres South -East of Mpanda town covers an area of 2,253 square kilometres. **MAJOR ATTRACTION:** Lakes Chala and Chada plus other springs and rivers whose waters feed into lake Rukwa constitute a unique environment. Animals in the park include zebra, sable, eland, leopard, buffalo, lion, antelops etc. Animals like, Buffalos, Elephants, Zebras and BushBucks are a good attraction to visitors.

(x)MAHALE NATIONAL PARK	LOCATION Located some 120 south of Kigoma town along the shores of lake Tanganyika, Mahale National Park is yet another attraction in Tanzania's Natural Heritages. AREA: Mahale nation Park has about 1,613 square kilometres and was gazzetted in 1948. MAJOR ATTRACTIONS:Chimpanzees are a major attraction. Also there is a good number of monkey species including red colobus monkeys. It is estimated that there are 700 Chimpanzees in Mahale and 15 species of monkeys whose habits tally with those of the Chimps.
(xi) GOMBE NATIONAL PARK	LOCATION Gombe National Park is situated 16 km north of Kigoma town in western Tanzania. It is a narrow strip of mountainous country bounded in the east by the eastern rift valley escarpment and by lake Tanganyika in the west AREA: Covering some 52 square kilometres. National park, was commssioned in 1968. MAJOR ATTRACTIONS:Ever green forests and primates. These include Chimpanzees, Baboons, blue monkey red tails and red colobus.
(xii) RUBONDO NATIONAL PARK	LOCATION: The Park which form park of a number of archipelagos in Lake Victoria covers some 240 square Kilometres. it was established in 1977 MAJOR ATTRACTIONS: The Chimpanzees. But other attractions include, Hippos, Giraffes, and Elephants. the absence of man-eaters such as Lions & Leopards ensures a safe walk in Rubondo Park even some fishing activities with boats under Park wardens are carried out.
(xiii) NGORONGORO	LOCATION: It is situated west of Arusha town some 230 kms. AREA: The park covers 8320 sq km MAJOR ATTRACTION: Wildebeest, Lions, Buffalos, Leopards, Variety of birds species, Giraffes, elephans etc