



THE UNITED REPUBLIC OF TANZANIA

MBEYA REGION SOCIO-ECONOMIC PROFILE



Joint Publication by:
THE PLANNING COMMISSION
DAR ES SALAAM
and
REGIONAL COMMISSIONER'S OFFICE
MBEYA

TABLE OF CONTENTS

| | Pages |
|--|--------------|
| FOREWORD | v |
| SECTION I | 1 |
| LAND POPULATION AND CLIMATE | 1 |
| GEOGRAPHICAL LOCATION:..... | 1 |
| REGIONAL AREA AND ADMINISTRATIVE UNITS..... | 1 |
| ADMINISTRATIVE DIVISIONS:..... | 2 |
| LAND USE: | 4 |
| (III) 1.2.1 ETHNIC GROUPS:..... | 7 |
| (IV) 1.2.2 POPULATION SIZE AND GROWTH:..... | 7 |
| POPULATION DENSITY AND DISTRIBUTION : | 12 |
| MIGRATION :..... | 19 |
| 1.1.4 TOPOGRAPHY: | 23 |
| SECTION II | 25 |
| 2.0 THE REGIONAL ECONOMY :..... | 25 |
| 2.1 INTRODUCTION | 25 |
| 2.3 PRODUCTIVE SECTORS..... | 40 |
| 2.3.1 Agriculture:..... | 40 |
| A. <i>FOOD CROPS</i> | 40 |
| CASH CROPS: | 45 |
| IRRIGATION : | 52 |
| FARM IMPLEMENTS :..... | 53 |
| FARM INPUTS:..... | 55 |
| 2.3.5 STORAGE FACILITIES | 57 |
| LIVESTOCK | 58 |
| 2.4.2 DIARY CATTLE DEVELOPMENT..... | 62 |
| 2.2.5 LIVESTOCK INFRASTRUCTURES: | 65 |
| 2.5 NATURAL RESOURCES:..... | 67 |

| | |
|---|------------|
| 2.5.1 Introduction:..... | 67 |
| Afforestation:..... | 70 |
| 2.5.4 Wildlife:..... | 73 |
| 2.5.5 Beekeeping:..... | 74 |
| FISHING INDUSTRY:..... | 78 |
| MINING:..... | 84 |
| INDUSTRIAL ACTIVITIES:..... | 85 |
| SECTION III..... | 88 |
| ECONOMIC INFRASTRUCTURE:..... | 88 |
| ROAD NETWORK:..... | 88 |
| <i>Introduction:</i> | 88 |
| SOURCE: PLANNING COMMISSION - COMPILED DATA BASED ON DISTRICT SOCIO-ECONOMIC PROFILES-1996..... | 89 |
| ROAD NETWORK MAP - MBEYA REGION..... | 90 |
| <i>RAILWAY TRANSPORT:</i> | 95 |
| <i>AIR TRANSPORT:</i> | 95 |
| <i>WATER WAYS: (Marine Transport)</i> | 95 |
| ENERGY:..... | 96 |
| ELECTRICITY:..... | 96 |
| FUELWOOD AND CHARCOAL:..... | 97 |
| SOLAR ENERGY:..... | 98 |
| BIO-GAS ENERGY:..... | 98 |
| COAL AND PADDY HUSKS:..... | 98 |
| POSTS AND TELECOMMUNICATION NETWORK:..... | 98 |
| SECTION IV..... | 101 |
| SOCIAL SERVICES..... | 101 |
| EDUCATION:..... | 101 |
| PRIMARY EDUCATION:..... | 101 |
| PRIMARY SCHOOL DROP-OUTS:..... | 120 |
| SECONDARY SCHOOL EDUCATION..... | 132 |
| ADULT EDUCATION..... | 138 |

| | |
|--|------------|
| OTHER TRAINING INSTITUTIONS: | 141 |
| HEALTH SECTOR: | 142 |
| DISPENSARIES: | 144 |
| HEALTH CENTRES: | 145 |
| HOSPITAL SERVICES: | 146 |
| <i>Mortality:</i> | 149 |
| MATERNAL MORTALITY | 151 |
| MALNUTRITION: | 154 |
| IMMUNIZATION | 157 |
| WATER SECTOR | 159 |
| (A) URBAN WATER SUPPLY: | 161 |
| RURAL WATER SUPPLY SCHEMES: | 163 |
| ENVIRONMENTAL SANITATION: | 165 |
| SECTION V | 167 |
| OTHER RELATED DEVELOPMENT ISSUES: | 167 |
| CO-OPERATIVE ACTIVITIES:..... | 167 |
| A. <i>UNIONS:</i> | 167 |
| PRIMARY CO-OPERATIVE SOCIETIES: | 169 |
| WOMEN IN DEVELOPMENT: | 171 |
| SECTION VI | 175 |
| DEVELOPMENT POTENTIALS AND PROSPECTS: | 175 |
| AGRICULTURE: | 175 |
| IRRIGATION:..... | 175 |
| ANIMAL HUSBANDRY: | 177 |
| BEEKEEPING: | 177 |
| FISHING: | 178 |
| INDUSTRIES:..... | 178 |
| TOURISM: | 179 |
| MINING INDUSTRY: | 181 |

| | |
|---|------------|
| ANNEX I..... | 186 |
| 1.0 GENERAL INFORMATION ABOUT TANZANIA | 186 |
| AREA OF MAINLAND | 186 |
| TANZANIA MAINLAND AREA BY REGIONS (SQ KM)..... | 186 |
| POPULATION | 187 |
| LAND USE..... | 188 |
| ARABLE LAND:..... | 188 |
| LAKES | 188 |
| MOUNTAIN SUMMITS (METRES ABOVE SEA LEVEL)..... | 188 |
| CLIMATE..... | 189 |
| (A) RAINFALL..... | 189 |
| 1.2 SOCIAL SERVICES..... | 190 |
| HEALTH FACILITIES | 190 |
| EDUCATION: ENROLMENT RATES 1995 COMPARED WITH OTHER EAST AFRICA COUNTRIES..... | 190 |
| NATIONAL PARKS | 191 |

FOREWORD

1. *As we approach the 21st Century the problems facing rural areas in developing countries like Tanzania are numerous and formidable. Social and Economic services are deteriorating and proving to be unsustainable; school enrollment rates are declining; food situation is precarious; infant and maternal mortality rates continue to be high; unemployment is on the rise triggering off mass migration of youth from the rural areas into already overcrowded urban centres; in Mbeya Region, for example, land pressure is escalating and deforestation is going on at an alarming rate.*
2. *This situation has arisen because of many factors including ill - prepared rural development programmes and weak monitoring and supervision of the implementation of development programmes and sectoral strategies. The observed shortcomings in the policy formulation, project identification, design, and implementation in the developing countries is in turn attributed to lack of reliable and adequate data and information on the rural development process.*
3. *The publication of Regional Socio-economic Profiles series by the Planning Commission in collaboration with Regional Commissioner's offices should be viewed as a fruitful attempt towards finding solutions to the existing problem of data and information gap.*
4. *The Regional Profile series cover a wide range of data and information on geography, population, social economic parameters, social services, economic infrastructure and productive sectors. The publications so far have proved to be of high demand and a vital source of information to many*

policy makers, planners, researchers, donors and functional managers.

The Planning Commission has found it a worthwhile effort to extend the exercise to cover even more regions. Readers are invited to make suggestions and constructive criticisms which can assist in improving the quality and effectiveness of future Profiles.

5. *I would like to take this opportunity to acknowledge with thanks once again the financial support of the Royal Norwegian Embassy which facilitated the preparation of the Mbeya Region Socio-Economic Profile. I would also like to thank both the Planning Commission and Mbeya Regional Planning Staff who put a lot of effort into ensuring the successful completion of this task.*



Nassoro W. Malocho (MP)

MINISTER OF STATE

PLANNING AND PARASTATAL SECTOR REFORM

April 1997

SECTION I

LAND POPULATION AND CLIMATE:

Geographical Location:

Mbeya Region originally belonged to the Southern Highlands Province. In 1963, the Southern Highlands Province was split into two regions namely, Mbeya and Iringa. In 1972, Mbeya Region was extended to incorporate Sumbawanga District which before then belonged to the Western Province. However, the inclusion of Sumbawanga District into Mbeya Region did not last long because in 1974 Sumbawanga District was separated and accorded full Regional status.

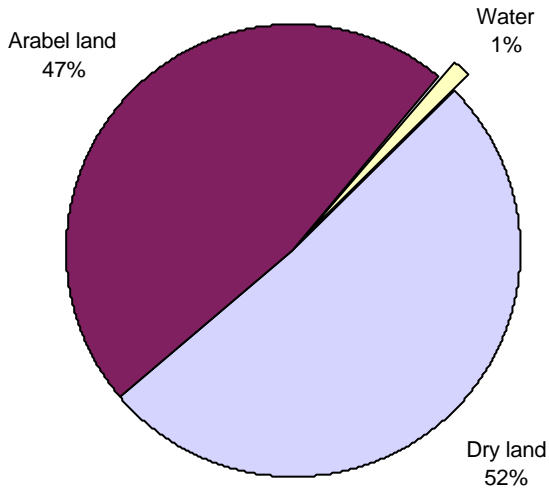
It is located in the South Western Corner of the Southern Highlands of Tanzania. The Region lies between Latitudes 7° and 9° 31' South of Equator, and between Longitudes 32° and 32° and 35° East of Greenwich. Mbeya region lies at an altitude of 475 metres above sea level with high peaks of 2981 metres above sea level at Rungwe higher attitudes.

Mbeya shares borders with countries of Zambia and Malawi to the immediate South; Rukwa Region to the West; Tabora and Singida Regions to the North; while Iringa Region lies to its East, with Tunduma and Kasumulu in Mbozi and Kyela districts respectively being the main entries and/or exist into neighbouring countries of Malawi and Zambia.

Regional Area and Administrative Units

The Regional spacial area covers 63,420 Sq.kms. which is 6.4% of the total area of the United Republic of Tanzania. Out of the regional surface areas, 61,868 Sq.Kms. is dry land, about 57,000 Sq.kms. arable land; and 1.757 Sq.kms. is covered with water.

Fig. 1: Distribution of surface area in sq. km, Mbeya Region



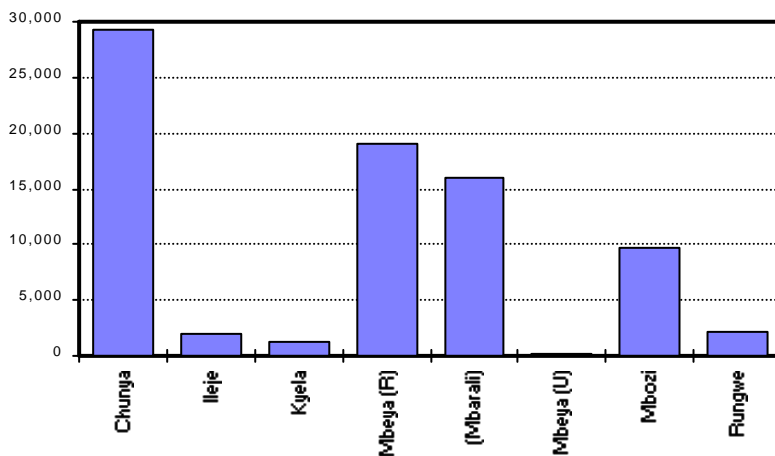
Administrative Divisions:

Mbeya Region is divided in six Administrative districts namely Chunya, Ileje, Mbeya, Mbozi and Rungwe. However, the official establishment of the seventh district of Mbarali (curved from Mbeya District) is soon to be effected. The districts are further divided into 25 divisions which are subdivided into 135 wards and 577 villages.

Table I: MBEYA REGION ADMINISTRATIVE UNITS BY DISTRICT

| Districts | Area (Sq.Km.) | Regional Share (%) | No. of Divisions | No. of Wards | No. of Village |
|-----------|---------------|--------------------|------------------|--------------|----------------|
| Chunya | 29,219 | 46.0 | 4 | 22 | 34 |
| Ileje | 1,908 | 3.0 | 2 | 13 | 35 |
| Kyela | 1,322 | 2.0 | 2 | 14 | 82 |
| Mbeya (R) | 19,093 | 30.0 | 5 | 21 | 158 |
| (Mbarali) | (16,000) | (25.15) | (2) | (8) | (71) |
| Mbeya (U) | 185 | 1.0 | 2 | 20 | - |
| Mbozi | 9,679 | 15.0 | 6 | 26 | 141 |
| Rungwe | 2,211 | 3.0 | 4 | 30 | 136 |
| Total | 63,617 | 100.0 | 25 | 163 | 594 |

Source: Mbeya Regional Data Bank, 1996

Fig. 2: Distribution of land (sq. km) by District in Mbeya Region

LAND USE:

Land in Mbeya Region is put under different uses as Table II highlights.

Table II: **LAND CLASSIFICATION IN MBEYA REGION**

| Classification | Area in Sq.Kms | Area in Hectares | Area Share (%) |
|--|----------------|------------------|----------------|
| Arable Land | 57,000 | 5,700,000 | 89.6 |
| Game Reserves | 990.4 | 99,040 | 1.6 |
| Forest Reserves | 2,314 | 231,400 | 3.6 |
| Water Bodies | 1,757 | 175,700 | 2.8 |
| Other Land Use (Settlement, in district etc) | - | 190,842 | 3.0 |
| Total | 63,617 | 6,361,700 | 100 |

Source: Planning Commission - Compiled Data from District Profiles

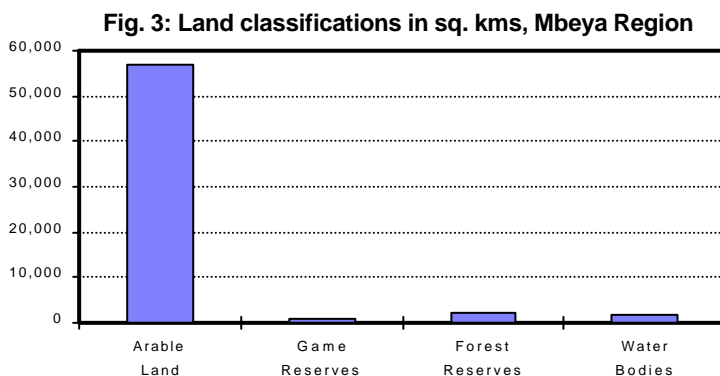


Fig. 4: Land classification (Area thousands Ha.) in Mbeya Region

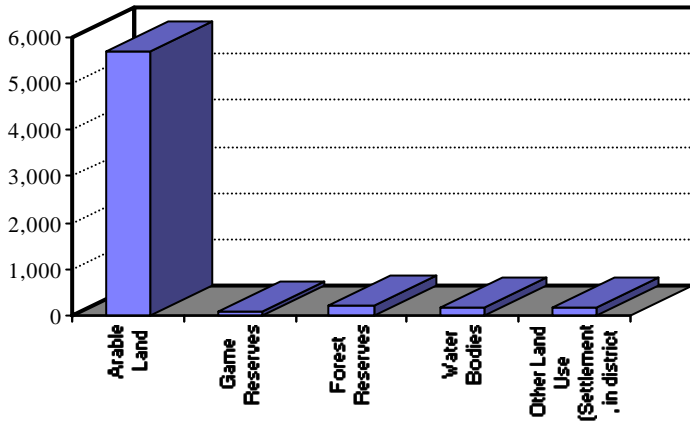


Table III below shows the intensity of land use in each District. One serious observation can be made in Table III. That is, in Kyela district all arable hectares of land are being utilised

Table III: LAND USE BY DISTRICT IN MBEYA REGION

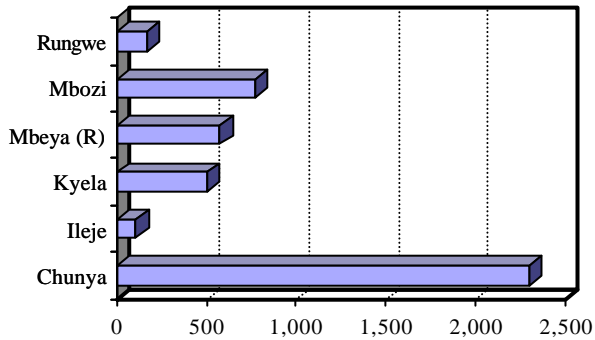
| District | Arable land (Ha.) | Land under Agriculture (Ha.) | % of Land under Agriculture | Game Reserve (Ha.) | Forest Reserve (Ha.) | Water Area (Ha.) | Others (Ha.) |
|-----------|-------------------|------------------------------|-----------------------------|--------------------|----------------------|------------------|--------------|
| Chunya | 2,300,500 | 51,200 | 2.2 | 200,000 | 39,640 | 110,500 | 281,760 |
| Ileje | 101,600 | 350 | 0.3 | - | 6,050 | - | 83,150 |
| Kyela | 500,000 | 500,000 | 100 | - | 6,320 | 45,000 | 30,880 |
| Mbeya (R) | 572,089 | 211,420 | 37 | 500 | 46,623 | - | 1,290,088 |
| Mbozi | 766,640 | 421,652 | 55 | 93,738 | - | 29,200 | 78,322 |

| | | | | | | | |
|--------------------|-----------|-----------|----|---------|---------|---------|-----------|
| Rungwe | 166,820 | 67,420 | 40 | - | 4,450 | - | 49,830 |
| Average Total Area | 4,407,649 | 1,252,042 | 28 | 200,000 | 196,821 | 184,700 | 1,822,030 |

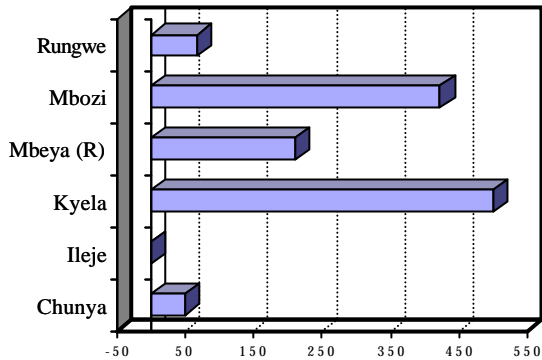
Source: Planning Commission Compiled Data

for agricultural activities. Unlike Chunya and Ileje districts where only 2.2 and 0.3 percent of their rable land are under agriculture respectively.

Fig. 5: Arable land (Thousands Ha.) use by District Mbeya Region



**Fig. 6: Land under Agriculture (Thousands Ha.)
by District , Mbeya Region**



(iii) 1.2.1 Ethnic Groups:

The indigenous tribes of Mbeya region are of Bantu Origin, who are believed to have moved into the region a long time ago. The ethnic groups in the region are Nyakyusa in Kyela and Rungwe Districts, Safwa, Malila and Sangu in Mbeya District, Nyika and Nyamwanga in Mbozi District, Ndali in Ileje District, and Bunguu and Kimbu in Chunya district. Between 1970 and 1990 there have been a significant inter-regional and intra-regional migration of tribes resulting into the Masai and Sukuma occupying Chunya and Mbeya Districts. A very heterogenous tribal composition is common in urban centres, like Mbeya Municipality and the District centres. The original settlements of various tribes in the region were determined by availability of water, fertile soil, and good pastures. These factors have led to the variation of population densities between and within the districts.

(iv) 1.2.2 Population Size and Growth:

The population of Mbeya region grew from the 776,373 in 1967 census to 1,080,241 in the 1978 census; reflecting an annual growth rate of 3.3% compared with an average of 3.4% p.a. between 1957 and 1967 population census. The population continued to grow and by 1988 population census it had reached 1,476,199 people. This was about 6 percent of the total Tanzania Mainlands population, Making Mbeya region one of the most populous regions after Shinyanga and Mwanza. It also makes Mbeya one of the regions with high population growth rates. The 1988 population census revealed a population growth rate of 3.1 percent. Based on 1978-88 annual average growth rate of 3.1 percent, the population of the region is estimated to be 2.2 million people in the year 2000.

Table IV: **POPULATION GROWTH AND 1978-88 GROWTH RATES, BYDISTRICT**

| District | 1978 Census | 1988 Population Ce | | | Annual Growth Rates |
|-----------|-------------|--------------------|----------|-----------|---------------------|
| | | Male | Female | Total | |
| Chunya | 89,119 | 85,214 | 79,340 | 164,554 | 3.1% |
| Ileje | 71,228 | 41,664 | 46,772 | 88,436 | 3.1% |
| Kyela | 114,553 | 64,105 | 71,540 | 135,645 | 3.1% |
| Mbeya (R) | 256,472 | 160,347 | 172,083 | 332,430 | 3.1% |
| (Mbarali) | (114,640) | (75,465) | (77,465) | (152,882) | 3.1% |
| Mbeya (U) | 78,111 | 74,259 | 78,585 | 152,844 | 3.1% |
| Mbozi | 235,444 | 157,325 | 172,957 | 330,282 | 3.1% |
| Rungwe | 235,314 | 129,846 | 142,162 | 272,008 | 3.1% |

| | | | | | |
|-------|-----------|---------|---------|-----------|------|
| Total | 1,080,241 | 712,760 | 763,439 | 1,476,199 | 3.1% |
|-------|-----------|---------|---------|-----------|------|

Source: Planning Commission: Compiled Data based on 1988 Population Census.

Fig. 7: Population Growth by Sex and District, 1988 Census

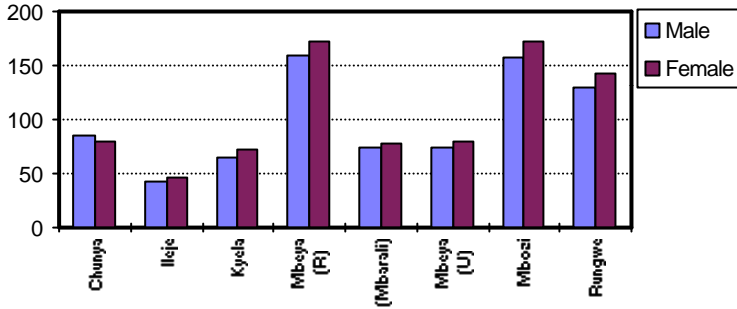


Table V: POPULATION TREND AND PROJECTIONS BASED ON 3.1 PERCENT GROWTH RATE

| District | 1978 Census | 1988 Census | Population Projections | | |
|-----------|-------------|-------------|------------------------|-----------|-----------|
| | | | 1975 | 1998 | 2000 |
| Chunya | 89,119 | 164,554 | 194,495 | 213,149 | 226,570 |
| Ileje | 71,228 | 88,436 | 105,427 | 115,539 | 122,813 |
| Kyela | 114,553 | 135,645 | 152,194 | 166,791 | 177,293 |
| Mbeya (R) | 256,474 | 332,430 | 392,931 | 430,618 | 457,730 |
| (Mbarali) | (114,640) | (152,882) | (180,706) | 198,038 | 210,507 |
| Mbeya (U) | 78,111 | 152,844 | 190,005 | 208,229 | 221,339 |
| Mbozi | 235,444 | 330,282 | 420,771 | 461,128 | 490,161 |
| Rungwe | 235,314 | 272,008 | 299,379 | 318,229 | 338,265 |
| Total | 1,080,241 | 1,476,199 | 1,759,814 | 2,111,721 | 2,244,678 |

Source: Population Projections, based on 1988 Censu.

Fig. 8: Population Trend (Thousands) by District 1978 and 1988 Census

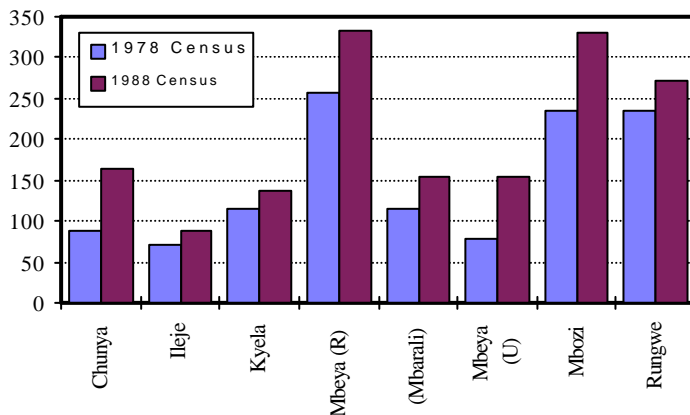
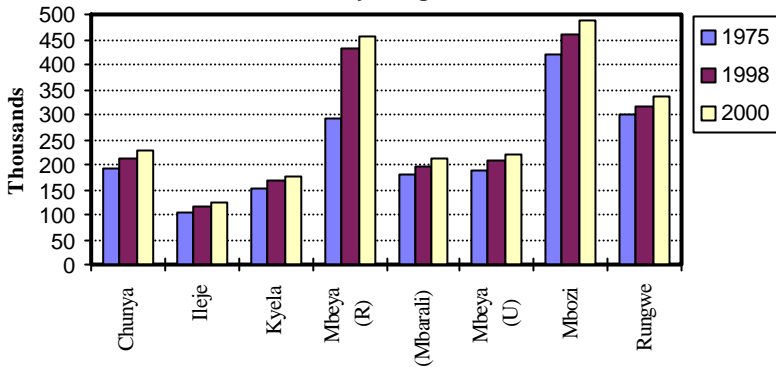


Fig. 9: Population Projections 1975, 1988 and 2000 by District in Mbeya Region



According to Table V, the population of Mbeya increased by 37 percent between 1978 and 1988 population census. It is further observed that there are more people in Mbeya Rural, Mbozi and Rungwe than other rural districts. Ileje is the only rural district with the least number of people. Compared with a population of 776,373 people in 1967, the projected population for the year 2000 will almost triple.

Population growth rate in Mbeya region seems to be too high, a situation which is not healthy especially in terms of efficient use of resources and their sustainability.

Table VI: POPULATION BY RURAL/URBAN AND SEX - 1988

| District | Rural | | | Urban | | |
|-----------|----------|----------|-----------|--------|--------|--------|
| | Male | Female | Total | Male | Female | Total |
| Chunya | 49,502 | 49,266 | 98,768 | - | - | |
| Ileje | 34,449 | 38,759 | 73,208 | - | - | |
| Kyela | 51,784 | 57,777 | 109,561 | - | - | |
| Mbeya (R) | 100,625 | 109,677 | 210,302 | - | - | |
| (Mbarali) | (34,779) | 935,631) | (70,410) | - | - | |
| Mbeya (U) | 139,745 | 153,763 | 293,507 | 8,043 | 9,187 | 7,230 |
| Mbozi | 140,309 | 154,009 | 294,318 | - | - | |
| Rungwe | 110,561 | 121,177 | 231,738 | 5,507 | 6,039 | 11,546 |
| Total | 626,975 | 684,428 | 1,311,403 | 13,550 | 15,226 | 8,776 |

Source: 1988 Population Census.

Population Density and Distribution:

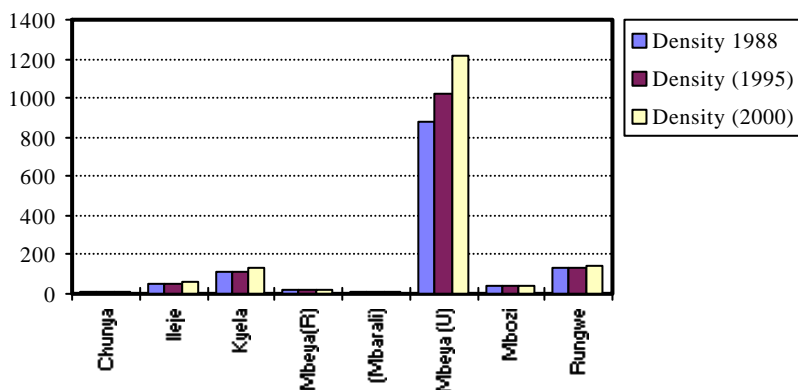
Comparing with other regions in Tanzania Mainland, the population of Mbeya region is the 3^d highest after Shinyanga and Mwanza, while in terms of population density, the region ranks tenth with 25 persons per square kms. (1988 Census). According to the projections in Table IV, Population densities could be 28 and 31 persons in 1995 and 2000 respectively. It is also observed from the same table that population

Table VII: POPULATION DENSITY AND DISTRIBUTION BY DISTRICT IN MBEYA REGION

| District | Area (Sq.Km.) | | | Population 1988 Census | Density 1988 | Population Estimate 1995 | Density (1995) | Population Estimate 2000 | Density (2000) |
|--------------|---------------|-------|----------|------------------------|--------------|--------------------------|----------------|--------------------------|----------------|
| | Land | Water | Total | | | | | | |
| Chunya | 28,114 | 1,105 | 29,219 | 164,554 | 6.0 | 194,495 | 7.0 | 235,625 | 8.1 |
| Ileje | 1,908 | - | 1,908 | 88,436 | 49.0 | 103,427 | 54.0 | 122,456 | 64.2 |
| Kyela | 965 | 357 | 1,322 | 135,645 | 109.0 | 152,194 | 115.0 | 174,149 | 131.7 |
| Mbeya(R) | 19,093 | - | 19,093 | 332,430 | 19 | 399,642 | 21.0 | 426,256 | 22.3 |
| (Mbarali) | (16,000) | - | (16,000) | (152,885) | (9.5) | (180,706) | (11.3) | (195,604) | (12.2) |
| Mbeya (U) | 185 | - | 185 | 152,844 | 879.0 | 190,005 | 1027.0 | 225,678 | 1219.9 |
| Mbozi | 9,307 | 292 | 9,679 | 330,282 | 36.0 | 420,771 | 43.0 | 436,175 | 45.1 |
| Rungwe | 2,211 | - | 2,211 | 272,008 | 131.0 | 299,379 | 135.0 | 315,937 | 142.9 |
| Total Region | 61,868 | 1,757 | 63,622 | 1,487,199 | 25.0 | 1,759,814 | 28.0 | 1,956,276 | 31.0 |

Source: Planning Commission Compiled Data (1996)

Fig. 10: Distribution of Population Density 1988 & 1995 and Population Density Estimate 2000 by District in Mbeya Region



densities are high in the rural districts of Rungwe, Kyela, Ileje and Mbozi. Population densities are lowest in Mbeya rural and Chunya. Low population densities may be caused by rampant environmental

degradation especially in Chunya. Unproductive land attracts less human activities and hence discourages further human settlement, a situation which may have prevailed in Chunya District.

Table VIII: POPULATION DENSITY AND DISTRIBUTION BY REGION - 1988 CENSUS

| Region (Mainland) | Land Area (Kms ²) | Population | Population Density |
|-------------------|-------------------------------|------------------|--------------------|
| Dar es Salaam | 1,393 | 1,360,850 | 976.9 |
| Mwanza | 19,683 | 1,876,776 | 95.8 |
| Kilimanjaro | 13,309 | 1,108,699 | 83.7 |
| Mtwara | 16,710 | 887,583 | 53.2 |
| Tanga | 26,677 | 1,280,262 | 48.1 |
| Kagera | 28,456 | 1,313,639 | 46.6 |
| Mara | 21,760 | 952,616 | 43.7 |
| Shinyanga | 50,760 | 1,763,960 | 34.9 |
| Dodoma | 41,311 | 1,235,277 | 30.0 |
| Mbeya | 63,622 | 1,487,199 | 25.4 |
| Kigoma | 37,040 | 853,263 | 23.1 |
| Iringa | 56,850 | 1,193,074 | 21.3 |
| Arusha | 82,098 | 1,352,225 | 16.5 |
| Rukwa | 68,635 | 704,050 | 10.1 |
| Lindi | 66,040 | 642,364 | 9.8 |
| Tabora | 76,151 | 1,036,293 | 14.0 |
| Pwani | 32,407 | 638,015 | 20.0 |
| Singida | 49,341 | 791,814 | 16.0 |
| Morogoro | 70,799 | 1,222,737 | 17.0 |
| Ruvuma | 66,477 | 583,327 | 12.0 |
| Total Tanzania | 885,987 | 23,174,443 | 26.1 |

Source: 1988 Population Census.

It is observed from Table IX that the 1988 population census recorded average household size of 4.9 persons - lower than the national average of

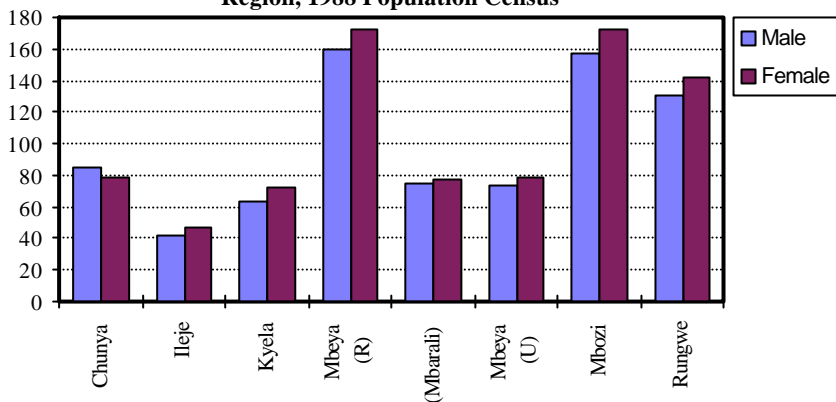
5.2 persons. Mbozi District had the highest average household size, followed by Kyela and Chunya.

Table IX: POPULATION DISTRIBUTION BY DISTRICT, SEX AND AVERAGE HOUSEHOLD SIZE (1988)

| District | Sex | | | No. of Household | Average Household Size |
|--------------|----------|----------|-----------|------------------|------------------------|
| | Male | Female | Total | | |
| Chunya | 85,214 | 79,340 | 154,554 | 32,777 | 5.0 |
| Ileje | 41,664 | 46,772 | 88,436 | 17,735 | 4.9 |
| Kyela | 64,105 | 71,540 | 135,645 | 26,585 | 5.1 |
| Mbeya (R) | 160,347 | 172,540 | 332,430 | 72,247 | 4.6 |
| (Mbarali) | (75,468) | (77,417) | (152,995) | (33,293) | (4.6) |
| Mbeya (U) | 74,259 | 78,585 | 152,844 | 33,726 | 4.9 |
| Mbozi | 157,325 | 172,957 | 330,282 | 59,674 | 5.5 |
| Rungwe | 129,846 | 142,162 | 272,008 | 54,892 | 4.9 |
| Total Region | 712,760 | 763,439 | 1,476,199 | 301,265 | 4.9 |

Source: Population Census Report - 1988

Fig. 11: Population Distribution by District and Sex in Mbeya Region, 1988 Population Census



It is observed from Table X below that the average household size in Mbeya region in relative terms was lower than the average household size in many regions including Kilimanjaro, Arusha, Tanga, Mwanza and Mara.

Table X: POPULATION DENSITY AND HOUSEHOLD SIZE BY REGION FOR 1967, 1978 AND 1988 CENSUS

| Region | Land Area (Sq.Kms.) | Population Density | | | Household Average Size | | |
|-------------|---------------------|--------------------|------|------|------------------------|------|------|
| | | 1967 | 1978 | 1988 | 1967 | 1978 | 1988 |
| Dodoma | 41,311 | 17 | 24 | 30 | 4.4 | 4.7 | 5.0 |
| Arusha | 82,306 | 7 | 11 | 16 | 4.8 | 5.3 | 5.4 |
| Kilimanjaro | 13,309 | 49 | 68 | 83 | 5.0 | 5.3 | 5.4 |
| Tanga | 26,808 | 29 | 39 | 48 | 3.8 | 4.7 | 5.1 |
| Morogoro | 70,799 | 10 | 13 | 17 | 4.2 | 4.7 | 5.3 |
| Coast | 32,407 | 13 | 16 | 20 | 4.0 | 4.3 | 4.9 |

| | | | | | | | |
|---------------------|---------------|-----------|-----------|-----------|------------|------------|------------|
| D'Salaam | 1,393 | 256 | 605 | 977 | - | 4.1 | 4.3 |
| Lindi | 66,046 | 6 | 8 | 10 | 3.7 | 4.4 | 4.6 |
| Mtwara | 16,707 | 37 | 46 | 53 | 3.8 | 4.3 | 4.4 |
| Ruvuma | 63,498 | 6 | 9 | 12 | 4.0 | 5.2 | 5.3 |
| Iringa | 56,864 | 12 | 16 | 21 | 4.5 | 4.5 | 4.8 |
| Mbeya | 63,617 | 12 | 18 | 25 | 4.8 | 5.0 | 4.9 |
| Singida | 49,341 | 9 | 12 | 16 | 4.1 | 4.6 | 5.3 |
| Tabora | 76,151 | 7 | 11 | 14 | 4.5 | 5.0 | 5.7 |
| Rukwa | 68,635 | 4 | 7 | 10 | 4.7 | 5.1 | 5.3 |
| Kigoma | 37,037 | 13 | 18 | 23 | 4.5 | 5.5 | 5.8 |
| Shinyanga | 50,781 | 18 | 26 | 35 | 5.7 | 5.8 | 6.3 |
| Kagera | 28,388 | 23 | 36 | 47 | 3.9 | 4.5 | 4.9 |
| Mwanza | 19,592 | 54 | 74 | 96 | 5.7 | 6.0 | 6.4 |
| Mara | 19,566 | 28 | 37 | 50 | 6.0 | 6.2 | 6.7 |
| Average mainland | 881,289 | 14 | 19 | 26 | 4.5 | 4.9 | 5.3 |

Source: Population Census Report (1988)

Table XI: PERCENTAGE DISTRIBUTION OF POPULATION BY SEX AND AGE GROUPS: 1988 CENSUS IN MBEYA REGION

| Age groups (years of Rural age) | Rural | | | Urban | | | Total | | |
|---------------------------------------|--------|--------|--------|-------|--------|--------|--------|--------|--------|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 0-4 | 100223 | 101432 | 201655 | 19931 | 20551 | 40482 | 120154 | 121983 | 242137 |
| 5-19 | 243001 | 246350 | 489360 | 45609 | 53690 | 102299 | 288619 | 300040 | 591659 |
| | 0 | | | | | | | | |
| 20-39 | 135225 | 167726 | 302951 | 44066 | 45779 | 86845 | 179291 | 213505 | 389796 |
| 40-64 | 73788 | 90767 | 164555 | 15935 | 14446 | 30381 | 89323 | 105213 | 194936 |
| 65-79 | 19711 | 16783 | 36494 | 1962 | 2193 | 4158 | 21673 | 18976 | 40649 |

| | | | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| 80-Over | 6682 | 8665 | 121036 | 752 | 1002 | 1754 | 7434 | 9667 | 17101 |
| | | | 2 | | | | | | |
| Total | 578639 | 631723 | 121036 | 128255 | 137661 | 265916 | 706894 | 7693874 | 1476278 |
| | | | 2 | | | | | | |

Source: Population Census Regional Profile - Mbeya, 1998

Fig. 12: Percentage Distribution of Population (Rural) by Age Groups and Sex, 1988 Census in Mbeya Region

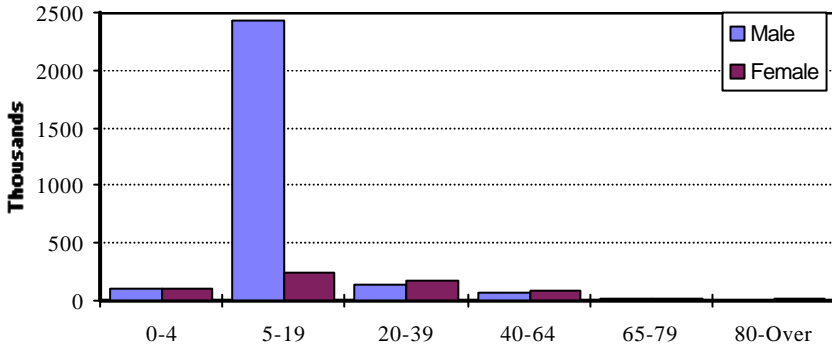
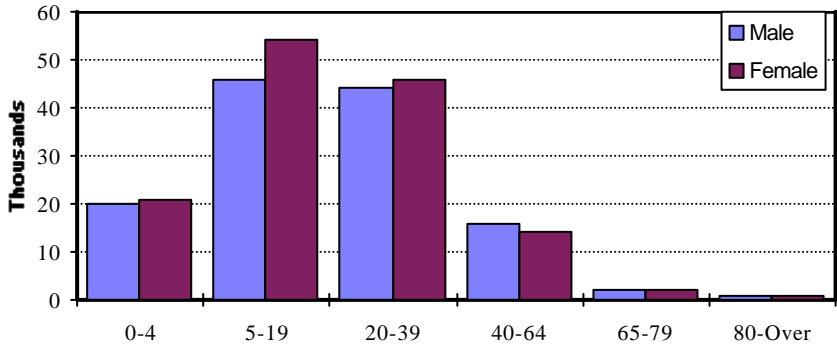


Fig. 13: Percentage Distribution of Population (Urban) by Age Groups and Sex, 1988 Census in Mbeya Region



The economic - able group 15-64 years constitute 50.68 percent of the population, while the dependent group (0-4, 5-14 and 65 + above) constitute the remaining 49.32 percent. It implies that the number of the dependent group is almost the same as the number of the economically supporting group (15-64). When the number of dependants is equal or more than the number of the supporting group there may be a problem of providing adequate support to the needy ones. The point here is that more children or old people create huge demands on the economy that sometimes may not be feasible or affordable.

Migration:

Migration is a movement of people in or out of the region and/or village. Thus, migration falls under two main categories namely, permanent and short-term.

Permanet:

It is a situation, where people move from rural to rural or rural to urban or vice versa in order to obtain more of better place to live/stay or simply to do business. This type of migration is common among agriculturists and livestock keepers especially the Nyakyusa, Masai, Sukuma, Gogo and Safwa people.

Short-Term

This type of migration is common, in Chunya district especially among the tobacco growers and rice growers in the Usangu Plains. Usually, the farmers do come to their original residence after harvest. This type migration is also commonly experienced in areas with limited growth potential like most areas of Chunya district, around Lake Rukwa and South-West of Mbozi.

Employment:

Several studies conducted have revealed that about 80 percent of the population in Mbeya engage in Agriculture. Most of them have an average of 2.5 acres of intercropping and/or monocropping land. People living near Lake Nyasa and Rukwa engage also in fishing activities, whereas those living in forested areas like Chunya are involved in beekeeping. Besides, Mbeya people do keep cattle, goats, sheep and pigs, although in small quantities. The number of livestock is limited due to frequent expansion of crop land area, a situation which has tended to diminish the size of pastures. Other enterprises engaging the people of Mbeya include public and private service, industries and other petty activities.

Climate, Vegetation on Soils:

The climate of Mbeya Region is greatly influenced by physiology and altitude. The climate is generally tropical with marked seasonal and altitudinal temperatures and high rainfall variations causing dry and rainy seasons. Temperature ranges between 16°C in the highlands and 25°C in the lowlands areas.

Rainfall:

The region enjoys abundant and reliable rainfall. Annual rainfall varies between 650mm. in Usangu Plains and Chunya to 2600mm. on the Northern shores of Lake Nyasa in Kyela District and highlands of Rungwe and the Southern parts of Ileje District. The rains normally start in October and go through to May with dry and cold spell between June and September. The crop growing season, in most parts of the region begin in November and continues to May.

Soils and Vegetation:

In most arable areas, soils are commonly of moderate fertility, coarse or medium textured and varying from sandy loams, alluvial solids to cracking rocks.

Although a large area of the region is cultivated, large tracks of land are still covered with natural vegetation such as "Miombo" (Broschystegion, Julbernardia) woodland. Areas with rains between 800-1200 mm. per annum favour the growth of Miombo woodland, while areas with less rains especially in the North of the region support the growth of wooded grassland and bushlands of dense thickets - of acacias and thorny trees. Those areas with higher rainfall e.g. Rungwe, Kyela and South - East Ileje support forests, often evergreen and bamboo trickers - except at the highest elevations, where afro-alpine grasslands occur.

Agro-Economic Zones:

The region is divided into 3 main Agro-economic Zones, as shown below:

High Potential Zones:-

It includes areas with high rainfall and fertile soils, with a lot of agricultural production. These are the density populated areas i.e. South Usangu Plains, Central Mbeya Plain, Poroto and Ilembo Highlands, East Ileje, West Rungwe Plain, East and Central Rungwe, South Rungwe/North Kyela, and the South Kyela. Lowlands.

Medium Potential Zones:-

Areas that fall under Medium Zone do experience moderate rainfall and they include Rukwa Valley, Mbozi/Ileje Plateau, and North Usangu Plain.

Low Potential Zones:-

It includes Central Chunya areas and Msangaji Plateau. Usually rainfalls are unreliable and soils are less fertile.

Highlands Zone

The Highlands zone lies at an altitude of 1,500 to 2,400 metres above sea level and covers the areas of Central Mbeya Plain, Mbeya Highlands, Ilembo and Poroto Highlands East Ileje and West Rungwe Plain, East and Central Rungwe, South Usangu Plain and North Kyela and Southern parts of Rungwe. The Highlands have cool temperatures and receive rainfall exceeding 2,500 millimeters per year.

Crops cultivated include, maize, groundnuts, beans, wheat, potatoes, coffee, bananas, tea, cocoa. Dairy farming is common.

Midlands Zone:

The Midlands zone lies at an altitude of 800 to 1500 meters above sea level and embraces the areas of Rukwa Valley, Mbozi/Ileje Plateau, Southwest of Mbozi, and North Usangu Plain. Rainfalls is highly variable and increases with increasing altitude, ranging from less than 700 mm. per year at North Usangu Plain to 1,700 mm. per year at the Mbozi/Ileje Plateau.

In the Midland zone people prefer cultivating maize, sorghum, finger millet, cotton, cowpeas, groundnuts, cassava, beans and some paddy. Cattle and goats are also common animals in the zone.

Lowlands Zone:

The Lowlands zone lies at an altitude of 500 metres to 1000 metres above sea level occupying mainly the areas of North Chunya Plain, Central Chunya and Msangaji Plateau and Kyela Lowlands. Temperatures are warm with annual rainfall of less than 1000 mm. However, the Kyela Lowlands sometimes get rainfall as high as 2500mm. per year. Several crops thrive well in the Lowlands zone, for instance, tobacco, maize, sorghum, finger millet, cassava, groundnuts, cocoa, cashewnuts, palm oil, paddy and bananas. Cattle, goats and sheep are reared as well.

1.1.4 Topography:

The major topographic features of Mbeya region are:

- (a) The Low elevation of the Western Rift Zone - covers lake Rukwa and Nyasa;

- (b) The Eastern Rift Zone - covers the Usangu Plains and the neighbouring parts of the Ruaha Trough;
The lowlands within the Rift Valley lie between 500m. and 1400 metres above sea level (m.a.s.l);

Drainage System:

There are three main drainage basins within the region. The Ruaha - Rufiji basin extending towards the East; the inland Lake Rukwa basin in the North - West; and the Lake Nyasa basin in the South. Thus the surface runoff pattern corresponds closely to the unimodal rainfall distribution. The South Highlands on the Southern Plateau of Tanzania, form a watershed area of the main rivers draining the region. Main rivers include the Great Ruaha - fed by Kimani, Chimala, Igurusi etc. Tributaries, is one of the great inlet of Indian Ocean. Rivers Zira and Songwe form the inland drainage into Lake Rukwa, while those of Kiwira, Lufilyo, Mmbaka and Songwe drain South wards into Lake Nyasa, which serves as the main reservoir for Malawi; and finally towards Indian Ocean - through Shire and Zambezi Rivers.

SECTION II

2.0 THE REGIONAL ECONOMY:

2.1 INTRODUCTION

The economy of Mbeya region, like that of other regions in the country mainly depends on subsistence agriculture. About 80 percent of Mbeya population depend on agriculture, and the rest of the people depend on livestock-keeping, fishing, small-scale industrial activities, shop-keeping, minor mining and other petty business. It is also reported that over 40 percent of the Regional Gross Domestic Product (RGDP) is derived from the Agriculture.

THE GDP AND PER CAPITA INCOME

The Gross Domestic Product (GDP) of Mbeya region was T.shs.105 billion in 1993 and making a contribution of 5.7 percent to the National GDP. Unexpectedly, in 1994, the GDP dropped slightly to 103 billion in 1994. It is said that a drop in GDP in 1994 was mainly caused by a fall in crop production, industrial output and mining. Nevertheless, the GDP picked up again in 1995 to register T.shs.109 billion, which raised the level of average per capita income to T.shs.61,932 per annum from only 48,737/= in 1994.

Table XII compares both Mbeya's GDP and per capita GDP with the one other three Maize Surplus Producer Regions, commonly known as the "Big Four".

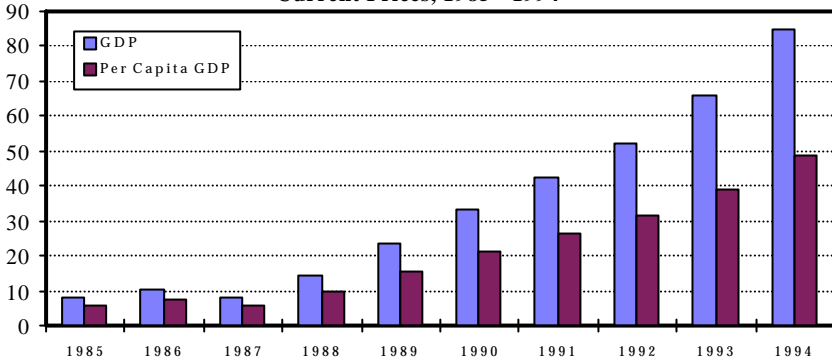
Table XIII: REGIONAL GDPs AND PER CAPITA GDP FOR THE "BIG FOUR" REGIONS (IRINGA, MBEYA, RUKWA AND RUVUMA) IN MILLION, T.SHS. (AT CURRENT PRICES)

| Year | Iringa | | Mbeya | | Ruvuma | | Rukwa | |
|------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|
| | GDP | Per Capita GDP | GDP | Per Capita GDP | GDP | Per Capita GDP | GDP | Per Capita GDP |
| 1985 | 5,801 | 5,204 | 7,904 | 5,911 | 3,329 | 4,691 | 2,751 | 4,534 |
| 1986 | 7,773 | 6,789 | 10,362 | 7,517 | 3,886 | 5,296 | 3,886 | 6,141 |
| 1987 | 11,040 | 9,390 | 8,074 | 5,681 | 9,163 | 12,077 | 6,425 | 9,733 |
| 1988 | 20,515 | 17,010 | 14,542 | 9,874 | 17,210 | 22,023 | 12,103 | 17,457 |
| 1989 | 32,667 | 26,339 | 23,485 | 15,507 | 27,412 | 34,109 | 19,273 | 27,031 |
| 1990 | 35,897 | 28,144 | 32,978 | 21,174 | 18,063 | 21,856 | 24,346 | 33,203 |
| 1991 | 45,663 | 34,812 | 42,243 | 26,374 | 22,909 | 26,954 | 31,721 | 42,067 |
| 1992 | 56,694 | 42,028 | 52,191 | 31,685 | 29,567 | 33,828 | 39,933 | 51,495 |
| 1993 | 71,664 | 51,659 | 65,901 | 38,904 | 38,638 | 42,985 | 51,631 | 64,742 |
| 1994 | 92,021 | 64,502 | 84,903 | 48,737 | 48,565 | 52,537 | 66,160 | 80,669 |

Source: Planning Commission Compiled data based on National Accounts of Tanzania 1976-1994 Eleventh edition, August 1995

* Per Capita GDP figures are not in millions

Fig. 14: Regional GDPs & Per Capita GDP for the "Big Four" Regions "Mbeya Region" in Thousands Million T.Shs. at Current Prices, 1985 - 1994



Fi. 15: Regional GDPs & Per Capita GDP for the "Big Four" Regions "Iringa Region" in Thousands Million, T.Shs. at Current Prices, 1985 - 1994

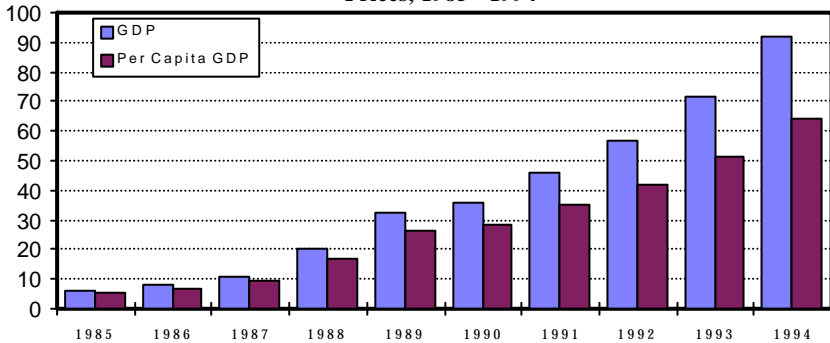


Fig. 16: Regional GDPs & Per Capita GDP for the "Big Four" Regions "Ruvuma Region" in Thousands Million T.Shs. at Current Prices, 1985 - 1994

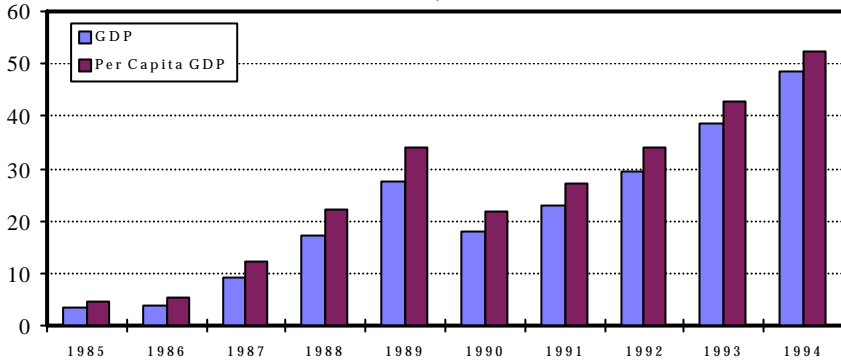


Fig. 17: Regional GDPs & Per Capita GDP for the "Big Four" Regions "Rukwa Region" in Thousands Million T.Shs. at Current Prices, 1985 - 1994

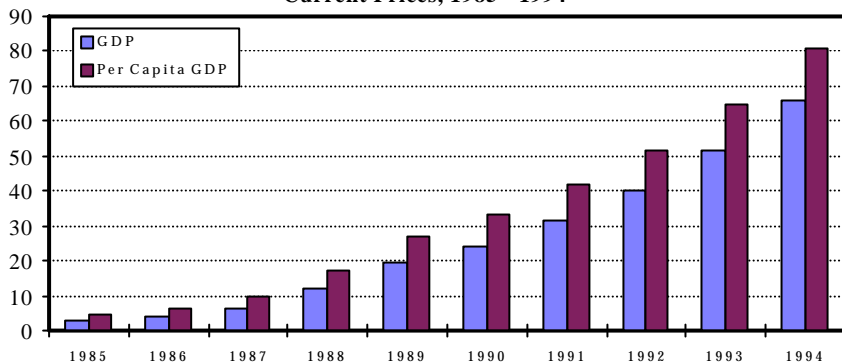
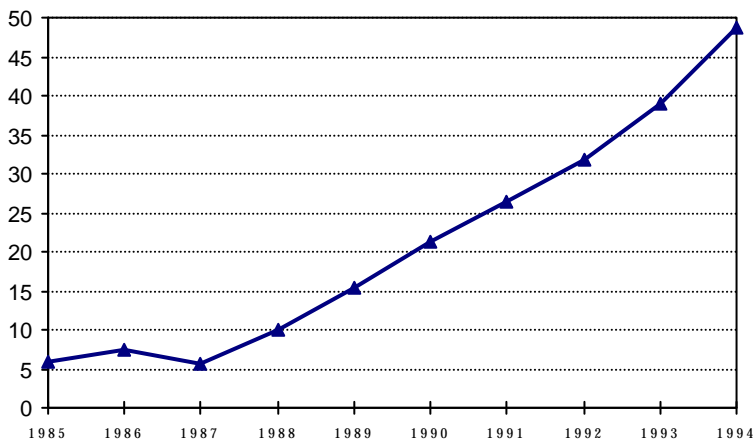


Fig. 18: A Trend for Per Capita GDP in Thousands Million T.Shs. at Current Prices, Mbeya Region from 1985 - 1994



From Table XII, Mbeya Region seems to have the smallest per capita income compared with other Big Four Regions. Iringa had 64,502/=, Ruvuma 52,537/= and Rukwa had 80,669/=. The relative low level of the per capita income in Mbeya can be explained by differences in populations. The population of Mbeya in 1988 was much higher than that of the other regions.

Table XIII: THE GDP AND PER CAPITA GDP OF MBEYA REGION AT CURRENT PRICES AND PERCENTAGE CHANGE 1980-1994

| Year | GDP at Prices Tshs. (Millions) | Current % Change | Per Capita GDP at Current Prices | | | |
|------|--------------------------------------|------------------------|----------------------------------|------------------------------------|-------------------|--------------------------------|
| | | | T.shs. | Exchange Rate T.shs./Dollars | U.S.A. Dollars | % Change (in Dollars) |
| 1980 | 2,110 | | 1,838 | 8.22 | 224 | |
| 1981 | 2,855 | 35 | 2,412 | 8.35 | 289 | 29 |
| 1982 | 3,737 | 30 | 3,055 | 9.52 | 321 | 11 |
| 1983 | 4,122 | 10.6 | 3,277 | 12.44 | 263 | -18 |
| 1984 | 5,755 | 40 | 4,437 | 18.16 | 244 | -7 |
| 1985 | 7,904 | 37 | 5,911 | 16.50 | 358 | 46 |
| 1986 | 10,362 | 32 | 7,517 | 51.70 | 145 | -59 |
| 1987 | 8,074 | -22 | 5,681 | 83.70 | 68 | -53 |
| 1988 | 14,542 | 80 | 9,874 | 125.00 | 79 | 16 |
| 1989 | 23,485 | 61 | 15,507 | 192.00 | 81 | 2 |
| 1990 | 32,978 | 40 | 21,174 | 197.00 | 107 | 32 |
| 1991 | 42,243 | 28 | 26,374 | 234.00 | 113 | 6 |
| 1992 | 52,191 | 23 | 31,685 | 335.00 | 95 | -16 |
| 1993 | 65,901 | 26 | 38,904 | 480.00 | 81 | -15 |
| 1994 | 84,903 | 29 | 48,737 | 553.00 | 88 | 9 |

Source: Planning Commission, Compiled data based on National Accounts of Tanzania, 1997-94 Eleventh Edition, August, 1995.

Table XIII above further highlights the trend in GDP and per capital GDP growth of Mbeya region in the last 15 years (1980-1994). According to Table XIII, the per capita GDP of Mbeya region at current prices increased in absolute terms from T.shs. 1,838/= in 1980 to T.shs. 48,7737/= in 1994. But this increase is simply nominal as the purchasing power of a shilling fell drastically in dollar terms from US \$.224 in 1980 to only US \$.88 in 1994. A drop in GDP per head implies that the average living standards of the Mbeya people worsened in 1994. It also means that Mbeya people in 1994 bought fewer goods than they bought in 1980 with a shilling. With regards to the GDP, it is observed from the table that between 1980 and 1988, the growth was very slow and sometimes even dropped (1977). The region experienced significant GDP growth from 1989 and by 1994 it had gone up by 261 percent.

Fig. 19: Contribution(%) of Mbeya Region in Average Annual GDP to the Total National GDP Contribution(%) (1980 - 1994)



Table XIX: **AVERAGE ANNUAL REGIONAL GDP CONTRIBUTION TO NATIONAL GDP (1980-1994)-MAINLAND**

| Regions | Average Annual GDP Contribution (%) | GDP Contribution Ranking |
|---------------|-------------------------------------|--------------------------|
| Dar es Salaam | 20.33 | 1 |
| Arusha | 7.80 | 2 |
| Mwanza | 7.67 | 3 |
| Mbeya | 6.00 | 4 |
| Shinyanga | 5.80 | 5 |
| Iringa | 5.53 | 6 |
| Tanga | 5.52 | 7 |
| Morogoro | 4.67 | 8 |
| Kagera | 4.60 | 9 |
| Kilimanjaro | 3.67 | 10 |
| Mara | 3.47 | 11 |
| Tabora | 3.40 | 12 |
| Ruvuma | 3.33 | 13 |
| Ruvuma | 3.27 | 14 |
| Rukwa | 3.13 | 15 |
| Dodoma | 3.07 | 16 |
| Singida | 2.87 | 17 |
| Kigoma | 2.53 | 18 |
| Lindi | 2.00 | 19 |
| Coast | 1.00 | 20 |

| | | |
|-------|--------|---|
| Total | 100.00 | - |
|-------|--------|---|

Source: Mbeya Regional Data Bank, 1996.

Table XX: SELECTED SOCIO-ECONOMIC INDICATORS IN MBEYA REGION BY DISTRICTS 1995

| Indicators | Chunya | Ileje | Kyela | Mbeya (R) | Mbeya (U) | Mbozi | Rungwe | Region | Nation |
|--|-------------------------|---------------------|------------------------|-------------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|
| 1. Population Density | 7 | 54 | 109 | 18 | | 35 | 123 | 23 | 26 |
| 2. Per Capita Income (Sh.) | 6,800 | 53,000 | 69,210 | 70,000 | 110,000 | 75,000 | 90,000 | 71,667 | 62,138 |
| 3. Gross Domestic Product (GDP) (T.s bill.) | 15,317 | 5,588 | 10,489 | 29,250 | 10,911 | 31,500 | 26,944 | 109,000 | |
| 4. Primary School gross Enrolment (%) | 71.4 | 65 | 68.5 | 101.4 | 76.8 | 72 | 81 | 73.5 | |
| 5. Form I Selected Rate in Govt. Secondary Schools (%) | 4.6 | 4.1 | 4.9 | 2.8 | 3.8 | 3.7 | 17.8 | 4.2 | 5.9 |
| 6. Life Expectance (Yrs) | - | 47 | 45 | - | 50.0 | 50 | 52 | 51 | |
| 7. Literacy Rates (%) | 79.1 | 106 | 80 | 78 | 72.4 | 75 | 82.7 | 78.6 | 67 |
| 8. Infant Mortality Rate (-/1000) | - | 175 | 94 | 75 | 60 | 46 | 100 | 96 | 96 |
| 9. U-5 Mortality Rates (-/100000) | - | 184 | 102 | 147 | 221 | 173 | 165 | 163 | 158 |
| 10 Maternal -/100000) | - | - | 184 | 250 | 670 | 425 | - | 436 | 197 |
| 11 Physician: Population | ¹ 194,495 | ¹ 957 | ¹ 38,055 | ¹ 205,000 | ¹ | ¹ 32,367 | ¹ 99,793 | ¹ 68,408 | ¹ 48,000 |
| 12 Hospital Bed: Population | ¹ 2,628 | ¹ 700 | ¹ 1,013 | ¹ 22,221 | ¹ 1,580 | ¹ 1,405 | ¹ 830 | ¹ 1,135 | ¹ 800 |

Source: Planning Commission Compiled Data based on Mbeya District Profiles

Fig. 20: Population Density Indicator in Mbeya Region by District 1995

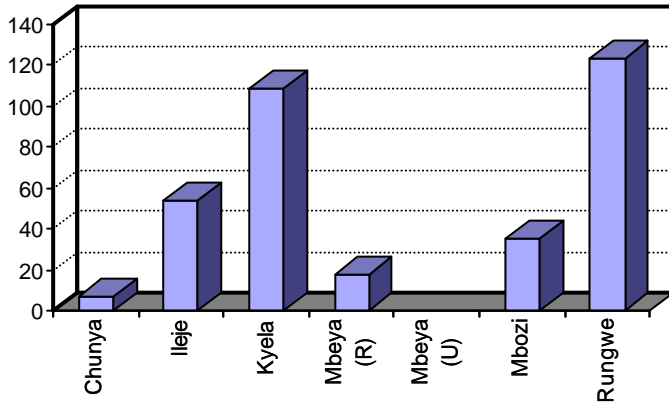


Fig. 21: Per Capita Income (T.Shs.) in Mbeya Region by District 1995

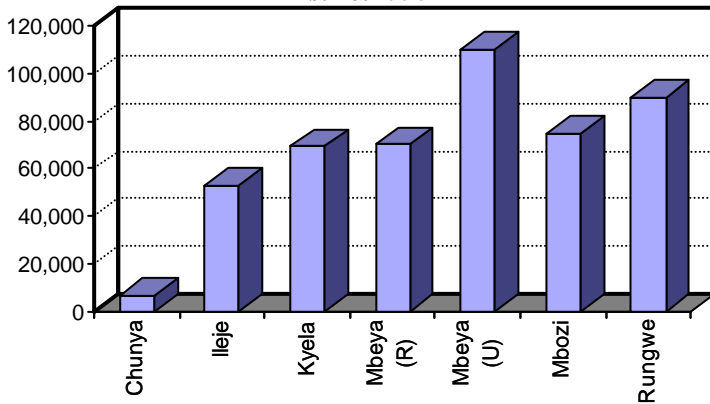


Fig. 22: GDP (Bill T.Shs.) in Mbeya Region by District, 1995

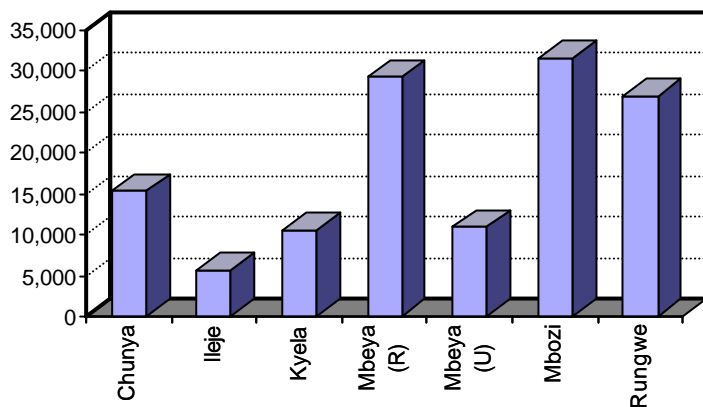


Fig. 23: Distribution of Primary School Gross Enrolment (%) in Mbeya Region by District, 1995

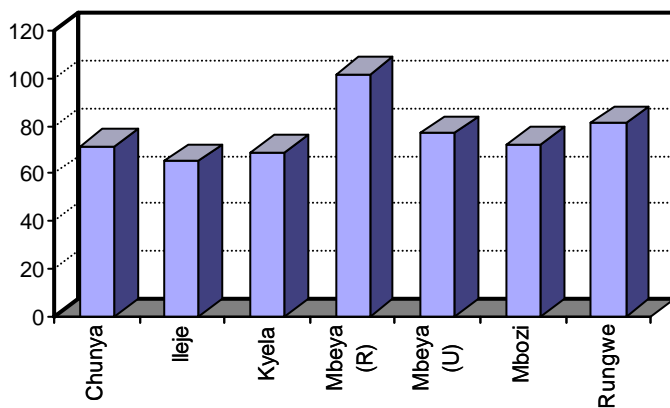


Fig. 24: Form I Selected Rate in Government Secondary Schools (%) in Mbeya Region by District, 1995

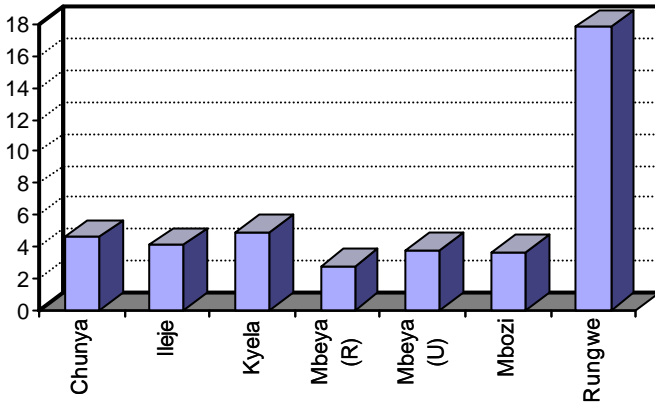


Fig. 25: Life Expectancy (Years) by District, Mbeya Region, 1995

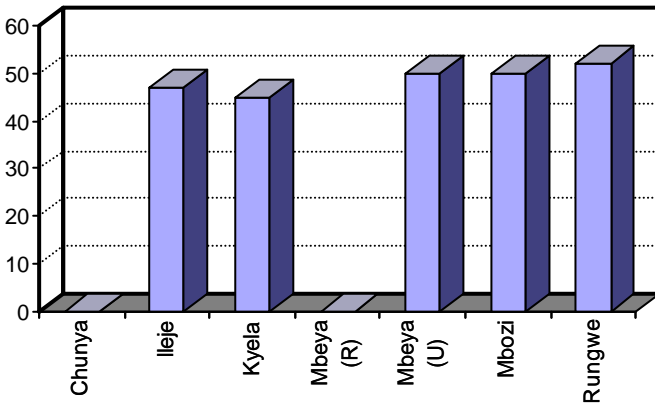


Fig. 26: Literacy Rates (%) by District, Mbeya Region, 1995

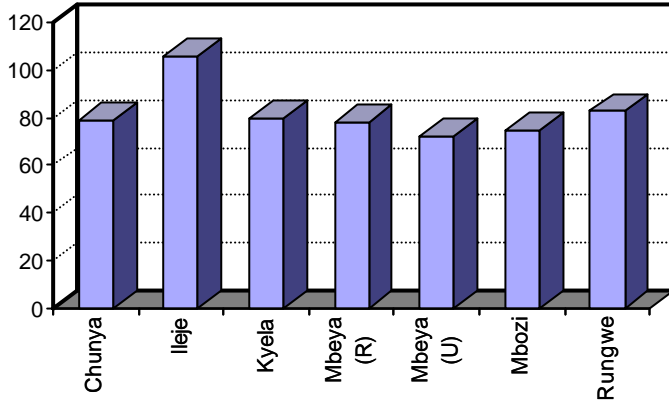


Fig. 27: Infant Mortality Rate (-/1000) by District, Mbeya Region, 1995

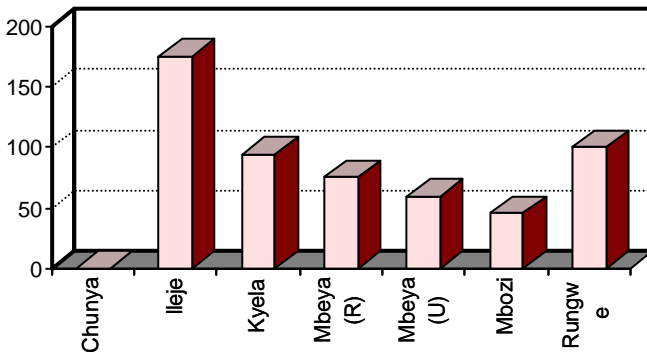


Fig. 28: U-5 Mortality Rates (-/100000) by District in Mbeya Region, 1995

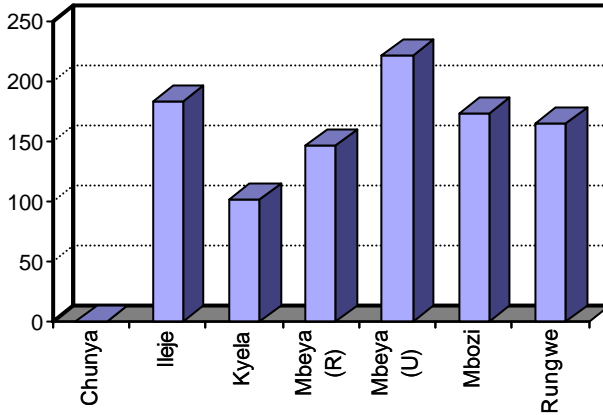
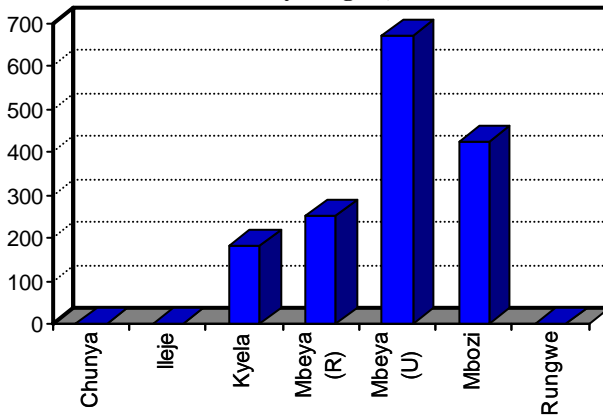


Fig. 29: Maternal (-/100000) Indicator by District in Mbeya Region, 1995



2.3

PRODUCTIVE SECTORS

2.3.1 Agriculture:

Mbeya region is one of the main food surplus regions in Tanzania. The region has an area of 6,362,200 Ha. of which 3,960,000 Ha. are suitable for agriculture and livestock keeping. However, only an average of 1,300,000 Ha. are cultivated annually for both food and cash crops. About 80 percent of the population depends on agriculture for their livelihood. The region also produces surplus food (maize, paddy, potatoes, pulses and green vegetables) to the tune of 350,000 tones a year, which in most cases the region exports to other regions like, Dar es Salaam, Dodoma, Singida and the Lake Regions.

A. FOOD CROPS

1 MAIZE

It is the major staple food in Mbeya region. For the past five years (1990-1995) an average of about 220,000 Ha. of the arable land has been under maize production with an average production of 2.5 tones per Ha. Maize is both a major food staple and the most important marketed crop in the region (in volume terms). Therefore, maize is of vital importance to the region and its level of production in the region is also an important determinant of the National Maize surplus. It is possible to cultivate maize in all areas of the region, although in some areas the comparative advantage may be greater than other parts of the region depending on varying climatic conditions. Table XXI highlights major food crops production trend between 1990/91 and 1994/95.

Table XXI: PRODUCTION OF MAJOR FOOD CROPS 1990-91 - 1993/94 (TONS)

| Year/Crop | 1990/91 | 1991/92 | 1992/93 | 1993/94 | 1994/95 |
|----------------|---------|-----------|-----------|-----------|-----------|
| Maize | 434,111 | 451,290 | 436,000 | 517,623 | 572,630 |
| Paddy | 105,330 | 120,945 | 108,000 | 113,430 | 139,185 |
| Sorghum/Millet | 37,969 | 28,404 | 32,474 | 10,350 | 17,300 |
| Wheat | 146 | 330 | 269 | 485 | 570 |
| Beans | 13,667 | 18,432 | 35,136 | 30,725 | 30,909 |
| Peas | 445 | 486 | 533 | 315 | 450 |
| Irish Potatoes | 65,374 | 83,700 | 89,322 | 77,711 | 54,580 |
| Sweet Potatoes | 45,445 | 61,340 | 100,434 | 111,736 | 107,380 |
| Cassava | 27,866 | 55,500 | 48,977 | 83,802 | 61,602 |
| Bananas | 181,798 | 166,435 | 197,217 | 213,617 | 171,678 |
| Graundnuts | 9,779 | 5,655 | 13,600 | 14,422 | 13,604 |
| Fruits | 16,828 | 9,275 | 76,542 | 83,560 | 78,650 |
| Simsim | 230 | 350 | 898 | 923 | 440 |
| Vegetables | 29,000 | 18,640 | 25,437 | 83,560 | 10,685 |
| Total | 950,312 | 1,033,819 | 1,160,842 | 1,210,889 | 1,259,663 |

Source: Regional Data Bank, Mbeya Region

Fig. 30: Production of Major Food Crops (Maize) in Thousands Tons, Mbeya Region 1990/91 - 1994/95

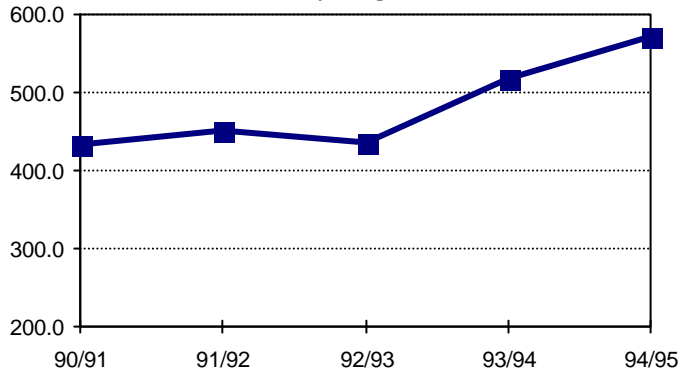


Fig. 31: Production of Major Food Crops (Paddy) in Thousands Tons, Mbeya Region 1990/91 - 1994/95

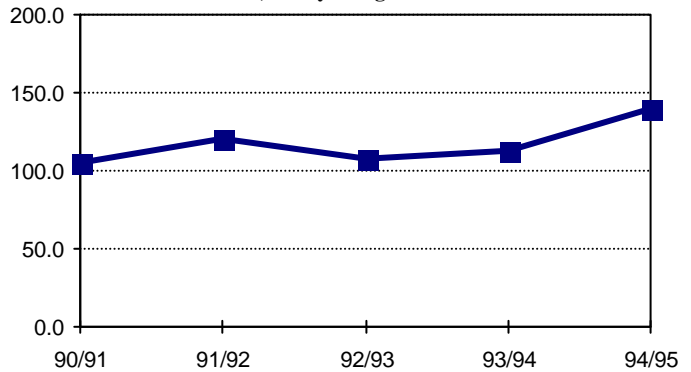
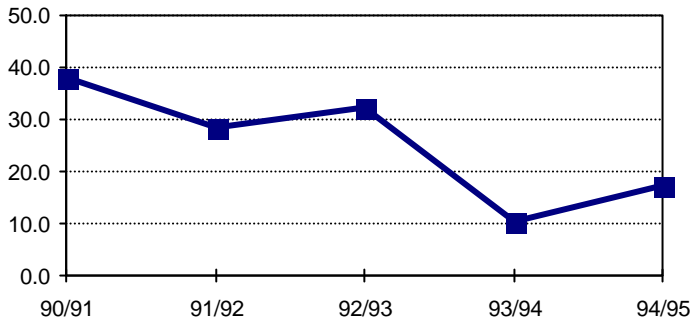
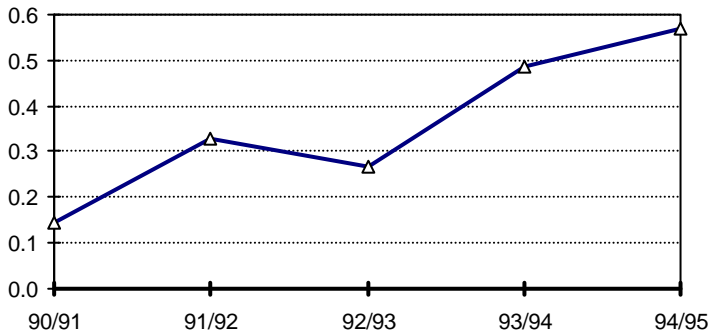


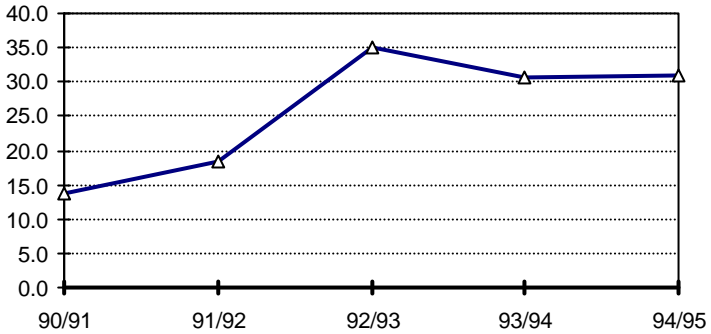
Fig. 32: Production of Major Crops (Sorghum/Millet) in Thousands Tons, Mbeya Region, 1990/91 - 1994/95



Fi. 33: Production of Major Crops (Wheat) in Thousands Tons, Mbeya Region 1990/91 - 1994/95



Fi. 34: Production of Major Crops (Beans) in Thousands Tons, Mbeya Region 1990/91 - 1994/95



Fi. 35: Production of Major Crops (Peas) in Thousands Tons, Mbeya Region 1990/91 - 1994/95

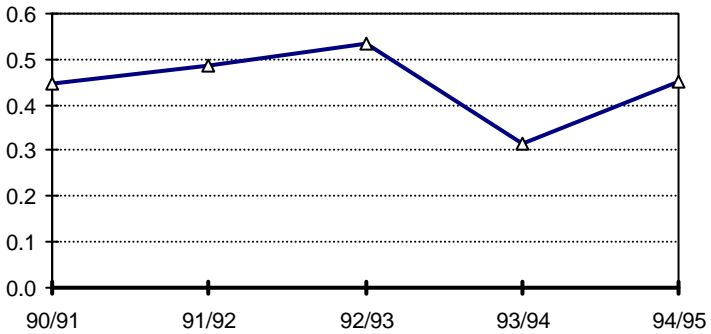


Fig. 36: Production of Major Crops (Irish Potatoes) in Thousands Tons, Mbeya Region, 1990/91 - 1994/95,

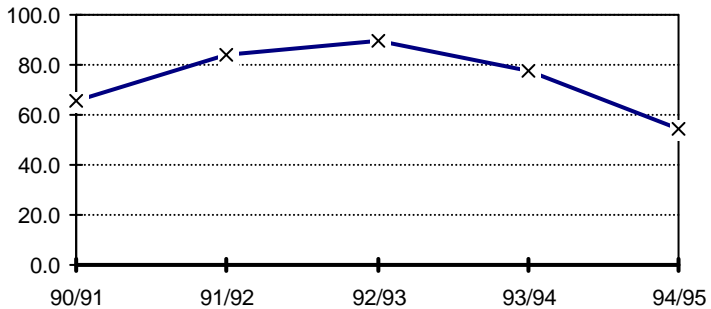


Fig. 37: Production of Major Crops (Sweet Potatoes) in Thousands Tons, Mbeya Region, 1990/91 - 1994/95,

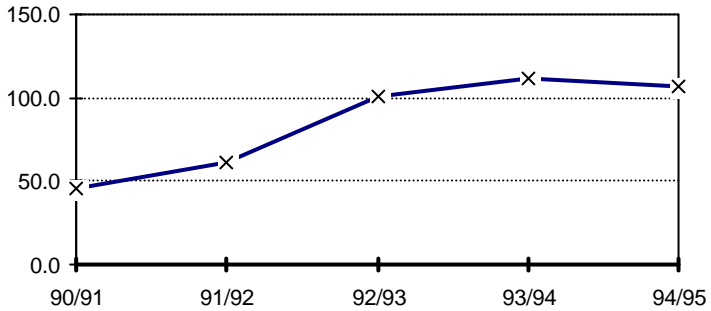


Fig. 38: Production of Major Crops (Cassava) in Thousands Tons, Mbeya Region, 1990/91 - 1994/95,

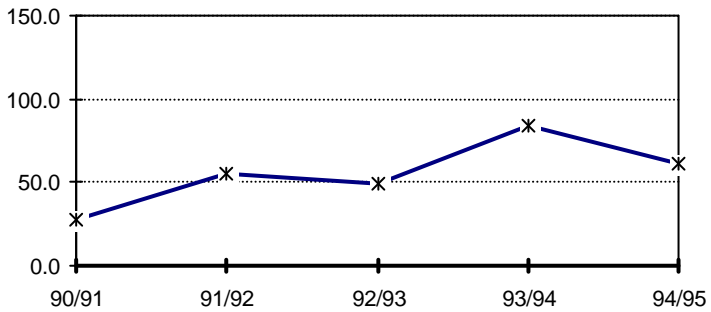


Fig. 39: Production of Major Crops (Bananas) in Thousands Tons, Mbeya Region, 1990/91 - 1994/95,

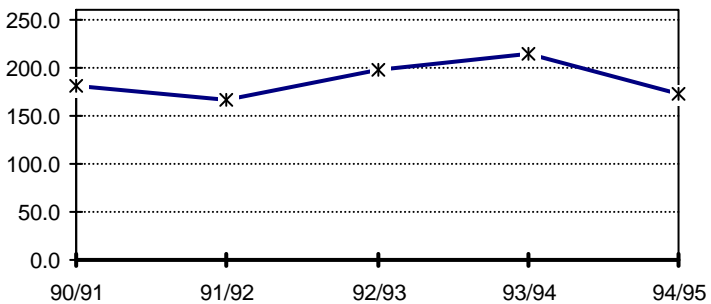


Fig. 40: Production of Major Crops (Groundnuts) in Thousands Tons, Mbeya Region, 1990/91 - 1994/95,

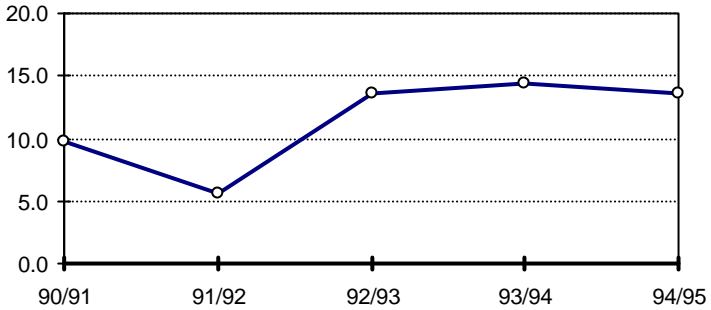


Fig. 41: Production of Major Crops (Fruits) in Thousands Tons, Mbeya Region, 1990/91 - 1994/95,

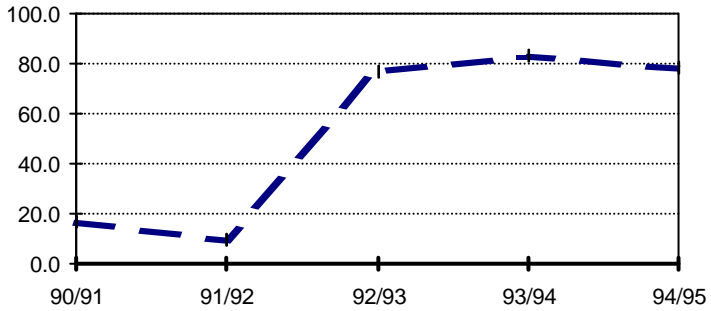


Fig. 42: Production of Major Crops (Simsim) in Thousands Tons, Mbeya Region, 1990/91 - 1994/95,

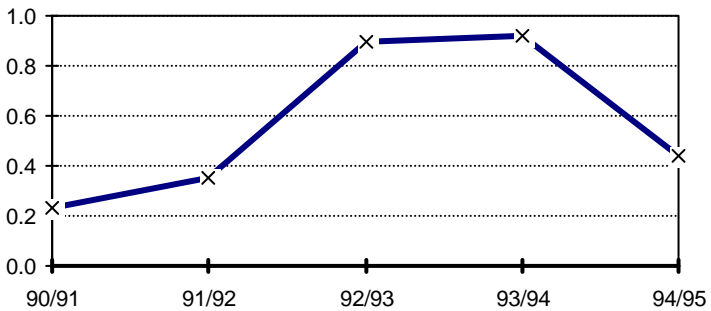
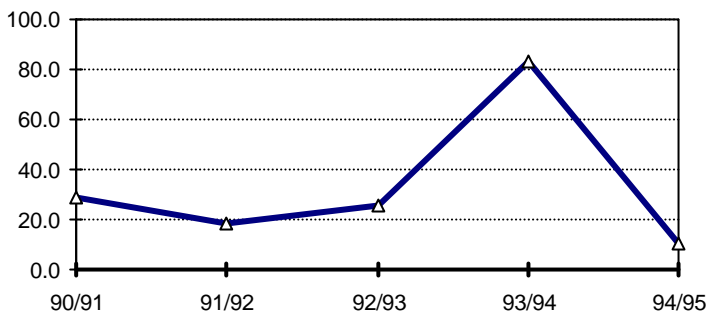


Fig. 43: Production of Major Crops (Vegetables) in Thousands Tons, Mbeya Region, 1990/91 - 1994/95,



Paddy:

Paddy is the second important cereal crop grown in Mbeya region. An average of 35,000 Ha. are under paddy production, undertaken by both small holders and parastatal organisations. The average yields per Ha. for the past five years (1990/95) has been 3.0 tons. Table XXI shows a fluctuating production trend of paddy between 1990/91 and 1994/95 seasons. For instance, production was 105,330 tons in 1990/91, and in 1991/92 season it went up to 120,945 tons. Production dropped to 108,000 tons in 1992/93 and slowly picked up to 113,430 tons in 1993/94.

Beans:

Beans are important food pulses in Mbeya Region. For the past five years, an average of 30,000 Ha. have been under beans production, with an average yield of about 18,000 tons per annum (approximately 0.6 tons per Ha.) As seen from Table XXI beans production between 1990/91 and 1994/95 increased tremendously from a mere 13,667 tons to 30,909 tons. Nevertheless, production levels are still low especially when productivity stands at 0.6 tons per Ha.

Bananas:

Bananas are permanent food crops in the region, particularly in Kyela, Rungwe, Ileje and Mbeya Rural. An average of 25,000 Ha. are under banana crop in the Region. Production level is at 185,000 tons per annum on the average. According to Table XXI, the Region recorded the highest production level in 1993/94.

Sweet Potatoes:

Sweet potatoes are also very important food crop. About 50,000 tons of potatoes are produced per year in Mbeya Region. Productivity per hectare is still low, only 5 tons per hectare. Irish potatoes are also grown especially in the temperate climate zone.

Oil Seeds:

Oil seeds production in Mbeya region is increasingly becoming important. For the past five years about 8,000 Ha. have been under oil seeds production each year. By the year 2000, oilseeds production is expected to expand to 12,000 Ha.

Food production in Mbeya region has to a large extent been also supplemented by the produce from the state farms as shown in Table XXII.

Table XXII: CROP PRODUCTION IN PARASTATAL FARMS 1990/91-1994/95 IN MBEYA REGION

| Name of Farm | Crop | 1990/91 | | 1991/92 | | 1992/93 | | 1993/94 | | 1994/95 | |
|--------------|---------------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | | Ha. | Tons | Ha. | Tons | Ha. | Tons | Ha. | Tons | Ha. | Tons |
| Kapung a | Rice | 442 | 1,840 | 3,000 | 10,160 | 3,000 | 5,885 | 3,000 | 6,382 | 3,000 | 12,000 |
| Mbarali | Rice | 2,392 | 11,002 | 2,442 | 8,863 | 2,506 | 8,500 | 2,500 | 8,750 | 2,300 | 10,000 |
| Magamb a | Maize | 502 | 2,129 | 715 | 3,377 | 501 | 3,253 | 700 | 2,912 | 700 | 3,500 |
| Magamb a | Wheat | 314 | 550 | 281 | 513 | 303 | 455 | 176 | 211 | 200 | 300 |
| Magamb a | Beans | 14 | 17 | 33 | 22 | 44 | 29 | 31 | 15.5 | 50 | 40 |
| Magamb a | Sunfl ower | 10 | 6 | 62 | 36 | 19 | 6 | - | - | - | - |
| Magamb a | Coffee | 5 | 1.25 | 5 | 3.06 | 5 | 2.5 | 5 | 4.0 | 5 | 4.0 |
| Total | | 3,679 | 15,545 | 6,538 | 22,974 | 6,378 | 18,130 | 6,412 | 18,274 | 6,255 | 25,844 |

Source: Mbeya Region, Data Bank, 1996.

Production of rice in Kapung State Farm in 1990/91 was 2 percent of the overall rice production in Mbeya region. The percentage share increased to 9 percent in 1994/95 season. While rice production in Mbarali in 1990/91 was 10 percent of the total production in the region. Unlike the Kapung percentage share which increased in 1994, Mbarali percentage share in rice production fell to only 7.

CASH CROPS:

Mbeya region is one of the most important cash crops producer in Tanzania. The region produces over 12,000 tons of coffee, representing about 21 percent of total National coffee production. It produces also 1,800 tons of pyrethrum, equivalent to 48 percent of the National production. Similarly Mbeya region produces 35 percent of tea produced in the whole country. Tobacco and cotton are also produced to the tune

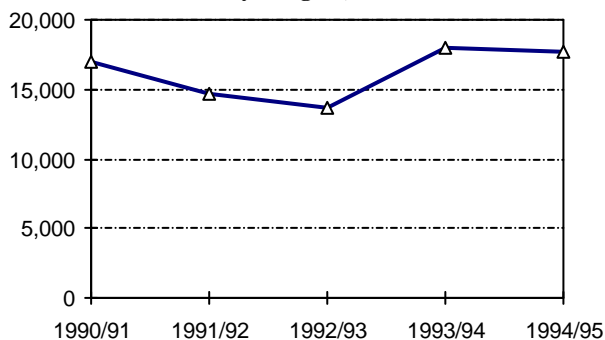
of 1,000 tons and 6,000 tons respectively yearly. Table XXIII below shows production trend in major cash crops in the region.

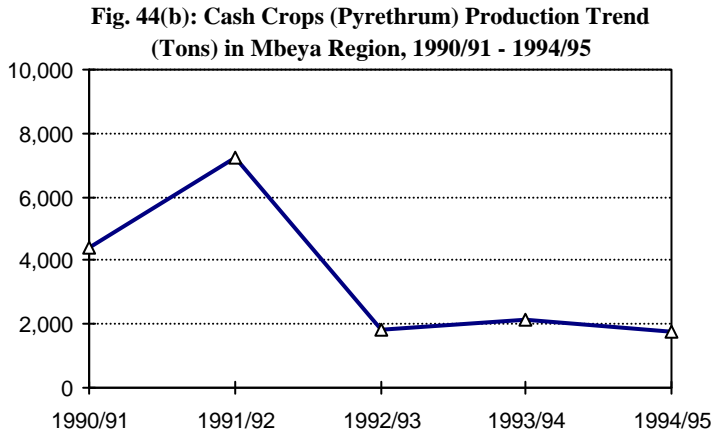
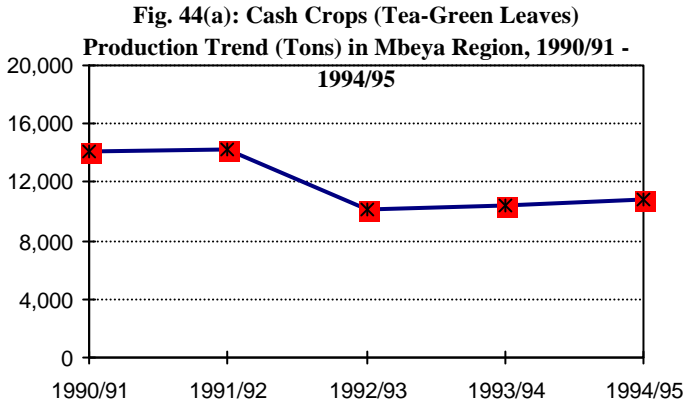
Table XXIII: **CASH CROPS PRODUCTION TREND IN MBEYA REGION BETWEEN 1990/91 AND 1994/95 (TONS)**

| Name of Crop | 1990/91 | 1991/9 2 | 1992/93 | 1993/9 4 | 1994/9 5 |
|------------------|---------|-------------|---------|-------------|-------------|
| Coffee | 16,996 | 14,694 | 13,600 | 17,954 | 17,709 |
| Tea-Green Leaves | 14,150 | 14,192 | 10,200 | 10,428 | 10,824 |
| Pyrethrum | 4,427 | 7,220 | 1,800 | 2,154 | 1,776 |
| Cotton | 4,725 | 6,780 | 7,900 | 7,800 | 8,900 |
| Cardamom | 43 | 79 | 138 | 120 | 94 |
| Sunflower | 2,794 | 1,285 | 11,187 | 4,059 | 3,748 |
| Cocoa | 3,050 | 2,430 | 1,600 | 4,152 | 3,816 |
| Tobacco | 1,000 | 1,620 | 1,620 | 1,800 | 1,617 |

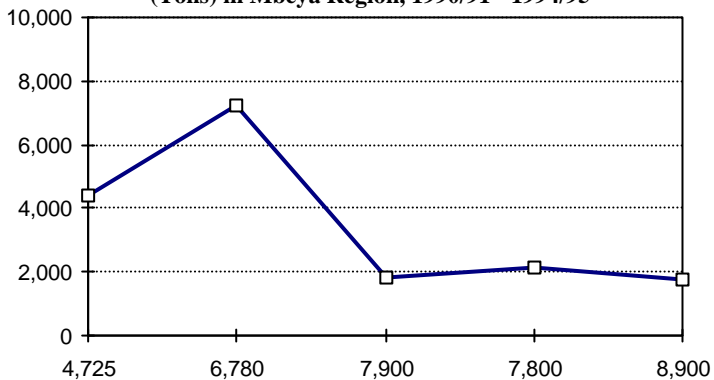
Source: Regional Development Perspective Strategies (1995)

Fig. 44: Cash Crops (Coffee) Production Trend (Tons) in Mbeya Region, 1990/91 - 1994/95





**Fig. 44(c): Cash Crops (Cotton) Production Trend
(Tons) in Mbeya Region, 1990/91 - 1994/95**



**Fig. 44(e): Cash Crops (Cardamom) Production
Trend in (Tons) in Mbeya Region, 1990/91 - 1994/95**

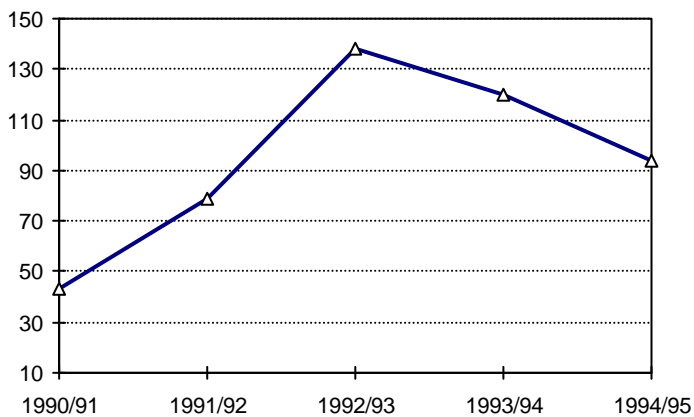


Fig. 44 (f): Cash Crops (Sunflower) Production Trend in Tons, Mbeya Region 1990/91 - 1994/95

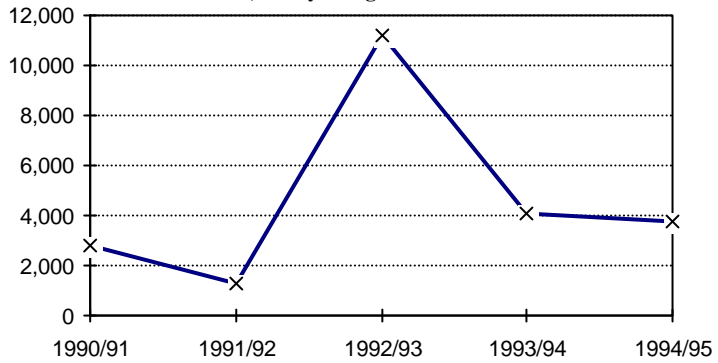


Fig. 44 (g): Cash Crops (Cocoa) Production Trend in Tons, Mbeya Region 1990/91 - 1994/95

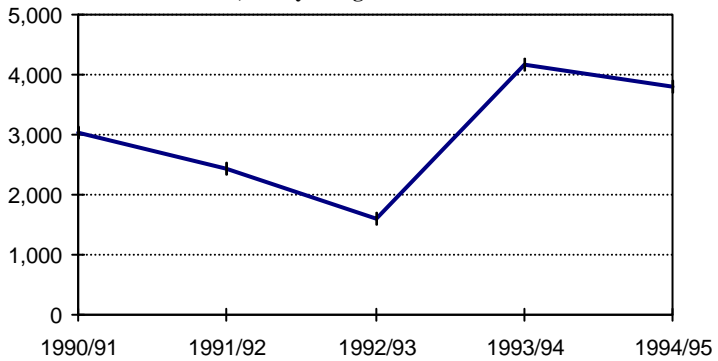
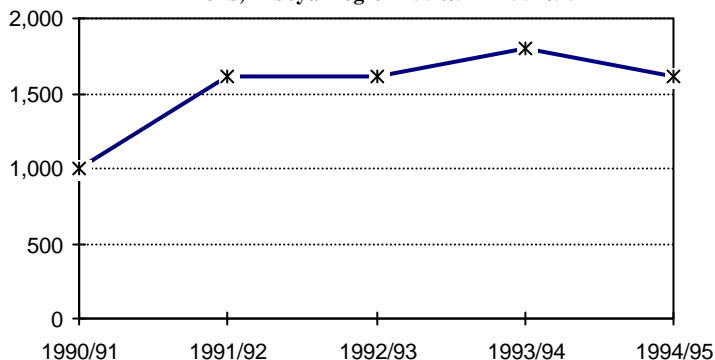


Fig. 44 (h): Cash Crops (Tobacco) Production Trend in Tons, Mbeya Region 1990/91 - 1994/95



Coffee:

Coffee is one of the major cash crops grown in Mbeya region especially in Mbeya, Mbozi, Rungwe and Ileje districts. About 4,000 Ha. have been under coffee for the past five years. Average production of 0.4 tons of coffee per Ha. has been the trend compared with maximum yield of 1.0 ton/Ha. while the average annual production has been about 12,000 tons. Productivity per Has. still needs to be improved.

Production levels for coffee have been rising and falling over the years. For instance in 1990/91 season it was 16,996 tons, in 1991/92 it was only 14,694 tons, while in 1993/94 it rose to 17,954 tons, but fell again to 17,709 tons in 1994/95.

Tea:

Tea is among traditional cash crops grown in large scale in Mbeya region. Most of the tea estates are private. About 5,535 Ha. are under tea production, with a yield of 3,500 tons per annum. The average yield per tree has been 0.6 kgs, which appears to be much lower than the standard of 3 kgs per tree. However, some of the Private Tea Estates have

managed to raise productivity to 2.0 kgs per tree. Like other cash crops, the production levels of tea also fluctuates as indicated by Table XXIII.

Pyrethrum:

Pyrethrum also thrives well in Mbeya region and it is planted in an area almost covering about 2,500 Ha. of land. Its production however, has continued to decline over the years (1990/91 - 1994/95). Pyrethrum production in Mbeya declined by 60 percent from 4,427 tons in 1990/91 to only 1976 tons in 1994/95.

Cotton:

It is a prominent cash crop grown in Chunya District and some few areas of Mbeya (Madibira). The crop covers an area of 5,500 Ha. with annual average production of 6,000 tons. Table XXIII shows production of cotton in tons between 1990/91 and 1994/95.

Tobacco:

Another cash crop mainly grown in Chunya is tobacco and covers an area of about 1,500 Ha. Tobacco annual production is 1,000 tons with an average yield of 0.6 ton/Ha. Production levels have been marginally increasing as shown in Table XXIII between 1990/91 and 1994/95.

Cocoa:

Cocoa is increasingly becoming an important cash crop in Kyela and Rungwe Districts. The area under Cocoa has increased from 5,022 Ha. in 1990/91 to 5,790 Ha. in 1994/95. However, production per unit still remains low - at 0.6 ton/ha. Table XXIII highlights production levels of cocoa between 1990/91 and 1994/95.

Irrigation:

Several studies conducted in Mbeya region regarding irrigation schemes by FAO (1961), Commonwealth Secretariat (1978-1980), Government initiative (1979-1980) and RIDEP (1982) concluded their reports by recommending Usangu Plains, Rukwa Basin, Kanga River Basin and Ulambya Plain for irrigation programmes. In Usangu Plains (Mbeya Rural), large and small scale, farms were recommended especially in Mbarali, Kapunga, Kimani and Igurusi.

Table XXIV: **IRRIGATION DEVELOPMENT BY DISTRICT
IN MBEYA REGION - 1995**

| District | Potential Area (Ha.) | Area under Irrigation |
|-----------|----------------------|-----------------------|
| | | Ha. |
| Chunya | 230,050 | - |
| Ileje | 800 | 35 |
| Kyela | 12,600 | 50 |
| Mbeya (R) | 130,000 | 50,000 |
| Mbozi | 486 | 215 |
| Rungwe | - | - |
| Total | 373,936 | 50,300 |

Source: Planning Commission - Compiled data based on District Profile Data

**Fig. 45: Irrigation Development Potential Areas
(Thousands Ha.) by District in Mbeya Region, 1995**

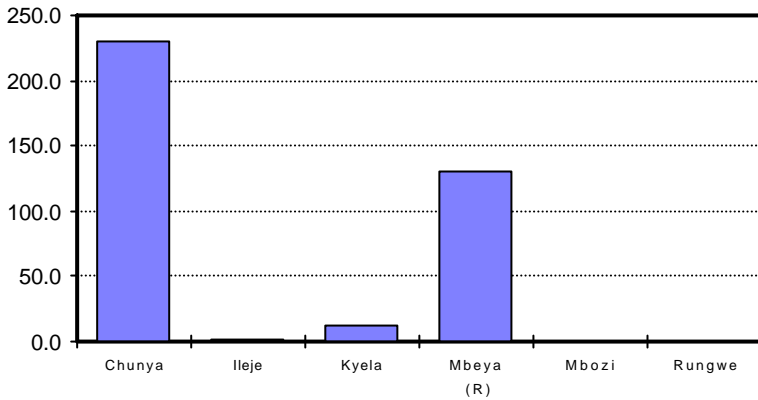


Table XXIV indicates that Mbeya region has high irrigation potential still under exploited. Kyela and Ileje districts have the smallest number of land under irrigation. It has not been very clear why only few hectares are being irrigated in Kyela and Ileje. One reason could be probably high investment costs involved.

FARM IMPLEMENTS:

Hand-hoe is the main tool for peasant farmers in Mbeya region. Oxdrawn ploughs technology is significantly spreading among the people. Mbeya Oxzenization Project (CIDA) has played a good role in training and educating peasant farmers on the use of ploughs and animal drawn implements (ridges, cultivators, carts etc). Table XXV shows the type and number of the agriculture equipments available.

Table XXV: THE NUMBER OF AGRICULTURAL TOOLS IN MBEYA REGION, 1996

| Type | Available Tools | In Use |
|-------------|-----------------|--------|
| Tractors | 262 | 215 |
| Ploughs | 42,389 | 3,283 |
| Cultivators | 253 | 141 |
| Harrows | 129 | 129 |
| Planters | 50 | 42 |
| Trailers | 138 | 120 |
| Ridges | 188 | 28 |
| Ox-carts | 378 | 292 |
| Hoes | Over 56,500 | ... |

Source: Mbeya Region Data Bank, 1996.

Table XXVI: DISTRIBUTION OF AGRICULTURAL IMPLEMENTS BY DISTRICT, (MBEYA REGION) 1992/93.

| District | Tractors | Ploughs | Cultivators | Harrows | Ox-Carts | Ridges | Planters | Trailers |
|----------|----------|---------|-------------|---------|----------|--------|----------|----------|
| Chunya | 9 | 7,208 | 32 | 9 | 160 | 27 | 2 | 4 |
| Ileje | 3 | 1,200 | 23 | 8 | 9 | 18 | - | 2 |
| Kyela | 24 | 11,000 | 15 | 8 | 25 | 13 | 5 | 24 |
| Mbeya | 100 | 9,104 | 60 | 23 | 43 | 44 | 18 | 57 |
| Mbozi | 59 | 13,700 | 123 | 62 | 140 | 86 | 24 | 31 |
| Rungwe | 21 | 177 | - | 4 | 1 | - | 1 | 15 |

| | | | | | | | | |
|-------|-----|------------|-----|-----|-----|-----|----|-----|
| Total | 215 | 42,38 9 | 253 | 114 | 378 | 188 | 50 | 138 |
|-------|-----|------------|-----|-----|-----|-----|----|-----|

Source: Regional Data Bank 1992

FARM INPUTS:

Input requirements for agriculture in Mbeya region in 1993/94 season were 50,000 tons of fertilizer, 1,317 tons of improved seeds, 6,000,000 litres and 6,500 tons of liquid of different chemicals such as insecticides, herbicides, fungicides and pesticides. The supply of inputs in the region is always less than the actual requirement. Also, distribution system of inputs is inefficient as farmers get them late.

Table XXVII below shows the amount of maize improved seeds, beans supplied in Mbeya region in 1993/94.

Table XXVII: QUANTITY OF IMPROVED SEEDS SUPPLIED, 1994/95

| Improved Seeds | | Quantity Supplied (Tons) |
|----------------|---------------|--------------------------|
| (i) | Maize | 60 |
| | TMV | 78 |
| | H.632 | 400 |
| | H.6302 | 120 |
| | H.614 | 27 |
| | UAC | 692 |
| | Katumani | |
| | Sub-Total | |
| | Maize | |
| (ii) | Beans: | 325 |
| | Kabanima | 170 |
| | Uyole `84' | 130 |
| | T 3 | 625 |
| | Sub - Total | 1,317 |
| | beans | |
| | Total Seeds | |

Source: Mbeya Region, Data Bank, 1996.

Table XXVIII: TREND IN SUPPLY OF INPUTS IN MBEYA REGION, 1990/91-1993/94 (TONS)

| Type of Input | 1990/91 | | 1991/92 | | 1992/93 | | 1993/94 | |
|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|
| | Requirement | Actual Supply | Requirement | Actual Supply | Requirement | Actual Supply | Requirement | Actual Supply |
| TSP | 9,551 | 4,415 | 5,000 | 6,932 | 6,850 | 1,332 | 7,551 | 1,565 |
| CAN | 28,014 | 11,378 | 9,800 | 8,758 | 22,700 | 9,613 | 10,500 | 7,500 |
| UREA | 7,769 | 5,667 | 8,000 | 7,186 | 6,950 | 6,741 | 7,661 | 5,147 |
| SA | 3,820 | 2,587 | 1,000 | 2,354 | 5,549 | 1,310 | 6,029 | 1,130 |
| NPK | 7,354 | 3,993 | 8,200 | 5,949 | 7,313 | 6,181 | 2,885 | 2,480 |
| SSP | 507 | - | - | 997 | - | 996 | 900 | 852 |
| SOP | 209 | 10 | - | 188 | 100 | 98 | 900 | - |
| DAP | - | - | - | - | - | 2,783 | 500 | 1,567 |
| TOTAL | 56,717 | 28,457 | 32,000 | 31,964 | 49,372 | 29,055 | 36,926 | 20,241 |

Source: Agriculture and Livestock Development: Annual Report 1990/91 - 1993/94

It is observed from Table XXVIII that in all years under discussion, the input requirements and actual supply are two different things. For instance in 1990/91, actual supply was less by 50 percent, in 1991/92 by 0.1 percent, in 1992/93 by 41 percent and in 1993/94 actual supply of inputs was less by 45 percent.

2.3.5 STORAGE FACILITIES

Post harvest losses are in most cases caused by poor food storage facilities. Poor storage facilities usually render food crops vulnerable to pests, moisture or rodents attack. Table XXIX below highlights the

situation pertaining to storage facilities in Mbeya Region. We would not give exactly the number of traditional granaries employed in each locality.

Table XXIX: **STORAGE POSITION IN THE REGION (1995)**

| District | No. of Godowns | Capacity | Capacity Utilized | Usage % |
|----------|----------------|------------------|-------------------|---------|
| Mbeya | 26 | 10,150 | 8,970 | 88.4 |
| Mbozi | 108 | 42,120 (Tons) | 38,970 | 92 |
| Chunya | 79 | 62,000 | 48,980 | 79 |
| Ileje | 23 | 5,850 | 3,825 | 65.4 |
| Rungwe | 48 | 14,400 (Tons) | 11,100 | 77.1 |
| Kyela | 18 | 41,600 | 25,000 | 60.1 |
| Total | 302 | 176,120 | 136,845 | 77.7 |

Source: Regional Office, Mbeya

Nevertheless, it was reported that apart from the godowns, there were enough traditional food storage facilities in Mbeya. Thus, there is no shortage problem, the problem may be just the quality of the facilities. It was also reported that most of the godowns are not being utilised fully due to trade liberalisation, whereby traders (crop buyers) take the bought crops to markets immediately after purchase. In this regard, the traders do not see the need to store the crops in the godowns and hence render them useless.

LIVESTOCK

Mbeya region has favorable climatic conditions that permit raising and keeping traditional and exotic cattle. The region has 965,212 (1995) cattle - out of which 960,746 are traditional, and 4,466 exotic. There are 171,529 goats, 101,369 sheep, 67,921 pigs and 1,130,456 chicken (poultry). Distribution of livestock in the region as per 1995 data is shown in Table XXX Mbeya district appears to possess large numbers of livestock followed by Mbozi district and Chunya. Kyela district in general seem to possess just a few livestock compared with other districts. For instance, Kyela has the least number of goats, sheep and in terms of cattle, the district comes second after Ileje district with the fewest number. The problem in Kyela with regards to livestock keeping is the inadequacy of land for livestock rearing.

Table XXX: **DISTRIBUTION OF TOTAL LIVESTOCK IN MBEYA REGION BY DISTRICT 1995**

| District | Cattle | Sheep | Goats | Pigs | Total |
|----------|---------|---------|---------|--------|-----------|
| Chunya | 135,365 | 16,711 | 27,791 | 3,488 | 183,355 |
| Ileje | 36,081 | 8,519 | 15,707 | 3,158 | 63,465 |
| Kyela | 40,243 | 1,361 | 1,909 | 6,303 | 49,816 |
| Mbeya | 512,526 | 53,226 | 80,282 | 17,006 | 663,040 |
| Mbozi | 188,184 | 15,313 | 37,316 | 19,349 | 260,162 |
| Rungwe | 52,803 | 6,239 | 8,524 | 18,617 | 86,183 |
| Total | 965,212 | 101,369 | 171,529 | 67,921 | 1,306,031 |

Source:

Fig. 46: Distribution of Total Livestock (Cattle) by District in Mbeya Region, 1995

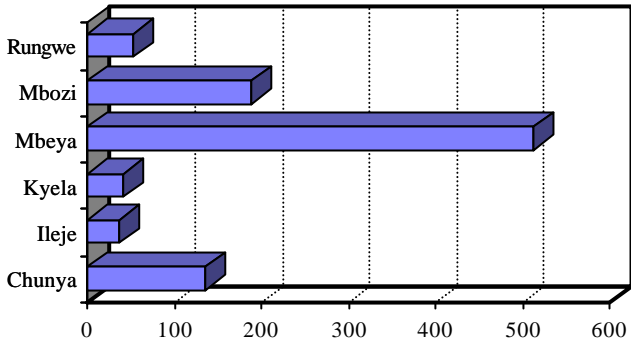


Fig. 46 (a): Distribution of Total Livestock (Sheep) by District in Mbeya Region, 1995

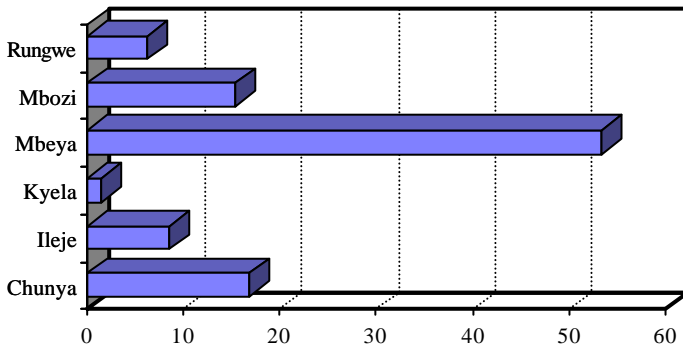


Fig. 46 (b): Distribution of Total Livestock (Goats) by District in Mbeya Region, 1995

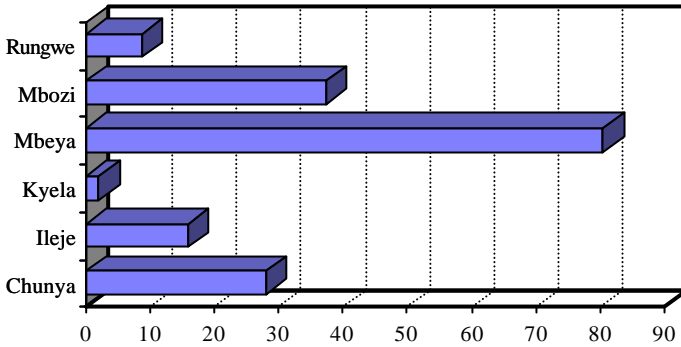
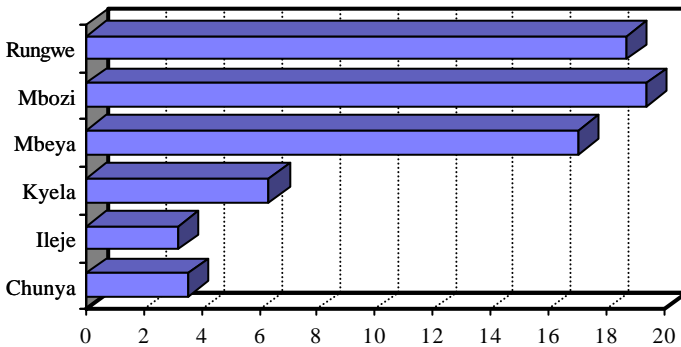


Fig. 46 (c): Distribution of Total Livestock (Pigs) by District in Mbeya Region, 1995



Compared with the 1984 Livestock Census, which registered 646,522 cattle, 134,671 goats, 94,663 sheep and 6,264 pigs, the 1995 livestock count (Table XXX) indicates a remarkable increase of livestock in each category (cattle, goats, etc.) For instance, the number of cattle increased by 49 percent from 646,522 in 1984 to 965,212 in 1995.

2.4.2 DIARY CATTLE DEVELOPMENT

Cattle are generally important for subsistence, particularly for the provision of meat and milk to enrich diet. In attempt to increase the supply of milk and improve the quality, the Government in collaboration with the Swiss Government launched Small Scale Diary Development Programme (SSDDP), known as the Heifer Project International (HPI). In this programme, FI heifers (calves) and bulls are given to selected farmers to improve the quality of

Table XXXI: **DIARY CATTLE DISTRIBUTION IN MBEYA REGION (1990/91 - 1994/95)**

| Year | SSDDP | | | H P I | | | | |
|---------|-----------------|-------|-------|---------|-------|-----|------|-------|
| | In calf Heifers | Bulls | Total | Heifers | Bulls | DOE | Bulk | Total |
| 1990/91 | 109 | 21 | 130 | - | - | - | - | - |
| 1991/92 | 80 | 5 | 85 | 19 | - | - | - | 19 |
| 1992/93 | 95 | 9 | 104 | 104 | 10 | - | - | 114 |
| 1993/94 | 100 | 8 | 108 | 30 | 2 | 20 | 2 | 54 |
| 1994/95 | 66 | - | 66 | 86 | 7 | 40 | 4 | - |
| Total | 450 | 43 | 493 | 239 | 19 | 60 | 6 | 324 |

Source: Mbeya Region Perspective Strategy (1995)

their stock and increase milk supply. Extension services are also made available to the farmers through training, advice and field visits. It has been reported that between 1990 and 1995 about 20,171 farmers have had some training. Table XXXI shows the number of diary cattle distributed between 1990/91 and 1994/95. The HPI project has increased milk production from 43,580,000 litres in 1992/93 to 45,960,000 litres in 1994/95.

Table XXXII: **ANNUAL REQUIREMENT AND MILK SUPPLY IN MBEYA REGION BY DISTRICT**

| District | Annual Requirement (Lts) | Annual Production (Lts) | Shortage (Lts) |
|----------|--------------------------|-------------------------|----------------|
| Mbeya | 14,876,443 | 11,766,400 | 3,110,043 |
| Mbozi | 15,123,031 | 11,900,200 | 3,222,831 |
| Rungwe | 8,338,623 | 10,300,000 | N I L |
| Chunya | 5,000,000 | 1,840,000 | 3,160,000 |
| Kyela | 4,158,293 | 2,160,000 | 1,998,293 |
| Ileje | 10,089,037 | 7,993,400 | 2,095,637 |

| | | | |
|-------|------------|------------|------------|
| Total | 57,587,427 | 45,960,000 | 11,627,427 |
|-------|------------|------------|------------|

Source: RALD - Annual Report (1995)

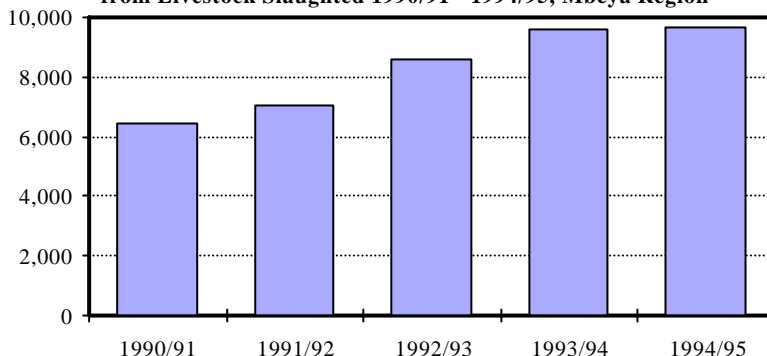
According to the data in Table XXXII, only Rungwe District does not face milk shortage. Rungwe has a surplus of 1,961,377 litres of milk. The remaining districts in Mbeya region still need to increase their milk production capacities in order to meet demand.

Table XXXIII: **REVENUE AND INCOME FROM LIVESTOCK AND ITS PRODUCTS 1990/91 - 1994/95**

| YEAR | LIVESTOCK SLAUGHTERED | | | LIVESTOCK SOLD IN MARKETS | | |
|---------|-----------------------|-----------------------------|----------------------------|---------------------------|-----------------------------|----------------------------|
| | Number (No.) | Government Revenue (T.shs.) | Income to Farmers (T.shs.) | Number (No.) | Government Revenue (T.shs.) | Income to Farmers (T.shs.) |
| 1990/91 | 45,526 | 6,473,600 | 33,110,000 | 13,694 | 686,426 | 235,635,290 |
| 1991/92 | 49,772 | 7,050,800 | 42,048,000 | 7,446 | 477,859 | 154,040,594 |
| 1992/93 | 35,128 | 8,601,800 | 68,774,000 | 13,193 | 703,265 | 323,423,678 |
| 1993/94 | 34,906 | 9,582,150 | 68,551,000 | 8,482 | 516,840 | 298,152,783 |
| 1994/95 | 34,903 | 9,657,000 | 64,872,000 | 3,684 | 184,200 | 135,219,361 |
| Total | 200,285 | 42,365,350 | 277,355,000 | 46,499 | 2,568,590 | 1,146,471,706 |

Source:

Fig. 47: Government Revenue (Thousands T.shs.) Collected from Livestock Slaughtered 1990/91 - 1994/95, Mbeya Region



It is evident from Table XXXIII that people could get a lot of money from livestock. The seventh column clearly shows how much income farmers received from the livestock sold in markets between 1990/91 and 1994/95. It is obvious that if quality of livestock is improved their market value goes up as well.

2.2.5 LIVESTOCK INFRASTRUCTURES:

Mbeya region is said to have 65 dips 24 crushes, 30 slaughter slabs, 15 hides sheds and 6 health centres and clinics, but only 25 percent of them are operating. Most of them require rehabilitation and renovation. The distribution of these infrastructures are in Table XXXIV below:-

Table XXXIV: DISTRIBUTION OF LIVESTOCK INFRASTRUCTURE IN THE REGION BY DISTRICT, 1995

| Types | Chunya | Ileje | Kyela | Mbeya | Mbozi | Rungwe | Total |
|-----------|--------|-------|-------|-------|-------|--------|-------|
| Dips | 7 | 1 | 4 | 23 | 32 | 21 | 65 |
| Abattoirs | 3 | 1 | 2 | 10 | 6 | 5 | 30 |

| | | | | | | | |
|------------------------|---|---|---|----|---|---|----|
| Crushers | 3 | 1 | 4 | 10 | 5 | 6 | 24 |
| Health Centres/Clinics | 5 | 1 | 1 | 2 | 1 | 1 | 11 |
| Hide/Skin Sheds | 3 | 1 | 1 | 6 | 3 | 2 | 16 |
| Livestock Market | 5 | - | - | 10 | 3 | - | 18 |

Source: Planning Commission - Compiled Data based on District Development Profiles

Mbeya region, in addition to already mentioned livestock facilities it has 18 livestock markets and two holding grounds at Igawa and Mbaao.

PROBLEMS FACING LIVESTOCK HUSBANDRY:

- (1) High prices of drugs, equipment and animal feeds
- (2) Poor services
- (3) Foot and mouth, Anthrax, Trypanosomiasis and East Coast Fever diseases
- (4) Tsetse infestation
- (5) Less attention given to livestock

2.5 NATURAL RESOURCES:

2.5.1 Introduction:

It is estimated that about 12,595 sq.kms or 19.8 percent of the total land area of the region is covered with forests and about 2,314 sq.kms are covered with forests, while 220 sq.kms belong to artificial forests. The most important types of forests in Mbeya region are three namely, Rain forests, Tropical Savannah and Miombo Woodlands. There are also about 18 Forest Reserves and about 63 Proposed Forest Reserves as shown below:-

Table XXXV: **FOREST RESERVES DISTRIBUTION AND CATEGORY IN MBEYA REGION BY DISTRICT**

| District | Name of Forest and Type | Category | Area (Ha.) | Ownership |
|----------|-------------------------|----------|------------|-----------|
| 1 | 2 | 3 | 4 | 5 |

| | | | | |
|----------------|------------------------|------------|------------|-------------------|
| Chunya | Lukwati (F.R) | Protected | 189514.16 | |
| | Lwipa (F.R) | " | 69058.81 | |
| | Kipembawe (F.R) | " | 3149.79 | |
| | North Lupa (F.R) | " | 5052.63 | |
| | Kalongoli (F.R) | " | 2259.91 | |
| | Mbiwe (P.F.R) | " | 49147.70 | |
| | Patamela (P.F.R) | " | 200,000.00 | |
| | Sianimpala (P.F.R) | Productive | 930.00 | |
| | Mtainula Hills (P.F.R) | " | 1820.00 | |
| | Ileme (P.F.R) | " | 2045.00 | |
| | Zira River (P.F.R) | " | 32,752.0 | |
| Itengu (P.F.R) | " | 10670.0 | | |
| Total Chunya | | | 396,400.23 | |
| Ileje | Iyondo (F.R) | Protected | 943.3 | Local Authority |
| | Mswima (F.R) | " | 718.8 | " |
| | Kyosa (F.R) | " | 943.5 | " |
| | Kabul (F.R) | " | 3448.0 | " |
| | Halembo (P.F.R) | " | 264.0 | National Gazetted |
| | Ileje Mountain (P.F.R) | " | 7090.0 | " |
| | Izuba (P.F.R) | " | 1116.0 | Local Authority |
| | Nalupembe (P.F.R) | " | 126.0 | " |
| | Membe (U.S) | Productive | - | " |
| | Shinji (U.S) | " | - | " |
| | Pimbi Hill (U.S) | " | - | " |
| | Chabu (U.S) | " | - | " |
| | Mboli (U.S) | " | - | " |
| | Mkumbukwa Hill (U.S) | " | - | " |
| Total Ileje | | | 14651.6+ | |
| Kyela | Njugilo (F.R) | Protected | 10,704 | National |
| | Ngana (P.F.R) | Productive | 6,000 | Local Authority |
| Total | | | 16,704 | |

| | | | | |
|----------------------|-----------------------|------------|-----------|-----------------|
| Mbeya | Chimala Scarp (P.F.R) | Protected | 17,570 | National |
| | Mporoto Ridge (F.R) | " | 15,745 | " |
| | Ikhoho (F.R) | " | 660 | Local |
| | Irungu (F.R) | " | 1,860 | Authority |
| | Irenga (F.R) | " | 635 | " |
| | Chumvi (P.F.R) | " | 250 | National |
| | Mbeya Peak (F.R) | " | 14,450 | Local |
| | Umalila (P.F.R) | " | 2,346 | Authority |
| | North Usafwa (P.F.R) | Productive | 755 | National |
| | Idugumia (P.F.R) | " | 740 | " |
| | Galijembe (P.F.R) | " | 260 | Local |
| | Mapara (P.F.R) | " | 1,170 | Authority |
| | Mlimanyoka (P.F.R) | " | 83,600 | National |
| | Mwambalizi | " | 7,600 | Local |
| | Ikogha | " | 211,600 | Authority |
| Galijembe Plantation | " | 123,600 | | |
| Total (Mbeya) (R) | | | 483,596 | |
| Mbozi | Lungwa (F.R) | Protected | 2,500 | National |
| | Uwawa Catchment (F.R) | Productive | 1,000 | " |
| | Senjele (F.R) | " | 3,000 | Local |
| | Ivuma (P.F.R) | " | 24,489 | Authority |
| | Isalalo (P.F.R) | " | 28,547 | " |
| | Chumwa (P.F.R) | " | 31,500 | " |
| | Longosote (P.F.R) | " | 1,041 | " |
| | Fonera (P.F.R) | " | 111 | " |
| | Mtanzu (P.F.R) | " | 1,550 | " |
| Total | | | 93,743 | |
| Rungwe | Mt. Rungwe Peak (F.R) | Protected | 169,537 | National |
| | Poroto Ridges (F.R) | " | 84,768 | Local Authority |
| Total Rungwe | | | 254,305 | |
| Total Region | | | 1,259,500 | |

Source: Planning Commission Compiled Data based on District Profiles (1995)

Afforestation:

Afforestation programmes have always been encouraged in Mbeya Region. For instance between 1988 - 1994, the region raised seedlings and mobilized several departments institutions and farmers to plant them in chosen areas. In response to this campaign, a total area of 15,473 Ha. were planted between 1988/89 and 1993/94 as indicated in Table XXXVI below. The afforestation programmes are being supported by the EEC - through Agricultural Sector Support Programme (ASSP) now EDF Fund, and the MAJI - DANIDA Project since 1989 in collaboration with local funds under RDD-Mbeya. The aim is to control land degradation, deforestation, soil erosion and floods as well as protection of catchment areas of river sources - like that of Ruaha, Songwe, Kiwira, and Lufilyo.

Table XXXVI: EEDLINGS RAISED AND AREA PLANTED IN MBEYA REGION (Nos.)

| Institutions | No. (1988/89) | No. (1989/90) | No.1990/9 1 | No. (1991/92) | No. (1992/93) | No. (1993/94) |
|--------------------|------------------|------------------|----------------|------------------|------------------|------------------|
| RDD | 500,000 | 300,000 | 400,000 | 400,000 | 400,000 | 15,000 |
| EEC | 785,304 | 5,964,000 | 5,674,391 | 6,700,000 | 4,832,538 | 4,832,535 |
| MAJI/DANIDA | - | 1,000,000 | 200,000 | 139,200 | 700,000 | 707,928 |
| W I A | - | 20,000 | 15,620 | 23,532 | 17,192 | 15,424 |
| Total | 1,285,304 | 7,284,000 | 7,284,878 | 7,284,878 | 8,312,000 | 5,570,880 |
| Area Planted (Ha.) | 578.0 | 532.2 | 3281.9 | 3281.9 | 4669.6 | 3129.7 |

Source: Planning Commission Compiled data - based on Regional Data Bank (1995)

Table XXXVII: REVENUE COLLECTED FROM SALES OF SOME FOREST PRODUCTS BETWEEN 1993/94 AND 1994/95

| District | 1993/1995 (M3) | 1994/1995 (M3) |
|----------|----------------|----------------|
| | | |

| | Timber | Revenue | Fuel/Wood | Revenue | Timber | Revenue | Fuel/Wood | Revenue |
|--------|---------|------------|-----------|-----------|---------|------------|-----------|------------|
| | (M3) | T.Shs M/≡) | (M3) | (T.shs.M) | (M3) | (T.sh.M/≡) | (M3) | (T.sh.M/≡) |
| Chunya | 496.6 | 0.77 | 26,262 | 131.3 | 196.2 | 0.3 | 6196.5 | 309.8 |
| Ileje | 78.5 | 0.12 | 834 | 4.2 | 25.0 | 0.04 | 770 | 3.9 |
| Kyela | 92.2 | 0.14 | 943 | 4.75 | 32.4 | 0.2 | 1568 | 7.84 |
| Mbeya | 3947 | 6.13 | 117836 | 589.1 | 806 | 1.25 | 148,253 | 741.3 |
| Mbozi | 8,950 | 13.9 | 118,500 | 592.42 | 4,200 | 6.51 | 119,400 | 597.03 |
| Rungwe | 7,450 | 11.6 | 365.050 | 1825.3 | 7,680 | 11.9 | 376,320 | 1881.6 |
| Total | 21014.3 | 32.66 | 629425 | 3147.07 | 12939.6 | 20.2 | 708276 | 3541.47 |

Source: Mbeya Region Data Bank, 1996.

Fig. 48: Revenue Collected from Timber in Million T.Shs. by District, 1993/95, Mbeya Region

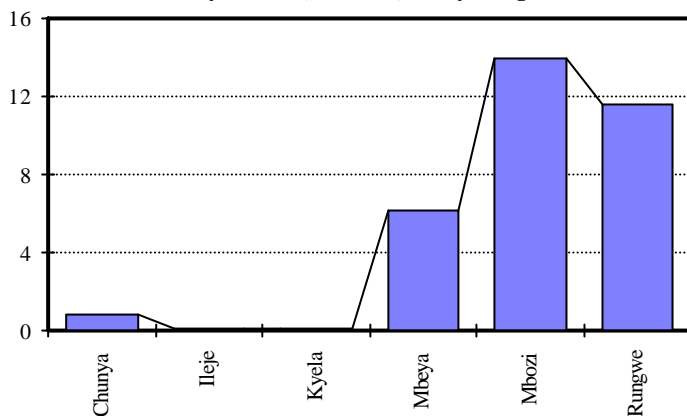


Fig. 48 (a) : Revenue Collected from Fuel/Wood in Million T.Shs. by District, 1993/95, Mbeya Region

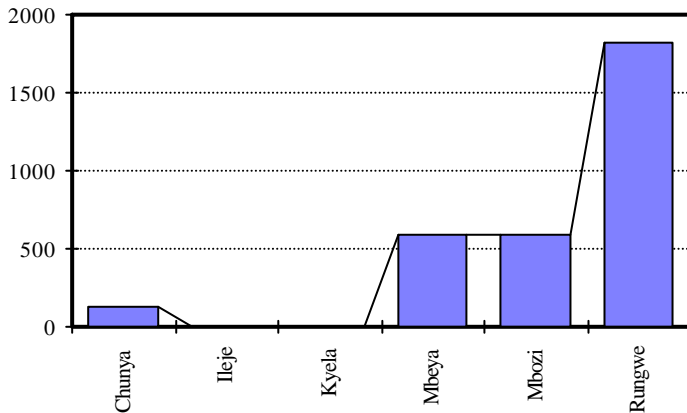


Fig. 48 (b): Revenue Collected from Timber in Million T.Shs. by District, 1994/95, Mbeya Region

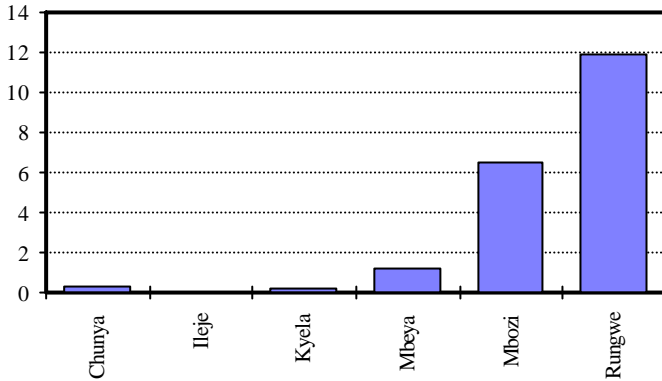
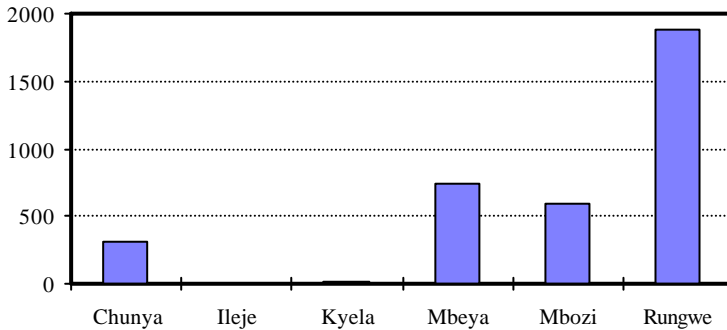


Fig. 48 (c): Revenue Collected from Fuel/Wood in Million T.Shs. by District, 1994/95, Mbeya Region



2.5.4 Wildlife:

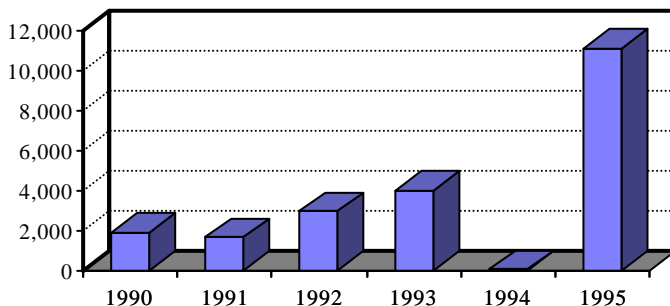
Despite the fact that Mbeya region is well endowed with forest reserves and game reserved areas - like Gua in Chunya and Madibira in Mbarali, wildlife activities are still not developed very much. The Lukwati, Lwipa, Kipembawe, North Lupa and Kalongali forested areas comprise a total area of 990.36 km² suitable for both wood harvesting and tourist hunting. Although,

annual cropping is not well developed, it is reported that between 1990 and 1995 Mbeya District alone managed to collect 5 million shillings from local hunting and US\$ 245,722 from tourist hunting (fees and licences). Table XXXVIII below highlights wildlife activities in Mbeya region.

Table XXXVIII: GAME ACTIVITIES AND TOURIST HUNTING REVENUE COLLECTED 1990 - 1995

| Activity | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Number of Poachers arrested | 31 | 10 | 8 | 15 | 12 | 6 |
| Number of Animals | 46 | 325 | 65 | 23 | 18 | 19 |
| Animals killed by Tourists and Local people | 453 | 365 | 419 | 493 | 1171 | 1207 |
| Revenue collected through Local Hunting | Tsh. 1,888,500 | Tsh. 1,625,100 | Tsh. 2,928,700 | Tsh. 3,990,900 | Tsh. 6,150,865 | Tsh. 11,155,518 |

Fig. 49: Revenue collected through Local Hunting (Thousands Million T.Shs.), Mbeya Region 1990 - 1995



2.5.5 Beekeeping:

Mbeya Region is rich in Miombo woodlands, characterized by rich melliferous species. The Miombo woodloads are usually preferred and are the most suitable for nursing bee- colonies. Currently, the production of honey and wax are on the average of 25 tons and 16 tons per annum respectively. Production per hive per annum is as low as 15 kgs of honey and 2.5 kgs of wax. Chunya district leads in the production of both products followed by Mbeya and Mbozi districts.

Table XXXIX: HONEY AND BEESWAX PRODUCTION BY DISTRICT, 1995

| District | Honey | | Beeswax | | Total |
|----------|-------------|-------------------|--------------|-----------------|--------|
| | Wight (Kgs) | Value (M.TShs./=) | Weight (Kgs) | Value (Tsh M/=) | |
| Chunya | 185,650 | 65.0 | 13,257 | 16.0 | 81.0 |
| Ileje | 3,660 | 1.4 | 1,220 | 1.5 | 2.9 |
| Kyela | 185 | 0.007 | 1,146 | 0.06 | 0.13 |
| Mbeya | 116,000 | 40.2 | 1,160 | 1.4 | 41.6 |
| Mbozi | 106,115 | 37.2 | 7,073 | 8.5 | 45.7 |
| Rungwe | 12,397 | 4.7 | 2,169 | 2.62 | 7.32 |
| Total | 426,007 | 148.57 | 24,925 | 30.08 | 178.65 |

Source: Mbeya District Reports, 1996

Fig. 50: Production of Honey in Thousands Kgs by District, 1995

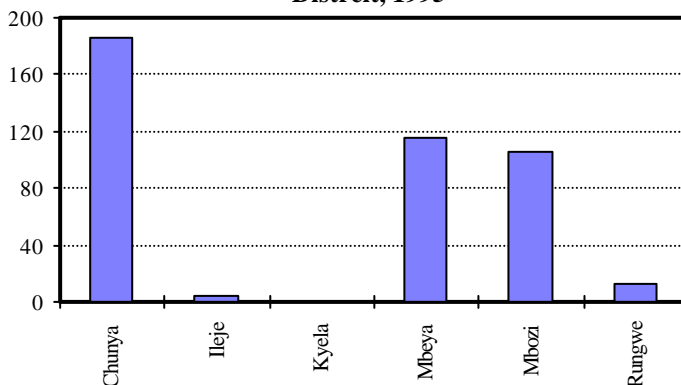
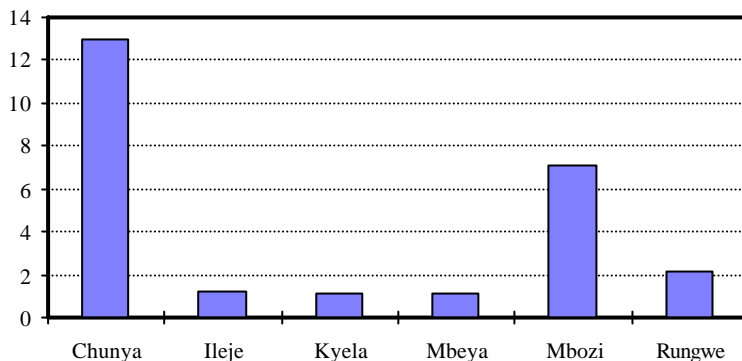


Fig. 50 (a) : Production of Beeswax in Thousands Kgs by District, Mbeya Region 1995



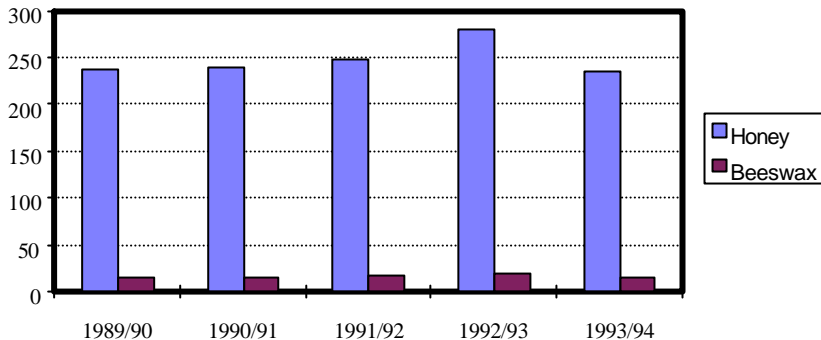
It is observed from Table XXXIX that 185,650 Kgs of honey and 13,257 kgs of wax were produced in Chunya District, while 116,000 kgs of honey and 1,160 kgs of wax were produced in Mbeya. Beekeeping activities in Kyela and Ileje districts appear less important. Only 185 kgs of honey were produced by Kyela District in 1995. Table XL further highlights the trend in honey and wax production in Mbeya Region between 1989/90 and 1993/94.

Table XL: PRODUCTION OF HONEY AND BEESWAX AND INCOME OBTAINED FOR THE PAST 5 YEARS

| Year | Number of Beehives | | Honey/Beeswax | |
|---------|--------------------|--------|---------------|--------------|
| | Traditional | Modern | Honey Kgs. | Beeswax Kgs. |
| 1989/90 | 104,900 | 315 | 236,970 | 15,778 |
| 1990/91 | 105,020 | 549 | 239,892 | 16,018.5 |
| 1991/92 | 109,480 | 549 | 248,622 | 17,420 |
| 1992/93 | 119,256 | 580 | 280,110 | 18,674 |
| 1993/94 | 126,593 | 659 | 234,110 | 16,378.5 |
| Total | 565,249 | 2,652 | 1,239,704 | 84,298 |

Source:

Fig. 51: Production of Honey and Beeswax obtained for the past 5 years in Mbeya Region (1990/91 - 1993/94)



Low production levels of bee-products are attributed to poor quality of bee hives, unreliable market and low prices. Bee-keeping Training Centre at Kipembawe in Chunya District should be rehabilitated so that it lives up to the expectations of the people (bee-keepers).

FISHING INDUSTRY:

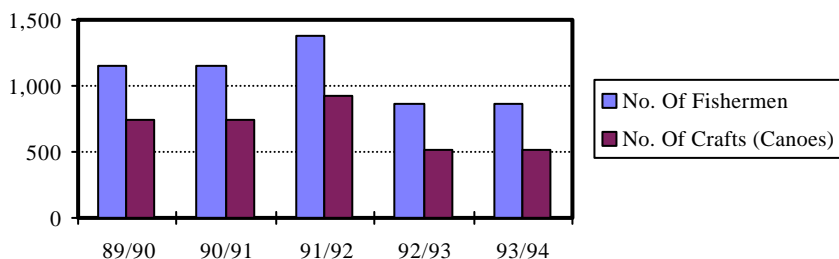
Mbeya Region, has two lakes (Nyasa and Rukwa), quite a number of rivers and a good number of fish ponds. This makes the Region rich in fish. Fish potential is high and what is required is the use of modern fishing gear. Mbeya Region has 2,500 fishermen using 1750 dug-out canoes. The average fish production is 8,600 metric tones in L. Rukwa. Fish catch in Chunya district is between 7 to 60 tons annually while that of Kyela District is on average below 50 tons annually. The common types of fish caught are Daga (engraulicypris sardine), opasaridium (Mbasa), balirius (Mbelele) synodontes - riverine fishes, lungfish (Kambale), tilapia (ngege) and presently the Aquarians for ornamental purpose (engrauslicypris sardella, tilapia, bagrus, and barbusct (inshore fishes).

Table XLI: TREND IN FISHING INDUSTRY IN MBEYA REGION 1989/90-1993/94

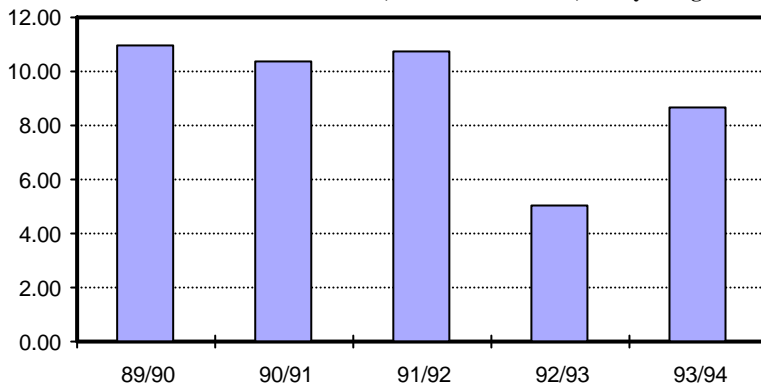
| Lake | Year | No. Of Fishermen | No. Of Crafts (Canoes) | Weight of Fish (Metric Tonnes) |
|-------|---------|------------------|------------------------|--------------------------------|
| Rukwa | 1989/90 | 1,155 | 736 | 10,934.5 |
| | 1990/91 | 1,155 | 736 | 10,390.0 |
| | 1991/92 | 1,384 | 926 | 10,765.1 |
| | 1992/93 | 863 | 512 | 5,050.0 |
| | 1993/94 | 863 | 512 | 8,635.9 |
| Nyasa | 1989/90 | 682 | 295 | 1,618.9 |
| | 1990/91 | 682 | 295 | 1,664.7 |
| | 1991/92 | 790 | 372 | 1,428.5 |
| | 1992/93 | 412 | 205 | 264.2 |
| | 1993/94 | 745 | 393 | 1,167.4 |

Source: Mbeya Region Data Bank, 1996.

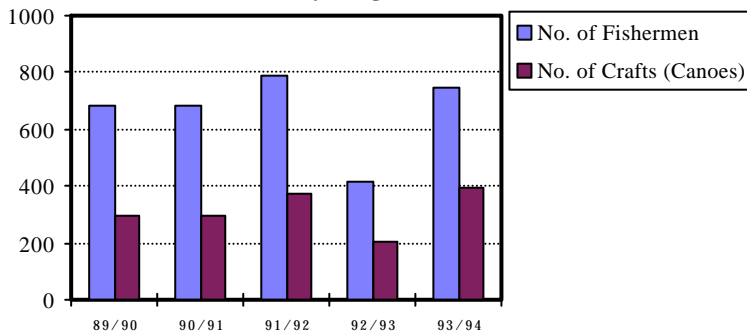
Fig. 52: Trend in Fishing Industry (No of Fishermen and No. of Crafts (Canoes) Lake Rukwa, 1989/90 - 1993/94, Mbeya Region



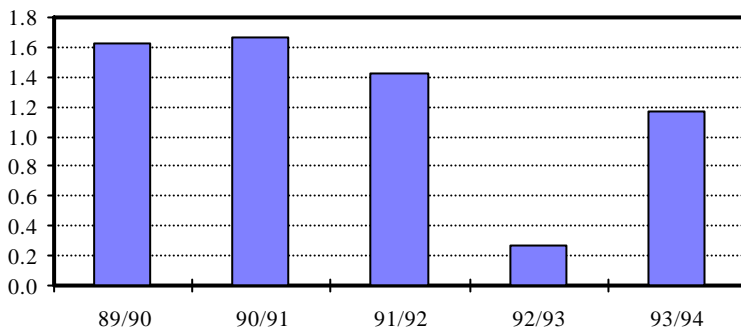
**Fig. 52 (a): Weight of Fish (Thousands Metric Tonnes)
Obtained from Lake Rukwa, 1989/90 - 1993/94, Mbeya Region**



**Fig. 52 (b): Trend in Fishing Industry (No. of Fishermen &
No. of Crafts (Canoes) From Lake Nyasa, 1990/91 - 1993/94,
Mbeya Region**



**Fig. 52 (c): Weight of Fish (Thousands Metric Tonnes)
Obtained from Lake Nyasa 1989/90 - 1993/94, Mbeya Region**



A part from fishing in lakes, fish ponds also provide an alternative fishing grounds. Fish ponds are estimated to be 937 in Mbeya Region. In Mbozi alone there are 342 fish ponds. Table XLII below highlights the developments in fish ponds in each District.

Table XLII: FISH FARMING/CULTURE BY DISTRICT

| District | Number of Ponds | | Fish Production (Kgs) |
|-----------------|-----------------|-------------------|-----------------------|
| | Ponds | Planted with fish | |
| Ileje | 141 | 52 | 300 |
| Kyela | 5 | 2 | 50 |
| Mbeya/mbarali | 287 | 197 | 500 |
| Mbozi | 342 | 288 | 600 |
| Rungwe | 152 | 36 | 200 |
| Mbeya Municipal | 10 | 8 | 600 |
| Total | 937 | 581 | 2250 |

Source: Mbeya Regional Natural Resources office: 1965

Fig. 53: Fish Farming/Culture by District, Mbeya Region

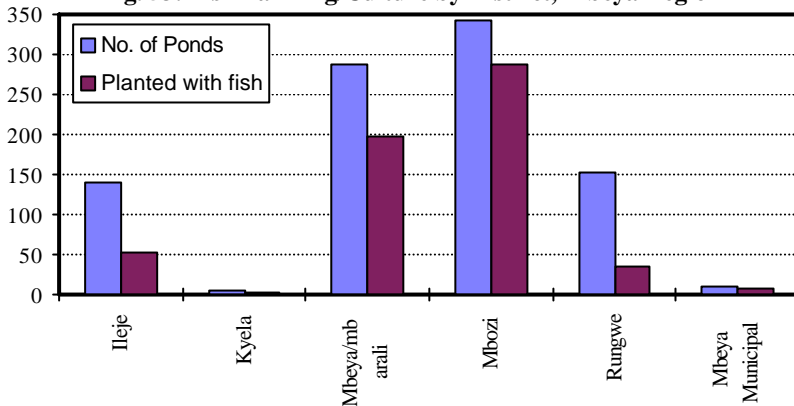
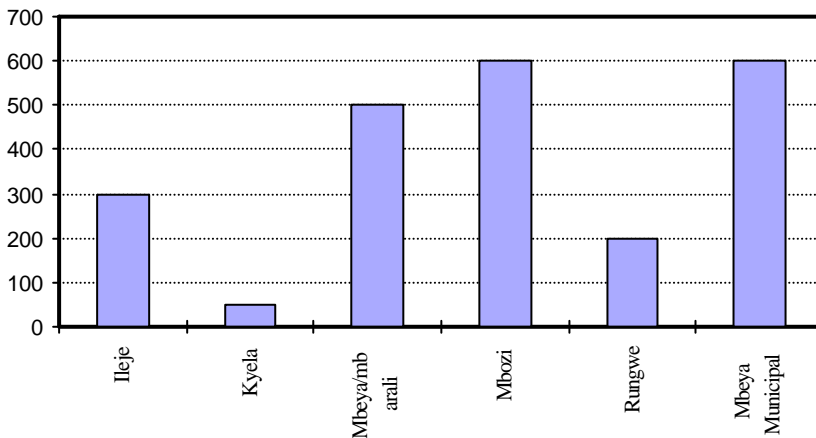


Fig. 53 (a): Fish Production (Kgs) by District in Mbeya Region



PROBLEMS FACING FISHING INDUSTRY:

- Poor fishing crafts and fishing gear.
- Lack of transport
- Lack of extension workers to assist fishermen.
- Silt deposition into Lakes

MINING:

Mining activities in Mbeya Region started way back in early 1930, following gold deposits discovery in Lupa and Ubiwe in Chunya District. Apart from gold deposits, there are several gemstones such as marble and Granite (in Mbeya), coal (in Rungwe/Kyela/Ileje), mica (in Ileje), limestone (in Mbeya/Mbozi), salt (in Mbozi), sand and dolomite (in Mbeya) and carbon dioxide (in Rungwe). Mining in Mbeya Region is of two magnitudes, that is, large-scale mining and small-scale mining. Big companies operating in Mbeya Region include:-

- i) Kiwira Coal Mine Ltd - Ilima; Coal Mining
- ii) Mbeya Cement Co. Ltd - Songwe; Limestone Mining
- iii) DEMCO - Saza / Chunya; Gold Mining
- iv) Consolidated Mines Ltd - Songwe; Marble/Travertine Quarrying
- v) Mans Mining Co. Sangambi / Chunya; Gold Mining

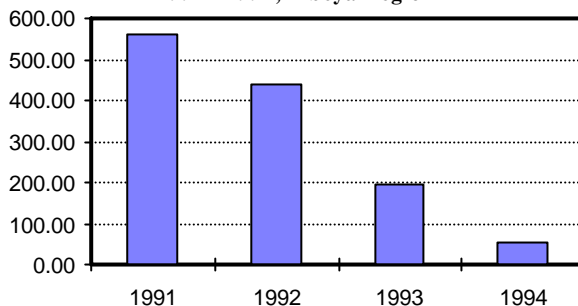
The value of minerals production in Mbeya region increased from T.Shs. 544,091, 746.30 in the year 1991 to T.Shs. 335,819,700.00 in the year 1993. But in 1992 the value was less, because Kiwira Coal Mines Ltd. gave no report for this production and value.

Table XLIII: GOLD PRODUCTION AND VALUE - MBEYA REGION

| Year | Mbeya Region | |
|------|---------------|------------------|
| | Quantity (GM) | Value (Tshs.) |
| 1990 | - | - |
| 1991 | 560,914.98 | 1,696,306,099.50 |
| 1992 | 440,455.98 | 1,630,978,213.80 |
| 1993 | 197,071.53 | 730,301,420.70 |
| 1994 | 52,745.66 | 223,236,025.70 |

Source: Mineral Production Register (1995), Mbeya Region

**Fig. 54: Gold Production Quantity (GM)
1991 - 1994, Mbeya Region**



INDUSTRIAL ACTIVITIES:

Mbeya Region can be identified with about 7 types of small-scale industrial activities as shown in Table XLIV.

Table XLIV: TYPE OF SMALL-SCALE INDUSTRIAL ACTIVITIES BY DISTRICT

| Type of Industrial Activities | Mbeya urban | Mbeya Rural | Kyela | Rungwe | Chunya | Ileje | Mbozi | Total |
|-------------------------------|-------------|-------------|-------|--------|--------|-------|-------|-------|
| Maize Mills | 92 | 88 | 79 | 85 | 57 | 58 | 78 | 537 |
| Automobile Repairs Shops | 36 | 9 | 5 | 7 | 6 | 3 | 4 | 66 |
| Metal Fabrication Shops | 29 | 6 | 4 | 3 | 2 | - | 3 | 47 |
| Oil Extraction | 5 | - | - | - | - | - | - | 5 |
| Carpentry Workshops | 15 | 3 | 3 | 4 | 1 | 1 | 3 | 30 |
| Shoe Repair/Making | 17 | 2 | 2 | 1 | - | - | 1 | 23 |
| Tailoring | 14 | 1 | 1 | 1 | 1 | - | 1 | 19 |
| | 208 | 109 | 94 | 101 | 67 | 62 | 90 | 731 |

Source:

Table XLV: EMPLOYMENT GENERATED BY SMALL-SCALE INDUSTRIES

| Type of Industrial Activities | Mbeya Urban (No.) | Mbeya Rural (No.) | Kyela (No.) | Rungwe (No.) | Chunya (No.) | Ileje (No) | Mbozi (No.) | Total (No.) |
|-------------------------------|-------------------|-------------------|-------------|--------------|--------------|------------|-------------|-------------|
| Maize | 184 | 176 | 158 | 170 | 114 | 116 | 156 | 1074 |
| Automobile Repair Shops | 396 | 72 | 50 | 56 | 30 | 15 | 40 | 649 |
| Metal Fabrication | 174 | 24 | 20 | 15 | 8 | - | 15 | 256 |
| Oil Extraction | 35 | - | - | - | - | - | - | 35 |
| Carpentry Workshop | 150 | 30 | 30 | 40 | 10 | 10 | 30 | 300 |
| Shoe Making/Repair | 68 | 6 | 8 | 3 | - | - | 4 | 89 |
| Tailoring | 42 | 3 | 3 | 3 | 3 | - | 3 | 57 |
| Total | 1049 | 311 | 269 | 287 | 165 | 141 | 248 | 2470 |

Source: Mbeya Region Data Bank, 1996

Table XLVI : EXISTING MEDIUM/LARGE-SCALE INDUSTRIES

| Name of Establishment | District | Products |
|---|-------------|--|
| 1. Kiwira Coal Mines Co. Ltd. | Rugwe | Coal |
| 2. Katumba (T.T.A) | Tukuyu | Black Tea |
| 3. Chivanjee/Musekera Tea Factory (Tukuyu Tea Estate Ltd) | Tukuyu | Black Tea |
| 4. Tanzania Animal Feeds Co. Ltd. Mbeya (Mbeya Plant) | Mbeya Urban | Animal Feeds |
| 5. Mbeya Cement Factory | Mbeya Rural | Portland Cement |
| 6. Mwakalele Tea Factory | Rungwe | Black Tea |
| 7. Highland Manufactures | Mbeya Urban | Knitted Garments |
| 8. PEMOCCO | Mbeya urban | Motors (Electric) |
| 9. Mbeya Wood | Mbeya Urban | Wooden Furniture |
| 10. Mbeya Plastics | Mbeya Urban | Plastic Toys Household |
| 11. Mbeya Farm Emplements Ltd | Mbeya Urban | Round eye hoes, wheel barrows, shovels |
| 12. Hisoap Co. Ltd. | Mbeya Urban | Rungwe Hoes |

| | | | |
|-----|----------------------------|-------------|-------------|
| 13. | Afri Bottlers | Mbeya Urban | Soft Drinks |
| 14. | Southern Highland Bottlers | Mbeya Urban | Soft Drinks |

Source: Mbeya Region, Data Bank, 1996

SECTION III

ECONOMIC INFRASTRUCTURE:

ROAD NETWORK:

Introduction:

Mbeya Region generally boasts of good Road network and Reliable rail transport (TAZARA). There are about 717 Kms. Of Trunk roads, 1,276.7 kms. Of Regional Roads; 1,420.2 kms of District Roads and 1,463.2 kms of Feeder Roads. From Dar es Salaam, Mbeya Region can be reached by road and rail. Mbeya is also connected by roads to its neighbouring Regions.

That is, from Tunduma to Sumbawanga, (Rukwa region) Mbeya to Higi (Singida) from Kambikatoto to Tabora region, from Mbeya to Iringa region; and from Uyole (Mbeya) to Kasumu the border with Malawi, and to Tunduma the border with Zambia. Interval roads system also connect district headquarters. Most of these roads are not during rain season.

Table XLVII: TYPE AND DISTRIBUTION OF ROADS BY DISTRICT - 1996

| District | Type of Road | | | | Total (kms) |
|-----------|--------------|----------------|----------------|--------------|-------------|
| | Trunk (Kms) | Regional (Kms) | District (Kms) | Feeder (Kms) | |
| Chunya | 250 | 65.5 | 322.4 | 68 | 705.9 |
| Kyela | 45 | 104 | 134 | 165 | 448 |
| Ileje | - | 175 | 223.0 | 185 | 583 |
| Municipal | 27 | 14 | - | 129 | 170 |
| Mbeya (R) | 188 | 351.2 | 392.4 | 271.6 | 1203 |

| | | | | | |
|--------------|-----|-------|--------|--------|--------|
| Mbozi | 140 | 254 | 62.4 | 314.6 | 771 |
| Rungwe | 67 | 313 | 286 | 330 | 996 |
| Total Region | 717 | 127.7 | 1420.2 | 1463.2 | 4831.1 |

Source: Planning Commission - Compiled data based on District Socio-economic profiles-1996

ROAD NETWORK MAP - MBEYA REGION

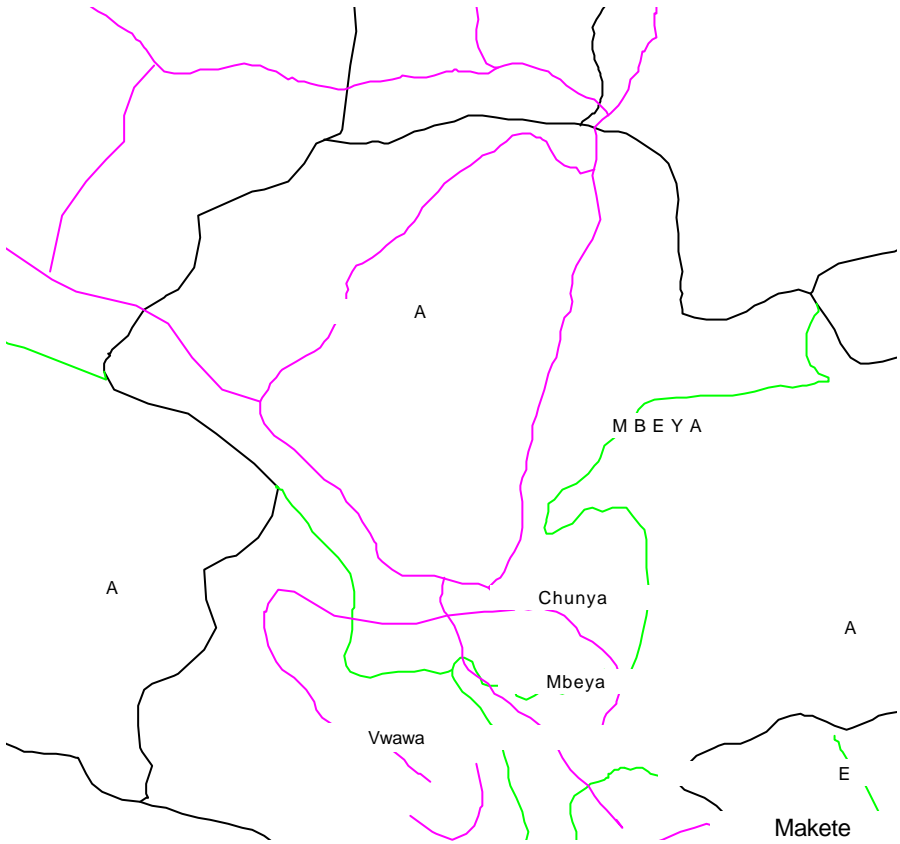


Fig. 55: Distribution of Trunk (Kms) Road by District, 1996

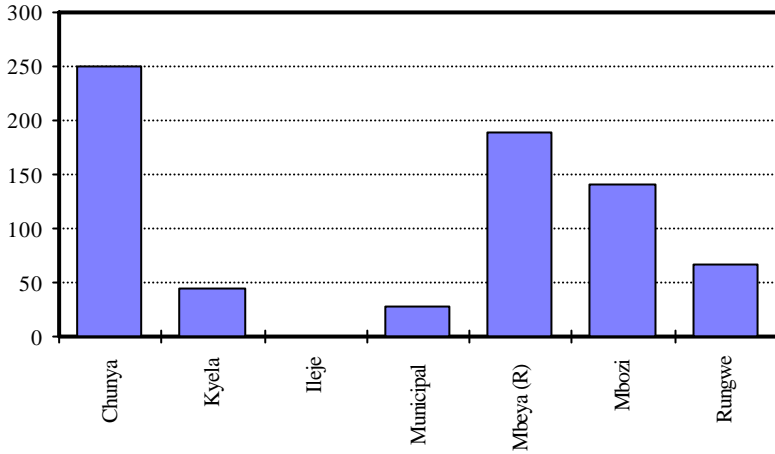


Fig. 55 (a) : Distribution of Regional (Kms) Road by District, 1996

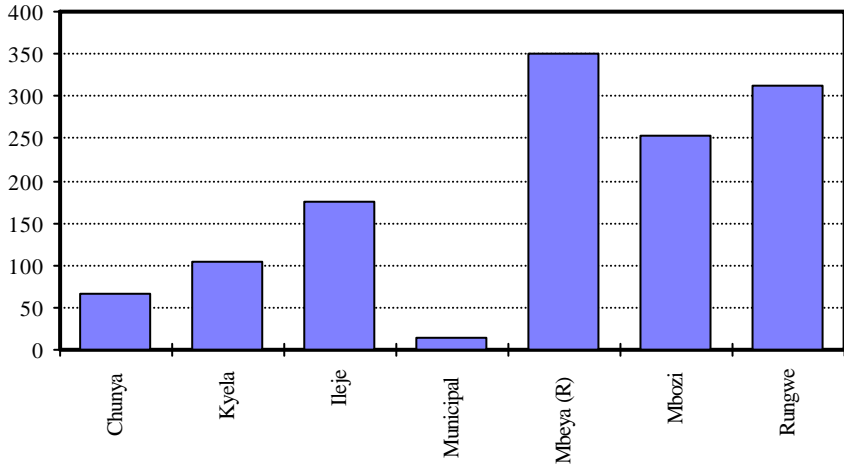


Fig. 55 (c) : Distribution of District (Kms) Road by District, 1996

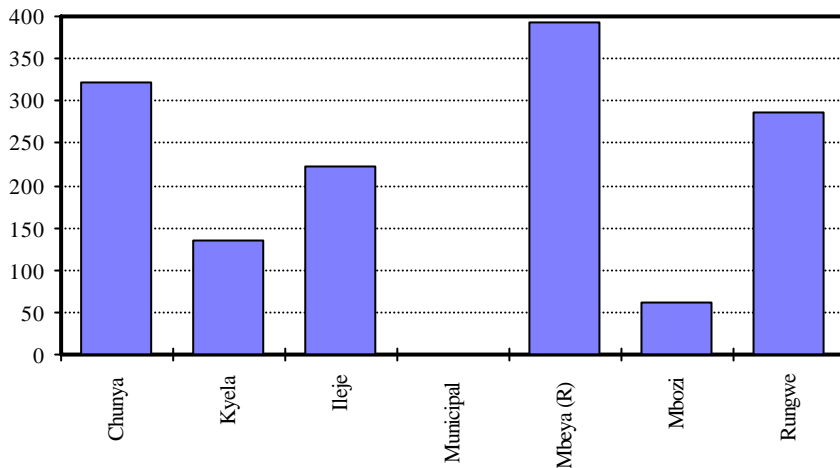


Fig. 55 (d) : Distribution of Feeder (Kms) Road by District, 1996

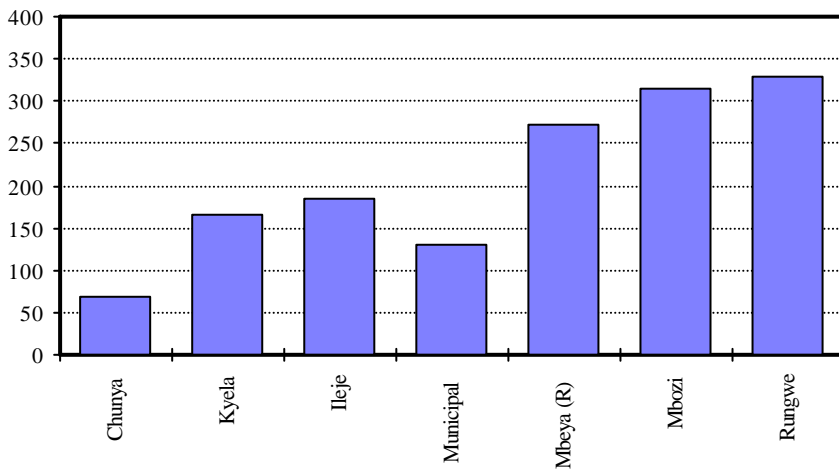


Table XLVIII: TYPE OF ROAD AND ROAD SURFACE IN MBEYA REGION

| Type of Road | Tarmac (Kms) | Gravel (Kms) | Earth (Kms) | Total (Kms) |
|--------------|--------------|--------------|-------------|-------------|
| Trunk | 344.1 | 205.1 | 167.8 | 717 |
| Regional | | 477.35 | 799.35 | 1,276.7 |
| District | | - | 1,420.2 | 1,420.2 |
| Feeder | | 44 | 1,377.2 | 1,463.2 |
| Total | 344.1 | 726.45 | 3,764.55 | 4,831.1 |

Source: Mbeya Regional Engineer, 1996

It is observed from Table XLVIII that Mbeya Region had by end of 1996, a total of 4,831.1 Kms of trunk and rural roads network. Feeder roads account for 30 percent of the total, while trunk roads account for only 15 percent.

Proportionally, Rungwe District appears to have more kilometres of roads than even large districts such as Chunya and Mbozi.

Roads network in Mbozi districts is not that good because their accessibility are only in dry seasons (may to November). Chunya on the other hand, is only accessible by Trunk and regional roads, leaving a large part of the district with no roads at all. The advantage with Chunya district is its low population density caused by large unoccupied wooded grassland areas. This may also help explain why there are only few kilometres of feeder roads compared with other districts.

**Table XLIX: DISTRIBUTION OF ROADS BY TYPE OF SURFACE
BY DISTRICT-1996**

| District | Tarmac (Kms) | Gravel (Kms) | Earth (Kms) | Total (Kms) |
|--------------|--------------|--------------|-------------|-------------|
| Chunya | - | 250 | 455.9 | 705.9 |
| Kyela | 45 | 101 | 302 | 448.0 |
| Ileje | - | 175 | 408 | 583.0 |
| Municipal | 26 | 59 | 44 | 129.0 |
| Mbeya (R) | 154 | 229.2 | 815 | 1198.2 |
| Mbozi | 140 | 124 | 507 | 771.0 |
| Rungwe | 67 | 313 | 616 | 996 |
| Total Region | 432.0 | 1251.2 | 3147.9 | 4831.1 |

Source: Planning Commission Dar es Salaam - Compiled Data, based on Compiled district reports, 1996

The improvement of road network as well as increases in total lengths are very important in opening up new agricultural potential avenues, stimulating economic agents trade activities and makes easy transport for the people.

As can be seen from Table XLIX above only 432 kms of Roads are tarmac and only 26 percent of the Roads are of gravel surface. Thus, the condition of Roads network in Mbeya Region still leaves much to be desired. Trunk Roads which are passable throughout the year include:-

- Mbeya - Tabora/Mbeya/Singida border = 294 Kms;
- Mbeya - Iringa/Mbeya border (TANZAM Highway) = 135 Kms;
- Mbeya - Tunduma (TANZAM Highway) = 102 Kms;
- Tunduma - Mbeya/Rukwa border = 109 Kms.
- Uyole - Itungi Port = 124.5 Kms
- Ibanda - Kasumulu (Songwe)/Malawi border = 5.0

RAILWAY TRANSPORT:

Alongside the TANZAM highway (Dar es Salaam, through Mbeya region) the region enjoys a railway service (Tanzania Zambia Railway Line). Thus, the region enjoys 230 kms of the TAZARA rail road. The railway was constructed in early 1970's to serve the landlocked Zambia as an alternative way to South Africa. Most of Zambian, Malawi and Zaire imports and exports are transported through this line. The TAZARA Railway line has also made possible the hard timber harvesting in the basins of tropical forests of Mlimba - Kilombero as well as boosting up economic and agricultural activities along the rail line. Commodities like timber, food, cash crops and livestock are easily ferried from producing areas to markets. Currently TAZARA is facing high competition with the road transport between Tunduma and Dar es Salaam.

AIR TRANSPORT:

Mbeya region does not have a big airport except a small old airfield in Mbeya town and some three airstrips - situated in Chunya town (Kiwanja), Rungwe district Tea Estates (Chivanjee) and one at Mbalizi for emergency cases. Twin Otter planes land at Mbeya airfield while small charter planes land at the remaining airstrips. The airfield at Mbeya has proved not be safe for heavy aircraft, despite high demand for air service in the region.

WATER WAYS: (Marine Transport)

Mbeya region has reliable marine transportation in Lake Nyasa. The Marine Division of the Tanzania Railways Corporation has two vessels plying Lake Nyasa - namely M.V. Iringa and M.V. Songea. The vessels ply between Itungi Port (Kyela District) and Mbamba-Bay (Ruvuma Region) via Liuli, Manda and other small stop over ports. There is also weekly M.V. Ilala sailing between Itungi Port and Nkata Bay (in Republic

of Malawi) via Mbamba-Bay. M.V. Iringa has a capacity of 165 passengers while M.V. Songea carries more than 250 passengers. There is a great demand for marine transport on the Tanzanian Coast than the interstate movements Between Malawi and Tanzania. Marine transport on L. Rukwa is still done either by small motor-boats or canoes also being- the most common means of transport across Ruaha, Kiwira, Songwe and other rivers in the region.

ENERGY:

Sources of energy utilised in Mbeya Region for both domestic and industrial use includes hydro, thermal, coal, fire wood and charcoal, petroleum oil products and to a negligible extent Solar and biogas. However, Mbeya region gets most of its electricity from national Grid - transmitted from Kidatu and Mtera Power Plants (220 KV Transmission lines). Some electricity power comes from Kiwira Coal Mine-which is able to produce about 3MW, and some power is imported from Zambia and used in Mlowo Coffee Curing Mill. People in rural areas and Urban low income earners depend mostly on firewood and charcoal as their main source of energy for domestic use. The demand for electricity in the region has been increasing due to establishment of new industries, and increasing urbanised settlements. The use of modern electric appliances has created also huge demands for electricity.

ELECTRICITY:

Demand for electric power in the region is to the tune of 17 MW, whereas the current supply is between 7 and 10 MW. By 1996 the Region had supplied electricity to Vwawa, Mlowo Coffee Curing Mill, Rungwe - Tukuyu urban, Kiwira, Ushirika and Tea factories of Katumba and Mwakaleli; Chunya Town, Igurusi, Chimala, Igoma and Kapunga NAFCO Rice farm. Kyela Urban received electricity from Kiwira Coal Mine. The immediate plan of the region is to extend electricity supply to

the remaining Itumba (Ileje district) town, Makongolosi, Mkwajuni, Rujewa, Ipindamatema minor settlements. Water falls from Livingstone Ranges in Rungwe and Kyela districts are potential sites for harnessing electric power.

FUELWOOD AND CHARCOAL:

This is another source of energy commonly used in Mbeya region. The use of FUELWOOD or charcoal, however has been found to have a negative effect on environmental eco-system. Some studies have shown that an average per capita use of FUELWOOD and charcoal in the region is 2.31 M³ of wood per annum. This means that an estimated population of 1,759,811 persons in 1995 would use about 4,065,163.6 M³ of wood for fuel a year. To meet this demand of wood 81302.6 Ha of Natural forests have to be cleared. Taking into account that the rate of growth of natural trees is 55667000 M³ equivalent to 111380 Ha. Per annum, and that the rate of tree planting annually keeps on decreasing due to meagre financial resources, it means therefore that the continued use of FUELWOOD and charcoal as sources of energy in the long run will cause serious environmental degradation.

Other alternative sources of power in Mbeya region includes coal, Solar energy and Bio-gas. Attempts have been also made in various areas in the region to use either heat-resistant stoves using coal or paddy husks. The Community Development has been entrusted with the responsibility of creating rural awareness and understanding of the need to use heat resistant stoves and bio-gas/solar power as alternative sources of energy. The main objective is to control the rate of FUELWOOD consumption - hence improve the environment and increase afforestation initiatives.

Solar Energy:

There are 12 solar-energy plants in Mbeya region:-

Three in Rungwe District, seven in Mbozi, one in Kyela and one in Chunya. The three solar-energy plants in Rungwe have been established by ADP (Mbozi). It is a private institution. While those in Mbozi are established by ELCT-Rungwe and Kyela and RC- Chunya and Mbozi.

Bio-Gas Energy:

There are 56 bio-gas plants all concentrated in Mbozi and Rungwe districts:

Mbozi - 45 plants

Rungwe- 11 plants

Coal and Paddy husks:

The technology of using heat resistant stoves is being tried in Rungwe, Kyela and Mbeya Districts. The technology is slowly taking root but the Regional Authority will need to popularise more the use of alternative sources of energy so that the rural people do not think only in terms of FUELWOOD and charcoal.

POSTS AND TELECOMMUNICATION NETWORK:

Mbeya region has six district post offices three franchised post offices, eight sub-post office centres and four Private Bag services - two in Mbeya Municipality and five in Mbeya (R) - Mbarali.

All district centres are served with telephone services. The trunk lines are centralized in the Mbeya Municipality, radiating to all district centres and other commercial settlement areas. There have been a considerable

increase in Telecommunication services between 1980 and 1995- from 116 trunk lines to 250 trunk lines respectively.

In addition there are 35 Radio-call centres, 36 Telex facilities and 30 Telefax lines. The distribution of Post Office services in the region as per 1996 is as shown in Table L below.

Table L: NUMBER OF POST OFFICES BY DISTRICT - 1996

| District | No. of Departmental Post Offices | No. of Franchised Post Offices | No. of Sub-Post Offices | No. of Private Bags |
|--------------|----------------------------------|--------------------------------|-------------------------|---------------------|
| Chunya | 1 | 1 | 2 | - |
| Ileje | 1 | - | 1 | - |
| Kyela | 1 | - | 2 | - |
| Municipal | 3 | 2 | - | 2 |
| Mbeya (R) | - | - | 1 | - |
| Mbarali | 2 | - | - | - |
| Mbozi | 1 | - | - | - |
| Rungwe | 1 | - | 2 | 5 |
| Total Region | 10 | 3 | 8 | 7 |

Source: Mbeya Regional Post Office - 1996

Ileje district is the least served, mainly because it is a newly established district compared with others. Mbeya (R) is mainly served by the Municipal facilities since its central offices are within the Municipality.

Table LI: TELECOMMUNICATION SERVICE DISTRIBUTION IN MBEYA REGION BY 1995

| District | Types of Service | | | | | |
|--------------|------------------|-----------------|-------------|-------------|-------|---------|
| | Trunk | Telephone Lines | | Radio Calls | Telex | Telefax |
| | | Capacity | Utilization | | | |
| Chunya | 3 | 80 | 69 | 3 | - | - |
| Ileje | 1 | 160 | 89 | 2 | - | - |
| Kyela | 12 | 200 | 105 | 8 | - | - |
| Municipal | 196 | 2300 | 2018 | 5 | 35 | 29 |
| Mbeya (R) | - | - | - | - | - | - |
| (Rujewa) | 1 | 170 | 89 | 3 | - | - |
| Mbozi | 2 | 100 | 95 | 3 | - | - |
| Rungwe | 33 | 700 | 248 | 11 | 1 | 1 |
| Total Region | 250 | 3810 | 2811 | 35 | 36 | 30 |

Source: Regional Telecommunication Office-Mbeya, 1996

There have been an improvement in Telecommunication system between 1985 and 1995. Telex and Telefax facilities have increased from 0 to 36 and 0 to 30 in 1985 and 1995 respectively. Along side these services, there are also EMS services at Mbeya Post Office.

SECTION IV

SOCIAL SERVICES

EDUCATION:

Formal education in Mbeya Region started way back in colonial period (German rule) by Christian Missionaries. Before Independence there were only a few primary schools, but no secondary school at all. There was also one Missionary Teachers' Training Centre at Rungwe - which later in 1961 was converted into a secondary school (Rungwe). With the introduction of UPE Programme in 1974, the demand for primary schools shot up, forcing almost every village to build at least one primary school. Thus, about 99% of the rural villages were provided with a primary school but the number of secondary schools did not increase accordingly.

PRIMARY EDUCATION:

The number of primary schools in Mbeya region increased from 353 in 1966 to 826 schools in 1995. Consequently, enrollment in primary schools in the region rose from 59,746 pupils in 1966 to 282,860 pupils in 1995. The table below highlights the primary educational status in Mbeya Region.

TABLE LII: EXPANSION OF PRIMARY EDUCATION IN MBEYA REGION

| PERIOD | 1966 | 1975 | 1980 | 1985 | 1990 | 1995 |
|---------------------------|--------|---------|---------|---------|---------|---------|
| No. of Pr. Schools | 353 | 517 | 665 | 764 | 839 | 826 |
| No. of Pupils enrolled | 59,746 | 135,993 | 198,116 | 202,544 | 238,120 | 282,860 |
| No. of Teachers | 1,452 | 2,832 | 3,862 | 4,488 | 7,275 | 7,645 |
| Female Teachers (%) | 15% | 40% | 36% | 35% | 30% | 41% |
| Pupils per teacher | 65 | 72 | 51 | 48 | 33 | 37 |
| % increase of Pr. Schools | - | 30% | 57% | 6% | 11% | (3%) |

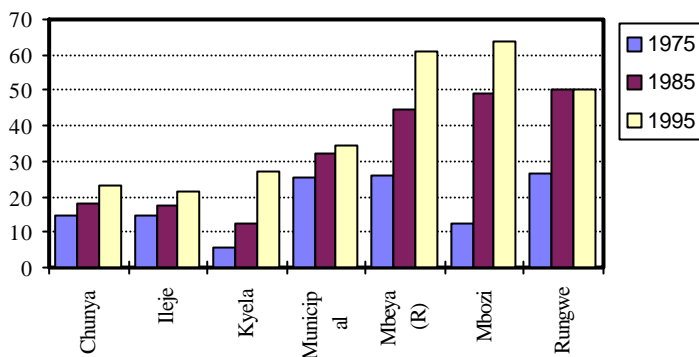
Source: Planing Commission = based on compiled Data from REO's Office Files

Table LIII : NUMBER OF PUPILS IN PRIMARY SCHOOLS IN 1975, 1985 AND 1995-BY DISTRICTS

| DISTRICT | NUMBER OF PUPILS | | | % CHANGE 1975/1995 |
|--------------|------------------|---------|---------|--------------------|
| | 1975 | 1985 | 1995 | |
| Chunya | 14,761 | 17,950 | 23,125 | 64 |
| Ileje | 14,675 | 17,253 | 21,184 | 69 |
| Kyela | 5,780 | 12,326 | 27,100 | 21 |
| Municipal | 25,655 | 32,444 | 34,244 | 74 |
| Mbeya (R) | 25,765 | 44,368 | 60,850 | 42 |
| Mbozi | 12,652 | 49,308 | 63,622 | 20 |
| Rungwe | 26,301 | 50,247 | 50,513 | 52 |
| Total region | 125,589 | 223,896 | 286,648 | 44 |

Source: Regional Education Office-Mbeya.

Fig. 56: Number of Pupils in Primary Schools in 1975, 1985 and 1995 by District in Mbeya Region



It is observed from Table LIII that there was a big increase in the number of pupils. It is believed that the influx of children into primary schools was caused by UPE Programme which demanded that all children aged 7-13 years had to go to school.

Table LIII(a): EXPANSION OF SCHOOLS BY DISTRICT

| District | 1964 | 1974 | 1980 | 1985 | 1990 | 1995 |
|-----------|------|------|------|------|------|------|
| Chunya | 33 | 44 | 50 | 51 | 68 | 71 |
| Ileje | 21 | 49 | 54 | 58 | 65 | 74 |
| Kyela | 22 | 43 | 75 | 93 | 94 | 91 |
| Mbeya (U) | 12 | 15 | 25 | 36 | 46 | 46 |
| Mbeya (R) | 25 | 76 | 112 | 148 | 182 | 171 |
| Mbozi | 66 | 114 | 158 | 178 | 189 | 183 |
| Rungwe | 86 | 173 | 191 | 193 | 195 | 190 |

| | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|
| Total | 265 | 517 | 665 | 757 | 839 | 826 |
|-------|-----|-----|-----|-----|-----|-----|

Source: Planning commission - Compiled from REO's Records.

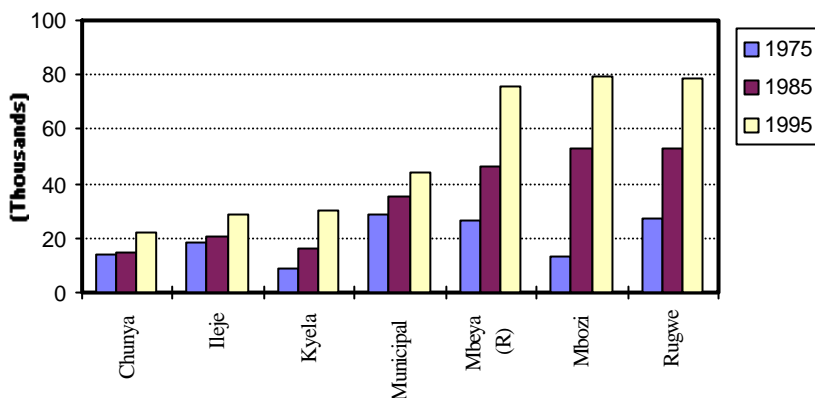
Between 1964 and 1995, Ileje district has been able to increase the number of primary schools by 252 percent while Rungwe District by 121 percent, Kyela by 314 percent, Chunya district by 115 percent and Mbozi by 177 percent, from 66 in 1964 to 183 primary schools in 1995.

Table LIII(b): STD. I ENROLMENT RATE AND TARGETS FOR 1975, 1985 AND 1995

| District | Enrolment Targets | | | Actual Enrolment | | | | | |
|-----------|-------------------|---------|---------|------------------|-------|---------|-------|---------|-------|
| | 1975 | 1985 | 1995 | 1975 | % | 1985 | % | 1995 | % |
| Chunya | 13,860 | 15,065 | 22,365 | 14,761 | 106.5 | 16,155 | 107.2 | 23,135 | 101.2 |
| Ileje | 18,270 | 20,475 | 28,350 | 14,675 | 80.3 | 15,528 | 75.8 | 21,184 | 74.7 |
| Kyela | 8,545 | 16,295 | 29,955 | 5,780 | 67.6 | 11,093 | 68.0 | 27,100 | 90.5 |
| Municipal | 28,560 | 35,000 | 44,000 | 25,655 | 89.8 | 29,199 | 83.4 | 34,244 | 77.8 |
| Mbeya (R) | 26,675 | 46,620 | 75,600 | 25,765 | 96.6 | 39,931 | 85.6 | 60,850 | 80.5 |
| Mbozi | 12,980 | 52,900 | 79,740 | 12,652 | 97.5 | 44,377 | 83.8 | 63,622 | 79.8 |
| Rugwe | 27,103 | 52,740 | 78,660 | 26,301 | 97.0 | 45,222 | 85.7 | 56,513 | 71.8 |
| Total | 135,993 | 238,895 | 358,670 | 125,589 | 92.3 | 202,544 | 84.7 | 286,648 | 79.9 |

Source: Regional Commissioners' Office - Education

Fig. 57: STD I Enrolment Rate and Targets for 1975, 1985 and 1995 by District, Mbeya Region.



Enrolment targets as indicated in Table LIII (b) above, were only achieved by Chunya district. In fact, Chunya in 1995 enrolled more children into class one than the number envisaged of 22365 children. Unlike Chunya district, other districts fell short of their targets as shown in the last column of Table LIII (b). It is reported that more enrolment of children in Chunya is a result of the influx of pastoralists entering the district with their families from the Northern bordering Regions.

Table LIII(c): STD I ENROLMENT RATE BY SEX IN 1975, 1985 AND 1995

| District | Enrolment | | | | | | Girls' Enrolment Rates (%) | | |
|-----------|-----------|-------|-------|-------|-------|-------|----------------------------|------|------|
| | Boys | | | Girls | | | 1975 | 1985 | 1995 |
| | 1975 | 1985 | 1995 | 1975 | 1985 | 1995 | | | |
| Chunya | 1,437 | 1,737 | 2,238 | 1,388 | 1,673 | 2,183 | 49.0 | 49.0 | 48.0 |
| Ileje | 1,182 | 1,451 | 1,782 | 928 | 1,405 | 1,728 | 44.0 | 49.0 | 49.0 |
| Kyela | 702 | 1,498 | 2,590 | 676 | 1,278 | 2,450 | 49.0 | 45.0 | 48.6 |
| Municipal | 2,359 | 2,857 | 3,016 | 2,422 | 3,031 | 3,199 | 50.6 | 51.0 | 51.5 |
| Mbeya (R) | 2,659 | 3,890 | 5,335 | 2,350 | 3,875 | 5,308 | 47.0 | 49.9 | 49.8 |

| | | | | | | | | | |
|--------------|--------|--------|--------|--------|--------|--------|------|------|------|
| Mbozi | 1,190 | 4,635 | 5,981 | 1,109 | 4,686 | 6,047 | 48.0 | 50.3 | 50.3 |
| Rungwe | 2,512 | 4,799 | 5,397 | 2,447 | 4,675 | 5,239 | 49.0 | 49.3 | 49.5 |
| Total region | 12,041 | 20,867 | 26,339 | 11,320 | 20,623 | 26,154 | 48.5 | 49.0 | 49.8 |

Source: Regional Commissioner's Office - REO

Fig. 58: STD I Enrolment Rate by District and Sex in 1975, Mbeya Region

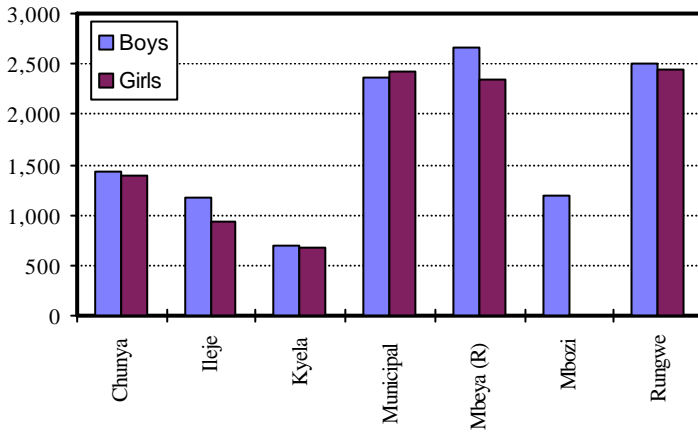


Fig. 58 (a): STD I Enrolment Rate by District and Sex in 1985, Mbeya Region

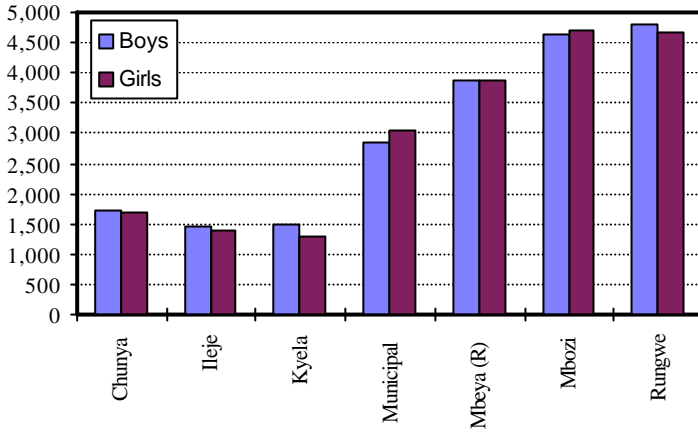
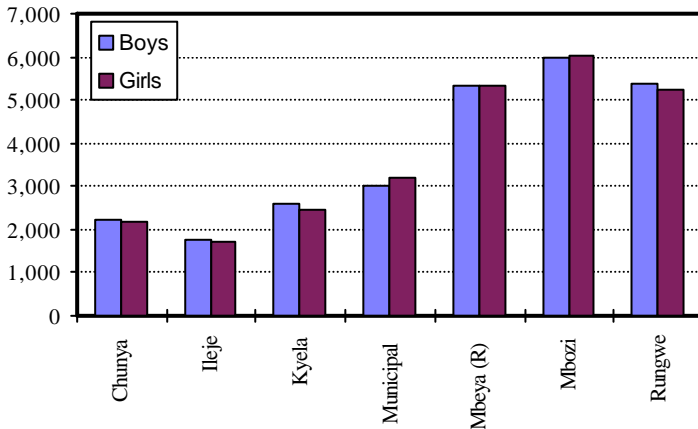


Fig. 58 (b): STD I Enrolment Rate by District and Sex in 1995, Mbeya Region



Girl's enrolment Rates are seen to be very low in all districts for the three years in question (1975, 1985 and 1995). The enrolment Rates are

hardly 50 percent. The regional authorities need to find out why enrolment Rates for girls in primary schools are too low.

Table LIII(d): ENROLMENT IN PUBLIC PRIMARY SCHOOLS BY SEX AND CLASS IN 1990 - 1996

| Sex | Year | Class | | | | | | |
|------------------------------|------|--------|--------|--------|--------|--------|--------|--------|
| | | I | II | III | IV | V | VI | VII |
| BOYS | 1990 | 21,331 | 19,887 | 18,842 | 18,517 | 14,727 | 13,835 | 11,387 |
| | 1991 | 22,432 | 21,359 | 18,958 | 19,663 | 14,975 | 13,942 | 12,633 |
| | 1992 | 24,136 | 20,686 | 19,135 | 19,934 | 16,467 | 14,654 | 13,344 |
| | 1993 | 23,820 | 22,563 | 20,401 | 19,425 | 17,645 | 16,370 | 14,592 |
| | 1994 | 24,688 | 22,367 | 21,245 | 20,472 | 16,952 | 16,297 | 14,741 |
| | 1995 | 26,339 | 23,201 | 21,475 | 20,407 | 18,742 | 15,909 | 15,410 |
| | 1996 | 26,591 | 25,256 | 21,947 | 23,279 | 16,605 | 17,272 | 16,035 |
| GIRLS | 1990 | 21,395 | 19,205 | 18,503 | 17,752 | 15,451 | 15,304 | 11,984 |
| | 1991 | 21,914 | 19,841 | 18,739 | 19,488 | 17,042 | 14,575 | 14,058 |
| | 1992 | 23,706 | 20,291 | 18,951 | 20,383 | 17,017 | 14,631 | 13,554 |
| | 1993 | 23,889 | 22,666 | 19,965 | 19,528 | 18,077 | 16,446 | 14,329 |
| | 1994 | 24,898 | 22,907 | 20,681 | 20,418 | 17,412 | 16,665 | 14,872 |
| | 1995 | 26,154 | 22,898 | 20,790 | 20,381 | 18,971 | 16,634 | 15,688 |
| | 1996 | 26,432 | 26,079 | 22,212 | 23,341 | 15,984 | 17,644 | 16,035 |
| TOTAL (Boys and Girls) | 1990 | 42,726 | 39,092 | 37,345 | 36,269 | 30,178 | 29,139 | 23,371 |
| | 1991 | 44,346 | 41,200 | 37,697 | 39,151 | 32,017 | 28,515 | 26,691 |
| | 1992 | 47,842 | 40,977 | 38,086 | 40,317 | 33,424 | 29,285 | 26,898 |
| | 1993 | 47,709 | 45,229 | 40,366 | 38,953 | 35,722 | 32,816 | 28,921 |
| | 1994 | 49,586 | 45,274 | 41,926 | 40,890 | 34,364 | 32,962 | 29,613 |
| | 1995 | 52,493 | 46,099 | 42,265 | 40,788 | 37,713 | 32,543 | 31,098 |

| | | | | | | | | |
|--|------|--------|--------|--------|--------|--------|--------|--------|
| | 1996 | 53,023 | 51,335 | 44,159 | 46,617 | 32,399 | 34,916 | 31,234 |
|--|------|--------|--------|--------|--------|--------|--------|--------|

Source:

Table LIII (d) Shows that there is a declining tendency in the number of pupils as they proceed into upper classes. For instance 42,726 pupils were enrolled in Class I in 1990 but only 32070 completed class VII in 1996. Drop-outs between STD I and STD VII were 10,656 (25%). Boys dropped out by (24.8%), while girls dropped out by (25.0%) between 1990 and 1996.

Table LIII(e): PUBLIC PRIMARY SCHOOL ENROLMENT IN MBEYA REGION BY DISTRICT, SEX AND CLASS 1995

| DISTRICT | SEX | STD I | STD II | STD III | STD IV | STD V | STD VI | STD VII | TOTAL |
|-----------|-----|-------|--------|---------|--------|-------|--------|---------|---------|
| Chunya | M | 2,288 | 2,023 | 1,799 | 1,767 | 1,570 | 1,231 | 1,304 | 11,982 |
| | F | 2,128 | 1,865 | 1,554 | 1,554 | 1,548 | 1,196 | 1,303 | 11,153 |
| Ileje | M | 1,778 | 1,564 | 1,490 | 1,368 | 1,505 | 1,284 | 1,378 | 10,367 |
| | F | 1,719 | 1,584 | 1,462 | 1,422 | 1,507 | 1,240 | 1,445 | 10,469 |
| Kyela | M | 2,590 | 2,226 | 2,131 | 1,877 | 1,961 | 1,603 | 1,663 | 13,991 |
| | F | 2,450 | 2,139 | 1,944 | 1,832 | 1,878 | 1,546 | 1,320 | 13,109 |
| Mbeya (U) | M | 3,016 | 2,640 | 2,522 | 2,312 | 2,134 | 1,784 | 1,819 | 16,227 |
| | F | 3,199 | 2,865 | 2,724 | 2,655 | 2,399 | 2,145 | 2,030 | 18,017 |
| Mbeya (R) | M | 5,335 | 4,743 | 4,289 | 4,050 | 3,746 | 3,420 | 3,031 | 28,614 |
| | F | 5,308 | 4,623 | 4,352 | 4,060 | 3,701 | 3,452 | 3,161 | 28,657 |
| Mbozi | M | 5,981 | 5,426 | 4,916 | 4,520 | 4,346 | 3,543 | 3,550 | 31,782 |
| | F | 6,047 | 5,373 | 4,657 | 4,502 | 4,405 | 3,693 | 3,163 | 31,840 |
| Rungwe | M | 5,384 | 4,576 | 4,339 | 4,527 | 3,445 | 3,036 | 3,267 | 28,575 |
| | F | 5,244 | 4,541 | 4,104 | 4,321 | 3,448 | 3,153 | 3,209 | 28,080 |
| Total | M+ | 52,46 | 46,18 | 42,28 | 40,767 | 37,59 | 32,326 | 31,203 | 282,860 |
| | F | 7 | 8 | 3 | | 3 | | | |

Source: Regional Education Office - Mbeya

Fig. 59: Public Primary School Enrolment in Chunya District by Sex and Class, Mbeya Region 1995

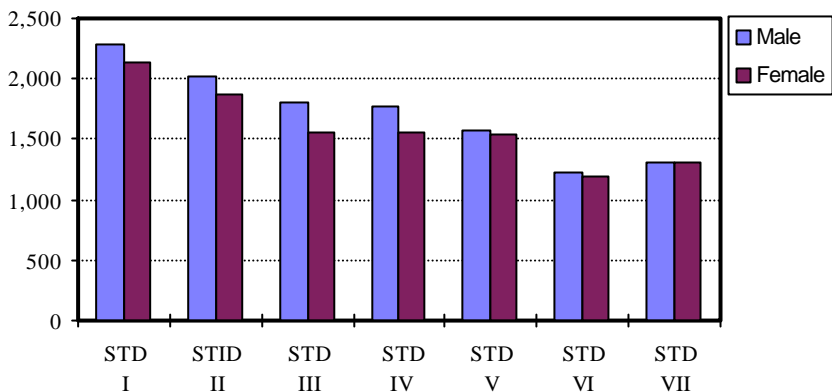


Fig. 59 (a): Public Primary School Enrolment in Ileje District by Sex and Class, Mbeya Region 1995

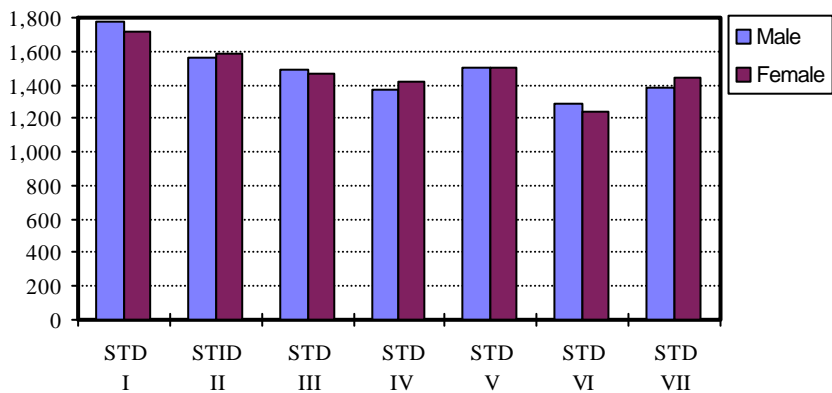


Fig. 59 (b): Public Primary School Enrolment in Kyela District by Sex and Class, Mbeya Region 1995

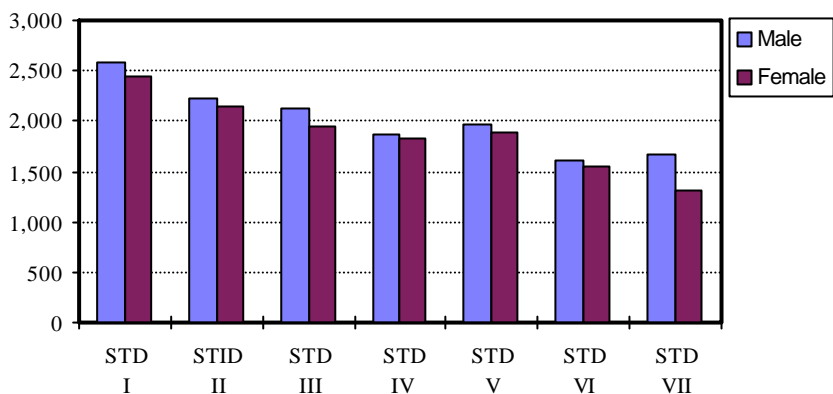


Fig. 59 (c): Public Primary School Enrolment in Mbeya Urban District by Sex and Class, Mbeya Region 1995

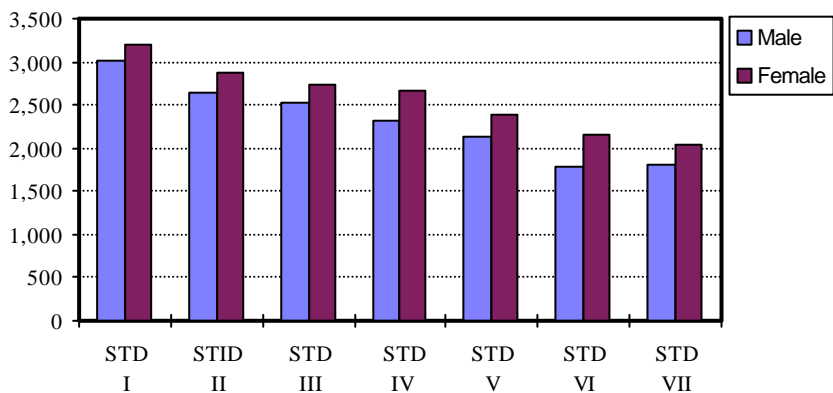


Fig. 59 (d): Public Primary School Enrolment in Mbeya Rural District by Sex and Class, Mbeya Region 1995

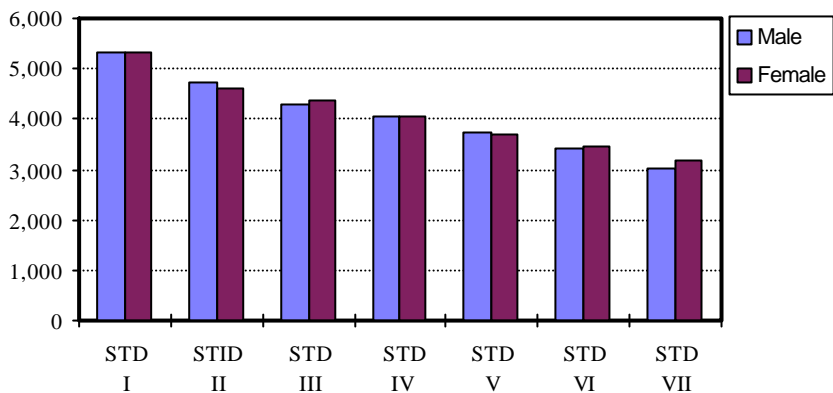


Fig. 59 (e): Public Primary School Enrolment in Mbozi District by Sex and Class, Mbeya Region 1995

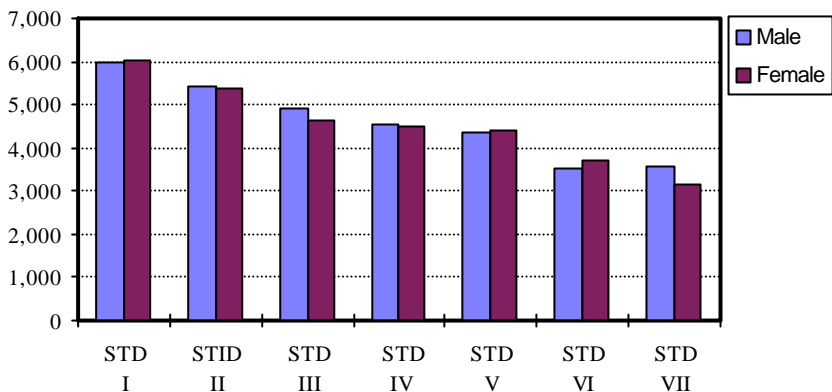


Fig. 59 (f): Public Primary School Enrolment in Rungwe District by Sex and Class, Mbeya Region 1995

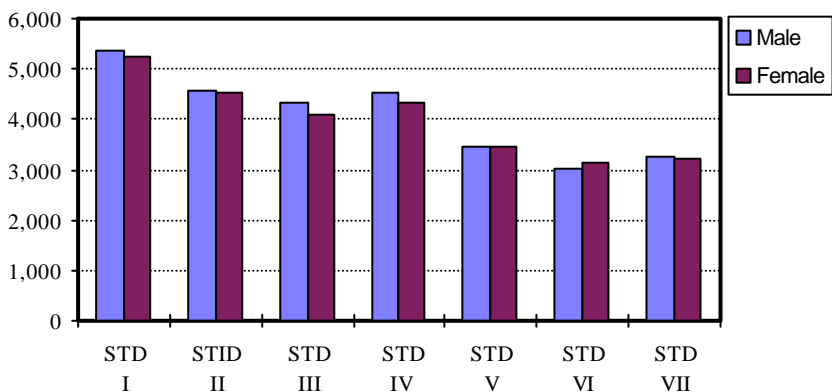


Table LIII(f): PUPILS SELECTED FOR FORM I BY SEX BETWEEN 1990-1995

| Year | Candidates | | | Number Selected for Form I | | | | | |
|------|------------|--------|--------|----------------------------|-----|-------|-----|-------|-----|
| | Boys | Girls | Total | Boys | % | Girls | % | Total | % |
| 1990 | 11,284 | 12,489 | 23,773 | 471 | 4.2 | 388 | 3.1 | 859 | 4.2 |
| 1991 | 12,780 | 13,798 | 26,578 | 649 | 5.1 | 440 | 3.2 | 1,089 | 4.1 |
| 1992 | 13,475 | 13,866 | 27,341 | 596 | 4.4 | 544 | 3.9 | 1,040 | 4.1 |
| 1993 | 14,592 | 14,329 | 28,927 | 611 | 4.2 | 526 | 3.7 | 1,237 | 4.2 |
| 1994 | 14,741 | 14,872 | 27,613 | 641 | 4.3 | 623 | 4.2 | 1,264 | 4.3 |
| 1995 | 15,410 | 15,688 | 31,098 | 682 | 4.4 | 634 | 4.0 | 1,316 | 4.0 |
| 1996 | 16,035 | 16,035 | 31,236 | 712 | 4.4 | 656 | 4.1 | 1,368 | 4.4 |

Source: Regional Commissioner's Office - REO, Mbeya

Fig. 60: Candidates(Thousands) for Form I by Sex between 1990 - 1995 in Mbeya Region

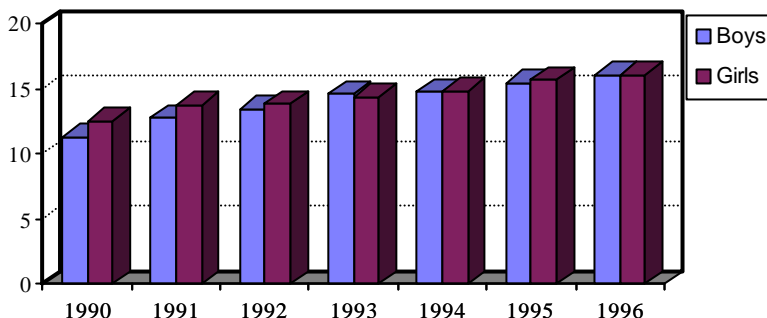
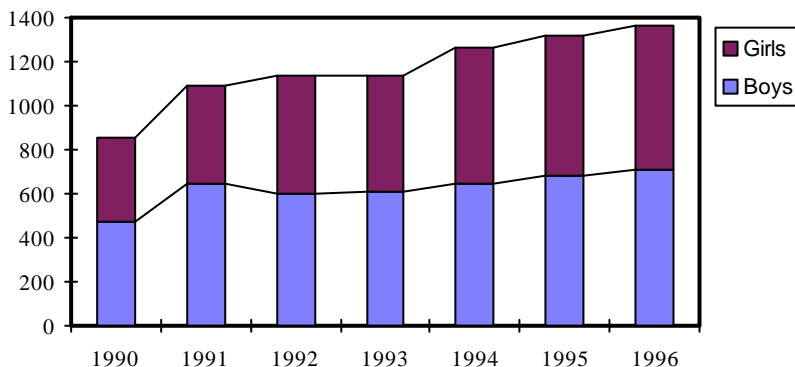


Fig. 60 (a): Pupils selected for Form I by Sex between 1990 - 1995 in Mbeya Region



There are 37 secondary schools in Mbeya Region, of which 10 are public and 27 private. The number of pupils selected to join public secondary schools is as show in Table above. It is noted that an average trend of 4.1% of Std. VII candidates joined Form I. Taking into account the number of those who joined private secondary schools in Mbeya Region in 1995, the region managed to get through 2,895 for Form I, (1,587 boys and 1,308 girls). Table LIII(g) highlights the number of pupils who joined form I in both Public and Private secondary schools in Mbeya region 1995.

Table LIII (g): PUPILS FOR FORM I IN PUBLIC AND PRIVATE SECONDARY SCHOOLS IN MBEYA REGION - 1995

| District | Selected in Public Schools | | | Joined Private Schools | | | Total | | |
|-----------|----------------------------|-------|-------|------------------------|-------|-------|-------|-------|-------|
| | Boys | Girls | Total | Boys | Girls | Total | B | G | T |
| Chunya | 40 | 35 | 75 | 82 | 72 | 155 | 123 | 107 | 230 |
| Ileje | 57 | 58 | 115 | 60 | 60 | 120 | 117 | 118 | 235 |
| Kyela | 81 | 62 | 148 | 66 | 36 | 102 | 147 | 98 | 245 |
| Municipal | 140 | 132 | 272 | 285 | 205 | 490 | 425 | 337 | 762 |
| Mbeya (R) | 73 | 81 | 154 | 160 | 142 | 302 | 237 | 223 | 460 |
| Mbozi | 137 | 120 | 257 | 28 | 22 | 50 | 165 | 142 | 307 |
| Rungwe | 126 | 90 | 216 | 247 | 193 | 440 | 373 | 283 | 656 |
| Total | 682 | 634 | 1,316 | 928 | 730 | 1,658 | 1,587 | 1,308 | 2,895 |

Source: Planning Commission - Compiled Data-1995

Fig. 61(a): Pupils Selected for Form I in Public Secondary Schools by District and Sex in Mbeya Region 1995

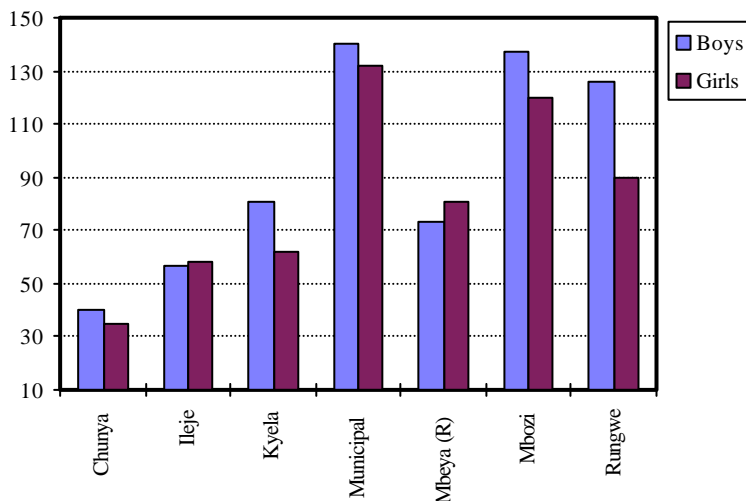
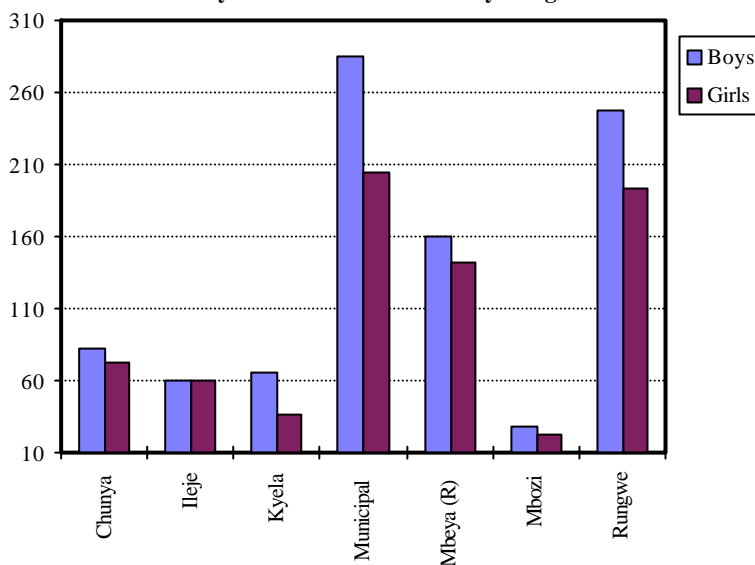


Fig. 61(b): Pupils Selected for Form I in Private Secondary Schools by District and Sex in Mbeya Region 1995



PRIMARY SCHOOL DROP-OUTS:

Table LIII (h) DROP-OUTS IN 1990 AND 1995 BY SEX

| District | 1990 | | | 1995 | | |
|-----------|-------|-------|-------|-------|-------|-------|
| | Boys | Girls | Total | Boys | Girls | Total |
| Chunya | 309 | 244 | 553 | 361 | 337 | 698 |
| Ileje | 35 | 25 | 60 | 67 | 40 | 107 |
| Kyela | 28 | 35 | 63 | 190 | 197 | 387 |
| Mbeya (U) | 98 | 85 | 183 | 159 | 144 | 303 |
| Mbeya(R) | 226 | 185 | 411 | 238 | 205 | 443 |
| Mbozi | 189 | 162 | 351 | 263 | 267 | 530 |
| Rungwe | 581 | 509 | 1,086 | 291 | 275 | 576 |
| Total | 1,466 | 1,245 | 2,707 | 1,569 | 1,465 | 3,034 |

Source: Regional Education Office - Mbeya

Fig. 62: Distribution of Drop-outs in 1990 by District and Sex, Mbeya Region

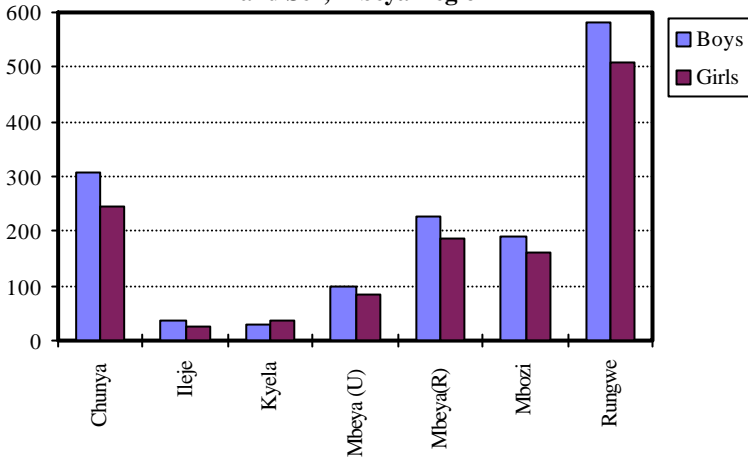
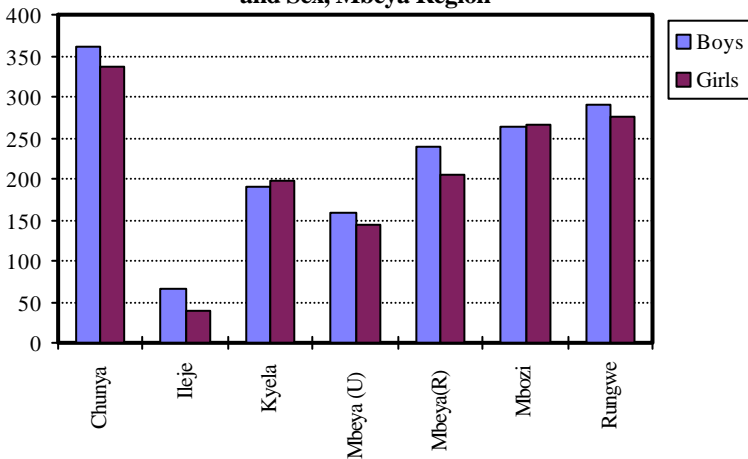


Fig. 62(a): Distribution of Drop-outs in 1995 by District and Sex, Mbeya Region



From Table LIII (h) Rungwe district appears to have many drop-out cases compared with other districts. In 1990, Rungwe had 581 boys and 509 girls dropping out from school while in 1995 Rungwe again had the

highest figures for boys and girls dropping out. The reasons are not clear yet why drop-out cases are common in Rungwe district. Is it because of common child labour taking place in tea estates? Another district with serious drop-out cases is Chunya followed by Mbeya rural and Mbozi.

Table LIII (i): DROP-OUTS IN 1990, 1993 AND 1995 BY SEX

| District | Reasons | STD I - STD VII | | | | | | | | |
|-----------|--------------|-----------------|------|------|-------|------|------|-------|------|------|
| | | Boys | | | Girls | | | Total | | |
| | | 1990 | 1993 | 1995 | 1990 | 1993 | 1995 | 1990 | 1993 | 1995 |
| Chunya | Truancy | 230 | 94 | 298 | 145 | 73 | 256 | 375 | 167 | 554 |
| | Pregnancy | - | - | - | 35 | 12 | 46 | 35 | 12 | 46 |
| | Death | 16 | 6 | 6 | 22 | 7 | 4 | 28 | 13 | 10 |
| | Other | 63 | - | 57 | 42 | - | 31 | 105 | - | 88 |
| Ileje | Truancy | 26 | 37 | 53 | 10 | 14 | 26 | 36 | 51 | 79 |
| | Pregnantness | - | - | - | 12 | 1 | 5 | 12 | 1 | 5 |
| | Death | 6 | 10 | 14 | 1 | 4 | 9 | 7 | 14 | 23 |
| | Other | 3 | - | - | 2 | - | - | 5 | - | - |
| Kyela | Truancy | 18 | 89 | 175 | 7 | 102 | 164 | 25 | 191 | 339 |
| | Pregnancy | - | - | - | 24 | 26 | 23 | 24 | 26 | 23 |
| | Death | 3 | 20 | 13 | 1 | 13 | 7 | 4 | 33 | 20 |
| | Other | 7 | - | 2 | 3 | 1 | 3 | 10 | 1 | 5 |
| Municipal | Truancy | 56 | 130 | 132 | 64 | 204 | 101 | 120 | 334 | 233 |
| | Pregnancy | - | - | - | 15 | 4 | 12 | 15 | 4 | 12 |
| | Death | 14 | 7 | 8 | - | 7 | 7 | 14 | 14 | 15 |
| | Other | 28 | - | 19 | 6 | - | 23 | 34 | - | 42 |
| Mbeya (R) | Truancy | 174 | 262 | 216 | 146 | 193 | 158 | 220 | 455 | 374 |
| | Pregnancy | - | - | - | 29 | 12 | 21 | 29 | 12 | 21 |

| | | | | | | | | | | |
|-----------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Death | 13 | 21 | 15 | 5 | 13 | 20 | 18 | 34 | 35 |
| | Other | 39 | 2 | 7 | 5 | 3 | 6 | 34 | 5 | 13 |
| Mbozi | Truancy | 154 | 480 | 229 | 102 | 401 | 182 | 256 | 881 | 411 |
| | Pregnancy | - | - | - | 15 | 39 | 48 | 45 | 39 | 48 |
| | Death | 7 | 27 | 27 | 14 | 38 | 22 | 21 | 65 | 49 |
| | Other | 28 | 11 | 7 | 1 | 11 | 15 | 29 | 22 | 22 |
| Rungwe | Truancy | 463 | 361 | 248 | 343 | 319 | 209 | 806 | 680 | 457 |
| | Pregnancy | - | - | - | 86 | 48 | 39 | 86 | 48 | 39 |
| | Death | 47 | 39 | 36 | 33 | 41 | 23 | 80 | 80 | 59 |
| | Other | 71 | 18 | 7 | 77 | 20 | 4 | 148 | 38 | 11 |
| | Truancy | 1,121 | 1,453 | 1,351 | 817 | 1,306 | 1,096 | 1,938 | 2,759 | 2,447 |
| Sub-Total | Pregnancy | - | - | - | 246 | 142 | 194 | 246 | 142 | 194 |
| | Death | 106 | 130 | 119 | 76 | 123 | 92 | 182 | 253 | 211 |
| | Other | 239 | 31 | 99 | 131 | 35 | 70 | 370 | 66 | 169 |
| Total | | 1,466 | 1,215 | 1,551 | 1,270 | 1,600 | 1,407 | 2,736 | 3,215 | 2,958 |

Source: Regional Commissioners' Office - REO, Mbeya

By observation alone from Table LIII (i) above, truancy is responsible for many drop-out cases. Reasons may be either joining wage-labour, petty cash activities as they advance in age; or simply running into towns. Truancy for girls may be caused by pregnancies or early marriages as it is the case in Chunya and Mbozi districts. Tea -plucking in Rungwe from which children get paid tend to attract most children during tea-plucking seasons. Gold mining and early marriages also force many girls out of school, especially in Chunya district.

PROBLEMS FACING PRIMARY SCHOOLS:

Problems facing primary schools in Tanzania are similar, and Mbeya Region is not an exception. The main problems include shortage of school infrastructure, and teaching/learning materials (textbooks, library etc). Table LIII (j) below highlights the real situation pertaining to school infrastructure.

Table LIII (j): SITUATION OF PRIMARY SCHOOL INFRASTRUCTURE BY DISTRICT - 1995

| District | Basic facility | No. Required | No. Available | % Available | No. Of Shortage | % |
|----------|----------------|--------------|---------------|-------------|-----------------|------|
| Chunya | Classrooms | 1,161 | 456 | 39.3 | 705 | 60.7 |
| | Staff houses | 577 | 190 | 32.9 | 387 | 67.1 |
| | Offices | 142 | 98 | 69.0 | 44 | 31.0 |
| | Toilets | 1,462 | 92 | 6.3 | 1,370 | 93.7 |
| Ileje | Classrooms | 540 | 358 | 66.3 | 182 | 33.7 |
| | Staff houses | 728 | 299 | 41.1 | 429 | 58.9 |
| | Offices | 148 | 82 | 55.4 | 66 | 44.6 |
| | Toilets | 1,088 | 41 | 3.8 | 1,047 | 96.2 |
| Kyela | Classrooms | 620 | 469 | 75.6 | 151 | 24.4 |
| | Staff houses | 881 | 353 | 40.1 | 528 | 59.9 |
| | Offices | 182 | 74 | 40.7 | 108 | 59.3 |
| | Toilets | 908 | 283 | 31.2 | 625 | 68.8 |

| | | | | | | |
|-----------------------|-----------------|-------|-------|------|-------|------|
| Mbeya Municipal | Class rooms | 648 | 407 | 62.8 | 241 | 37.2 |
| | Staff houses | 995 | 78 | 7.8 | 917 | 92.2 |
| | Offices | 124 | 84 | 67.7 | 40 | 32.3 |
| | Toilets | 1,305 | 360 | 27.6 | 945 | 72.4 |
| Mbeya(R) | Classroom s | 1,040 | 859 | 82.6 | 181 | 17.4 |
| | Staff houses | 1,466 | 495 | 33.8 | 971 | 66.2 |
| | Offices | 358 | 149 | 41.6 | 209 | 58.4 |
| | Toilets | 1,310 | 495 | 31.8 | 515 | 62.2 |
| Mbozi | Classroom s | 1,450 | 959 | 66.1 | 491 | 33.9 |
| | Staff houses | 1,864 | 780 | 41.8 | 1,084 | 58.2 |
| | Offices | 354 | 133 | 37.6 | 221 | 62.4 |
| | Toilets | 2,545 | 891 | 35.0 | 1,654 | 65.0 |
| | Classroom s | 1,482 | 888 | 60.0 | 594 | 40.0 |
| Rungwe | Staff houses | 1,817 | 425 | 23.4 | 1,392 | 76.6 |
| | Offices | 384 | 161 | 41.9 | 223 | 58.1 |
| | Toilets | 1,104 | 612 | 54.4 | 492 | 44.6 |
| Total Mbeya Region | Classroom s | 6,941 | 4,396 | 63.3 | 2,545 | 36.7 |
| | Staff houses | 8,328 | 2,620 | 31.8 | 5,708 | 68.2 |
| | Offices | 1,692 | 781 | 46.2 | 911 | 53.8 |

| | | | | | | |
|--|---------|-------|-------|------|-------|------|
| | Toilets | 9,722 | 2,774 | 28.5 | 6,948 | 71.5 |
|--|---------|-------|-------|------|-------|------|

Source: Regional Commissioners' Office - REO, Mbeya: 1995

Table LIII (k): SITUATION OF SCHOOL FURNITURE BY DISTRICT AND ITEM IN MBEYA REGION - 1995

| District | Type of furniture | No. Required | No. Available | % | No. Of shortage | % |
|-----------------|-------------------|--------------|---------------|------|-----------------|------|
| Chunya | Desks | 6,479 | 1,971 | 30.4 | 4,508 | 69.6 |
| | Tables | 1,642 | 712 | 43.4 | 930 | 56.6 |
| | Chairs | 1,697 | 686 | 40.4 | 1,011 | 59.6 |
| | Cupboards | 1,559 | 310 | 19.9 | 1,249 | 80.1 |
| Ileje | Desks | 9,868 | 7,478 | 73.8 | 2,390 | 24.2 |
| | Tables | 1,329 | 695 | 52.3 | 634 | 47.7 |
| | Chairs | 1,329 | 511 | 38.5 | 818 | 61.5 |
| | Cupboards | 862 | 448 | 52.0 | 414 | 48.0 |
| Kyela | Desks | 11,918 | 2,087 | 17.5 | 9,831 | 82.5 |
| | Tables | 1,325 | 551 | 41.6 | 774 | 58.4 |
| | Chairs | 1,425 | 382 | 26.8 | 1,043 | 73.2 |
| | Cupboards | 842 | 292 | 34.7 | 550 | 65.3 |
| Mbeya Municipal | Desks | 17,612 | 6,512 | 35.8 | 11,300 | 64.2 |
| | Tables | 1,078 | 340 | 31.5 | 738 | 68.5 |
| | Chairs | 1,080 | 294 | 27.2 | 786 | 72.8 |
| | Cupboards | 514 | 94 | 18.3 | 420 | 81.7 |
| Mbeya(R) | Desks | 17,975 | 6,901 | 38.4 | 11,074 | 61.6 |
| | Tables | 2,027 | 1,271 | 62.7 | 756 | 37.3 |
| | Chairs | 2,101 | 612 | 29.1 | 1,489 | 70.9 |
| | Cupboards | 1,307 | 531 | 60.6 | 776 | 59.4 |

| | | | | | | |
|--------------------|-----------|---------|--------|------|--------|------|
| Mbozi | Desks | 31,811 | 4,020 | 12.6 | 27,791 | 87.4 |
| | Tables | 2,823 | 1,000 | 35.4 | 1,823 | 64.6 |
| | Chairs | 2,900 | 538 | 18.6 | 2,362 | 81.4 |
| | Cupboards | 1,327 | 104 | 7.8 | 1,223 | 92.2 |
| Rungwe | Desks | 26,723 | 11,564 | 43.3 | 15,159 | 56.7 |
| | Tables | 3,284 | 1,121 | 34.1 | 2,163 | 65.9 |
| | Chairs | 3,460 | 830 | 24.0 | 2,630 | 76.0 |
| | Cupboards | 2,137 | 496 | 27.9 | 1,541 | 72.1 |
| Total Mbeya Region | Desks | 122,386 | 40,533 | 33.1 | 81,853 | 66.9 |
| | Tables | 13,508 | 5,690 | 42.1 | 7,818 | 57.9 |
| | Chairs | 13,992 | 3,853 | 27.5 | 10,139 | 72.5 |
| | Cupboards | 8,548 | 2,275 | 26.4 | 6,273 | 73.4 |

Source: Regional Commissioners' Office - REO, Mbeya: 1966

Table LIII (I): SCHOOLS TEACHERS DISPOSITION IN 1995 BY SEX AND GRADE

| District | Grade | No. Required | | | No available | | | | Shortage/ surplus |
|----------|--------|--------------|--------|-------|--------------|--------|-------|------|----------------------|
| | | Male | Female | Total | Male | Female | Total | % | |
| Chunya | IIIA | 210 | 150 | 360 | 124 | 67 | 191 | 53.0 | 169 |
| | IIIB/C | 195 | 165 | 360 | 191 | 131 | 322 | 89.2 | 38 |
| | Total | 405 | 315 | 720 | 315 | 198 | 513 | 71.7 | 207 |
| | IIIA | 229 | 130 | 359 | 141 | 57 | 198 | 55.2 | 161 |

| | | | | | | | | | |
|--------------------|--------|-------|-------|-------|-------|-------|-------|-------|----------|
| Ileje | IIIB/C | 180 | 189 | 369 | 407 | 151 | 355 | 96.2 | 14 |
| | Total | 309 | 319 | 728 | 548 | 208 | 553 | 76,0 | 175 |
| Kyela | IIIA | 220 | 223 | 443 | 241 | 87 | 328 | 74.0 | 115 |
| | IIIB/C | 255 | 244 | 499 | 655 | 300 | 627 | 125.6 | (+128) |
| | Total | 475 | 467 | 942 | 896 | 387 | 955 | 101.4 | (+13) |
| Mbeya Municipal | IIIA | 275 | 299 | 574 | 148 | 328 | 488 | 85.0 | 86 |
| | IIIB/C | 185 | 352 | 537 | 91 | 497 | 551 | 102.6 | +14 |
| | Total | 450 | 651 | 1,111 | 239 | 825 | 1,039 | 93.5 | 72 |
| Mbeya (R) | IIIA | 475 | 300 | 875 | 294 | 211 | 505 | 57.7 | 370 |
| | IIIB/C | 524 | 474 | 998 | 524 | 335 | 859 | 86.1 | 139 |
| | Total | 999 | 774 | 1,873 | 818 | 546 | 1,364 | 72.8 | 509 |
| Mbozi | IIIA | 595 | 291 | 886 | 352 | 190 | 542 | 61.2 | 344 |
| | IIIB/C | 640 | 246 | 886 | 950 | 508 | 916 | 103.4 | (+30) |
| | Total | 1,235 | 537 | 1,772 | 1,302 | 698 | 1,458 | 82.3 | 314 |
| Rungwe | IIIA | 526 | 372 | 898 | 392 | 267 | 661 | | 237 |
| | IIIB/C | 674 | 349 | 1,023 | 692 | 458 | 1,099 | | +76 |
| | Total | 1,200 | 721 | 1,921 | 1,084 | 725 | 1,760 | | 161 |
| Total Mbeya Region | IIIA | 2,530 | 1,765 | 4,295 | 1,692 | 1,207 | 2,899 | 67.5 | 1,396 |
| | IIIB/C | 2,653 | 2,019 | 4,672 | 3,510 | 2,380 | 5,890 | 126.1 | (+1,218) |
| | Total | 5,183 | 3,784 | 8,967 | 5,202 | 3,587 | 8,789 | 98.0 | 178 |

Source: Planning Commission - Compiled Data: Based on district Profiles - 1995

Observation from Table LIII (l) above reveals serious teacher shortages in certain Districts in Mbeya region. Mbeya (R) has a deficit of 509 teachers - (27%) , where as Mbeya Municipal has a shortage of only 72 teachers - (6.5%) while Kyela has surplus of 13 teachers (4.4%). The main problem, therefore is the distribution of teachers, rather than shortage. The problem is aggravated by the influx of married female teachers who accompany their husbands in towns, and hence creating artificial shortages in rural schools.

The accumulation of women teachers in towns creating artificial shortages is a common phenomenon in all District urban schools. Problems of teacher shortages in schools are some of the causes lowering primary school education standards. To improve the situation the government and private institutions should ensure education quality is not tempered with.

Table LIII (m): FACTS ON PRIMARY SCHOOLS ADEQUACY IN MBEYA REGION - IN 1975, 1985, 1990 AND 1995

| Facts | 1975 | 1985 | 1990 | 1992 | 1995 |
|------------------------|---------|---------|---------|---------|---------|
| No. of Schools | 517 | 764 | 839 | 806 | 826 |
| No. of Enrolment | 135,993 | 202,544 | 238,120 | 256,829 | 282,860 |
| No. of Streams | 2,192 | 4,568 | 5,953 | ,578 | 7,857 |
| Pupils/School average | 191 | 265 | 284 | 319 | 345 |
| Pupils/Streams average | 45 | 43 | 40 | 39 | 36 |
| No. of Teachers | 2,832 | 1,488 | 7,275 | 7,589 | 7,645 |
| Pupils/Teacher average | 48 | 48 | 38 | 34 | 36 |

Source: Mbeya region Data Bank - 1995

Table LIII (n): PRE-PRIMARY EDUCATION CENTRES - 1995

| District | No. of Centres | | | No. of Children | | | Number of Teachers |
|-----------|----------------|---------|-------|-----------------|-------|-------|--------------------|
| | Public | Private | Total | Boys | Girls | Total | |
| Chunya | - | 1 | 1 | 50 | 59 | 109 | 2 |
| Ileje | 132 | 1 | 133 | 1,670 | 1,635 | 3,305 | 150 |
| Kyela | - | 4 | 4 | 236 | 134 | 370 | 6 |
| Municipal | - | 6 | 6 | 256 | 288 | 544 | 8 |
| Mbeya (R) | 143 | 3 | 146 | 1,566 | 1,257 | 2,823 | 143 |
| Mbozi | N.A | N.A | N.A | N.A | N.A | N.A | N.A |
| Rungwe | N.A | N.A | N.A | N.A | N.A | N.A | N.A |
| Total | [275 | 15 | 290 | 3,778 | 3,373 | 7,151 | 309] |

Source: Planning Commission - Compiled from District [These Data are tentative - verification] profiles.

Although, data on Table LIII (n) seems not to give us the correct picture of what pertains to the Pre-schools in Mbeya region, particularly in Mbozi and Rungwe districts, we have every reason to believe that more pre-schools are still needed in Chunya, Kyela and in Mbeya Municipality. The number of pre-schools in those districts are incredibly small especially if you take into account the fact that they are in fact, the building blocks of good primary schools thereafter.

SECONDARY SCHOOL EDUCATION

Mbeya region had 5 secondary schools in 1967 (3 public and 2 private) with about 1,100 pupils (720 boys and 380 girls). There was only one Girls Secondary School and one-co-education secondary school-(Sangu). This number increased to 9 secondary schools, by 1978 with a total enrolment of 2,923 pupils (2,051 males and 872 females). By 1995,

the number had increased to 37 secondary schools. Day-secondary schools recently built have increased the intake of primary school leavers since the year 1992. However the number of secondary schools available does not satisfy the educational thirst of a large number of Std. VII pupils completing primary school education each year.

Table LIV: PUBLIC AND PRIVATE SECONDARY SCHOOL EXPANSION IN MBEYA REGION BY DISTRICT

| District | 1967 | | | 1982 | | | 1995 | | |
|---------------------|--------|---------|-------|--------|---------|-------|--------|---------|-------|
| | Public | Private | Total | Public | Private | Total | Public | Private | Total |
| Chuya | - | - | - | - | - | - | 1 | 2 | 3 |
| Ileje | - | - | - | - | - | - | 1 | 1 | 2 |
| Kyela | - | - | - | - | 1 | 1 | 1 | 2 | 3 |
| Mbeya/ Municipal | 2 | 2 | 4 | 3 | 1 | 4 | 3 | 5 | 8 |
| Mbeya (R) | - | - | - | - | - | - | 1 | 8 | 9 |
| Mbozi | - | - | - | - | - | - | 1 | 2 | 3 |
| Rungwe | 1 | - | 1 | 1 | 3 | 4 | 2 | 7 | 9 |
| Total | 3 | 2 | 5 | 4 | 5 | 9 | 10 | 27 | 37 |

Source: Regional commissioner’s REO, Mbeya

Table LIV shows that there have been a significant increase in public secondary schools between 1967 and 1995. The number increased from 3 to 10 in 1967 and 1995 respectively while private secondary schools increased from 2 in 1967 to 27 in 1995. Rungwe and Mbeya (R), districts have the highest number of schools compared with other rural districts. Ileje had the least number by the end of 1995.

Table LIV (a): SECONDARY SCHOOL (FORM I-IV) ENROLLMENT BY SEX BETWEEN 1990-1996 IN MBEUYA REGION

| Years | Public Schools | | | Private Schools | | | Total | | |
|-------|----------------|-------|-------|-----------------|-------|-------|-------|-------|--------|
| | Boys | Girls | Total | Boys | Girls | Total | B | G | T |
| 1990 | 1,629 | 852 | 2,481 | 3,958 | 2,936 | 6,894 | 5,587 | 3,788 | 9,375 |
| 1991 | 1,641 | 864 | 2,502 | 4,333 | 3,225 | 7,558 | 5,974 | 4,089 | 10,063 |
| 1992 | 2,271 | 855 | 3,126 | 4,389 | 3,432 | 7,821 | 6,660 | 4,287 | 10,947 |
| 1993 | 2,218 | 1,310 | 3,528 | 4,843 | 3,859 | 8,702 | 7,061 | 5,169 | 12,230 |
| 1994 | 2,275 | 1,387 | 3,662 | 5,003 | 3,723 | 8,726 | 7,278 | 5,110 | 12,388 |
| 1995 | 2,460 | 1,552 | 4,012 | 4,553 | 3,623 | 8,166 | 7,013 | 5,175 | 12,188 |
| 1996 | 2,298 | 1,756 | 4,054 | 4,544 | 3,664 | 8,208 | 6,842 | 5,420 | 12,262 |

Source: Ministry of Education and Culture - Statistics (1966)

Fig. 63: Public Secondary School (Form I - IV) Enrolment by Sex between 1990 -1996 in Mbeuya Region

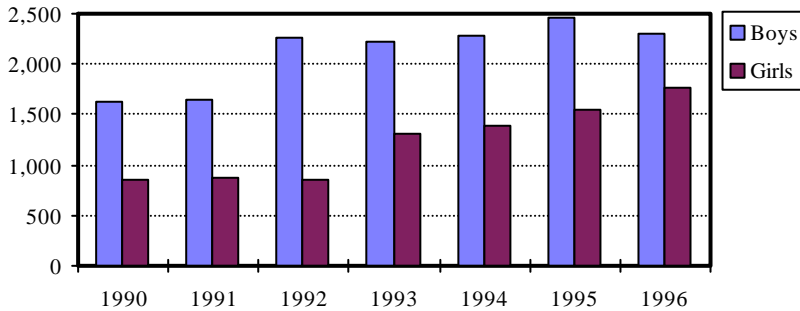


Fig. 63(a): Private Secondary School (Form I - IV) Enrolment by Sex between 1990 -1996 in Mbeuya Region

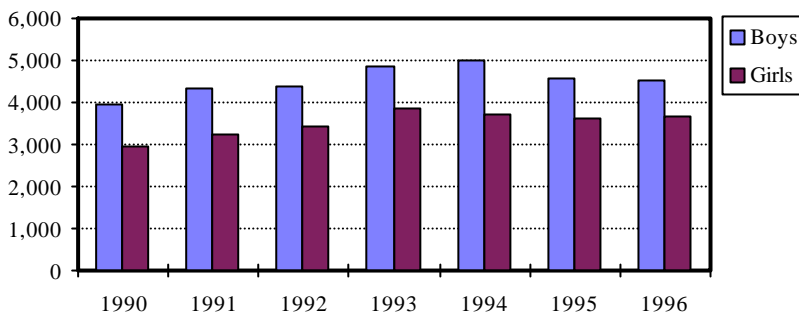


Fig. 63(c): Total Public/Private Secondary Schools (Form I - IV) Enrolment by Sex between 1990 -1996 in Mbeuya Region

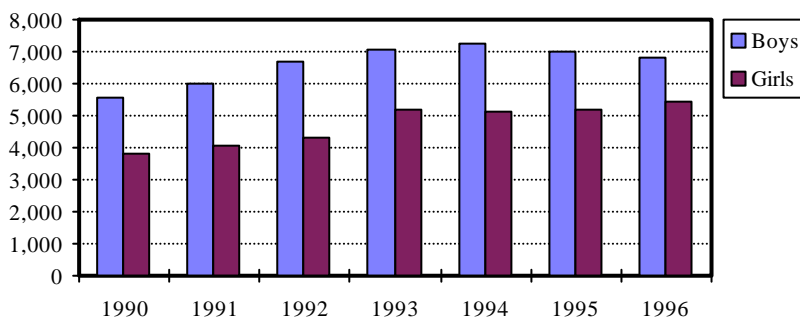


Table LIV (a) highlights trends in admission of pupils into public and private secondary schools between 1990 and 1996. It is evident that more boys and girls are absorbed into private secondary schools. For instance, out of 9,375 children who were in secondary schools in Mbeya region, in 1990, about 74 percent of them attended private secondary schools. Table LIV (b) below also attempts to show the number of boys and girls in public and private secondary schools in accordance with Grades (Form I-IV).

Table LIV (b): ENROLMENT BY SEX AND GRADE, PUBLIC AND PRIVATE SECONDARY SCHOOLS , 1994

| Category | Sex | Public | Private | Total |
|----------|-------|--------|---------|--------|
| Form I | Boys | 633 | 1,430 | 2,063 |
| | Girls | 410 | 1,132 | 1,542 |
| | Total | 1,043 | 2,562 | 3,605 |
| Form II | Boys | 558 | 1,372 | 1,930 |
| | Girls | 361 | 1,042 | 1,403 |
| | Total | 919 | 2,414 | 3,333 |
| Form III | Boys | 555 | 1,180 | 1,735 |
| | Girls | 337 | 878 | 1,215 |
| | Total | 892 | 2,058 | 2,950 |
| Form IV | Boys | 529 | 1,021 | 1,550 |
| | Girls | 279 | 671 | 950 |
| | Total | 808 | 1,692 | 2,500 |
| Total | Boys | 2,275 | 5,003 | 7,278 |
| | Girls | 1,387 | 3,723 | 5,110 |
| | Total | 3,662 | 8,726 | 12,388 |

Source: Basic Education Statistics 1994 Regional Data.

Fig. 64: Total Enrolment in Public and Private Secondary Schools, Mbeya Region 1994

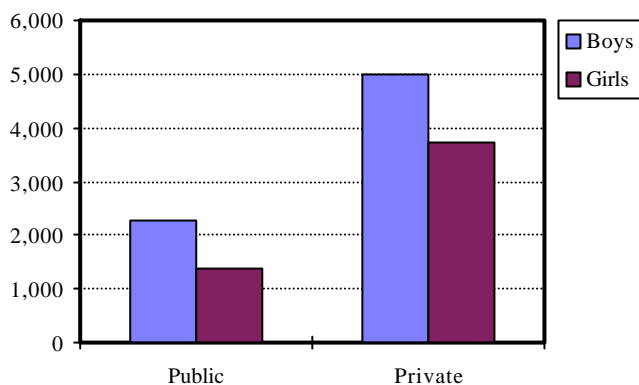


Table LIV (c) NUMBER OF SECONDARY SCHOOL TEACHERS AND THEIR QUALIFICATIONS, 1995

| Category | Sex | No. Of Teachers in Public secondary schools | No. Of Teachers in Private secondary schools | Total No. of Teachers |
|-------------|---------|---|--|-----------------------|
| Degree | Males | 23 | 67 | 90 |
| | Females | 8 | 11 | 19 |
| | Totals | 31 | 78 | 109 |
| Diploma | Males | 213 | 243 | 456 |
| | Females | 126 | 39 | 165 |
| | Totals | 339 | 282 | 621 |
| Certificate | Males | 5 | 108 | 113 |
| | Females | 3 | 15 | 18 |
| | Totals | 8 | 123 | 131 |

| | | | | |
|-------|---------|-----|-----|-----|
| Total | Males | 255 | 418 | 673 |
| | Females | 123 | 65 | 188 |
| | Totals | 378 | 483 | 861 |

Source: Regional Education Office - Mbeya, 1996

Table LIV (d): NUMBER OF SECONDARY SCHOOLS AND STREAMS FOR SELECTED FIVE REGIONS IN 1995

| Region | No. of Schools | | No. of Streams | |
|--------------|----------------|-----------|----------------|------------|
| | Public | Private | Public | Private |
| Mbeya | 10 | 27 | 108 | 223 |
| Kilimanjaro | 15 | 62 | 206 | 592 |
| Arusha | 13 | 23 | 119 | 235 |
| Kagera | 9 | 23 | 103 | 209 |
| Iringa | 13 | 32 | 187 | 247 |
| Rukwa | 7 | 5 | 62 | 20 |

Source: Basic Education Statistics in Tanzania

If we were to use Kilimanjaro Region as a bench-mark by which to measure the educational achievements of each region, then Mbeya and the other four regions will need to work much harder in trying to close-up the gap between what they have and what is in Kilimanjaro. Table LIV (d) is a case in point.

ADULT EDUCATION

The percent of literacy in Mbeya region has been increasing since 1967 population Census. It is observed from Table KIV (e) that the percent of literacy for Mbeya population in 1967 was 29 and 61.9 percent in 1988.

No doubt, the level of literacy in Mbeya Region must have gone up by now following Adult Education Programme being conducted. It has been reported that the literacy rate had reached 80 percent by the end of 1995.

Eradication of illiteracy among the people in the region is made difficult by the following:-

- Those attending first stage of adult education, do not continue with other stages, thus become illiterate again;
- An increase in the number of children not being enrolled in primary schools (UPE programme);
- Financial constraints of the government leading to inefficiency and poor adult education facilities
- Lack of qualified trainers for adult education programmes;
- Some people prefer doing something for their survival rather than attend Adult Education Classes.

Table LIV (e) : PERCENT OF LITERACY FOR POPULATION AGE 10 YEARS AND ABOVE BY REGION

| Region | 1967 Census | 1978 Census | 1988 Census |
|---------------|-------------|-------------|-------------|
| Kilimanjaro | 56 | 74.1 | 80.8 |
| Dar es Salaam | 60 | 73.3 | 80.7 |
| Ruvuma | 41 | 66.3 | 70.5 |
| Tanga | 40 | 60.6 | 60 |
| Morogoro | 37 | 58.6 | 62.8 |
| Mara | 35 | 56.4 | 63.9 |
| Iringa | 31 | 54.0 | 68.3 |
| Kagera | 40 | 52.9 | 59.5 |
| Mtwara | 28 | 51.4 | 57.1 |
| Dodoma | 24 | 49.5 | 55.5 |
| Mbeya | 29 | 49.2 | 61.9 |
| Rukwa | - | 48.5 | 58.6 |
| Lindi | - | 48.4 | 53.8 |
| Singida | 24 | 46.7 | 57.4 |
| Mwanza | 25 | 44.3 | 57.3 |

| | | | |
|-----------|----|------|------|
| Coast | 26 | 44.0 | 51.1 |
| Kigoma | 19 | 43.7 | 55.1 |
| Arusha | 26 | 41.9 | 58.1 |
| Tabora | 27 | 40.5 | 50.5 |
| Shinyanga | 16 | 33.2 | 48.3 |

Source: 1988 Population Census (National Profile, Table 5.2)

Table LIV (f): LITERACY RATES FOR RURAL AND URBAN POPULATION OF 10 YEARS AND ABOVE, 1988

| Region | Male | | | Female | | |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | Rural | Urban | Total | Rural | Urban | Total |
| Mara | 73.7 | 88.0 | 75.3 | 53.7 | 71.5 | 55.6 |
| Dodoma | 61.5 | 85.4 | 64.3 | 45.1 | 73.7 | 48.2 |
| Arusha | 61.5 | 91.8 | 65.6 | 46.4 | 82.8 | 50.9 |
| Kilimanjaro | 84.5 | 90.3 | 85.5 | 75.7 | 83.6 | 76.9 |
| Tanga | 72.8 | 88.6 | 75.9 | 53.2 | 75.6 | 57.3 |
| Morogoro | 68.8 | 86.4 | 72.9 | 49.5 | 72.0 | 54.6 |
| Coast | 60.1 | 72.2 | 64.0 | 40.1 | 51.8 | 44.9 |
| Dar es Salaam | 68.4 | 90.0 | 87.9 | 48.0 | 77.7 | 74.6 |
| Lindi | 62.4 | 75.9 | 64.6 | 42.0 | 60.2 | 44.8 |
| Mtwara | 65.5 | 77.9 | 67.3 | 46.3 | 61.6 | 48.5 |
| Ruvuma | 77.7 | 87.6 | 78.7 | 61.4 | 75.7 | 63.3 |
| Iringa | 80.1 | 87.4 | 84.9 | 57.2 | 70.4 | 58.5 |
| Mbeya | 69.9 | 87.5 | 73.3 | 48.4 | 70.0 | 52.4 |
| Singida | 65.0 | 85.5 | 66.8 | 47.2 | 70.8 | 49.3 |
| Tabora | 50.1 | 85.2 | 60.5 | 36.7 | 67.8 | 41.6 |
| Rukwa | 69.1 | 84.3 | 71.3 | 43.9 | 66.4 | 47.3 |
| Kigoma | 65.1 | 83.1 | 67.4 | 43.1 | 62.7 | 45.5 |

| | | | | | | |
|-----------|------|------|------|------|------|------|
| Shinyanga | 57.9 | 85.9 | 59.9 | 36.2 | 67.7 | 39.3 |
| Kagera | 68.0 | 84.4 | 69.0 | 49.7 | 72.4 | 50.9 |
| Mwanza | 63.7 | 83.7 | 67.6 | 43.4 | 66.9 | 47.8 |

Source: 1988 Population Census

OTHER TRAINING INSTITUTIONS:

Education is said to be one of the basic tools for social and economic development, and where it is lacking, social and economic underdevelopment persist. Thus, when we make efforts in the expansion of Training Institution's sector we give a chance to more people to improve their working skills and do better their work. It is in this spirit that the Government and private organisations take keen interest in establishing Training Institutions. Table LIV (g) shows the most important Training Institutions in Mbeya Region.

Table LIV (g): TRAINING INSTITUTIONS IN MBEYA REGION

| Institution | No. In Region | Location | Annual Enrolment Courses | Ownership |
|------------------------------|---------------|---------------------------|---|---------------------------------------|
| 1. Uyole Agricultural Centre | 1 | Uyole - Mbeya Municipal | Diploma & Certificate up grading | Government (MOA) |
| 2. Mbeya Technical College | 1 | Iyunga-Mbeya Municipal | Diploma Certificate | Government |
| 3. Teachers Training College | 2 | Tukuyu Mbeya Municipal | Certificate Diploma Certificate IIA | Government (MOE) ELCT (Mission) |

| | | | | | |
|----|-----------------------------|----|---|--|--|
| 4. | Medical Training | 3 | Mbeya Referral Hosp.. Mbozi Mor. Hosp.. (Mbozi) Tukuyu Govt. Hosp.. | Med. Assist. Nursing Certf. MCHA | Government Moravian Mission Government |
| 5. | Vocational Training Centres | 17 | In all districts | Masonry, Tinsmilhery Carpentry Plumbing agriculture dom. Science tech. Engendering | Private and Government owned. |

HEALTH SECTOR:

Like in other regions, health facilities are in most villages in Mbeya Region and a good number of the people have an access to them. The main problem which again is common in other regions is “shortage of medicines”, user charges and the poor state of the health infrastructure. Poor health services in Mbeya are said to be the cause for many untimely deaths now common in the region. It is reported that at least one child out of seven dies before reaching one year and 120 children out of 1000 also die before attaining five years. Malaria, preumania, measles, gastroenteritis and pregnancy complications are said to be responsible for many deaths.

Table LV below shows the distribution and expansion of the existing health facilities in Mbeya region.

Table LV: DEVELOPMENT OF HEALTH FACILITIES IN MBEYA REGION: 1975, 1985 AND 1995

| District | Hospitals | | | Health Centres | | | Dispensaries | | |
|----------|-----------|------|------|----------------|------|------|--------------|------|------|
| | 1975 | 1985 | 1995 | 1975 | 1985 | 1995 | 1975 | 1985 | 1995 |
| | 5 | 5 | 5 | 5 | | 5 | 5 | | |

| | | | | | | | | | |
|-----------|---|---|----|----|----|----|-----|-----|-----|
| Chunya | - | 1 | 1 | 2 | 2 | 3 | 16 | 24 | 27 |
| Ileje | 1 | 1 | 1 | 1 | 1 | 2 | 12 | 16 | 20 |
| Kyela | 1 | 1 | 2 | - | 2 | 1 | 10 | 18 | 22 |
| Municipal | 1 | 1 | 3 | - | 2 | 4 | 3 | 4 | 36 |
| Mbeya (R) | 1 | 1 | 1 | 4 | 6 | 7 | 24 | 30 | 74 |
| Mbozi | 1 | 1 | 2 | 2 | 4 | 3 | 21 | 25 | 42 |
| Rungwe | 2 | 2 | 4 | 3 | 3 | 5 | 27 | 32 | 47 |
| Total | 7 | 9 | 14 | 12 | 20 | 25 | 113 | 147 | 235 |

Source: Planning Commission - Compiled Data based on District Profiles - 1997

Table LV (a) THE STATUS OF PUBLIC AND PRIVATE HEALTH SERVICE CENTRES IN MBEYA REGION - 1995, BY DISTRICT

| District | Hospitals | | Shortage | R/Health Centre | | Shortage | Dispensaries | | Shortage |
|-----------|-----------|---------|----------|-----------------|---------|----------|--------------|---------|----------|
| | Public | Private | | Public | Private | | Public | Private | |
| Chunya | - | 1 | 1 | 3 | - | 2 | 25 | 5 | 39 |
| Ileje | - | 1 | 1 | 2 | - | 1 | 14 | 6 | 40 |
| Kyela | 1 | 1 | - | 1 | - | 1 | 18 | 3 | 61 |
| Municipal | 1 | 2 | 1 | 3 | 1 | 2 | 3 | 30 | - |
| Mbeya(R) | - | 1 | 1 | 5 | 6 | 3 | 47 | 24 | 87 |
| Mbozi | 1 | 1 | - | 3 | - | 2 | 21 | 17 | 117 |
| Rungwe | 1 | 2 | - | 2 | 2 | 1 | 27 | 17 | 98 |
| Total | 4 | 9 | 4 | 19 | 9 | 12 | 155 | 102 | 442 |

Source: Planning Commission - Compiled data based on district Reports - 1997.

Dispensaries:

District reports show that there are 257 dispensaries in Mbeya Region of which 155 are public and 85 private. A dispensary in Mbeya region serves an average of 7618 people. This figure is below the National Standard figure of 10,000 people per dispensary. On the whole, one would say that the dispensary service in the region is at least adequate. The problem for some people may be the walking distance from their residence to these centres.

Table LV (b) DISPENSARIES AND SERVICE RATIO BY DISTRICT IN 1995

| District | Dispensaries | | | Population (Estimates 1995) | Population Dispensary Ratio |
|-----------|--------------|---------|-------|-----------------------------------|-----------------------------------|
| | Public | Private | Total | | |
| Chunya | 27 | 0 | 24 | 194,495 | 7204:1 |
| Ileje | 16 | 4 | 20 | 103,328 | 5166:1 |
| Kyela | 17 | 5 | 22 | 152,194 | 7247:1 |
| Municipal | 3 | 33 | 36 | 399,642 | 15371:1 |
| Mbeya (R) | 48 | 26 | 74 | 190,005 | 2568:1 |
| Mbozi | 27 | 15 | 42 | 420,771 | 10018:1 |
| Rungwe | 29 | 18 | 47 | 299,379 | 6369:1 |
| Total | 149 | 85 | 231 | 1,759,814 | 7618:1 |

Source: Regional Commissioner's Office - Compiled Data based on District reports - 1997

The table above shows that Mbeya (R) district is the best served with dispensaries. Its dispensary population ratio is 1:2568. That is one dispensary serves 2568 people.

Next best served District in terms of Dispensaries is Ileje with a Ratio of 1:5166 people followed both Rungwe, Chunya and Kyela.

Health Centres:

There are 28 Health Centres in the Region, of which 19 are government and 9 private. These on average serve at least 62,851 people each. This figure is above the National Standard of serving only 50,000 people per

health Centre. According to Table LV (c) only Mbeya rural and Ileje Districts have adequate number of Health Centres. The other Districts would need more health centres if they were to serve people better.

Table Lv (c): RURAL HEALTH CENTRES AND SERVICE RATIO BY DISTRICT - 1995

| District | No. Of. Rural health centres | | | Populatio n/Ratio RHC 1995 | No. of Beds | | |
|-----------|------------------------------|---------|-------|----------------------------------|-------------|---------|-------|
| | Public | Private | Total | | Public | Private | Total |
| Chunya | 3 | - | 3 | 1:64,832 | 48 | 12 | 60 |
| Ileje | 2 | - | 2 | 1:51,664 | 60 | - | 60 |
| Kyela | 1 | 0 | 1 | 1:76,100 | 64 | - | 14 |
| Municipal | 3 | 1 | 4 | 1:99,911 | - | 22 | 22 |
| Mbeya (R) | 4 | 3 | 7 | 1:40,313 | 90 | 32 | 122 |
| Mbozi | 2 | 1 | 3 | 1:140,257 | 62 | - | 62 |
| Rungwe | 4 | 1 | 5 | 1:74,845 | 24 | 40 | 64 |
| Total | 19 | 6 | 25 | 1:62851 | 348 | 106 | 454 |

Source: Regional Commissioner's Office: Medical Monthly Report (1993)

Hospital Services:

Mbeya Region happens to have one of the a Zonal Referral Hospitals, in the country. The Hospital caters for Rukwa, Iringa, Ruvuma and Mbeya regions. In total Mbeya has 13 Hospitals, of which 4 are public and 9 private.

Table LV (d): DISTRIBUTION OF HOSPITALS, BEDS AND DOCTORS BY DISTRICTS IN MBEYA REGION - 1995

| District | NO. OF HOSPITALS | | | No. Of Beds | Pop./Bed 1995 | No. Of Doctors | Pop./Doctor 1995 | Pop./Hospital 1995 | MCH Clinics |
|-----------|------------------|---------|-------|-------------|---------------|----------------|------------------|--------------------|-------------|
| | Public | Private | Total | | | | | | |
| Chunya | - | 1 | 1 | 170 | 1:1144 | 6 | 1:32614 | 1:194500 | 29 |
| Ileje | - | 1 | 1 | 110 | 1:957 | 3 | 1:34443 | 1:103300 | 23 |
| Kyela | 1 | 1 | 2 | 150 | 1:2272 | 4 | 1:38050 | 1:76100 | 23 |
| Municipal | 1* | 2 | 3 | 419 | 1:515 | 7 | 1:21714 | 1:133200 | 19 |
| Mbeya (R) | - | 1 | 1 | 80 | 1:5965 | 6 | 1:66607 | 1:190000 | 31 |
| Mbozi | 1 | 1 | 2 | 280 | 1:1503 | 3 | 1:40257 | 1:210400 | 38 |
| Rungwe | 2 | 2 | 4 | 390 | 1:830 | 5 | 1:59876 | 1:9900 | 40 |
| Total | 5 | 9 | 14 | 1,601 | 1:1110 | 26 | 1:68468 | 1:135400 | 234 |

Source: Regional Commissioner's Office - Compiled data - based on district reports.

By National Standards, the population per doctor is supposed to be 24,930 people. In all rural Districts the population per Doctor is larger than the number required. The situation is worse in Mbeya Rural with 66,607 people followed by Rungwe with 59,876 people per doctor. Even in terms of Hospital/Population Ratio, Mbeya rural is still in worse situation because each Hospital in Mbeya serves 190,000 people instead of just 100,000 people in accordance with the National Standards. All in all, in terms of Hospital Service in the region, the situation still leaves a lot to desired. Mbozi, Mbeya, and Chunya districts need more Hospitals and this calls for an urgent intervention by the private sector.

Table LV (e): REQUIREMENT OF IMPORTANT MEDICAL MANPOWER IN MBEYA REGION - BY 1995

| Staff Category | No. Of Requirement | | No. Available | | | | No. Of Shortage | |
|--------------------|--------------------|------|---------------|------|------|-----|-----------------|------|
| | 1991 | 1995 | 1991 | % | 1995 | % | 1991 | 1995 |
| Doctors | 9 | 9 | 4 | 44 | 4 | 44 | 5 | 5 |
| Medical Officers | 9 | 9 | 6 | 66 | 6 | 66 | 3 | 3 |
| Medical Assistants | 47 | 47 | 47 | 100 | 42 | 89 | - | 6 |
| Lab. Technicians | 21 | 23 | 19 | 90 | 23 | 100 | 2 | - |
| X-Ray Technicians | 10 | 10 | 6 | 60 | 1 | 0 | 4 | 9 |
| ADO (Dental) | 4 | 4 | 4 | 100 | 1 | 25 | - | 3 |
| Nurse A/B | 22 | 22 | 5 | 23 | 7 | 31 | 17 | 15 |
| RMAs | 250 | 260 | 126 | 50.4 | 75 | 29 | 24 | 85 |
| MCHA | 230 | 240 | 229 | 99.9 | 230 | 100 | 1 | 10 |
| Pharmacists | 230 | 240 | 229 | 99.9 | 259 | 100 | 1 | - |
| Health Officers | 22 | 4 | 13 | 59 | 2 | 50 | 9 | 2 |
| Orthopaedic Tech. | 49 | 50 | 33 | 67 | 28 | 56 | 26 | 22 |
| Nursing Aux. | - | 3 | - | - | 0 | 0 | - | 3 |
| | 240 | 240 | 240 | | 240 | 100 | - | - |

Source: RMO Annual Reports 1991 and 1995 - Mbeya.

Table LV (f): COMMON TEN-DISEASES IN MBEYA REGION

| Diseases | regional Average Occurrences (%) | Regional No. of Deaths | National Average Occurrences |
|----------------------|----------------------------------|------------------------|------------------------------|
| Malaria | 25.4 | 266 | 31.0 |
| URT | 12.0 | 37 | 11.0 |
| Diarrhoea | 11.1 | 142 | 8.1 |
| Pneumonia | 4.8 | 116 | 4.4 |
| Intestinal Ubrms | 5.6 | 2 | 2.7 |
| Eye Diseases | 2.7 | - | 4.6 |
| Skin Diseases | 5.5 | - | 3.7 |
| Measches | 4.3 | 34 | 2.9 |
| Gonorrhea | 3.3 | 1 | 1.5 |
| Anaemia | 0.3 | 76 | 1.5 |
| Other diagnoses | 13.9 | 59 | 17.0 |
| Symptoms/Ill defined | 11.1 | 37 | 11.2 |
| Total | 100.0 | 77.0 | 100.0 |

Source: Regional Medical Officer - Health Statistics Abstract - 1955

Mortality:

The Physical Quality of Life Index (PQL1) is a measure of relative development status. It is used to compare nations with regard to their general well-being. The PQL1 is arrived at by considering all aspects of

Infant Mortality, Life Expectancy at birth, Maternal Mortality and Adult Literacy. Table LV (g) highlights the situation regarding life expectancy at birth as revealed by 1978 and 1988 Census Results. The ideal PQL1 score is 100, and it is achieved when infant mortality rate is 7/1000 live birth, life expectancy is 77 years and adult literacy is 100%. Tanzania's PQL1 score was 35.5 during 1978 Census and 45.6 during 1988 Census. Life expectancy at birth for the people of Mbeya Region has shown improvement between 1978 and 1988 Census, with 41 and 47 years for men and women and also 45 and 48 years for men and women respectively. The current projected life expectancy in Mbeya is between 50 and 57 for men and women. Infants, Under 5 years and Child bearing women are more vulnerable to deaths compared to other age groups.

Table LV (g): LIVE EXPECTANCY AT BIRTH BY SEX, 1978 AND 1988 ENSUS

| Region | 1978 Census | | 1988 Census | |
|---------------|-------------|-----------|-------------|-----------|
| | Male | Female | Male | Female |
| Arusha | 50 | 57 | 57 | 58 |
| Coast | 47 | 48 | 46 | 51 |
| Dar es Salaam | 50 | 50 | 50 | 50 |
| Dodoma | 45 | 46 | 45 | 47 |
| Iringa | 41 | 45 | 44 | 47 |
| Kagera | 45 | 45 | 44 | 45 |
| Kigoma | 40 | 48 | 47 | 49 |
| Kilimanjaro | 58 | 59 | 57 | 62 |
| Lindi | 42 | 47 | 46 | 48 |
| Mara | 44 | 47 | 46 | 48 |
| Mbeya | 41 | 47 | 45 | 48 |
| Morogoro | 44 | 46 | 45 | 48 |
| Mtwara | 40 | 46 | 45 | 48 |
| Mwanza | 44 | 48 | 46 | 50 |
| Rukwa | 40 | 45 | 44 | 48 |
| Ruvuma | 43 | 49 | 48 | 51 |
| Shinyanga | 42 | 50 | 48 | 51 |
| Singida | 44 | 55 | 54 | 55 |
| Tabora | 44 | 53 | 53 | 54 |

| | | | | |
|------------------|----|----|----|----|
| Tanga | 49 | 49 | 48 | 51 |
| Average Mainland | 44 | 50 | 49 | 51 |

Source: Health Statistics Abstract 1994

MATERNAL MORTALITY

Poor health and nutritional status of mothers before and after birth is one of the main reasons for high rates of maternal deaths. Some of the symptoms for poor health include, low birth weights and weight gains during pregnancy. Available data from specific studies in 1990 have indicated that rates of low birth weight babies below 2.5kgs were 1645 (7%) mothers with birth complications were 2526 (10%) and cases of neonatal deaths were 160 (1%). To date no reliable figures have been made available on the extent of Maternal Mortality Rate (MMR) in Mbeya Region.

Table LV (1): MATERNAL MORTALITY BY DISTRICT FOR 1992, 1994 AND 1996

| District | 1992 | | 1993 | | 1996 | |
|-----------|------------|--------|------------|--------|------------|--------|
| | Deliveries | Deaths | Deliveries | Deaths | Deliveries | Deaths |
| Chunya | 816 | 5 | 1,023 | 2 | 1,132 | 8 |
| Ileje | 1,563 | 4 | 1,235 | 5 | 2,064 | 4 |
| Kyela | 3,641 | 7 | 3,014 | 10 | 3,106 | 5 |
| Municipal | 7,525 | 36 | 5,731 | 57 | 7,390 | 47 |
| Mbeya (R) | 4,361 | 6 | 4,469 | 2 | 4,946 | 8 |
| Mbozi | 6,927 | 21 | 5,128 | 19 | 6,821 | 35 |
| Rungwe | 4,182 | 11 | 3,949 | 8 | 4,817 | 8 |
| Total | 2,9015 | 90 | 24,549 | 103 | 40,376 | 106 |

Source: Regional Commissioner's Office - ROM, Mbeya.

Table LV (I) : MATERNAL MORTALITY CASES IN MBEYA REGION

| District | Number of Delivery Cases | Live Births | Maternal Deaths |
|-----------|--------------------------|-------------|-----------------|
| Mbeya (U) | 7390 | 7080 | 47 |
| Mbeya (R) | 1839 | 1827 | 4 |
| Rungwe | 4817 | 4807 | 8 |
| Chunya | 1132 | 3679 | 8 |
| Ileje | 2064 | 1409 | 4 |
| Kyela | 3106 | 3172 | 5 |
| Mbozi | 6821 | 6070 | 35 |
| Mbarali | 3107 | 3093 | 4 |
| Total | 403767 | 31137 | 106 |

Source: Mbeya Region Data Bank

Table LV (j): MATERNAL MORTALITY RATE BY REGION FOR THREE CONSECUTIVE YEAR (1992, 1993 AND 1994)

| Region | Maternal Mortality Rate (MMR) | | |
|---------------|-------------------------------|------|------|
| | 1992 | 1993 | 1994 |
| Arusha | 102 | 158 | 114 |
| Coast | 209 | 111 | 70 |
| Dar es Salaam | 220 | 398 | 237 |
| Dodoma | 197 | 214 | 208 |
| Iringa | 311 | 321 | 276 |
| Kagera | 304 | 343 | 190 |

| | | | |
|--------------|-----------|------------|------------|
| Kigoma | 144 | 155 | 105 |
| Kilimanjaro | 126 | 46 | 107 |
| Lindi | 262 | 289 | 193 |
| Mara | 67 | 59 | 106 |
| Mbeya | 67 | 361 | 436 |
| Morogoro | 289 | 172 | 190 |
| Mtwara | 264 | 212 | 161 |
| Mwanza | 221 | 186 | 266 |
| Rukwa | 172 | 294 | 243 |
| Ruvuma | 225 | 189 | 186 |
| Shinyanga | 143 | 188 | 199 |
| Singida | 242 | 171 | 238 |
| Tabora | 151 | 185 | 130 |
| Tanga | 255 | 172 | 220 |

Source: Health Statistics Abstract, 1996

MALNUTRITION:

Malnutrition in Mbeya Region is most likely caused by insufficient food intake which results from insufficient education on child feeding practices and poor child care. Other reasons include, the women workload which reduces their time for child care and low level of participation of men in child care.

Table LV (k): NUTRITIONAL STATUS FOR U5s CHILDREN - 1995, BY DISTRICT (CSPD PROGRAMME)

| District | No. of Registered children U5Y | Attendance | | Normal Growth | | Moderate Under Weight | | Severe Under Weight | |
|--------------|--------------------------------|------------|------|---------------|------|-----------------------|------|---------------------|-----|
| | | NO. | % | NO. | % | NO. | % | NO. | % |
| Mbeya (R) | 33,833 | 21,163 | 62.5 | 14,955 | 70.7 | 5,619 | 26.6 | 588 | 2.8 |
| Kyela | 21,423 | 14,627 | 68.3 | 11,535 | 78.9 | 2,925 | 20.0 | 167 | 1.1 |
| Ileje | 16,398 | 12,862 | 78.4 | 9,855 | 76.6 | 2,894 | 22.5 | 113 | 0.9 |
| Chunya | 21,508 | 15,168 | 70.5 | 12,217 | 84.5 | 1,947 | 12.8 | 404 | 2.7 |
| Total Region | 93,162 | 63,219 | 68.0 | 48,562 | 76.8 | 13,385 | 21.2 | 1,272 | 2.0 |

Source: CSPD - Mbeya Region - 1995

Table: LV (l): CASES AND DEATHS CAUSED BY HIV AND AIDS OCCURRENCES IN MBEYA REGION BETWEEN 1987-1994 BY DISTRICTS

| District | 1987 | | 1988 | | 1989 | | 1990 | | 1991 | | 1992 | | 1993 | | 1994 | |
|-----------|------|----|------|----|-------|----|-------|----|-------|----|-------|---|-------|----|-------|-----|
| | C | D | C | D | C | D | C | D | C | D | C | D | C | D | C | D |
| Mbeya (M) | 11 | 4 | 214 | 21 | 582 | 6 | 618 | 63 | 574 | 14 | 317 | 0 | 739 | 0 | 1,300 | 31 |
| Mbeya (V) | 4 | 3 | 70 | 2 | 22 | 0 | 87 | 12 | 149 | 0 | 41 | 0 | 824 | 0 | 158 | 4 |
| Kyela | 1 | 1 | 51 | 15 | 79 | 15 | 143 | 2 | 267 | 8 | 13 | 3 | 130 | 8 | 165 | 32 |
| Rungwe | 0 | 0 | 65 | 15 | 309 | 7 | 577 | 11 | 406 | 3 | 494 | 0 | 280 | 31 | 763 | 373 |
| Mbozi | 6 | 1 | 100 | 6 | 238 | 14 | 294 | 0 | 330 | 0 | 323 | 0 | 215 | 0 | 740 | 16 |
| Chunya | 1 | 1 | 27 | 2 | 35 | 0 | 53 | 9 | 63 | 9 | 162 | 0 | * | * | 154 | 47 |
| Ileje | 0 | 0 | 14 | 0 | 55 | 0 | 32 | 1 | 64 | 1 | 62 | 0 | * | * | 25 | 2 |
| Region | 23 | 10 | 541 | 61 | 1,320 | 42 | 1,804 | 98 | 1,853 | 34 | 1,551 | 3 | 2,188 | 39 | 3,305 | 505 |

N.B. C = Cases D = Deaths * = Data not obtained

IMMUNIZATION

Immunization programme is intended to eliminate or reduce infant mortality Rate among children. Table LV (m) highlights in percentage terms the number in each District that got immunized against Polio 1, 2, & 3; BCG and DPT3.

Table LV (m): IMMUNIZATION COVERAGE (%) FOR U1Y AND U5Y BY DISTRICT

| District | 1990 | | 1993 | | 1995 | |
|----------------|------|-----|------|-----|------|-----|
| | U1Y | U5Y | U1Y | U5Y | U1Y | U5Y |
| Chunya | 81 | 76 | 78 | 82 | 96 | 90 |
| Ileje | 89 | 78 | 87 | 78 | 98 | 92 |
| Kyela | 69 | 65 | 72 | 67 | 92 | 87 |
| Municipal | 72 | 82 | 91 | 89 | 96 | 94 |
| Mbeya (R) | 89 | 86 | 88 | 80 | 85 | 82 |
| Mbozi | 79 | 71 | 82 | 67 | 87 | 81 |
| Rugwe | 96 | 91 | 89 | 86 | 98 | 96 |
| Average Region | 82 | 78 | 83 | 78 | 93 | 88 |

Source: RMO's Annual Report - Mbeya 1995

Note: U1Y = Under 1 year age. U5Y = Under 5 Years age.

Table LV (n): UNDER FIVE YEAR AND MOTHERS OF AGE (15-45) IMMUNISATION COVERAGE, 1994, MBEYA REGION

| District | UNDER FIVE YEAR | | | | | | | | | MOTHER OF BEARING AGE | | | | | | |
|-----------|---------------------|--------|-----|--------|----|--------|----|--------|----|-----------------------|-------|-------|-------|------|------|--------|
| | Registered Children | GCG | % | DPT3 | % | Polio3 | % | Surua | % | 15-45 Yrs | TT1 | TT2 | TT3 | TT4 | TT5 | TT2+ % |
| Mbeya (U) | 41600 | 58002 | 100 | 40153 | 96 | 38840 | 93 | 41187 | 99 | 41600 | 12721 | 7986 | 8060 | | | 39 |
| Mbeya (R) | 79576 | 62069 | 78 | 66843 | 84 | 65252 | 82 | 68435 | 86 | 79976 | 9711 | 7074 | 5750 | 553 | 127 | 17 |
| Rungwe | 30527 | 29305 | 96 | 27169 | 89 | 27450 | 90 | 28060 | 92 | 59962 | 6408 | 5156 | 4251 | 110 | 81 | 31 |
| Kyela | 59962 | 51567 | 86 | 59493 | 99 | 49505 | 82 | 52766 | 88 | 49813 | 34116 | 9996 | 1028 | | | 18 |
| Mbozi | 83475 | 78283 | 94 | 70726 | 85 | 77699 | 93 | 80892 | 97 | 20598 | 18832 | 18548 | 17441 | 288 | 92 | 44 |
| Chunya | 49813 | 42984 | 86 | 42984 | 86 | 41843 | 84 | 42983 | 86 | 30527 | 5169 | 4559 | 4291 | 4459 | 3290 | 33 |
| Ileje | 20598 | 20189 | 98 | 19362 | 94 | 18952 | 92 | 18540 | 90 | 83475 | 3963 | 3812 | 3087 | 1985 | 1276 | 49 |
| Mkoa | 365511 | 342399 | 94 | 326730 | 90 | 319541 | 88 | 332863 | 92 | 364406 | 90920 | 57131 | 43908 | 7395 | 4866 | 31 |

WATER SECTOR

Provision of adequate water supplies, is one of the basic prerequisites for improving quality of life, as well as providing one of the important inputs for productive activities such as agriculture and industry. Mbeya region continues to make efforts to ensure that more and more people get clean and safe water. It is reported that by the end of 1995 water had been supplied to 262 villages, equivalent to 45 percent of total villages in the region. The population getting water within a distance of 400 metres was estimated at 767,798 people in 1995.

Considering the existing resource constraints in the economy it is difficult to say whether the region may be able to achieve the National target of accessing potable water to every person within a distance of not more than 400 metres by the year 2002.

Table LVI shows the extent of water supply coverage in Mbeya region as estimated in 1995.

Table LVI: POPULATION SERVED WITH CLEAN WATER IN 1995, BY DISTRICTS

| District | Population (1995 projection) | Population Served with Water | % population served | Population Not Served |
|--------------|------------------------------|------------------------------|---------------------|-----------------------|
| Chunya | 194,418 | 98,684 | 51 | 96,334 |
| Ileje | 103,328 | 28,931 | 24 | 74,397 |
| Kyela | 152,022 | 95,685 | 63 | 56,337 |
| Municipal | 190,005 | 121,603 | 64 | 68,402 |
| Mbeya (R) | 399,642 | 239,785 | 60 | 159,857 |
| Mbozi | 420,771 | 130,439 | 31 | 290,332 |
| Rungwe | 339,398 | 101,100 | 30 | 238,298 |
| Total Region | 1,799,584 | 983,932 | 45.4 | 983,932 |

Source: Regional Commissioners Office - Data Bank. 1995

It is noted from Table LVI above that only 45.4% of the 1995 projected population of Mbeya region is provided with clean water. Ileje is the least served, while Kyela ranks first among rural districts (63%). Success in water provision in Kyela is attributed to ELCT mission which has supplied water to 14 villages. Water supply in Mbozi and Rungwe districts is also not adequate. Much is still require to be done to meet the target of supplying clean and safe water to people by the year 2002.

Table LVI (a): TYPE AND WATER SUPPLY SOURCES IN MBEYA REGION - 1996

| Type of Scheme | Chunya | Ileje | Kyela | Municipal | Mbeya (R) | Mbozi | Rungwe | Total |
|------------------------------|--------|-------|-------|-----------|-----------|-------|--------|-------|
| 1.Diesel-Driven pump | 11 | 1 | 4 | - | 6 | 13 | 3 | 38 |
| 2.Electric-Driven Schemes | - | - | - | 2 | - | 2 | - | 4 |
| 3.Gravity-System | 5 | 4 | 7 | 4 | 23 | 7 | 16 | 66 |
| 4.Shallow well and Boreholes | 40 | 9 | 3 | - | 128 | 133 | - | 313 |
| 5.Other Schemes | - | 2 | - | - | 2 | - | 3 | 7 |
| Total Schemes | 56 | 615 | 14 | 6 | 159 | 155 | 22 | 428 |

Source: Regional Data Bank - Mbeya 1996

Table LVI (a) Shows the type of water sources available in the region. The most common water sources almost depended upon by many people in all districts are Shallow and Boreholes. There are 40 of them in Chunya, 128 in Mbeya rural and 133 in Mbozi district. Water schemes in the region are mainly assisted by funds from EU, DANIDA, ODA, SIDA and ICCO.

(a) Urban Water Supply:

The Region has seven urban centres namely, Mbeya, Vwawa, Chunya, Tukuyu, Itumba and Tunduma. The rapid population expansion in towns is likely to create water shortages.

In 1995, the urban population was projected at 262,182 people. Table LVI (b) below highlights the number of people served with clear water in each respective town.

Table LVI (b): URBAN WATER SUPPLY IN MBEYA REGION BY 1995

| Urban Centre | 1988 Census Urban Total population | Urban Projected 1995 population | Actual Population Served | Percent getting water |
|-------------------|------------------------------------|---------------------------------|--------------------------|-----------------------|
| Mbeya Municipal | 152,544 | 190,005 | 122,553 | 64.5 |
| Vwawa and Tunduma | 18,214 | 44,230 | 23,884 | 54.0 |
| Chunya | 11,612 | 13,725 | 6,999 | 51.0 |
| Kyela | 14,599 | 16,362 | 9,490 | 68.5 |
| Itumba | 11,545 | 12,708 | 7,955 | 62.6 |
| Total Region | 5,288 | 6,178 | 5,300 | 86.0 |
| | 213,802 | 262,182 | 176,181 | 67.2 |

Source: Regional Water Engineer, Mbeya, 1997

Water supply in Mbeya Urban centre is done by the Urban Water and Sanitation Department (UWSD), while district urban centres get their water through their respective Local Government Authorities management.

According to Table LVI (b) more than 50 percent of the urban population in all districts get clean and safe water. The percentages of the population getting water in each District urban centre are still small.

Table LVI (c): WATER DEMAND AND SUPPLY IN URBAN CENTRES BY 1995

| Urban Centre | Water Demand M ³ /day | Water Supply M ³ /day | Installed Capacity | Water shortage M ³ /day |
|--------------|-------------------------------------|-------------------------------------|--------------------|---------------------------------------|
| Mbeya (U) | 30,000 | 20,640 | 21,000 | 9,360 |
| Vwawa | 2,840 | 2,300 | 2,300 | 540 |
| Chunya | 1,820 | 800 | 1,200 | 1,020 |
| Kyela | 2,410 | 2,000 | 2,700 | 410 |
| Tukuyu | 13,267* | 5,857 | 3,500 | 7,410 |
| Total | 825 | 724 | 724 | 101 |
| TOTAL | 39,695 | 27,425 | 31,424 | 12,270 |

Source: Regional Water Engineer, Mbeya

According to Table LVI (c) above, there is a serious water shortage in the major urban centres of Mbeya region. Water shortages are evident in every district urban centre. The situation of water supply in Chunya Vwawa mbeya (U) and Tukuyu towns is more serious in the sense that their water demand is greater than their installed water capacities. It is only in Kyela Urban where water demand is still less than the installed water capacity. Water demand in Kyela was 2410 Cu. Metres per day while the installed water capacity is 2700 Cu. Metres.

RURAL WATER SUPPLY SCHEMES:

Since the programme of rural water supply started in Mbeya region in 1971 there has been a substantial increase in the number of people supplied with clean water. It was estimated that by 1980 20% of Mbeya rural population had been supplied with piped water. By 1995, 43% of Mbeya rural population had been served with water. Until 1992, a total of 236 villages (30.8%) were served with piped water. About 582497

people (46.1%) were served with piped water. Until 1995, DANIDA programme had supplied water to 170 villages equivalent to 25% of the regional population. Apart from DANIDA other donors have also contributed to rural water supply in Mbeya region and these include SIDA, ELCT-Konde Diocese, and ODA. Since, 1966, the ELCT has been extending the project of Water Supply to Kabembe Group in Rungwe district which is intended to cater for 14 villages, after completion.

Table LVI (d): RURAL WATER SUPPLY COVERAGE IN MBEYA REGION - 1995, BY DISTRICT

| District | Total Rural Estimated Population (1995) | Rural Population Served | total Villages | No of Villages Served | % of Population Served (rural) | % of Villages Served |
|--------------|---|-------------------------|----------------|-----------------------|--------------------------------|----------------------|
| Chunya | 180,693 | 91,685 | 69 | 31 | 51 | 45.0 |
| Ileje | 9,150 | 23,631 | 60 | 14 | 24.3 | 22.0 |
| Kyela | 135,660 | 86,196 | 82 | 64 | 64.0 | 78.0 |
| Mbeya (R) | 399,642 | 239,785 | 158 | 89 | 60.0 | 62.0 |
| Mbozi | 332,311 | 106,555 | 155 | 49 | 32.1 | 31.6 |
| Rungwe | 313,982 | 93,145 | 142 | 136 | 29.7 | 95.8 |
| Total Region | 1,537,402 | 640,997 | 577 | 383 | 41.7 | 67.8 |

Source: Planning commission - Compiled data based on District Development Profiles - 1996

Table LVI (d) shows the real situation pertaining to Rural Water Supply in Mbeya Region. From the table above, it is evident that Rural Water Supply is still poor.

The percentage of the population served with clean water in all rural districts is below 65. The percentage is much lower in Ileje, Rungwe and

Mbozi districts. That is only 24.3 percent of the total rural population in Ileje gets clean water, while in Rungwe it is 29.7 percent and in Mbozi it is 32.1 percent. When it comes to the number of villages served with clean water, it is Ileje again having very few villages getting clean water. Kyela district appears to enjoy better rural water supply compared with other rural districts. DANIDA and other donors need to be commended for their efforts in supplying water in the rural areas and we wish the efforts to continue.

ENVIRONMENTAL SANITATION:

The availability of toilet facilities is an important aspect in dealing with environmental sanitation. Thus, the more use of toilets by the people the more safe people become from diseases and the better environmental sanitation people enjoy. Table below shows the number of households with toilet facilities.

Table LVI (e): HOUSEHOLDS WITH LATRINES IN MBEYA REGION 1995

| District | No. Of H/Holds | No. Of H/Holds Pit-hole Latrines | No. Of H/holds with VIP - Latri. | No. Of H/Holds with Permanent septic Tanks | No of H/Holds without | % without latrines |
|-----------|----------------|----------------------------------|----------------------------------|--|-----------------------|--------------------|
| Chunya | 43,221 | 25,932 | 12,544 | 422 | 4,323 | 10.0 |
| Ileje | 21,600 | 19,254 | 268 | 775 | 1,296 | 6.0 |
| Kyela | 30,430 | 27,044 | 288 | 244 | 2,863 | 9.4 |
| Municipal | 44,186 | 31,982 | 1,230 | 404 | 4,527 | 10.2 |
| Mbeya (R) | 72,934 | 43,021 | 101 | 1,524 | 29,408 | 40.3 |
| Mbozi | 61,589 | 49,222 | 146 | 2,084 | 12,362 | 21.8 |
| Rungwe | 52,544 | 49,222 | 695 | 2,084 | 543 | 1.0 |

| | | | | | | |
|--------------|---------|----------|--------|--------|--------|-----|
| Total Region | 310,654 | 240,684* | 15,440 | 11,850 | 12,984 | 4.2 |
|--------------|---------|----------|--------|--------|--------|-----|

Source: RMO - Mbeya annual report 1995.(* Most of the latrines are very temporary, thus,they may collapse anytime).

It is observed from Table LVI (e) that a large percentage of households without latrines is in Mbeya Rural (40.3%) and Mbozi (21.8%) districts. Rungwe district has the smallest percentage of households without latrines. Nevertheless, it was reported that most of the latrines are not strongly built to last long, which means, they are simply temporary structures for short-term use. People should be urged to put up permanent latrines for longer periods of use.

SECTION V

OTHER RELATED DEVELOPMENT ISSUES:

Co-operative Activities:

The cooperative movement in Tanzania has undergone various changes over the past fifteen years. Since the Co-operative Act No. 14 of 1982, major policy modifications have been made especially in the new Co-operative Act of 1991. The changes relate to the reduction of government intervention, encourage individual freedom to join cooperatives, the establishment of membership fees and the allowance of share-holdings by members. Before 1990 Mbeya Co-operative Union (MBECU) was the only crop procuring and input supplying agent to farmers. It had the monopoly of marketing of all main food and cash crops produced by farmers in the region. Until 1995, Mbeya region had the following 6 Cooperative Unions and 200 primary cooperative societies:

A. UNIONS:

1. Mbeya/Ileje Co-operative Union-for Mbeya and Ileje District (MICU)
2. Rungwe Co-operative Union-for Rungwe District - (RUCU)
3. Kyela Co-operative Unio for Kyela District - (KYECU)
4. Mbozi co-operative Union - (MBOCU) For Mbozi District
5. Isayula Co-operative Union)
6. Chunya Co-operative Union - For Chunya district - (CHUDICU)

Primary Co-operative Societies:

The Primary Co-operative societies are 290 in total distributed as shown in the Annex I below.

**Table Annex I: PRIMARY COOPERATIVE SOCIETIES DISTRIBUTION
IN MBEYA REGION:**

| Co-operative Societies | Chunya | Ileje | Kyela | Mbeya Municipality | Mbeya (R) | Mbozi | Rungwe | Total |
|----------------------------|--------|-------|-------|--------------------|-----------|-------|--------|-------|
| Rural Pr. Co-op Society | 25 | 10 | 16 | 2 | 10 | 34 | 25 | 122 |
| Co-operative Shops | 1 | 2 | - | 4 | 5 | 1 | - | 13 |
| Fishery Cooperatives | - | - | 2 | 9 | 2 | 3 | 3 | 19 |
| Savings Societies (SACCOS) | 1 | 2 | 6 | 26 | 3 | 3 | 6 | 47 |
| Industrial Societies | - | 10 | - | 16 | - | 2 | 10 | 38 |
| Mining Societies | - | - | - | 2 | - | - | - | - |
| Housing Societies | - | - | - | 5 | 1 | 1 | - | 7 |
| Diary Cattle Societies | - | - | - | 1 | 2 | 7 | 8 | 18 |
| Transportation | 1 | - | 1 | 3 | - | - | 1 | 6 |
| Undefined Societies | 0 | 0 | 0 | 23 | 5 | 5 | 5 | 38 |
| Total Region | 29 | 25 | 27 | 76 | 24 | 54 | 56 | 290 |

Source: Regional Commissioner's Office - Co-operative Office - Mbeya

Main crops procured by Cooperative Unions and Primary Societies are Coffee, Maize, Cotton, Rice, Cocoa and Tobacco. The problem facing Unions and the Rural Primary Societies is liquidity leading to their failure to pay farmers promptly. To solve the problem of liquidity and lack of credit facilities from Banks, the Government has formulated a liberalised

policy on crop marketing. This policy has killed the monopolistic tendencies of the Unions and the cooperatives.

Women in Development:

According to 1988 population census, women constituted nearly 51% of the total population in the country. Yet the status of women is still low both economically and socially. In spite of the efforts made by the government, it still remains a fact that very few women do participate in decision making, on issues that concern them, and more often than not they are subjected to poor nutrition and even deprived of the right to get fully or an equal share of the income they generate. The women in trying to solve their poverty problem in Mbeya region, some have organised themselves into various economic groups as shown in Annex II

Annex II: WOMEN ECONOMIC DEVELOPMENT STATUS IN MBEYA REGION BY DISTRICT 1995

| District | Activities Undertaken | No. of Village Coverage | No. of Groups | Donating Agencies |
|-------------|--|-------------------------|---------------|---|
| Chunya | Agriculture-Maize, and beans farming Tailoring Local brew Restaurant | 52 | 9 | Mbeya ozonisation programme (MOP) |
| Ileje | Maize milling machines projects Maize, Beans and Sunflower farming Restaurants Tailoring | 44 | 22 | DANIDA/Belgium Community Dev. trust Funds |
| Kyela | Agriculture-Paddy and Cassava Small scale market farming business Tailoring and knitting Pot-making local Brewing | 68 | 29 | ICCO ELCT and DANIDA |
| Mbeya urban | Tailoring-Cloth and leather goods Local brewing Tree planting Maize, beans farming | 52 | 9 | MOP |

| | | | | |
|-----------------------|--|-----|-----|---|
| Mbeya Rural | Agriculture/beans and maize horticulture Animal keeping (goats) Milling machines Tree planting Irrigated farming - paddy Tailoring Local brewing Retail shops | 158 | 48 | IFAD and FAO for women in Irrigated Agriculture (WIA) programme |
| Mbozi | Agriculture-maize and beans farming Tree planting Milling machines Piggery Tailoring Local Brewing | 144 | 21 | MOP ADP- Mbozi and DANIDA |
| Rungwe | Milling machines Restaurants Mats-making Agriculture-maize, Paddy, Irish potatoes farming Livestock keeping (goats and pigs) Small scale market businesses | 138 | 30 | ICCO ELCT DANIDA |
| Mbeya Region Coverage | | 656 | 168 | |

Problems:

Some of the projects undertaken by women do not perform well due to:-

- Lack of financial support to enable them secure working capital, equipment, inputs etc.
- Low level of business exposure due to low technical know how and limited training opportunities to enable them acquire marketing skills and improve their enterprises.
- Lack of Communication and transport facilities

- Lack of technical assistance to enable them improve quality of their products and services
- Lack of a well established marketing system for their products.

Non government Organisations (NGO's) and Donors Supporting Development of Mbeya Region:

The region has several NGO's operating in various sectors of the economy. They are either external developmental agencies like DANIDA, UNICEF, ODA, NORAD and COOIBO - ADP or Church Missionary Agencies like CARITUS-RC, ICCO/LUTHERAN, LWF and SDA. They have been involved mainly in Rural Water Supply (DANIDA and ICCO/ELCT-Konde), Road Construction (NORAD), Agriculture (EEC, FAO, IFAD and GLOBAL 2000), Promotion of Primary Education (IDA and PEP, DANIDA) health Improvement of mothers and young children (CSPD - UNICEF) and many other social and economic activities.

Annex III below highlights the activities of the NGO's in Mbeya Region.

Annex III NGO's/DONOR AGENCY SUPPORTING PROGRAMMES IN MBEYA REGION:

| NGO's and Donor Agency | Type of Project/Programme | Activities Undertaken | Area of Operation |
|------------------------|---------------------------------|---|----------------------------------|
| COOIBO ADP | Agriculture and Rural Economics | Agricultural Development Programmes: <ul style="list-style-type: none"> - Godowns construction - Running farm service centres - Manufacturing cheap roofing tiles - Ox carts, and culverts - Rural financing services | Mbozi, Ileje and Mbeya Districts |
| EEC | Agriculture and Agro-Forestry | <ul style="list-style-type: none"> - Construction of godowns - Coffee quality improvement - Tree planting programmes | Mbeya region |

| | | | |
|--|--|---|---|
| FAO | Agriculture | - Village godown construction - Fertilizer utilization - Extension Services | mbeya Region |
| IFAD | Agriculture | - Extension Services on Agriculture - Promotion of small scale Livestock Keeping | Mbeya Region |
| DANISH | Livestock | - Rural Financing Services - Small Scale Diary development - Milling Machine Women Projects Programme - Rural Water Supply | Mbeya Region |
| SASAKAWA BLOBAL 2000 | Agriculture | - Agricultural input supply to households | Mbeya Region |
| IDA | Social Education | - Primary School rehabilitation -8th IDA | |
| PEP (DANIDA) | Education | - Rehabilitation of Schools' infrastructures - Improvement of teaching and learning materials | |
| NORAD | Economic Rural Roads | - Rural roads construction and maintenance | Mbeya Region |
| UNICEF | Child Survival Protection and Development (CSPD) | - Promotion of well being of women and children | Kyela, Mbeya, Ileje and Chunya District |
| GTZ | AIDS Control | - Financing and Conducting AIDS preventive programmes | Mbeya Region |
| District Development Trust Funds | Education | -Promotion of education standards-mostly for secondary schools | Kyela, Rungwe and Chunya |
| Inter-Church Dev. Organization ICCO/ELCT | - Education - Water Supply Services - Heifer project International | - Improvement of schools - Rural Water Supply - Promotion of diary Cattle for small scale livestock keepers - Rural Financing Services | Kyela |
| CARITUS (Roman Catholic) | Social Services | - Rural financing Services - Youth Economic Development Support - promotion of rural wellbeing | |

SECTION VI

DEVELOPMENT POTENTIALS AND PROSPECTS:

AGRICULTURE:

Mbeya region has an area of 570,000 ha. of arable land-of which only 500,000 ha. of land are under actual cultivation. The geographical set up of the region is suitable for a great variety of crops both temperate and tropical. Coffee growing in Mbeya, Mbozi and Rungwe districts still has a good chance for improved and needs expanded production. Mbeya and mbozi districts have adequate land for coffee growing. Cocoa growing in Rungwe and Kyela districts need increased production, and the establishment of cocoa milling machine. Tea production in Rungwe and tobacco and cotton production in Chunya are produced under capacity. Rungwe and Kyela districts require intensive agricultural technology, compared to other districts like mbozi, mbeya and Chunya.

IRRIGATION:

Irrigation potentials for Mbeya region cover an area of about 374,450 ha. out of which only 50,325 ha. are under current utilization. The best irrigation potentials fall within:-

- the Rufiji basin of the Usangu Plains
- the Lake Nyasa basin, and
- Lake Rukwa basin

Peasants through their own initiatives employ simple traditional irrigation technologies. A more advanced technology is needed to exploit the idle irrigation potential. The Rujiji Basin of Usangu Plain potential utilizes only

30% , while other areas still remain under poor traditional irrigation technology. Important irrigation potential areas include:

- (a) Naming'ong'o - Msangano Plain, lying along Southern Rukwa Rift Valley. The potential area has 1255 ha.
- (b) Songwe Plains - has area of over 5000 ha. suitable for cotton, maize and paddy.
- (c) Lake Nyasa basin - with potential irrigatable land of 12,600 ha. still underutilized.

**Annex IV: POTENTIAL LAND FOR IRRIGATION
IN MBEYA REGION, 1997**

| District | Potential irrigable Land (Ha.) | Land Under irrigation (Ha.) |
|--------------|--------------------------------|-----------------------------|
| Chunya | 230,050 | - |
| Ileje | 800 | 35 |
| Kyela | 12,600 | 75 |
| Municipal | - | - |
| Mbeya (R) | 130,000 | 50,000 |
| Mbozi | 1,000 | 215 |
| Rungwe | - | - |
| Total Region | 374,450 | 50,325 |

Source: Planning Commission - compiled Data based on District Profile

Animal Husbandry:

The region has a potential for keeping both indigenous and exotic cattle. The region has an estimate of 901,077 cattle, 171,486 goats, 101,366 sheep, 7881 pigs and 1,130,456 poultry out of the total number of cattle 896,611 are traditional while 4466 are exotic. The growth rate of diary cattle was 3% in 1995, and is expected to shoot up to 23% by year 2000. Increase in livestock will depend on better feeding and better services offered. Similarly, better quality of livestock products will depend on the services offered. Mbeya Region like many other regions still need adequate supply of animal protein and milk for their people. It is in this connection that a more serious investment is needed in livestock quality improvement.

BEEKEEPING:

The present average production of honey is 230 tons and 15.8 tons of beeswax. Most of the production comes from Chunya district followed by Mbozi, Mbarali and Mbeya woodland forested areas.

The past few years production of honey and beeswax has been as follows:-

| Year | Honey (Kgs) | Beeswax (Kgs) |
|---------|-------------|---------------|
| 1989/90 | 236,970 | 15,778 |
| 1994/94 | 290,000 | 15,800 |

Source: Forest Department Mbeya Regional Commission Office, 1996.

Bee-keeping in many parts of the country has proved to be a very good alternative source of income for the rural people. Therefore, with

improved technology, (modern bee-hives, etc) more honey and better quality will fetch better prices and hence higher incomes for the people.

FISHING:

Mbeya region has two lakes namely Nyasa and Rukwa, and numerous rivers. There are 2,500 fishermen using 1,750 dugout canoes. Nyasa has a huge potential that could be exploited for even export. With modern fishing gear, the production of fish could increase from the current 12,000 metric tons to over 20,000 tons annually.

INDUSTRIES:

The industrial sector for about twenty years has played an important role in the region. The region has several agro-based factories like tea, coffee and paddy mills. It has a big potential in fruit production especially in Kyela and Rungwe district. Potentials are also in palm-oil production. Thus, industrial sector still requires heavy investment as most of the industries operate under capacity. Annex V highlights some few of them.

Annex V: IMPORTANT INDUSTRIES IN MBEYA REGION

| Industry | Products | Units | Installed Capacity | Utilisation Capacity | % Utilisation |
|-----------------------|-----------------------|-------|--------------------|----------------------|---------------|
| *ZZK | Fam Implements | Units | 379,566 | 370,078 | 97 |
| * Mbeya Textiles | Cotton yarm | Tons | 4,500 | 1,186 | 26 |
| Mbozi Coffee Curing | Graded Coffee | Tons | 25,000 | 12,000 | 48 |
| * Mbeya Cement | Cement | Tons | 250,000 | 100,000 | 40 |
| * Tanzania Oxygen | Carbon dioxide | Tons | 2,102 | 1,560 | 74 |
| Hi-soap manufactures | Laundry & toilet Soap | Tons | 19,800 | 17,000 | 85 |
| Jivanjee Tea Factory | Graded Tea | Tons | 2,384 | 1,266 | 53 |
| Museleka Tea Factory | Graded Tea | Tons | 965 | 960 | 96 |
| * Katumba Tea Factory | Graded Tea | Tons | 2,800 | 2,600 | 92 |

Source:

TOURISM:

the tourism potential is unexploited; and only a few tourist attractions have so far been exposed and advertised for tourism purposes.

The region commands several tourist attractions such are the Mountains of Rungwe, Mbeya Peak and Kyejo. Sandy beaches on the shores of Lake Nyasa also add to the attractions. Other attractions include, cool

mountainous climate, the warmth of Lake Nyasa and Rukwa basins, the Rift Valley (the Usangu Plains); the unique ecological features of the tropical rain forests, the wildlife in the Usangu and Lukwati Game Reserves. In fact, the potential is there, what remains to be done is serious investment in this sector so that it attracts more and more tourists.

LIST OF TOURIST ATTRACTIONS IN MBEYA REGION

| District | Type of Attraction | Interests | Distance from Town Centre or Highway/Trunk road |
|----------|----------------------|--|---|
| 1. Mbeya | 1. Mbeya Peak | 1. Mountaineering | 25 Km. |
| | 2. Loleza Peak | 2.Ecotouring | |
| | 3. Mount Mbeya | 3.Scenic | |
| | | 4.Mbeya Mount foot safaris | 15 km. |
| | | a) Kawetere forest Plantation | |
| | | b) Fire Tower | |
| | | c) Highest Road Point | |
| | | d) floral endemism and Biodiversity | |
| | | 5.Scenic | 30 km. From Rujewa |
| | | 6.Bird viewing, Tourist Photography | |
| | | 7.Professional hunting | |
| | | 8.Spring bathing at Ruaha river "Majimoto" | |
| | 4. Utengule Wetlands | 9. Crater Lake Biodiversity | 200 km from Rujewa |
| | | 10.Scenic springs Unique forest Ecology | 4 km. from Uyole Kasumbulu highway |
| | | 11.Chief mereres Castle | |
| | 5. Lake Ngosi | 12.Scenic | 8 km. from Rujewa |

| | | | |
|-----------|---------------------------------|--|-----------------------------------|
| | 6. Isangala Crater | | 15 km. from DSM Lusaka Highway |
| | 7. Utengule Fortfield village | | |
| | 8. Bat Caves and Hot | - Caves | |
| | | - Snake | |
| | | - Limestone Mining | |
| 2. Rungwe | 1. Isongole trout Fish | 1.Trout Fishing | 3 km. from Uyole/Kasumulu highway |
| | 2. Mount rungwe | 1.Ecotoruing | |
| | 3. Kilombo spring | 2.Nountaineering | |
| | | 3.Fauna and floral endemism | |
| | 4. Daraja la Mungu | 4.Biodiversity | 10 km |
| | 5. Kaporogwe Falle | 5.Sport fishing | 10 km |
| | | 6.Amazement and excitement over the bridge | |
| | 6. Kyejo Carbon-Dioxide Deposit | 7.Amazement and excitement over the falls | 10 km |
| | 7. Lake masoko Ranges | 8.Sport fishing | 20 km. |
| | | 9. Scenic | |
| | 10. Scenic | | |

MINING INDUSTRY:

The region has important mineral deposits including coal, gold, iron ore, limestone, marble, traventive, kaolin, copper, salt and apatic/niobium,

Geological surveys by STAMICO in the 1970s show that the region is endowed with mineral deposits, as shown in Annex VI.

Annex VI: MINERAL DEPOSITS

| Minerals | Location | Mining Activities |
|----------------|------------------------|---|
| 1. GOLD | Chunya | Artissanal & large scale mining & prospecting |
| | Umalila | Artissanal mining |
| | Mabadaga | Artissanal mining & prospecting |
| | Igawa | Prospecting & exploration |
| | Ileya/Luwanjiro | |
| | Tukuyu | Artissanal mining |
| | Kyela | Prospecting |
| | Mbozi | Prospecting |
| 2. COAL | Ilima | Large scale mining in place |
| | Mbozi | Prospecting |
| | Chunya | Prospecting |
| 3. GEMSTONE | Ileya/Luwanjiro | Prospecting |
| i. Amethyst | Ileje | Prospecting |
| | Mbozi | Artissanal mining |
| ii. Aquamarine | Tukuyu & Ileje | Prospecting |
| iii. Ruby | Mbozi & Ileje | Prospecting |
| iv. Emerald | Ileje & Mbozi | Prospecting |
| v. Apatite | Ileya, Chunya, Mbozi & | Prospecting |
| vi. Garnet | Ileje | Prospecting |

| | | |
|-------------------------------|------------------|-----------------------------------|
| 4. DIMENSIONAL STONE | Tukuyu, Mbozi & | Prospecting |
| i. Opal | Chimala | Prospecting |
| ii. Fluorite | Ileje | Artissanal mining |
| iii. Granite | Chimala | Artissanal mining |
| iv. Travertine | Mbozi | Artissanal mining |
| v. Marble/Dolomite | Mbozi & Igawa | |
| 5. INDUSTRIAL MINERALS | Umalila, Mbozi | Prospecting |
| i. Gypsum | Igawa & Mbozi | Prospecting |
| ii. Feldspar | Chimala & Igawa | Prospecting |
| iii. Kaolin | Panda Hill/Mbozi | Exploration complete |
| iv. Phosphate | | |
| 6. MICA | Mbozi & Ileje | Prospecting & Artissanal Mining |
| 7. SALT | Mbozi | Prospecting |
| 8. MINERAL WATER (Hot spring) | Igawa | prospecting |
| 9. CARBON DIOXIDE | Kyejo | Large scale Extraction (NDC) TOL. |
| 10. NICKEL | Mbozi | prospecting |
| 11. BUILDING MINERALS | Mbozi | Prospecting |
| i. Limestone | Mbozi | large & artissanal mining |
| ii. Clay | Mswiswi, Uyole & | Artissanal mining |
| iii. Aggregates | Kiwira | Mining going on. |

SUMMARY OF OPPORTUNITIES FOR INVESTMENT IN MBEYA

| Sector | No. | Product/Industry | Remarks |
|---------------------------|-----|---|---|
| Agriculture and Livestock | 1 | Cocoa Processing/Chocolate Production | 3,500 tonnes of Cocoa are produced in Kyela nd Rungwe Districts. Currently all raw cocoa is exported. Also all chocolate products are imported. |
| | 2 | Sugar production two plants each with capacity of 40,000 tones to cater for 4 Regions of Mbeya, Rukwa, Iringa, Ruvuma | Two sugar Cane plantations of more than 15,000 Ha. Each in Namingongo and usangu Valleys and currently Mbeya region consumers 15,000 tonnes of sugar from Malawi and Zambia |
| | 3 | Tannery to process over 100,000 sq. metres | Over 60,000 Hides and skins produced in Mbeya, Iringa and Ruvuma regions |
| | 4 | Slaughter and meat packing plant of not less than 6,000 tones of meat | The region has 1,000,000 Livestock units of which 6% can be slaughtered annually |
| | 5 | Maize Flour Milling plant of 30,000 tonnes capacity | The region produces a surplus of 180,000 tonnes of maize; 20%, can be milled and packed for both local and export consumption in northern Malawi and Zambia |
| | 6 | Phosphates plant of not less than 60,000 tonnes capacity | Proven one million tonnes of deposits at Panda Hill. With residual of 10.3% P ² O ⁵ viable for economic investment |
| | 7 | Marble - 60,000 sq. Metres | Proven tonnes of 0.8 mill tones at Songwe and 1.2 mill. Tonnes - Igawa |
| | 8 | Limestone plant of not less 250,000 tonnes capacity | 2 mill tonnes of Deposits at Songwe |

| | | | |
|--|----|---|---|
| | 9 | Gold Mining 5 Tonnes capacity | In Chunya district several places have proven deposits viable for Technical Economic Investment eg: a) 5 gm from one ton of rees God b) 1 gm. from one ton of Alluvial Gold |
| | 10 | Iron | In Chunya district 1.5 mill tonnes of Iron are proven deposits |
| | 11 | Completion of Bushtrekker Hotel project in stalled construction | a 40 Rooms tourist Hotel which is 75% complete located near the TANZAM Road. More information available at TDFL Dar es Salaam |
| | 12 | Rehabilitation of Mbeya Hotel (ex Railways) | A prime site at closed Mbeya Hotel. More information available at TRC headquarters Dar es Salaam |
| | 13 | Deep Water Fishing Lake Nyasa (Lake Malawi) | Tropical Salmon fish - Average of 10,000 tonnes annually. Ornamental fish 3,000 also available. |

ANNEX I

1.0 GENERAL INFORMATION ABOUT TANZANIA

Location: (29⁰E-41⁰; 1⁰S - 12⁰S)

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 |
| Zanzibar 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 minimum temperature (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 1995 compared with other East Africa countries

| COUNTRY | GROSS ENROLLMENT | |
|----------|------------------|-----------|
| | PRIMARY | SECONDARY |
| KENYA | 94 | 28 |
| UGANDA | 76 | 20 |
| TANZANIA | 67 | 13 |

NATIONAL PARKS

National Parks (area in sq km)

| PARK | LOCATION AND PARTICULARS |
|---|--|
| <p>(i) SERENGETI NATIONAL PARK</p> | <p><u>LOCATION:</u> At the border of Arusha & Mara Region, about 32 km from Arusha town</p> <p><u>AREA SIZE:</u> 14,763 square km. It is the largest and oldest Park in Tanzania having been established under the British Colony in 1951. It contains the greatest and most spectacular concentration of plain animals left any where in Africa.</p> <p><u>MAJOR ATTRACTIONS:</u> Wildebeest about 1.7 million, Lions 3,000. About 35 species of animals and 500 species of birds, Buffalos, Chetah, Leopards etc.</p> |
| <p>(ii) LAKE MANYARA NATIONAL PARK</p> | <p><u>LOCATION:</u> Some 125 Kilometres South West of Arusha town. It was officially established and gazzetted as a National Park in 1960.</p> <p><u>AREA:</u> Lake Manyara National Park covers a total area of 320 square kilometres, 230 kilometres constituting Lake Manyara itself.</p> <p><u>MAJOR ATTRACTIONS:</u> 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.</p> |
| <p>(iii) TARANGIRE NATIONAL PARK</p> | <p><u>LOCATION:</u> South of Arusha town along the Dodoma Highway. It was established in 1970.</p> <p><u>AREA:</u> Tarangire National Park covers some 2,600 Square kilometres.</p> <p><u>MAJOR ATTRACTIONS:</u> Tree climbing pythons, zebra, kongoni, elephant, buffalo, waterbuck, gazettes and oryx.</p> |

| | |
|---|--|
| <p>(iv)ARUSHA NATIONAL PARK (MOMELA)</p> | <p><u>LOCATION:</u> The Park is located between Mount Meru and Mount Kilimanjaro. Formally Ngudoto National Park until 1967. Was commissioned as National Park in 1960.</p> <p><u>AREA:</u> The park covers some 137 square Kilometres.</p> <p><u>MAJOR ATTRACTIONS:</u> 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.</p> |
| <p>(v)KILIMANJARO NATIONAL PARK</p> | <p><u>LOCATION:</u> The Kilimanjaro National Park which derived its name from Mount Kilimanjaro is part and parcel of the Mountain. It was established in 1973.</p> <p><u>AREA:</u> The boundaries of the Park include the natural forest under and around the Mountain. It covers some 760 square Kilometres.</p> <p><u>MAJOR ATTRACTIONS:</u> 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.</p> |
| <p>(vi)MIKUMI NATIONAL PARK</p> | <p><u>LOCATION:</u> It is situated some 216 km along the Dar - Zambia Highway. It was established in 1964.</p> <p><u>AREA:</u> 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.</p> <p><u>MAJOR ATTRACTIONS:</u> The plains surrounding 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 Impalas.</p> |

| | |
|------------------------------------|---|
| <p>(vii)UDZUNGWA NATIONAL PARK</p> | <p><u>LOCATION:</u> This Park is located South of Mikumi National Park along the Mikumi-Ifakara Highway. The Park was established in 1992.</p> <p><u>AREA:</u> The Park which derives its identity from the famous Udzungwa mountain has an area of 1990 square kilometres.</p> <p><u>MAJOR ATTRACTIONS:</u> 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.</p> |
| <p>(viii)RUAHA NATIONAL PARK</p> | <p><u>LOCATION:</u> The name Ruaha, is derived from the Hehe word "Luvaha" meaning a river.</p> <p><u>AREA:</u> 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.</p> <p><u>MAJOR ATTRACTIONS:</u> 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.</p> |
| <p>(ix) KATAVI NATIONAL PARK*</p> | <p><u>LOCATION:</u> It is located in Mpanda District, Rukwa Region. It was established in 1974.</p> <p><u>AREA:</u> The Katavi National Park which is about 40 kilometres South -East of Mpanda town covers an area of 2,253 square kilometres.</p> <p><u>MAJOR ATTRACTION:</u> 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.</p> |

| | |
|---|--|
| <p>(x)MAHALE NATIONAL PARK</p> | <p><u>LOCATION</u> 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.</p> <p><u>AREA:</u> Mahale nation Park has about 1,613 square kilometres and was gazzetted in 1948.</p> <p><u>MAJOR ATTRACTIONS:</u>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.</p> |
| <p>(xi) GOMBE NATIONAL PARK</p> | <p><u>LOCATION</u> 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</p> <p><u>AREA:</u> Covering some 52 square kilometres. National park, was commssioned in 1968.</p> <p><u>MAJOR ATTRACTIONS:</u>Ever green forests and primates. These include Chimpanzees, Baboons, blue monkey red tails and red colobus.</p> |
| <p>(xii) RUBONDO NATIONAL PARK</p> | <p><u>LOCATION:</u> The Park which form park of a number of archipelagos in Lake Victoria covers some 240 square Kilometres. it was established in 1977</p> <p><u>MAJOR ATTRACTIONS:</u> 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.</p> |
| <p>(xiii) NGORONGORO</p> | <p><u>LOCATION:</u> It is situated west of Arusha town some 230 kms.</p> <p><u>AREA:</u> The park covers 8320 sq km</p> <p><u>MAJOR ATTRACTION:</u> Wildebeest, Lions, Buffalos, Leopards, Variety of birds species, Giraffes, elephants etc</p> |

