



United Republic of Tanzania

NJOMBE REGION SOCIO-ECONOMIC PROFILE 2018



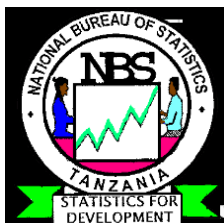


The United Republic of Tanzania

NJOMBE REGION SOCIO-ECONOMIC PROFILE 2018

Jointly prepared by

**Ministry of Finance and Planning,
National Bureau of Statistics
and
Njombe Regional Secretariat**



National Bureau of Statistics
Dodoma



Njombe Region
Njombe

November, 2020

Foreword

The goals of Tanzania's Development Vision 2025 are in line with United Nation's **Sustainable Development Goals (SDGs)** and are pursued through the National Strategy for Growth and Reduction of Poverty (NSGRP) or MKUKUTA II. The major goals are to achieve a high-quality livelihood for the people, attain good governance through the rule of law and develop a strong and competitive economy. To monitor the progress in achieving these goals, there is need for timely, accurate data and information at all levels.

Problems especially in rural areas are many and demanding. Social and economic services require sustainable improvement. The high primary school enrolment rates recently attained have to be maintained and so is the policy of making sure that all pupils who passed **Primary School Leaving Examination must join form one**. The Nutrition situation is still precarious; infant and maternal mortality rates continue to be high and unemployment triggers mass migration of youths from rural areas to the already overcrowded urban centres.

Added to the above problems, is the menace posed by HIV/AIDS, the prevalence of which hinders efforts to advance into the 21st century of science and technology. The pandemic has been quite severe among the economically active population leaving in its wake an increasing number of orphans, broken families and much suffering. AIDS together with environmental deterioration are problems which cannot be ignored.

Our efforts to meet these challenges are hampered by many factors including ill prepared rural development programs followed by weak implementation, monitoring and their supervision. The shortcomings in policy formulation, project identification, design and implementation due to the lack of reliable and adequate data and information on the rural development process have to be addressed. The availability of reliable, adequate and relevant qualitative and quantitative data and information at regional level is a prerequisite for the success of the formulating, planning, implementation, monitoring and evaluation of regions' development programs.

The publication of the Njombe Region Socio-Economic Profile series by the President Office, Regional Administration and Local Government Authority (PO-RALG) in collaboration with the National Bureau of Statistics and Njombe Regional Administration Management Team should be viewed as a modest attempt towards finding a solution to the existing problem of data and information gap at regional level.

The Regional Profile covers a wide range of statistics and information on geography, population, social-economic parameters, social services, economic infrastructure,

productive sectors and cross cutting issues. Such data are vital to many policy makers, planners, researchers, donors and functional managers.

This Njombe Region Socio-Economic Profile has taken advantage of the experience gained in the production of other Region and District Council Socio-Economic Profiles in the country. It provides valuable information to our clients. Constructive views and criticisms are invited from readers to make a profile like this a better tool in the implementation of the country's policies.

I would like to take this opportunity to acknowledge, the contribution made by National Bureau of Statistics, Council officials who coordinated the data collection and other staff of Njombe Regional Office who devoted their time to ensure the successful completion of this assignment.



Katarina Tengia Revocati
Regional Administrative Secretary
November, 2020

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infections
ARV	Antiretroviral
CBO	Community Based Organization
CRDB	Cooperative Rural Development Bank
DC	District Council
DPT3/HB3	Diphtheria Pertusis Tetanus 3 rd doze/ Haemoglobin Level
ECF	East Cost Fiver
FAO	Food Agriculture Organization
GIS	Geographical Information System
Govt	Government
Ha	Hectares
HIV	Human Immune Virus
IMR	Infant Mortality Rate
MVC	Most Vulnerable Children
NCD	New Castle Disease
NMB	National Microfinance Bank
NBC	National Bank of Commence
OPV3	Oral Polio Vaccine 3rd Doze
PMTCT	Prevention Mother to Child Transmission
SACCOS	Savings and Credit Cooperative Societies
Sq. Km.	Square Kilometre
Std VII	Standard seven
STI	Sexual Transmitted Infection
TB	Tuberculosis
TBA _s	Traditional Birth Attendants
TC	Town Council
TPR	Toilet Pupil Ratio /Teacher Pupil Ratio
TT2	Tetanus Toxoid 2 nd doze
TPB	Tanzania Postal Bank
U5MR	Under Five Mortality Rate
UTI	Urinary Track Infection
VCT	Voluntary Counselling and Testing

VHC	Village Health Committee
VHWs	Village Health Workers
VWC	Village Water Committee
VWF	Village Water Fund
WUG	Water User Group

CHAPTER ONE

Land, Climate, Agro-Ecological Zones and People

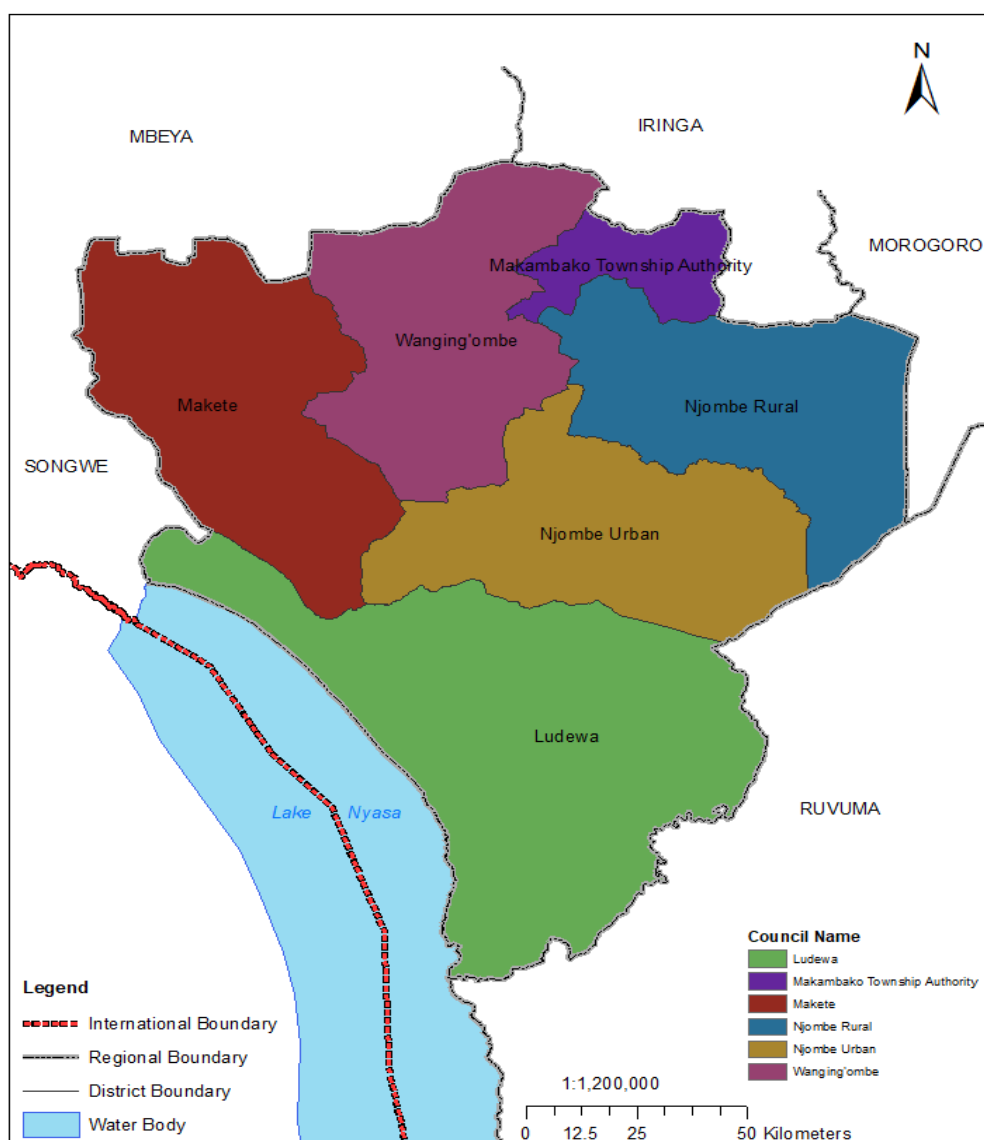
1.0 An Overview

Chapter one describes the geographical location, land area, administrative units, climate and agro-ecological zones of Njombe Region. Information about ethnic groups, population distribution, size, trend, growth and other demographic characteristics is also provided in brief.

1.1 Geographical Location

Njombe Region is located in the Southern Highlands Zone of Tanzania, below the equator between latitudes $8^{\circ} 40'$ and $10^{\circ} 32'$. Longitudinally, the region is situated between $33^{\circ} 47'$ and $35^{\circ} 45'$ East of Greenwich. It shares borders with Iringa region to the North; Morogoro region to the East; Mbeya region to the West; Ruvuma region to the South and the Republic of Malawi via Lake Nyasa to the North West.

NJOMBE REGION MAP SHOWING COUNCIL BOUNDARIES, 2018



1.2 Land Area, Land Use Pattern and Administrative Units

Njombe region has a total surface area of 24,994 square kilometers, divided into land area (21,299 sq.kms equivalent to 85.2 percent of total area) and water area (3,695 sq.kms or 14.8 percent is covered by water of Lake Nyasa. Njombe region is considered to be the 5th smallest region in size in the country and it occupy about 2.8 percent of Tanzania Mainland total land area of 881,300 sq.km.

Table 1.1 and Figure 1.1 shows that, at District level; Ludewa District Council has the largest land area (8,397 sq.km equivalent to 33.6 percent) whereby land area is 6,325sq.kms and 2,072 sq.kms is covered by water. Makete DC is the second with surface area 5,800 sq.kms followed by Wanging’ombe DC 3,570sq.kms. Smallesst land area was

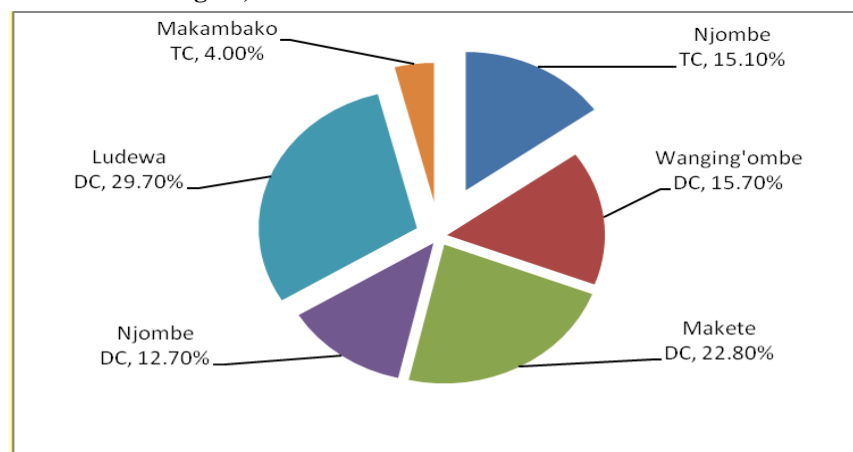
observed in Makambako Town Council 862 sq.kms equivalent to 3.4 percent. It was also observed that Njombe and Makambako Town Councils have no water area while large area covered by water was observed in Ludewa DC (2,072 sq.kms) and small water area in Wanging’ombe DC (226 sq.kms).

Table 1. 1: Distribution of Surface Area, Land Area and Water Area by District/Council, Njombe Region, 2018

District/Council	Land Area (sq.kms)	Percent of Land Area	Water Area (sq.kms)	Percent of Water Area	Total Surface Area (sq.kms)	Percent of Surface Area
Njombe TC	3,212	15.1	0	0	3,212	12.9
Wanging’ombe DC	3,344	15.7	226	6.1	3,570	14.3
Makete DC	4,850	22.8	950	25.7	5,800	23.2
Njombe DC	2,706	12.7	447	12.1	3,153	12.6
Ludewa DC	6,325	29.7	2,072	56.1	8,397	33.6
Makambako TC	862	4.0	0	0	862	3.4
Total	21,299	100.0	3,695	100.0	24,994	100.0

Source: Land, Natural Resources and Environment Department, Njombe Region 2019

Figure 1. 1: Percentage Distribution of Land Area by Council, Njombe Region, 2018



Source: Land, Natural Resources and Environment Department, Njombe Region 2019

Administratively, Njombe Region is divided into 6 districts namely: Njombe Town Council, Wanging’ombe, Makete, Njombe, Ludewa and Makambako Town Council. Moreover, Njombe region is divided into divisions, wards, villages, streets and hamlets. Table 1.2 shows that Njombe Region has a total of 18 divisions which are divided into 107 wards, 381 villages, 82 mitaa and 1,839 hamlets.

Table 1. 2: Surface Area and Number of Administrative Units by District/Council, Njombe Region, 2018

District/Council	Surface Area (sq. kms)	Divisions	Wards	Villages	Hamlets	Streets
Njombe TC	3,212	2	13	44	224	28
Wanging'ombe DC	3,570	3	21	108	525	0
Makete DC	5,800	6	23	93	444	0
Njombe DC	3,153	1	12	45	227	0
Ludewa DC	8,397	5	26	77	352	0
Makambako TC	862	1	12	14	67	54
Total	24,994	18	107	381	1839	82

Source: Land, Natural Resources and Environment Department; Njombe Region, 2019

Table 1.3 shows that the average surface area per ward in Njombe region was 233.6 sq. kms, and varying from 71.8 sq. kms. per ward in Makambako TC to 323 sq. kms in Ludewa DC. Similar situation can also be observed at the village level. The average surface area per village in Njombe region was 64.8 sq kms, but varied from 33.1 sq. kms per village in Wanging'ombe DC to 109.1 sq. kms. per village in Ludewa DC for rural districts only. The Njombe regional population per ward was 6,562 people. The average population per ward varied from 4,229 people in Makete DC to 10,017 people persons in Njombe TC. The average population per village in Njombe Region was 1,819 people per village at regional level while in rural councils, the population per village ranged from 993 people per village in Makete DC to 1,905 people per village in Njombe DC.

Table 1. 3: Distribution of Land Area and Population among Wards and Villages by Council, Njombe Region, 2018

District/Council	Surface area (sq. kms)	Total population, 2012	Wards			Villages		
			Number of wards	Average area per ward (sq.kms.)	Average population per ward	Number of villages	Average area per village (sq.kms.)	Average population per village
Njombe TC	3,212	130,223	13	247.1	10,017	44	73.0	2,960
Wanging'ombe DC	3,570	161,816	21	170.0	7,706	108	33.1	1,498
Makete DC	5,800	97,266	23	252.2	4,229	93	59.2	993
Njombe DC	3,153	85,747	12	262.8	7,146	45	70.1	1,905
Ludewa DC	8,397	133,218	26	323.0	5,124	77	109.1	1,730
Makambako TC	862	93,827	12	71.8	7,819	14	61.6	6,702
Total	24,994	702,097	107	233.6	6,562	381	64.8	1,819

Source: Regional Commissioner's Office, 2012 Population and Housing Census, Vol.II Population Distribution by Age and Sex, 2019

1.3 Climate, Soil and Topography

1.3.1 Climate

Temperature and Rainfall are the two key features which can describe the climate of Njombe region. The region along with Iringa and Mbeya regions form what is called the Southern Highlands as distinct from the Northern Highlands of Kilimanjaro, Arusha and Manyara regions in the far North of Tanzania. The Southern Highlands experience long rainfall and short dry seasons which more often are cool with fairly moderate wind. Total rainfall ranges from 600mm to 1,600mm per annum with high geographical, seasonal and annual variations. There is one rather well defined rain season starting from November through May followed by a dry and cold season which lasts from May to September.

Altitude, topography and vegetation influence the climate greatly, resulting in micro climates in specific areas and macro climate in larger areas. The climate in Njombe region is influenced by several factors resulting in the formation of three distinctive climatic zones. These are the Highlands Zone, the Midlands Zone and the Lowlands Zone.

The temperature in the region vary according to altitude but generally range from 0° C in May/June to about 20° C to 24° C during the month of October/November. Moreover, temperature differences can be observed between day and night and may be high with hot afternoons going up to 26° C and chilly evenings and nights going down to below 0° C.

Winds follow a monsoonal pattern being north-easterly during the months of May to October and south-easterly for the rest of the year. In May to October, the winds are usually dry and sometimes dusty.

1.3.2 Soil

In Njombe region, three major superficial geological deposits can be identified. These are the red/yellow, well drained and highly weathered and the leached clay soils in the high altitude areas. Intermediate gravel sandy soils which are characterized by being moderately drained and leached are found in the midlands while the lowlands are occupied dominantly by red brown and acidic loams which are highly fertile. Most of the farmlands are on red brown sandy loams with some red soils which characteristically host Acacia woodland.

1.3.3 Topography

Njombe region occupies the southern part of the southern plateau of Tanzania which has elevations ranging from 600m to 3,000m above sea level. Surrounding the region on all sides is a major scarp of up to 800 meters high which is the eastern part of the Kipengere Ranges. A prominent feature of the land escarpment in Makete and Ludewa DCs is the massive outcrops escarpments and metamorphic rocks. These outcrops, alternatively known as inselbergs, are remnants of ancient land surfaces which in the adjacent areas have been eroded to form an extensive gently undulating pen plain. The region is generally dominated by the Kipengere and Livingstone Mountains separating Njombe and Mbeya regions in the west. The northern parts of the region are relatively flat, high plains cut by the eastern arm of the Great Rift Valley in which the tributaries of the Great Ruaha River flows. The region is further characterized by the presence of a big plateau portion which forms the common landform of the region. The only permanent and big rivers in the region are the Ruhuji, Hagafilo, Ruaha, Mbarali and Ruhuhu.

1.4 Vegetation

The vegetation of Njombe region varies from miombo woodlands, savanna and mountain forest. The western slopes are woodland, giving way to grassland patches at 2,200 meters and moist forest on the wetter eastern slopes and rivers draining eastwards into the Ruhuji and Hagafilo rivers. The forest is upper montane at high altitudes with montane forest below. There are large areas of secondary forest following logging.

1.5 Agro – Ecological Zones (AEZ)

Climatic conditions as well as geological features have been the base of identifying different agro-ecological zones in Njombe region. Basically the region has three distinctive agro-ecological zones.

1.5.1 The Highlands Zone

The zone is characterized by moderately high rainfall with annual mean precipitation ranging from 1,000mm to 1,600mm falling in single season from November through April or sometimes May. The dry and cold season occurs after the rain season and lasts from May to October. The zone is generally mountainous with plains dissected by many seasonal streams. The zone covers the central and eastern parts of Njombe DC and Wanging'ombe DC, the Western parts of Ludewa DC and most parts of Makete DC. The

soils are red/yellow, well drained and highly weathered and leached clay soils. Crops grown are mainly maize, bananas, peas, tea, wheat, sweet and Irish potatoes, temperate fruits and beans. Livestock keeping is largely practiced and includes cattle, pigs, goats and sheep.

1.5.2 The Midlands Zone

This zone lies at an altitude of 1,200 to 1,600 meters above sea level. The temperatures range from 10⁰ C to 20⁰ C. The zone enjoys moderate rainfall with annual precipitation from 600mm to 1,000mm. The area is characterized by a gently undulating plateau with isolated hills, rocky outcrops and dissected by many streams in the central parts of Njombe region covering parts of Wanging'ombe and Ludewa DCs and Makambako TC. The Midlands areas are occupied by intermediate clay soils, which are characterized by being moderately drained and leached. Crops grown here are mainly maize, cowpeas, sweet potatoes, beans, and fruits. Livestock keeping includes cattle and dairy farming, sheep, pigs and goats.

1.5.3 The Lowlands Zone

The zone is predominantly undulating, flat and broken by occasional small hills and has a fair rainfall regime ranging between 600mm and 1000mm annually. It has an altitude of 600 meters to 1,400 above sea level. This zone covers the low lying western parts of the Njombe DC, western parts of Wanging'ombe DC and most parts of Makambako TC. It also includes the southern lowlands of Ludewa DC along Lake Nyasa belt. The temperatures vary between 15⁰ C to 28⁰ C. The Lowlands are dominated by red/brown loams and are highly fertile. There is considerable soil erosion. The zone is suitable for growing drought resistant crops like sorghum, millet and cassava; groundnuts, paddy, bananas, vegetables and fruits. The zone is free from tsetse flies and hence livestock keeping (cattle, goats, sheep and donkeys) is taking place in the zone.

1.6 Drainage System

Njombe region is generally dominated by the Kipengere and Livingstone Mountains which separate Njombe and Mbeya regions in the west. The northern parts of the region are relatively flat. The region is further characterized by the presence of a big plateau portion, which forms the common landform. Njombe region forms part of the Indian Ocean drainage zone. The central plateau of the region divides the catchment into northern drainage and southern drainage. The rivers draining north all merge into the Great Ruaha and those draining south join the Ruhuhu River. Most of the rivers in the southern parts of the region drain into Lake Nyasa and which via the Shire and Zambezi rivers flow into the Indian Ocean.

1.7 Population

1.7.1 Ethnic Groups

Njombe Region is among the fast growing Regions in Tanzania; experiencing fast population growth by both natural birth and migration. As a result, more ethnic groups are found in the Region. However, among all people, the Region has ten main ethnic groups namely: Bena, Kinga, Pangwa, Hehe, Sangu, Nyakyusa, Ngoni, Wanji, Kisi and Manda. The Bena being the main ethnic group occupy most of the District, while Pangwa, Manda and Kisi occupy most of the Ludewa DC. Ngoni and Nyakyusa occupy most of Njombe TC and Makete DC while Wanji ethnic group is found only in Makete DC. (Table 1.4)



The Bena are the major ethnic groups in Njombe region

Table 1.4: Number of Major Ethnic Groups by District/Council, Njombe Region, 2018

Council	Number of Ethnic Groups	Names of Major Ethnic Groups
Njombe TC	5	Bena, Pangwa, Kinga, Ngoni and Nyakyusa
Wanging'ombe DC	5	Bena, Hehe, Kinga, Kisi and Pangwa
Makete DC	5	Kinga, Wanji, Bena, Nyakyusa and Sangu
Njombe DC	1	Bena
Ludewa DC	3	Kisi, Pangwa and Manda
Makambako TC	3	Bena, Hehe and Kinga

Source: Regional Commissioner's Office, Njombe Region, 2019

1.7.2 Population Distribution and Sex Ratio

At District level, Njombe TC had the highest sex ratios of 90 followed by Ludewa DC (89), Njombe DC and Makambako both with 87 males for every 100 females in 2002. Makete DC had the lowest sex ratio of 84 males for every 100 females in 2002 followed by Wanging'ombe DC (85). This means that more females than males were found in Njombe Region almost for all districts. In year 2012 and 2018, Ludewa DC had highest sex ration of 91 and 92 males for every 100 females respectively followed by Njombe TC and Makambako TC both with same sex ratios of 88 and 91 males for every 100 females respectively.

Table 1.5 shows that in 2012 and 2018, lowest sex ratio was observed in Wanging'ombe DC with 87 and 89 males for every 100 females followed by Makete DC with sex ratio of 87 and 90 respectively. (Table 1.5)

Table 1.5: Population Distribution by Sex With Sex Ratio by District/Council: Njombe Region, 2002, 2012 and 2018 Projections

District/Council	2002 Census			2012 Census			2018 Population Projection		
	Male	Female	Sex Ratio	Male	Female	Sex Ratio	Male	Female	Sex Ratio
Njombe TC	53,807	59,816	90	61,112	69,111	88	71,690	79,375	90
Wanging'ombe DC	70055	82222	85	75,427	86,389	87	86,881	97,365	89
Makete DC	48377	57398	84	45,300	51,966	87	52,053	57,875	90
Njombe DC	39272	44887	87	40,047	45,700	88	45,911	50,906	90
Ludewa DC	60477	67678	89	63,442	69,776	91	73,494	79,800	92
Makambako TC	32048	37008	87	44,031	49,796	88	51,381	56,568	91
Total	304,036	349,009	87	329,359	372,738	88	381,410	421,889	90

Source: NBS, Computed Data from 2002 and 2012 Population Censuses Reports and Population Projections, 2018 Njombe Region, 2019

1.7.3 Population Size and Growth

The population of Njombe region has experienced a significant growth in the last decade. Table 1.6 shows that the regional population has increased by 7.5 percent in 2012 from 653,045 people in 2002 to 702,097 people counted in the 2012 Population Census, resulting in a significant increase of 49,052 people during the inter-censal period. The region accounted for 1.6 percent of the total population of Tanzania Mainland which was 43,625,354.

The 2012 population census put the Region's population at 702,097 out of which, females account for 53.1 percent (372,738) of the population and males account for 46.9 percent (329,359) of the total population. Table 1.6 shows the population size and its increase for Njombe Region and its councils for the census years of 2002, 2012 and Population Projections 2018. Compared to other councils of Njombe region, Table 1.6 also shows that Wanging'ombe was the most populous council throughout the two censuses and 2018 population projections followed by Ludewa DC and Njombe TC. Njombe DC was the least populous council followed by Makambako TC and Makete district council.

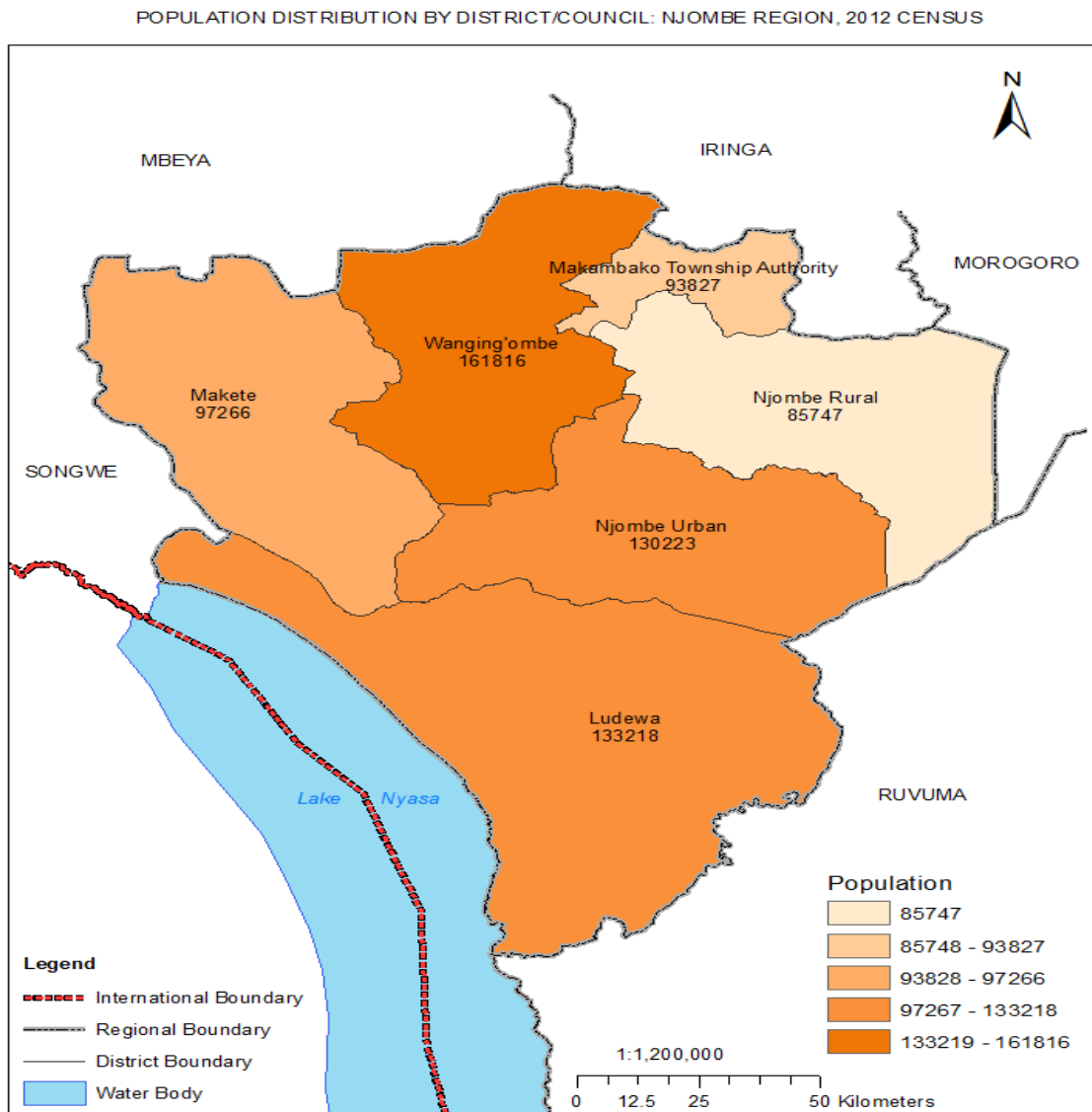
Table 1.6: Population Size and Growth by District/Council, Njombe Region, 2002, 2012 and Population Projection 2018

District/Council	Population (Number)			Increase 2002 - 2012		Increase 2012 - 2018	
	2002	2012	2018	Increase (Number)	Rate (%)	Increase	Rate (%)
Njombe TC	113,623	130,223	151,065	16,600	14.6	20,842	16.0
Wanging'ombe DC	152,277	161,816	184,246	9,539	6.3	22,430	13.9
Makete DC	105,775	97,266	109,928	(8,509)	-8.0	12,662	13.0
Njombe DC	84,159	85,747	96,817	1,588	1.9	11,070	12.9
Ludewa DC	128,155	133,218	153,294	5,063	4.0	20,076	15.1
Makambako TC	69,056	93,827	107,949	24,771	35.9	14,122	15.1
Total	653,045	702,097	803,299	49,052	7.5	101,202	14.4

Source: National Bureau of Statistics; 2012 Population Censuses Reports and 2019 Population Projections

Although the population of Njombe region increased by 7.5 percent from 2002 to 2012, the increase varied at council level. Makambako had the largest increase of 35.9 percent followed by Njombe TC (14.6 percent), Wanging'ombe DC (6.3 percent). Ludewa DC (4.0 percent) and Njombe DC (1.9 percent). The council population increases from 2002 to 2012 show a different picture with Makete DC showing negative increases (-8.0 percent).

Table 1.6 also shows that Wanging'ombe DC continued to have a big share of the regional population projections for 2018; 184,246 people (22.9 percent) followed by Ludewa DC (19.0 percent) and Njombe TC (18.8 percent). Similarly Njombe DC continued to be the least populous (12.1 percent) followed by Makambako TC (13.5percent).



1.7.4 Population Density

Table 1.7 gives the population density at council level for the census years of 2002, 2012 and 2018 Population Projections of the districts/councils in Njombe region. In 2002, Makambako TC with a population density of 80 people per sq. km. was the most densely populated district council followed by Wanging'ombe DC and Njombe TC with 46 and 35 people per sq. km. respectively.

In 2012, the situation was almost the same with Makambako TC being the most densely populated district council (109 persons per sq.km) while Wanging'ombe DC (48 persons per sq. km.) was the second most densely populated district council in the region. As Table 1.7 shows, in 2018, Makambako TC (125 people per sq. km) was again the mostly

densely populated district followed by Wanging'ombe DC (55 people per sq. km.) and Njombe TC whose population density was 47 people per sq. km.

Table 1.7: Population Density by District/Council and Ranking, Njombe Region, 2002, 2012 and 2019

District/Council	Land Area (sq.km.)	Population			Population Density (persons per sq.km)			Rank
		2002	2012	2018	2002	2012	2019	
Njombe TC	3,212	113,623	130,223	151,065	35	41	47	3
Wanging'ombe DC	3,344	152,277	161,816	184,246	46	48	55	2
Makete DC	4,850	105,775	97,266	109,928	22	20	23	6
Njombe DC	2,706	84,159	85,747	96,817	31	32	36	4
Ludewa DC	6,325	128,155	133,218	153,294	20	21	24	5
Makambako TC	862	69,056	93,827	107,949	80	109	125	1
Total	21,299	653,045	702,097	803,299	31	33	38	

Source: National Bureau of Statistics; 2002 and 2012 Population Censuses Reports and 2018 Population Projections

1.7.5 Population Trend

Table 1.8 shows that the region's population increased slightly from 702,097 in 2012 to 803,299 in 2018. However, at the council level, there were significant differences in the nature and level of population change with Njombe TC registered a population increase of 16 percent followed by Ludewa DC and Makambako TC both with 15 percentage of increase. Least percentage change of population was observed in Makete DC and Njombe DC (13percent) each.

Table 1.8: Population Trend by District/Council, Njombe Region, 2012 and 2018 Projections

District/Council	Land Area (sq.km.)	Population Increase (2012 to 2018)			
		2012 Population	2018 Population Projection	Increase (Number)	Percentage Difference
Njombe TC	3,212	130,223	151,065	20,842	16
Wanging'ombe DC	3,344	161,816	184,246	22,430	14
Makete DC	4,850	97,266	109,928	12,662	13
Njombe DC	2,706	85,747	96,817	11,070	13
Ludewa DC	6,325	133,218	153,294	20,076	15
Makambako TC	862	93,827	107,949	14,122	15
Total	21,299	702,097	803,299	101,201	14

Source: Computed Data from 2012 PHC Reports and Population Projections 2019

1.7.6 Dependency Ratio

The Dependency Ratio is a measure which shows the load the economically active population has in supporting the young and the old population who are termed as dependents. The Age Dependency Ratio therefore gives the number of persons aged 0 – 14 years and those aged 65 years and above who are the dependants for every 100 persons aged 15 – 64 years who are in the economically active ages. Table 1.9 shows that the number of dependants in Njombe region decreased from 339,676 in 2002 to 330,110 in 2012 while number of economically active population increased from 343,774 in 2002 to 371,987 in 2012. At the council level, the dependency ratio in Wanging'ombe DC was the highest at 107 persons per 100 of the active population in 2002 while Njombe DC had the lowest dependants per 100 of the active population for 90 persons.

Table 1.9 show, dependency ratio in 2012 was ranging from 75 the lowest to 112 the highest. Njombe Town Council had the lowest number of dependency (75) whilst Njombe District Council had the highest (112). Therefore, economic active population in Njombe District Council has more burdens of taking care of dependants than economic active population in Njombe Town Council.

Table 1. 9: The Dependency Ratios by Council, Njombe Region, 2002 and 2012

District/Council	2002 Population			2012 Population		
	Number of		Dependency Ratio	Number of		Dependency Ratio
	Dependants	Economically Active		Dependants	Economically Active	
Njombe TC	61,911	64,308	96	55,979	74,244	75
Wanging'ombe DC	84,332	78,879	107	77,451	84,365	92
Makete DC	51,672	54,103	96	45,155	52,111	87
Njombe DC	39,592	44,214	90	45,275	40,472	112
Ludewa DC	64,453	63,702	101	64,549	68,669	94
Makambako TC	37,716	38,568	98	41,701	52,126	80
Total	339,676	343,774	99	330,110	371,987	89

TC: Town council, DC: District council

Source: Computed Data from 2002 and 2012 Population Censuses Reports, 2019

1.7.7 Population Distribution by Sex and Age

The 2012 population of Njombe region as depicted by Table 1.10 below was a young population, made up of children under 18 years who were 339,362 (169,202 males and 170,160 females) or 48.3 percent of the total population, followed by the young population aged between 18 – 29 years estimated to be 140,640 persons (63,511 males and 77,129

females) or 20.0 percent of total population. Persons aged 61 years and above were 40,081 (16,370 males and 23,711 females) or 5.7 percent of the total population.

Table 1. 10: Population Distribution by Broad Age Groups and by Sex, Njombe Region, 2012

Age Group	Sex			Percent of Total
	Male	Female	Total	
0 – 17	169,202	170,160	339,362	48.3
18 – 29	63,511	77,129	140,640	20.0
30 – 44	51,962	62,974	114,936	16.4
45 – 60	28,314	38,764	67,078	9.6
61+	16,370	23,711	40,081	5.7
Total	329,359	372,738	702,097	100.0

Source: 2012 Population and Housing Census Report, 2019

1.7.8 Households and Household Size

In 2002, the smallest average household size of 3.8 was registered in Makete DC followed by Wanging'ombe DC and Njombe DC both with (4.2) while in 2012 it was registered in Makete DC (3.8) followed by Wanging'ombe (4.1). Table 1.11 shows that during the 2002-2012 intercensal periods, there was no changes in the councils average household sizes since it remain the same (4.2).

In terms of number of households, Table 1.11 shows, in 2002, Wanging'ombe DC had the largest number of households (36,470) followed by Ludewa DC (27,729) and Makete (27,672). In terms of the number of households, in 2012, Wanging'ombe DC was also first. However, it was followed by Njombe TC then Ludewa DC. Njombe DC had the smallest number of households.

Table 1.11: Distribution of Households and Average Households Size by Councils, Njombe Region, 2002 and 2012

Council	2002 Census			2012 Census		
	Total Population	Number of Households	Average Household size	Total Population	Number of Households	Average Household size
Njombe TC	113,623	26,300	4.3	130,223	31,279	4.2
Wanging'ombe DC	152,277	36,470	4.2	161,816	39,855	4.1
Makete DC	105,775	27,672	3.8	97,266	25,736	3.8
Njombe DC	84,159	20,128	4.2	85,747	20,211	4.2
Ludewa DC	128,155	27,729	4.6	133,218	29,990	4.4
Makambako TC	69,056	15,927	4.3	93,827	21,911	4.3
Total	653,045	154,226	4.2	702,097	168,982	4.2

Source: Computed Data from 2002 and 2012 Population Censuses Reports.

1.7.9 Rural and Urban Population

Table 1.12 (a) shows Population Distribution by Districts and Rural-Urban area in Njombe Region. Results indicate that population sizes varied within districts. The district with the largest proportion was Wanging'ombe DC with a population of 161,816 persons (23.0 percent) and the districts with the smallest proportion was Njombe DC with population of 85,747 people (12.2 percent).

Moreover, results show that the proportion of population in rural areas was more than thrice (536,189 people) that of urban areas (165,908 people).

Table 1.12 (a): Population Distribution by District and Rural -Urban; Njombe Region, 2012 Census

District	2012				
	Total Population	Urban Population	Percent Urban	Rural Population	Percent Rural
Njombe TC	130,223	64,122	38.6	66,101	12.3
Wanging'ombe DC	161,816	8,678	5.2	153,138	28.6
Makete DC	97,266	9,129	5.5	88,137	16.4
Njombe DC	85,747	10,563	6.4	75,184	14.0
Ludewa DC	133,218	16,128	9.7	117,090	21.8
Makambako TC	93,827	57,288	34.5	36,539	6.8
Total	702,097	165,908	100.0	536,189	100.0

Source: National Bureau of Statistics, Population Census Data 2012

Table 1.12 (b) presents Population Size and Growth by Districts and Rural -Urban Areas in Njombe Region from 2002 to 2012 Censuses. Results show that the proportion in rural areas decreased slightly from 0.55 million in 2002 to 0.54 million in 2012, a decrease of 3.4 percent between 2002 and 2012 Censuses. At the same period, urban population increased from 0.1 million in 2002 to 0.2 million in 2012, a decrease of 68.9 percent.

Table 1.12 (b) Population Size and Growth by District and Rural -Urban; Njombe Region, 2002 -2012 Census

District/Council	Rural			Urban		
	Population Size		Percentage Change 2002 -2012	Population Size		Percentage Change 2002 -2012
	2002 Census	2012 Census		2002	2012	
Njombe TC	77,440	66,101	-14.6	36,183	64,122	77.2
Wanging'ombe DC	149,523	153,138	2.4	2,754	8,678	215.1
Makete DC	98,480	88,137	-10.5	7,295	9,129	25.1
Njombe DC	81,886	75,184	-8.2	2,273	10,563	364.7
Ludewa DC	114,375	117,090	2.4	13,780	16,128	17.0
Makambako TC	33,137	36,539	10.3	35,919	57,288	59.5
Total	554,841	536,189	-3.4	98,204	165,908	68.9

Source: National Bureau of Statistics, Population Census Data, 2002 and 2012

1.7.10 Migration

Factors that cause change in the population of an area are births, deaths and migration. Migration is one of the most complexes of the demographic variables, like deaths it occurs at any time. Migration can affect the growth of population directly, and by influencing fertility and mortality of the areas of origin and destination. The measurement and analysis of migration are important in the preparation of population estimates and projections for a region. Furthermore, it is of particular significance for manpower and regional planning. Unfortunately there are no data on migration for Njombe region as it was only established in 2012 and the analytical report for the 2012 population census is not out yet.

CHAPTER TWO

The Regional Economy and Poverty Level

2.0 Introduction

This chapter describes the economy of Njombe region. The economic indicators used include Gross Domestic Product (GDP), Per Capita Gross Domestic Product and main source of income for the residents of Njombe region. The non-income poverty indicators cover demographic characteristics, health, and education status, access to drinking water, food security and housing condition.

The regional economy continues to be dominated by the agriculture sector. Both commercial and peasantry farming are carried out. In 2019 Agriculture sector contributes most of the region's cash income mainly from tea, beans, maize, groundnuts, Irish potatoes, paddy and sunflower production. It also accounts for about 45.2 per cent of the region's GDP. Generally the crop sub-sector's performance has been adequate to ensure good food security.

Services is the second most important economic activity after agriculture, contributing about 32.6 per cent to the region's GDP in 2019. The Industry and construction sector comes third in economic contribution to the region's GDP. It is estimated that the sectors contributes about 22.1 percent of the GDP in 2019.

Table 2.1 shows the number of Government employees in key sectors of economy in Njombe Region from 2016 to 2018. Statistics of employment by sector highlights relative importance of different economic activities with regard to employment. Education sector is the main sector of employment in Njombe Region with more than a half (73.5 percent) of total employment from 2016 – 2018. Health sector is the second with 22 percent of total employment, followed by agriculture and livestock sector with 4.3 percent. Natural resources recorded the least proportion of Government employees with only 0.3 percent of the total employees in the region for the period.

Table 2. 1: Number of Government Employees in Key Sectors of the Economy, Njombe Region, 2016-2018

Sector of Economy/Year	2016				2018			
	Primary sch. teachers		Secondary sch. teachers		Primary sch. teachers		Secondary sch. teachers	
Education sector(Primary & Secondary school Teachers)	3921		2670		3789		2464	
Health sector (Medical doctors(specialists), Other Doctors, Nurses and Other staffs)	Doctors (Specialists)	Doctors (Others)	Nurses	Other staff	Doctors (Specialists)	Doctors (Others)	Nurses	Other staff
Total	0	27	690	1159	2	41	756	1162
Agriculture and Livestock sector	Agriculture officers	Agriculture extension officers	Livestock officers	Livestock extension officers	Agriculture officers	Agriculture extension officers	Livestock officers	Livestock extension officers
Total	27	246	13	93	32	239	14	81
Natural Resource sector (forest, beekeeping and fishing officers)	Forest officers	Beekeeping officers	Fishing officers	Forest Officers	Forest officers	Beekeeping officers	Fishing officers	Forest Officers
Total	20	3	1	0	10	10	3	3

Source: Regional Commissioner's Office, Njombe Region, 2019

2.1 Regional Gross Domestic Product

Table 2.2 shows the GDP estimates by council in Njombe region from 2016 to 2019. It can be observed that the Region's economy grew from TZS 2,132,154 Million (2016) to TZS. 3,157,746 million in 2019 at current prices. The report further reveals that, in 2016 Makambako TC contributed more to the region's GDP (26.6 percent) followed by Njombe TC (24.8 percent) and Wanging'ombe DC (13.9 percent). Njombe DC had smallest share of Region's GDP (10.4 percent) followed by Makete DC (10.6 percent). The trend of economic performance changed from 2017 to 2019 whereby Njombe TC had a big share to Region's GDP (27.7 percent in 2017, 26.6 percent in 2018 and 27.4 percent in 2019) followed by Makambako TC (24.4 percent in 2017, 24.8 percent in 2018 and 24.6 percent in 2019). On the other hand, Njombe DC's share in the GDP was very little in all the three years while smallest share was observed in Makete DC in 2019. (Table 2.2).

Table 2.2: GDP Estimates by Council, Njombe Region, 2016, 2017, 2018 and 2019

District/ Council	Tshs. Million							
	2016		2017		2018		2019	
	Mill.TZS	Percent	Mill.TZS	Percent	Mill.TZS	Percent	Mill.TZS	Percent
Njombe TC	529,672	24.8	699,269	27.7	720,313	26.5	864,129	27.4
Wanging'ombe DC	296,884	13.9	383,564	15.2	442,783	16.3	511,102	16.2
Makete DC	225,041	10.6	265,907	10.5	288,386	10.6	306,406	9.7
Njombe DC	222,685	10.4	242,790	9.6	256,958	9.4	318,623	10.1
Ludewa DC	290,916	13.6	319,874	12.7	337,523	12.4	381,266	12.1
Makambako TC	566,956	26.6	615,948	24.4	673,311	24.8	776,221	24.6
Total	2,132,154	100.0	2,527,353	100.0	2,719,274	100.0	3,157,746	100.0

Source: National Bureau of Statistics, National Accounts Department, 2019

When we look at sector contributions in Njombe region (Table 2.3), agriculture sector contributed a big share of the GDP in all the four years. In 2016 the sector contributed 42.3 and 48.4 percent in 2017, 47.4 percent in 2018 and 45.2 percent in 2019. Services sector was the second contributing 33.6 percent of the GDP in 2016, 30 percent in 2017, 29.6 percent in 2018 and 32.6 percent in 2019. The Industry and Construction sector contributed less share of the GDP in all the four years.

Table 2.3: GDP Estimates by Sector, Njombe Region, 2016, 2017, 2018 and 2019

Sector	2016		2017		2018		2019	
	Mill. TZS	Percent	Mill. TZS	Percent	Mill. TZS	Percent	Mill. TZS	Percent
Agriculture	902,016	42.3	1,223,263	48.4	1,288,659	47.4	1,428,050	45.2
Industry and Construction	512,734	24.0	545,688	21.6	624,426	23.0	700,708	22.2
Services	717,403	33.6	758,402	30.0	806,188	29.6	1,028,988	32.6
Total	2,132,153	100.0	2,527,353	100.0	2,719,273	100.0	3,157,746	100.0

Source: National Bureau of Statistics, National Accounts Department, 2019

2.2 Per Capita Gross Domestic Product

Looking at the distribution of the regional economy, Makambako TC ranked the first in Per Capita GDP in all the four years with Tshs. 5,484,243 in 2016 and 7,019,415 in 2019. Njombe TC was second Council with Per Capita GDP in the region, TZS 3,661,674 in 2016 and TZS 5,601,876 in 2019. The least councils were Wanging'ombe DC in the two years (2016 and 2017) and Ludewa DC in 2018 and 2019. (Table 2.3)

Table 2.4: Per Capita GDP Estimates by Council, Njombe Region, 2016, 2017, 2018 and 2019

District/ Council	Tshs							
	2016		2017		2018		2019	
	TZS	Rank	TZS	Rank	TZS	Rank	TZS	Rank
Njombe TC	3,661,674	2	4,756,514	2	4,768,358	2	5,601,876	2
Wanging'ombe DC	1,682,775	6	2,124,289	6	2,403,005	5	2,719,671	5
Makete DC	2,143,392	4	2,451,777	4	2,623,507	4	2,726,711	4
Njombe DC	2,402,990	3	2,542,116	3	2,654,032	3	3,217,110	3
Ludewa DC	1,975,943	5	2,145,367	5	2,201,871	6	2,441,256	6
Makambako TC	5,484,243	1	5,826,721	1	6,237,537	1	7,019,415	1
Total Regional Per Capita	2,771,374		3,214,043		3,385,132		3,849,243	

Source: National Bureau of Statistics, National Accounts Department, 2019

2.3 Poverty Indicators

Besides GDP and per capita GDP, there are a number of other indicators that can be used to describe the poverty levels of a geographical location. These include gini coefficient, poverty gap and the poverty head count - also expressed as percentage of households below the nationally defined poverty line, and main source of cash income. Other indicators include food security situation, food consumption patterns, adult literacy rate, access to safe drinking water, housing conditions in terms of type of toilet, roofing material, and sources of energy for lighting as well as for cooking.

2.3.1 Income Poverty Rate, Poverty Gap and Gini Coefficient

According to the 2012 Region and District Poverty Estimates for Tanzania Report, the district with highest poverty line was Ludewa DC with 29.5 percent of its people living below basic needs poverty line. The councils of Wanging'ombe DC and Njombe DC had 28.7 and 26.4 percent of their people living below the poverty line respectively as shown in Table 2.4. The lowest District with percentage of its people living below basic needs poverty line was Njombe TC with 16.1 percent followed by Makambako TC with 23.5. With respect to rate of poverty gap, the Table shows that Ludewa with 6.9 percent was the worst district in Njombe region followed by Wanging'ombe DC and Njombe DC with 6.4 and 5.8 percent respectively.

Regarding the Gini Coefficient Rate, the results in Table 2.4 show that one council in Njombe region had a very high uneven distribution of wealth. At 30.7 percent, Makete DC was leading on uneven distribution of wealth in Njombe region followed closely by Njombe TC with 30.2 percent and Ludewa DC with 29.3 percent.

Table 2. 5: Selected Poverty Indicators by District/Council, Njombe Region, 2008

Council	Percent of households living below basic needs Poverty Line	Percent of Poverty Gap	Gini Coefficient Rate
Njombe TC	16.1	3.3	30.2
Wanging'ombe DC	28.7	6.4	28.2
Makete DC	25.5	5.7	30.7
Njombe DC	26.4	5.8	28.5
Ludewa DC	29.5	6.9	29.3
Makambako TC	23.5	5.5	29.0

Source: Region and District Poverty Estimates for Tanzania Report, 2012

2.3.2 Main Sources of Cash Income

The major Region's revenue contributors were forest produce fees, timber produce cess, other food and crops service levy. It was observed that, Njombe Region's revenue collected from different sources increased from TZS 1.2 billion in 2014 to TZS 5.7 billion in 2018 (46.0 percent increase). In 2018, forest produce (timber produce cess) recorded the largest share of total region's revenue with TZS 1.4 billion (24 percent) followed by other food crop cess TZS 1.0 billion (17.8 percent) and service levy fee TZS 179 million (3.1 percent).

2.3.3 Literacy Rate and Level of Education

Literacy is the ability to read and write with an understanding a short simple sentence on everyday life. It excludes the ability to only write or sign one's own name or write memorized phrase. The ability to read and write may be in any language.

The measure of literacy is obtained by calculating the literacy rate as the percentage of a specified population, which is literate in specified language(s). Literacy rate in this profile is defined as the percentage of a population that can read and write in Kiswahili, English, Both Kiswahili and English or in any other language (s).

Out of 597,398 people aged 5 years and above, 468,576 (78.4 percent) were literate. The literate rate was higher among males (81.4 percent) than females (75.8 percent). Literacy rates were higher among people age 10 to 49 years (ranging from 92.4 to 80.8 percent).

Literacy rate in urban areas (89.1 percent) was significantly higher than that in rural areas (75.2 percent). Males were more literate than females in both rural and urban areas.

The 2012 censuses results show that adult literacy rate (persons aged 15 years and above), stands at 81.9 percent and it was higher in urban areas (92.2 percent) than in rural areas

(78.5 percent). Males were more literate than females in both rural and urban areas. The results also revealed that literacy rate decreases as the age increases.

Adult literacy rates vary across districts from 88.4 percent in Njombe TC to 74.6 percent in Makete DC. Districts with literacy rates above 70 person were Makambako TC (86.5 percent), Ludewa DC (84.0 percent), Njombe DC (78.6 percent) and Wanging’ombe DC (78.3 percent).

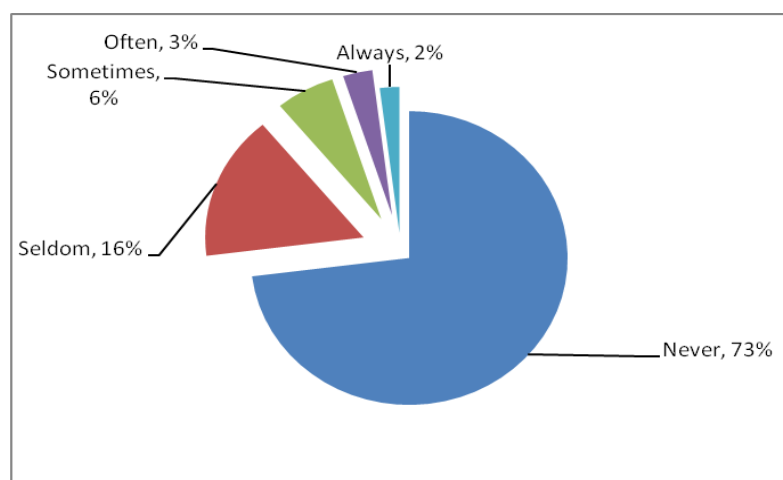
2.3.4 Food security and Food Consumption Patterns

Food security and level of food consumption is also an indicator of poverty level of the household. The number of meals consumed in a day and the frequencies of protein intake per week particularly meat and fish are most superior in measuring poverty levels of the households in the country.

2.3.4.1 Food Security

According to the 2007/08 National Sample Census of Agriculture, in Njombe region, 102,106 households (73 percent of the total agricultural households in the region) said they never experienced any food sufficiency problems. However, 16 percent said they seldom experienced food sufficiency problems, six percent said they sometimes experienced food sufficiency problems and three percent often experienced problems. About two percent of the agricultural households said they always experienced food sufficiency problems.

Figure 2. 1: Percentage of Households Reporting the extent of Food Sufficiency Problems Njombe Region, 2007/08



Source: NBS, National Sample Census of Agriculture, Iringa Region, 2007/08.

2.3.4.2 Number of Meals per Day

The National Sample Census of Agriculture 2007/08 reveals that the majority of rural agricultural households in Njombe region normally had 2 meals per day (55 percent). This was followed by 3 meals per day (44 percent) and one meal per day (two percent). None of the households have 4 meals per day.

Makete DC, Ludewa DC and Njombe TC had a larger percentage of households eating one and meal per day while Makete DC had the highest percentage of households eating three meals per day (Table 2.6).

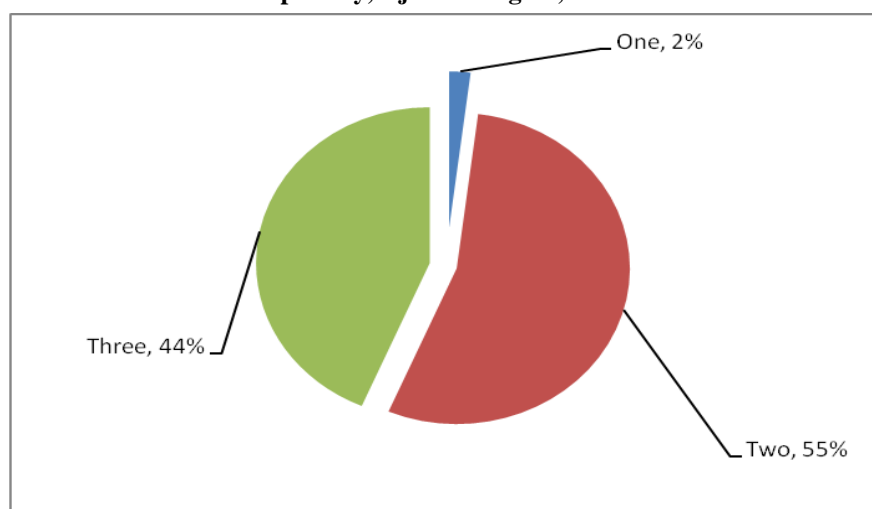
Table 2.6: Number of Households by Number of Meals Consumed per Day by Council, Njombe Region, 2007/08

District/Council	Number of Meals per Day						Total
	One	Percent	Two	Percent	Three	Percent	
Njombe TC	358	2.2	8,123	50.4	7,645	47.4	16,126
Wanging'ombe DC	*	*	*	*	*	*	*
Makete DC	646	2.2	14,581	50.1	13,863	47.7	29,090
Njombe DC	676	0.9	38,557	56.3	29,256	42.7	68,489
Ludewa DC	461	1.7	15,823	59.3	10,417	39.0	26,701
Makambako TC	*	*	*	*	*	*	*
Total	2141	1.5	77,084	54.9	61,181	43.6	140,406

*= Information included in Njombe DC

Source: NBS, National Sample Census of Agriculture, 2007/08, Iringa Region Report

Figure 2. 2: Percentage of Households by Number of Meals the household consumed per day, Njombe Region, 2007/08



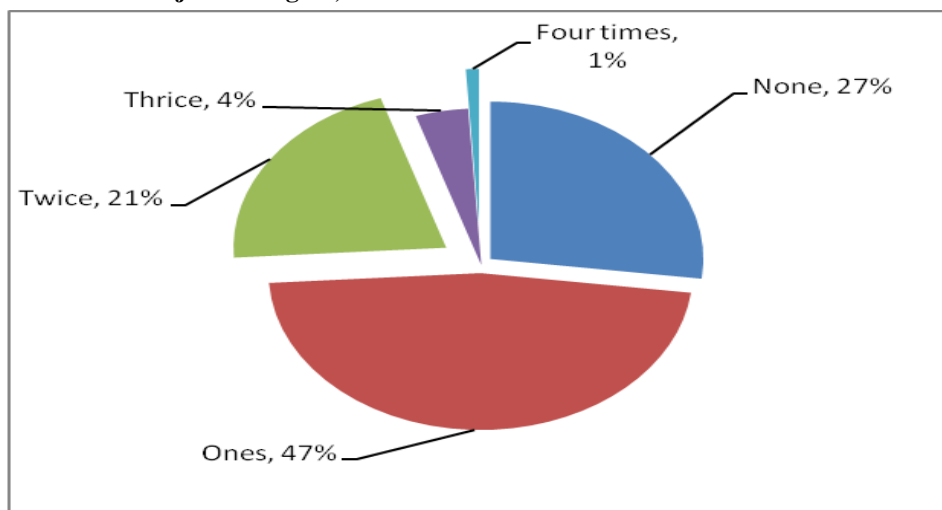
Source: NBS, National Sample Census of Agriculture, 2007/08, Iringa Region Report

2.3.4.3 Protein (Meat and Fish) Consumption Frequencies

The National Sample Census of Agriculture 2007/08 further reveals that the percentage of agricultural households that consumed any meat during the week preceding the census was

(72.8 percent). The percentage of household that out of these consumed meat once was (47 percent), twice (21 percent) and three times or more (5 percent). About 27 percent of the agricultural households in Njombe region did not eat meat during the week preceding the census.

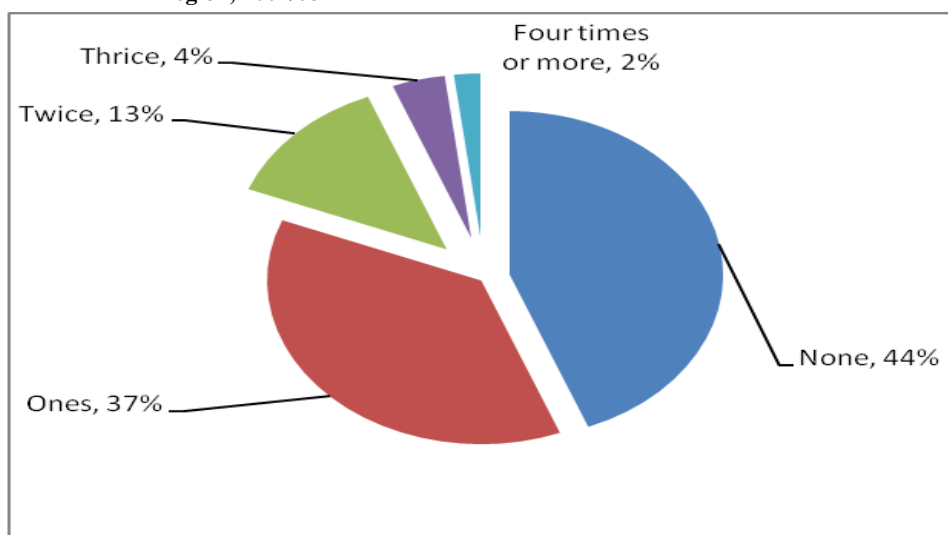
Figure 2. 3: Percentage of Households by the frequency of Meat Consumption, Njombe Region, 2007/08



Source: NBS, National Sample Census of Agriculture, 2007/08, Iringa Region Report

The observation was different regarding fish consumption. The percentage of agricultural households that consumed any fish in the week preceding the Census was 56 percent. The frequency of fish consumption was as follows: once (37 percent), twice (13 percent) and three times or more (6 percent). About 44 percent of the agricultural households in Njombe region did not eat fish during the week preceding the Agriculture Sample Census.

Figure 2. 4: Percentage of Households by the Frequency of Fish Consumption, Njombe Region, 2007/08



Source: NBS, National Sample Census of Agriculture, 2007/08, Iringa Region Report

CHAPTER THREE

Production Sectors

3.0 Overview

This chapter presents the performance of productive sectors in the region. The productive sectors include crop production, livestock keeping, natural resources, tourism, manufacturing, fishing and mining.

3.1 Agriculture

Agriculture is the back born of the Njombe economy and about 80 percent of its residents depend on it as their main source of livelihood. In general, crop production levels per unit area are very low due to, among other reasons, the use of out-dated, inferior agricultural implements, soil exhaustion and soil infertility. However, agriculture sector contributes over 70 percent of the region's GDP and it is carried out by all councils in the region. According to UN classifications, agriculture comprises of crop production, livestock, forestry and hunting sub sectors. Others are fishing, beekeeping and tourism.

3.1.1 Distribution of Arable Land

The 2017/18 land use planning shows that Njombe region has a total land area of 2,129,900 ha of which 1,363,913 hectares (42.6 percent) were classified as arable land which is suitable for crop farming. The remaining 765,987 hectares (36.0 percent) are used for other economic activities such as grazing and game reserves (Table 3.1).

At council level, Table 3.1 shows that Ludewa District Council has the biggest arable land (663550ha) while Makambako town council has the smallest (51,422 ha). Wanging'ombe district council utilized 76.2 percent of its arable land for growing crops followed by Ludewa district council (33.5 percent). The least utilization of its arable land for cultivation was Njombe town council 17.9 percent (57,114ha). The rest of councils had insignificant acreage of arable land utilized to grow crops over the specified period of time.

Table 3.1: Percentage Distribution of Arable Land by Council; Njombe Region, 2017/18

Council	Total land Area (ha)	Total Arable land (ha)	Arable land Under Cultivation (ha)	Percent of Arable land under cultivation
Njombe TC	321,200	318,400	57,114	17.9
Wanging'ombe DC	334,400	254,959	194,391	76.2
Makete DC	485,000	75,582	19,410	25.7
Njombe DC	270,600	-	74,931	0.0
Ludewa DC	632,500	663,550	222,408	33.5
Makambako TC	86,200	51,422	12,820	24.9
Total	2,129,900	1,363,913	581,074	42.6

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.2 Land under Cultivation

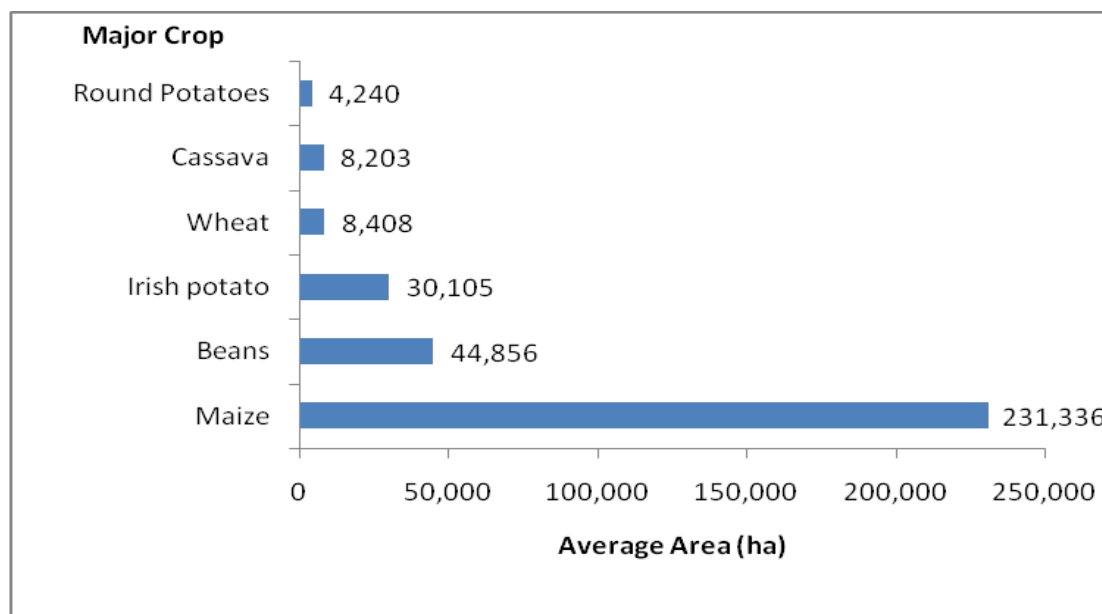
3.1.2.1 Area under Major Food Crops Cultivation

Maize, beans, Irish potatoes, wheat, cassava, round potatoes and cow peas are the major food crops grown in Njombe region. Table 3.2 and figure 3.1 shows that maize was planted on the largest area than other food crops and was the leading food crop in the region. Over the period of 2013/14– 2017/18, maize was planted on an annual average area of 4,240 ha (68.7 percent). Round potatoes and Cowpeas were planted in small area with an annual average of 1,581 ha (1.3 percent) and 4,133 ha (1.2 percent) respectively.

Table 3.2: Estimated Land Area (Ha) under Major Food Crops; Njombe Region, 2013/14 – 2017/18

Crop	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Maize	230,977	237,255	202,402	241,393	244,654	231,336	68.7
Beans	39,311	52,047	39,007	47,637	46,280	44,856	13.3
Irish potato	26,689	26,511	25,315	30,787	41,222	30,105	8.9
Wheat	9,415	9,075	7,696	8,232	7,624	8,408	2.5
Cassava	5,130	10,184	9,273	8,372	8,058	8,203	2.4
Round Potatoes	2,193	4,636	4,837	5,666	3,867	4,240	1.3
Cowpeas	3,522	3,804	4,109	4,437	4,792	4,133	1.2
Sweet potatoes	1,805	1,829	1,602	1,735	2,158	1,826	0.5
Sorghum	1,110	1,012	1,147	1,289	1,817	1,275	0.4
Garden peas	1,563	1,555	934	884	1,317	1,250	0.4
Paddy	461	465	544	544	544	512	0.2
Finger millet	492	369	510	483	682	507	0.2
Ground nuts	181	176	88	108	82	127	0.0
Sweet bananas	43	41	45	47	54	46	0.0
Plantain banana	19	7	20	20	26	18	0.0
Pigeon peas	17	12	10	15	20	15	0.0
Total	322,929	348,979	297,538	351,648	363,195	336,858	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

Figure 3.1: Annual Average Area (HA) planted with Major Food Crops, Njombe region, 2013/14-2017/18.

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(i) Maize

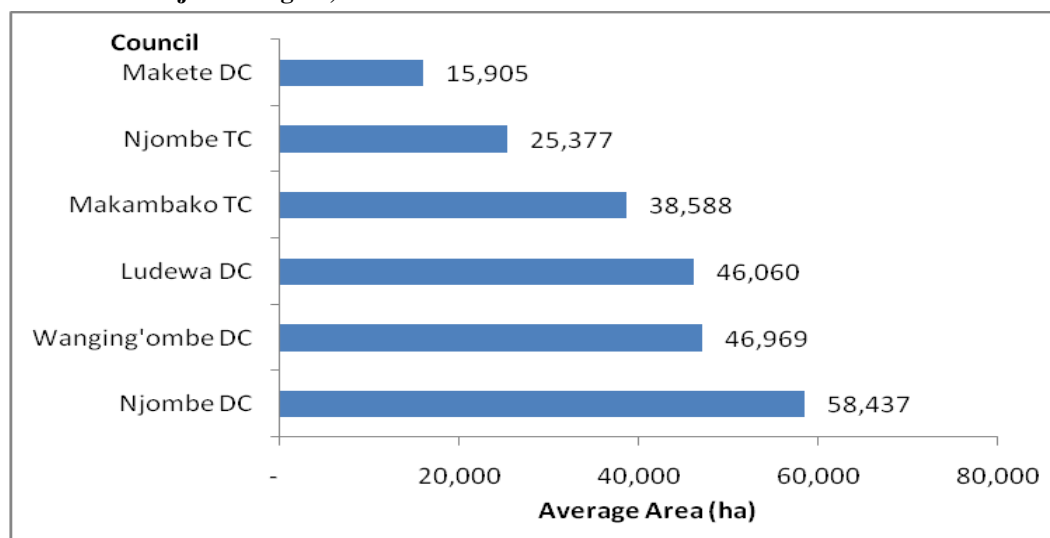
Maize is a staple food and the most important marketed crop in Njombe region. According to table 3.3 and figure 3.2, area planted with maize was on average of 231,336 hectares per year, this was equivalent to 54.1 percent of the average area planted with major food crops per year. Area planted with maize has been increasing from 230,977 ha in 2013/14 to 237,255 ha in 2014/15 and decreased to 202,402 in 2015/16 then increased 244,654 ha in 2017/18.

Figure 3.2 shows the area planted with maize from 2013/14 – 2017/18 in Njombe Region. Njombe district council had the largest average area of 58,437 ha followed by Wanging'ombe district council (46,969). The least area planted with maize was in Makete district council (15,905 ha).

Table 3.3: Estimated Land Area (Ha) under Major Food Crops of Maize by Council; Njombe Region, 2013/14 – 2017/18

Council	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Njombe DC	55,491	58,210	58,320	59,486	60,676	58,437	25.3
Wanging'ombe DC	40,031	43,233	46,692	50,428	54,461	46,969	20.3
Ludewa DC	46,447	45,120	46,200	46,185	46,350	46,060	19.9
Makambako TC	46,697	48,367	11,443	44,468	41,966	38,588	16.7
Njombe TC	25,287	25,289	25,388	25,451	25,471	25,377	11.0
Makete DC	17,024	17,036	14,359	15,375	15,730	15,905	6.9
Total	230,977	237,255	202,402	241,393	244,654	231,336	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

Figure 3.2: Annual Average Area (HA) planted with Major Food Crops Maize by Council, Njombe region, 2013/14-2017/18.

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(ii) Beans

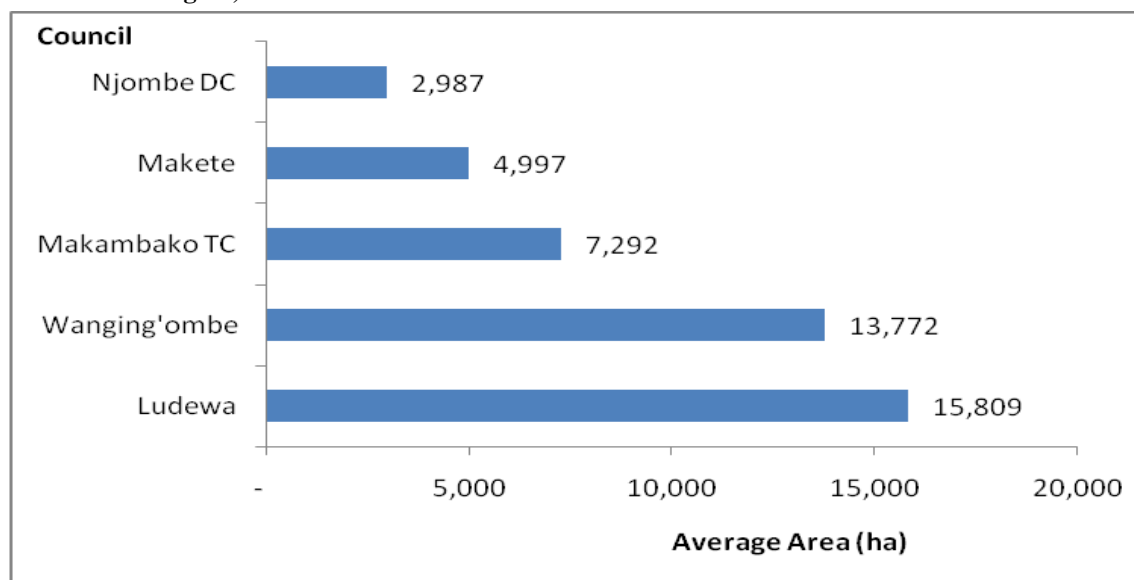
Beans are the second mostly important food crop grown in the region. Over the period of 2013/14- 2017/18 the annual average area planted with beans was 44,856 hectares or 20.5 percent of the average area planted with major food crops in the region (Table 3.4).

Figure 3.3 shows the area planted with beans from 2013/14 – 2017/18 in Njombe Region. Ludewa district council had the largest average area of 15,809 ha followed by Wanging'ombe district council (13,772 ha). The least area planted with beans was in Njombe district council (2,987 ha).

Table 3.4: Estimated Land Area (Ha) under Major Food Crops of Beans by Council; Njombe Region, 2013/14 – 2017/18

Council	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Ludewa	11,007	23,272	14,136	16,437	14,193	15,809	35.2
Wanging'ombe	11,737	12,676	13,690	14,785	15,968	13,772	30.7
Makambako TC	8,533	8,087	3,299	8,197	8,344	7,292	16.3
Makete	5,175	5,157	4,848	5,154	4,650	4,997	11.1
Njombe DC	2,858	2,856	3,034	3,063	3,125	2,987	6.7
Total	39,311	52,047	39,007	47,637	46280.08	44,856	100

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

Figure 3.3: Annual Average Area (HA) planted with Major Food Crops Maize by Council, Njombe region, 2013/14-2017/18.

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(iii) Irish Potatoes

In terms of area planted, Irish potato is the third important crop grown in the region. The crop is grown for food and cash earning. Table 3.5 shows that the average area planted with Irish potatoes per year is 15,485 hectares with major food crops in Njombe region.

Table 3.5: Estimated Land Area (Ha) under Major Food Crops of Irish Potatoes by Council; Njombe Region, 2013/14 – 2017/18

Council	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Makete DC	12,924	12,835	12,255	14,938	20,147	14,620	94.4
Njombe DC	841	841	805	910	928	865	5.6
Total	13,765	13,676	13,060	15,848	21,075	15,485	100

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(iv) Wheat

This is another important crop grown in the region. The crop is also grown for food and cash earning. Table 3.2 shows that, the annual average area planted with cowpeas was 8,408 hectares which accounted for 2.5 percent of the total area planted with major food crops in the region.

Table 3.6 shows the area planted with wheat from 2013/14 – 2017/18 in Njombe Region. Makete district council had the largest average area of 6,472 ha followed by Wanging'ombe district council (1,936 ha) with the least average area planted with wheat. Other crops such as Cowpeas, sweet potatoes, sorghum, garden peas, paddy, finger millet, ground nuts, sweet bananas, plantain banana and pigeon peas had the area planted less than one percent of the total area planted with major food crops.

Table 3.6: Estimated Land Area (Ha) under Major Food Crops of Irish Potatoes by Council; Njombe Region, 2013/14 – 2017/18

Council	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Wanging'ombe	1,650	1,782	1,925	2,079	2,245	1,936	23.0
Makete	7,765	7,293	5,771	6,154	5,379	6,472	77.0
Total	9,415	9,075	7,696	8,232	7,624	8,408	100

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.2.2 Area under Major Cash Crops Cultivation

The main cash crops grown in Njombe region are Irish potatoes, Sunflower, Groundnuts, Tea, Tomato, Avocadoes, Pyrethrum, Coffee, Onions and Watermelon. Table 3.7 shows that, the annual average area planted with cash crops was 75,028 ha. Irish potatoes had the largest share (41.9 percent) of the total area planted with cash crops. Coffee, Onions and Watermelon Water melon had the smallest share of 0.4, 0.3 and 0.1 percent respectively.

Table 3.7: Estimated Land Area (ha) under Major Cash Crops; Njombe Region, 2013/14 – 2017/18

Crop	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Irish potatoes	29,622	30,507	31,526	32,209	33,313	31,435	41.9
Sunflower	19,645	21,963	19,623	22,744	26,840	22,163	29.5
Groundnuts	6,652	7,184	7,757	8,379	9,048	7,804	10.4
Tea	4,936	4,938	4,944	4,944	4,950	4,942	6.6
Tomato	7,408	5,316	1,869	4,431	5,349	4,875	6.5
Avocadoes	8,926	620	397	507	596	2,209	2.9
Pyrethrum	892	1,281	806	1,030	631	928	1.2
Coffee	209	278	335	418	354	319	0.4
Onions	205	222	239	259	279	241	0.3
Watermelon	95	103	111	120	130	112	0.1
Total	78,590	72,412	67,607	75,041	81,489	75,028	100

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.3 Crop Production

3.1.3.1 Production of Major Food Crops

Njombe region had a total production of 3,384,949 tons of the major food crops during the period of 2013/14 to 2017/18, grown at an average of 676,990 tons per year (Table 3.8). The production of major food crops increased from 618,585 tons in 2013/14 to 720,519 tons in 2016/17, but decreased to 701,327 tons in 2017/18.

Maize was a dominant food crop grown in the region with a share of 61.9 percent (419,015 tons) of the total production, followed by Irish Potatoes (22.8 percent), Beans (6.5 percent), Round Potatoes (4.2 percent), Sweet potatoes (1.7 percent) and Wheat (1.4 percent). Other crops such as cowpeas, cassava, paddy, sorghum, garden peas, finger millet, sweet

bananas, plantain banana, ground nuts, and pigeon peas had the share less than one percent of the total production in of the region. Regional production was at the peak in the season of 2016/17 at 720,519 tons which was above the annual average production of 676,990 tons during the period of 2013/14 to 2017/18.

Table 3. 8: Estimated Production in Tons of Major Food Crops Njombe Region; 2013/14 – 2017/18

Crop	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Maize	401,809	407,673	456,223	445,295	384,078	419,015	61.9
Irish Potatoes	141,075	136,515	132,920	162,253	198,834	154,319	22.8
Beans	34,673	51,855	41,019	46,960	44,013	43,704	6.5
Round Potatoes	16,723	35,357	28,974	29,588	29,910	28,110	4.2
Sweet potatoes	6,470	6,164	11,793	14,392	18,685	11,501	1.7
Wheat	9,667	9,410	8,329	10,103	10,192	9,540	1.4
Cowpeas	2,676	3,826	3,082	3,993	4,313	3,578	0.5
Cassava	1,377	1,660	1,634	2,882	5,460	2,603	0.4
Paddy	1,153	1,163	1,360	1,360	1,360	1,279	0.2
Sorghum	1,110	1,012	1,147	1,289	1,817	1,275	0.2
Garden peas	805	800	925	1,250	1,140	984	0.1
Finger millet	492	369	347	440	690	468	0.1
Sweet banana	311	263	298	440	509	364	0.1
Plantain banana	150	50	200	200	260	172	0.0
Ground nuts	91	88	54	67	56	71	0.0
Pigeon peas	6	6	5	8	10	7	0.0
Total	618,585	656,209	688,308	720,519	701,327	676,990	100

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(i) Production of Maize by Council

Maize is the leading food crop in the region which grows in both in lowlands and highlands areas. It accounts for about 61.9 percent of total tonnage of all major food crops produced in Njombe region (Table 3.8). Table 3.9 also shows that maize is grown in almost all district councils but at different production levels. Njombe district council with total production of 812,895 tons and an average annual production of 162,579 tons was leading council in maize production in the region. It accounted for 38.8 percent of the region's maize total production of 2,095,077 tons. Wanging'ombe DC was the second (26.1 percent) producer followed by Ludewa DC (19.2 percent), Makete DC and Makambako TC with 7.9 percent each for maize producers in the region during the specified seasons.

Table 3.9: Production of Maize tons by Council, Njombe Region; 2013/14 – 2017/18

Council	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Njombe DC	138,724	138,725	174,960	178,458	182,028	162,579	38.8
Wnging'ombe	86,915	101,674	112,061	111,010	136,154	109,563	26.1
Ludewa	100,882	97,999	101,640	92,915	9,734	80,634	19.2
Makete	34,045	34,072	31,133	33,550	33,577	33,275	7.9
Makambako TC	41,243	35,203	36,429	29,362	22,585	32,964	7.9
Total	401,809	407,673	456,223	445,295	384,078	419,015	100

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(ii) Irish Potatoes Production by Council

Table 3.8 shows that, over the period of 2013/14- 2017/18 , the production of Irish potatoes was realized in only two district councils with the total production of 771,597 tons at an annual average production of 15,4319 tons per year. Makete district council had high production of Irish potatoes, with an annual average production of 141,082 tons, it accounted for 91.4 percent of the regional total production. Njombe district council had the least production of Irish potatoes with an average of 13,237 tons or 8.6 percent.

Table 3.10: Production of Irish Potatoes tons by Council, Njombe Region; 2013/14 – 2017/18

Council	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Makete	128,460	123,900	119,540	148,603	184,908	141,082	91.4
Njombe DC	12,615	12,615	13,380	13,650	13,926	13,237	8.6
Total	141,075	136,515	132,920	162,253	198,834	15,4319	100

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(iii) Production of Beans by Council

Beans are the third most important food crop in terms of production in Njombe region. Table 3.8 shows beans production over the period of 2014/15 to 2016/17 of which the highest productions were recorded in 2014/15 and 2016/17 seasons. The worst season was 2013/14 of which only 34,673 tons of cumulative total products harvested. Table 3.11 shows that at council level, Ludewa DC leads with 46.3 percent of the region's total production. Second council was Wanging'ombe with 31.9 percent followed by Njombe DC (8.9 percent) and Makambako TC (7.2 percent). Makete district produced the smallest tonnage of beans and its share was 5.7 percent of the region's total production.

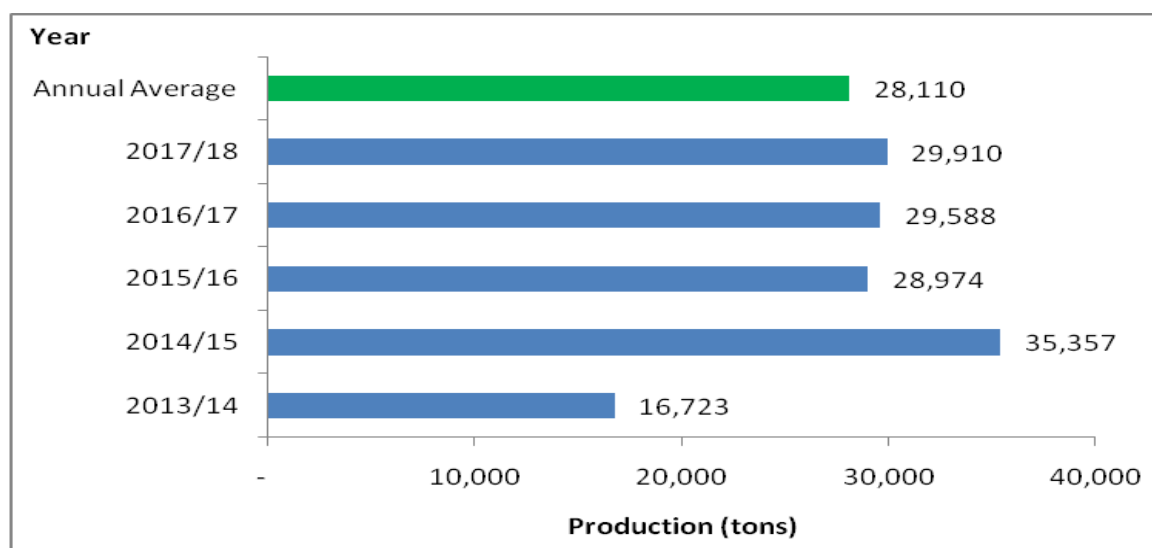
Table 3.11: Production of Beans in tons by Council, Njombe Region; 2013/14 – 2017/18

Council	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Ludewa	14,344	30,328	18,671	19,894	17,954	20,238	46.3
Wnging'ombe	10,735	12,747	13,690	15,605	16,826	13,921	31.9
Njombe DC	3,533	3,532	3,752	4,724	3,866	3,881	8.9
Makambako TC	3,474	2,670	2,482	4,161	3,037	3,165	7.2
Makete	2,588	2,579	2,424	2,577	2,330	2,499	5.7
Total	34,673	51,855	41,019	46,960	44,013	43,704	100

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(iv) Round Potatoes Production

Table 3.8 shows that, over the period of 2013/14- 2017/18, the production of round potatoes was realized in only one district council with the total production of 140,552 tons at an annual average production of 28,110 tons per year. Ludewa district council was the only council with production of Round potatoes for the period of 2013/14- 2017/18 with an average of 28,110 tons as shown in figure 3.4.

Figure 3.4 Production of Round Potatoes in tons in Ludewa District Council, Njombe Region; 2013/14 – 2017/18

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.3.2 Production per Hectare of Major Food Crops

Table 3.12 shows crop yield in Njombe region for the major food crops. Productivity of maize in terms of production per hectare was almost the same in all three seasons under consideration. In the 2013/14 crop season, Round Potatoes had the best yield of 7.6 tons per hectare. The best yield for beans was in the season of 2015/16, Irish potatoes had the same yield for two seasons of 5.3 tons per hectare. There was very little variation in the yields of wheat over the seasons under consideration.

Table 3.12: Production per Hectare of Major Food Crops, Njombe Region; 2013/14, 2015/16 and 2017/18

Crop	2013/14			2015/16			2017/18		
	Planted Area (ha)	Production (tons)	Yield (t/ha)	Planted Area (ha)	Production (tons)	Yield (t/ha)	Planted Area (ha)	Production (tons)	Yield (t/ha)
Maize	230,977	401,809	1.7	202,402	456,223	2.3	244,654	384,078	1.6
Irish Potatoes	26,689	141,075	5.3	25,315	132,920	5.3	41,222	198,834	4.8
Beans	39,311	34,673	0.9	39,007	41,019	1.1	46,280	44,013	1.0
Round Potatoes	2,193	16,723	7.6	4,837	28,974	6.0	3,867	29,910	7.7
Sweet potatoes	1,805	6,470	3.6	1,602	11,793	7.4	2,158	18,685	8.7
Wheat	9,415	9,667	1.0	7,696	8,329	1.1	7,624	10,192	1.3
Regional Total	310,390	610,416	N/A	280,859	679,258	N/A	345,805	685,713	N/A

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.3.3 Production of Major Cash Crops

The major cash crops grown in Njombe region are Irish potatoes, maize, avocado, sunflower, tomatoes, tea, wheat, beans, groundnuts, onions, pyrethrum, watermelon and coffee. The total production of cash crops in the region was 3074435.1 tons from 2013/14 to 2017/18 with an average production of 614,887 tons per year. Irish potatoes were the leading cash crop in terms of production, accounting for 65.9 percent of the total production in the region followed by avocado (18.5 percent) and sunflower (4.8 percent). Coffee recorded the smallest share of less than one percent of the total production in the region (Table 3.13).

Table 3.13: Estimated Production in Tons of Major Cash Crops Njombe Region; 2013/14 – 2017/18

Crop	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Irish potatoes	428,815	326,046	307,949	450,505	511,863	405,036	65.9
Maize	113,790	113,709	114,292	113,728	114,638	114,031	18.5
Avocado	24,493	19,372	21,968	45,075	36,460	29,474	4.8
Sunflower	23,395	29,654	23,369	24,195	26,442	25,411	4.1
Tomatoes	9,621	11,409	12,898	24,972	19,483	15,677	2.5
Tea	8,103	8,103	8,714	8,947	10,550	8,883	1.4
Wheat	4,812	4,657	4,846	4,878	4,846	4,808	0.8
Beans	4,548	2,994	3,584	4,448	7,205	4,556	0.7
Groundnuts	5,697	3,840	4,093	4,202	4,536	4,474	0.7
Onions	232	887	1,049	1,112	1,201	896	0.1
Pyrethrum	730	1,045	680	887	532	775	0.1
Watermelon	191	721	853	925	1,000	738	0.1
Coffee	145	110	107	136	149	129	0.0
Total	624,571	522,548	504,402	684,008	738,906	614,887	100

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(i) Production of Irish Potatoes as Cash Crop by Council

Irish potato is the leading cash crop in the region which grows in both in lowlands and highlands areas. It accounts for about 65.9 percent of total tonnage of all major cash crops produced in Njombe region (Table 3.13). Table 3.14 shows Irish potato is grown mostly in two district councils but at different production levels. Njombe town council with total production of 1,418,644 tons and an average annual production of 283,729 tons was leading council in Irish potato production in the region. It accounted for 70.1 percent of the region's Irish potato total production of 2,025,178 tons. Wanging'ombe DC was the second (29.9 percent) producer of Irish potato in the region during the specified seasons.

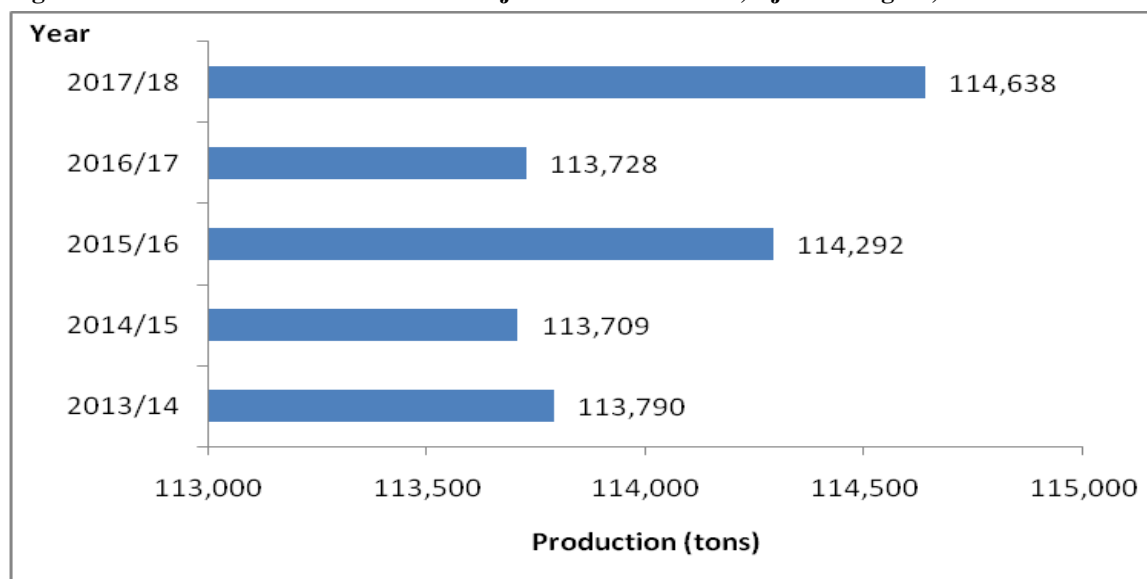
Table 3.14: Production of Irish Potatoes tons by Council, Njombe Region; 2013/14 – 2017/18

Council	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Njombe TC	324,351	270,992	166,846	303,427	353,028	283,729	70.1
Wanging'ombe	104,464	55,054	141,103	147,078	158,836	121,307	29.9
Total	428,815	326,046	307,949	450,505	511,863	405,036	100

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(ii) Maize Production as Cash Crop by Council

Maize is the major cash crop grown in the region. Maize as a cash crop is mainly grown in Njombe town councils, the region had a total production of 2,025,178 tons produced at an average of 405,036 tons annually (Figure 3.5).

Figure 3.5: Production of Maize tons in Njombe Town Council, Njombe Region; 2013/14 – 2017/18

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(iii) Production of Avocado as Cash Crop by Council

Avocado is among cash crop in the region which grows mostly in two councils. It accounts for about 4.8 percent of total tonnage of all major cash crops produced in Njombe region (Table 3.13). Table 3.15 shows avocado is grown mostly in two district councils but at different production levels. Makambako town council with total production of 138,803 tons and an average annual production of 27,761 tons was leading council in avocado production in the region. It accounted for 94.2 percent of the region's avocado total production of 147,368 tons. Wanging'ombe district council was the second (5.8 percent) producer of Irish potato in the region during the specified seasons.

Table 3.15 Production of Avocado in tons by Council, Njombe Region; 2013/14 – 2017/18

Council	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Wanging'ombe	1,357	1,464	1,732	1,929	2,082	1,713	5.8
Makambako TC	23,135	17,908	20,236	43,146	34,378	27,761	94.2
Total	24,493	19,372	21,968	45,075	36,460	29,474	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

(iv) Sunflower Production

Sunflower is grown in lowland areas of the region and is the fourth most important cash crop in terms of production. Table 3.13 shows that from year 2013/14 to 2017/18, a total of 127,055 tons of sunflower were produced at an average of 25,411 tons annually. Table 3.16 shows that, sunflower was produced by only four councils. Wanging'ombe was leading in terms of sunflower production, it accounted for an average production of 19,574 tons per year which is equivalent to 77.0 percent of the total regional production. It was followed by Njombe district council with a share of 17.9 percent. Makete district council was the least producers of sunflower, with a share of 0.8 percent of the regional production of sunflower.

Table 3.16 Production of Sunflower in tons by Council, Njombe Region; 2013/14 – 2017/18

Council	2013/14	2014/15	2015/16	2016/17	2017/18	Annual Average	Percent
Wanging'ombe	12,219	18,790	21,373	21,869	23,618	19,574	77.0
Njombe DC	9,853	9,852	963	1,014	1,045	4,546	17.9
Makambako TC	1,134	783	913	1,143	1,528	1,100	4.3
Makete	189	230	120	170	252	192	0.8
Total	23,395	29,654	23,369	24,195	26,442	25,411	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.3.2 Production per Hectare of Major Cash Crops

Table 3.17 shows crop yield in Njombe region for the major cash crops. Productivity of Irish potatoes in terms of production per hectare was almost the same in all three seasons

under consideration. In the 2013/14 crop season, Round Potatoes had the best yield of 14.5 tons per hectare. The best yield for tea was in the season of 2017/18, Irish potatoes had the same yield for three seasons of 2.1 tons per hectare. There was very little variation in the yields of sunflower over the seasons under consideration.

Table 3.17: Production per Hectare of Major Cash Crops, Njombe Region; 2013/14, 2015/16 and 2017/18

Crop	2013/14			2015/16			2017/18		
	Planted Area (ha)	Production (tons)	Yield (t/ha)	Planted Area (ha)	Production (tons)	Yield (t/ha)	Planted Area (ha)	Production (tons)	Yield (t/ha)
Irish potatoes	29,622	428,815	14.5	31,526	307,949	9.8	33,3	511,863	15.4
Groundnuts	6,652	5,697	0.9	7,757	4,093	0.5	9,048	4,536	0.5
Avocado	8,926	24,493	2.7	397	21,968	55.3	596	36,460	61.2
Sunflower	19,645	23,395	1.2	19,623	23,369	1.2	26,840	26,442	1.0
Tomatoes	7,408	9,621	1.3	1,869	12,898	6.9	5,349	19,483	3.6
Tea	4,936	8,103	1.6	4,944	8,714	1.8	4,950	10,550	2.1
Total	77,189	500,123	N/A	66,116	378,990	N/A	80,096	609,335	N/A

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.4 Crop Marketing

Table 3.18 shows an indicative estimated amount of cash crops marketed and revenue earned in Njombe region during the 2017/18 season. A total of 650,642,324 kilograms of Irish potatoes, beans, maize, tea, avocados, wheat, coffee, paddy, cashew nuts, sunflower, ground nuts, watermelon, tomatoes, pyrethrum, sweet potatoes, cassava, sweet banana and onions were marketed in the region which earned a sum of Tshs. 273,538,052,988. Most of the revenue earned from Irish potatoes which accounted for 77.8 percent of total revenue, followed by beans (16.3 percent), maize (3.0 percent) and avocado (1.1 percent). Other crops share less than one percent of the total revenue in the region.

Table 3.18 Amounts and Value of Cash Crops Purchased by Council; Njombe Region, 2017/18

Crop	Amount Purchased (Kgs)	Average Price per Kg (Tshs.)	Revenue Earned in Tshs	Percent Earnings
Irish potatoes	473,436,070	400	212,788,995,000	77.8
Beans	137,601,951	1,500	44,522,175,720	16.3
Maize	22,366,396	430	8,257,944,550	3.0
Tea	10,583,754	314	3,323,302,308	1.2
Avocado	2,777,500	1,000	1702895000	0.6
Wheat	2,434,645	650	1,587,594,250	0.6
Coffee	110,209	4,000	393,381,500	0.1
Paddy	612,000	500	306,000,000	0.1
Cashew nut	64,160	3,300	211,728,000	0.1
Sunflower	375,000	350	120,050,000	0.0
Ground nuts	50,500	2,000	104,000,000	0.0

Crop	Amount Purchased (Kgs)	Average Price per Kg (Tshs.)	Revenue Earned in Tshs	Percent Earnings
Water melon	89,000	1,000	89,000,000	0.0
Tomato	97,704	950	62,086,160	0.0
Pyrethrum	18,435	2,300	42,400,500	0.0
Sweet potato	3,000	500	15,000,000	0.0
Cassava	19,000	500	9,500,000	0.0
Sweet Banana	1,000	1,000	1,000,000	0.0
Onions	2,000	500	1,000,000	0.0
Total	650,642,324		273,538,052,988	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

Contrary to the fact that Njombe TC is the main producer of Irish potatoes in the region followed by Makete district council. Table 3.18a shows Njombe town district was the first council in Njombe region for marketing irish potatoes. The council marketed 176,513,935kilogram of irish potatoes worth Tshs. 88,256,967,500, equivalent to 70.9 percent of total revenue earned by the region through selling of that crop. Never the less, Makete DC was the second by earning 29.0 percent of the region's irish potatoes revenue obtained. Wanging'ombe district earned 0.2 percent in earning revenue for marketing of such crop in year 2017/18.

Table 3.18a: Amount of Irish Potatoes Marketed and Revenue Earned by Council; Njombe Region, 2017/18

Council	Amount Purchased (Kgs)	Average Price per Kg (Tshs.)	Revenue Earned in Tshs	Percent Earnings
Njombe TC	176,513,935	500	88,256,967,500	70.9
Wanging'ombe	218,000	1,000	218,000,000	0.2
Makete	120,190,200	300	36,057,060,000	29.0
Total	296,922,135	400	124,532,027,500	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

In 2017/18, beans was the second cash crop marketed in the region after maize (refer Table 3.18). Beans earned 16.3 percent of the region's total revenue obtained from marketing of all types of cash crops. On the other hand, Table 3.18b shows that Makete council leading on the data of the amount of cotton sold. By comparing the revenue earned by councils, Makete earned almost 98.9 percent followed by Wanging'ombe (1.1 percent) and Makambako TC with the least council which earned the minimum amount Tsh. 8,884,170 of all revenue obtained from selling beans in the region.

Table 3.18b: Amount of Beans Marketed and Revenue Earned by Council; Njombe Region, 2017/18

Council	Amount Purchased (Kgs)	Average Price per Kg (Tshs.)	Revenue Earned in Tshs	Percent Earnings
Wanging'ombe	315,000	1500	472,500,000	1.1
Makete	137,271,261	1500	44,040,791,550	98.9
Makambako TC	15,690	1500	8,884,170	0.0
Total	137,601,951	1500	44,522,175,720	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

Table 3.18 shows that maize with 3.0 percent of earning in the region was the third valuable cash crop in the region. Table 3.18c shows the amount of maize marketed in the crop season of 2017/18. Out of 22,366,396 kg of maize marketed in 2017/18 season, the region managed to earn a sum of Tshs. 8,257,944,550. Makete district council was the first council in marketing of maize by earning 63.8 percent of the region's revenue obtained from selling of that crop. The second and third councils were Ludewa and Wanging'ombe earned 22.7 percent and 10.3 percent of total earnings, while Njombe district council was the least by having 3.2 percent of the region's revenue earned through marketing of maize.

Table 3.18c: Amount of Maize Marketed and Revenue Earned by Council; Njombe Region, 2017/18

Council	Amount Purchased (Kgs)	Average Price per Kg (Tshs.)	Revenue Earned in Tshs	Percent Earnings
Wanging'ombe	2,429,600	350	851,985,000	10.3
Makete	15,052,923	350	5,268,523,050	63.8
Njombe DC	533,873	500	266,936,500	3.2
Ludewa	4,350,000	430	1,870,500,000	22.7
Total	22,366,396	430	8,257,944,550	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

Tea with 1.2 percent of earnings was the fourth valuable cash crop in the region (Table 3.18). Table 3.18d shows marketing status of tea in the crop season of 2017/18. The region marketed a total of 10,583,754 kg of tea and earned a sum of Tshs. 3,323,302,308 in 2017/18 season. Njombe district council was the first council in marketing of tea by earning 99.7 percent of the region's revenue obtained from selling of that crop. Ludewa was the second for 0.3 percent of the region's revenue earned through marketing of tea.

Table 3.18d: Amount of Tea Marketed and Revenue Earned by Council; Njombe Region, 2017/18

Council	Amount Purchased (Kgs)	Average Price per Kg (Tshs.)	Revenue Earned in Tshs	Percent Earnings
Njombe DC	10,550,610	314	3,312,891,540	99.7
Ludewa	33,144	314	10,410,768	0.3
Total	10,583,754	314	3,323,302,308	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.5 Irrigated Agriculture

Njombe region is endowed with a potential area for irrigation prospects of about 15,376.4 hectares due to its geographical location, topography and ecological conditions. The largest potential irrigated area was found in Njombe TC (43.9 per cent) followed by Ludewa council (22.1 per cent). The smallest area cultivated in Njombe DC (2.7 per cent). Major crops irrigated were Maize, beans, tomatoes, potatoes, other vegetables, egg plant, carrot, paddy, Irish Potatoes (Table 3.19).

Table 3.19: Distribution of Irrigation Prospects and Crop Grown by Council, Njombe Region; 2017/18

Council	Potential Area		Major crops
	Area (Hacters)	Percent	
Njombe TC	6,753.0	43.9	Irish Potatoes, vegetables
Wanging'ombe	1,949.0	12.7	Maize, beans, tomatoes, potatoes, other vegetables
Makete	570.0	3.7	Paddy, maize and vegetables
Njombe DC	417.8	2.7	Maize, Beans, African egg plants, Carrots, Tomatoes
Ludewa	3,400.0	22.1	Paddy
Makambako TC	2,286.6	14.9	Tomato, maize, beans and avocado
Total	15,376.4	100.0	

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.6 Agriculture Inputs/Implements

3.1.6.1 Introduction

Reducing rural poverty by delivering appropriate modern farming implements and inputs, accessibility of extension services and credits as well as markets for agriculture products are among the strategies of Agriculture Policy. The farming input which are most used in Njombe region are described below;

3.1.6.2 Types of Chemical Fertilizers

Soil infertility, plant pests and diseases are among the factors which limit agricultural production in Njombe region. Over the past five years, the region soils have depended on application of chemical fertilizers for optimum crop harvests. CAN, UREA, DAP, TSP, SA, Minjingu Mazao, NPK, MRP, KYNOPLUS, NPS and YARA were the most used chemical fertilizers in the region.

Table 3.20a shows that Njombe region supplied a total of 157,353,920.7 Kgs of different types of fertilizers to farmers, CAN being the leading chemical fertilizer which accounted for 52.8 percent of the total kilograms of chemical fertilizers, followed by UREA (23.6 percent), DAP (14.9 percent while the least used chemical fertilizers in the region was YARA with less than one percent.

Table 3.20 a: Type and Quantity of Chemical Fertilizers (Kgs) Distributed to Farmers; Njombe region; 2013/14-2017/18

Type of Fertilizers	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Percent
CAN	18,758,111.4	22,860,890.3	16,107,121.7	13,593,916.4	11,812,599.6	83,132,639.4	52.8
UREA	7,616,331.9	9,328,244.8	7,314,868.5	7,061,154.7	5,773,536.2	37,094,136.1	23.6
DAP	5,434,516.2	8,438,745.8	4,454,918.8	2,680,162.8	2,411,672.8	23,420,016.4	14.9
TSP	1,738,778.3	1,766,914.7	2,706,083.5	1,636,783.8	1,633,001.6	9,481,561.9	6.0
SA	505,466.0	534,655.0	800,567.0	310,550.0	226,679.0	2,377,917.0	1.5
Minjingu Mazao	1,768,577.0	33,087.0	18.0	28.0	-	1,801,710.0	1.1
NPK	3,901.7	3,543.0	5,517.8	4,425.6	3,906.8	21,294.9	0.0
MRP	2,727.0	1,811.0	3,223.0	5,359.0	2,609.0	15,729.0	0.0
KYNOPLUS	-	-	-	5,136.0	544.0	5,680.0	0.0
NPS	-	-	-	3,233.0	-	3,233.0	0.0
YARA	-	-	-	-	3.0	3.0	0.0
Total	35,828,409.5	42,967,891.6	31,392,318.3	25,300,749.3	21,864,552.0	157,353,920.7	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.6.3 Types of Insecticides

Insecticides are chemicals used to control insects by killing them or preventing them from engaging in behaviors deemed undesirable or destructive. Table 3.20b shows that, over the period of 2013/14-2017/18, Njombe region supplied a total 257,590.8 Litres of different types of insecticides. Actellic was the most common insecticide supplied to farmers, it accounted for 45.8 percent of the total kilograms supplied in the region. The least insecticide was Herbicides (Liquid Lts) with the share of 9.5 percent.

Table 3.20b: Type and Quantity of Insecticides (in Litres) Distributed to Farmers; Njombe Region; 2013/14-2017/18

Type of Insecticides	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Percent
Actellic	22,785.0	22,988.3	17,797.1	24,501.0	29,851.0	117,922.3	45.8
Insecticide (Liquid Lts)	8,369.0	9,637.0	14,033.0	14,057.0	14,084.0	60,180.0	23.4
Pesticides (Liquid Kg)	4,372.0	5,200.0	6,501.0	6,521.0	6,540.0	29,134.0	11.3
BOOSTER	4,621.0	5,208.0	5,313.0	5,329.0	5,345.0	25,816.0	10.0
Herbicides (Liquid Lts)	4,364.0	5,308.5	4,924.0	4,959.0	4,983.0	24,538.5	9.5
Total	44,511.0	48,341.8	48,568.1	55,367.0	60,803.0	257,590.8	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.6.4 Type of Fungicides

Managing diseases is an essential component of production for most crops. Fungicides, herbicides and insecticides are pesticides used in plant protection. A fungicide is a specific type of pesticide that controls fungal disease by specifically inhibiting or killing the fungus causing the disease.

Table 3.20c present different types of fungicides which are used to control plant diseases in Njombe region. The most common fungicides used in Njombe region was Blue copper, it accounted for 82.5 percent of all fungicides in the region, it was followed by Fungicides (Powder Kg) (10.7 percent), the least fungicides was Fungicides (Liquid Lts) which accounted for only 6.8 percent of the regional total fungicides supplied to farmers.

Table 3.20 c: Type and Quantity of Fungicides (in Litres) Distributed to Farmers; Njombe region; 2013/14-2017/18

Type of Insecticides	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Percent
Blue copper	37,141	32,058	29,788	56,158	48,261	203,406	82.5
Fungicides (Liquid Lts)	3,489	3,110	3,361	3,439	3,466	16,865	6.8
Fungicides (Powder Kg)	4,801	5,349	5,307	5,409	5,440	26,306	10.7
Total	45,431	40,517	38,456	65,006	57,167	246,577	100.0

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.6.5 Type of Improved Seeds

Seeds is the most vital and crucial input for crop production. Crop improvement and the delivery of the high quality seeds and planting materials of selected to growers is necessary for ensuring improved crop production and meeting growing environmental challenges. Food security therefore is dependent on the seed security of the farming community. Table 3.8 shows that, the use of improved seeds has resulted into high production of maize in the region with annual production of 2,095,075 tons.

A total of 16,211,461kilograms of improved seeds was distributed to farmers from 2013/14- 2017/18, of the distributed seeds, round potatoes accounted for 7,464,363 Kgs which is equivalent to 46.0 percent of the total seeds distributed in the region. It was followed by maize (43.8 percent). Other improved seeds which were distributed in the region but in small amount include cassava, beans, vegetables, sunflower, paddy and wheat.

Table 3. 20d: Type and Quantity of Improved seeds (Kgs) Distributed to Farmers; Njombe Region 2011-2015

Type of Improved seed	Quantity of Improved seeds (Kgs)						Total	Percent
	2013/14	2014/15	2015/16	2016/17	2017/18			
Round potatoes	2,112,307	222,955	1,793,637	1,664,355	1,671,110	7,464,363	46.0	
Maize	935,851	1,119,944	943,941	2,007,975	2,094,994	7,102,704	43.8	
Cassava	187,000	187,000	117,000	135,000	158,000	784,000	4.8	
Beans	17,692	37,219	39,211	258,215	252,235	604,571	3.7	
Vegetables	24,421	23,987	23,200	24,640	24,756	121,004	0.7	
Sunflower	12,052	20,078	83	21,099	21,113	74,424	0.5	
Paddy	8,172	8,181	8,190	17,200	18,211	59,954	0.4	
Wheat	71	88	91	94	96	439	0.0	
Total	3,297,564	1,619,451	2,925,354	4,128,578	4,240,515	16,211,461	100.0	

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.6.6 Agriculture Implements

The use of agricultural implements is necessary for crop production. Table 3.21 shows the demand and supplied agriculture implements in Njombe region in the year 2017/18. A total of 38,831 implements were demanded by the farmers in 2017/18 but 96,790 were supplied. The most common demanded farm implements in the council were Ox plough, Ox chain, Oxcart, Ox cultivator, power tillers and tractors. The table shows that, Ox ridger and power tillers were demanded but the supply was very small. Low supply of implements might have been caused by high prices together with the low purchasing power of small scale farmers.

Table 3. 21: Availability of Agriculture Implements, Njombe region; 2017/18

Type of Implements	Demand	Supplied	Deficit (-) / Excess
Maize shellers	50	3	-47
Ox chain	12,033	24,583	12,550
Ox cultivator	371	592	221
Ox harrow	766	47	-719
Ox plough	13,095	23,606	10,511
Ox ridger	420	22	-398
Ox shares	10,358	22,205	11,847
Oxcart	1,095	12,908	11,813
Oxridger	140	12,388	12,248
Power tillers	269	152	-117
Tractors	234	284	50
Total	38,831	96,790	57,959

Source: Njombe Region, Compiled Data from Councils (Agriculture Departments), 2019

3.1.7 Policy Implication in Agriculture

Limited access to agricultural inputs especially by peasant farmers, low prices of agricultural produce against production costs, poor agricultural practices as well as adverse weather condition are other factors which are responsible for the poor performance of the agricultural sector in the region. Improving extension services, reliable supply of agricultural inputs through improvement of procedures of National Agricultural Input Voucher Scheme (NAIVS) are some of the initiatives that can be taken to improve the efficiency of the agricultural sector.

3.1.8 Investment Opportunities in Agriculture sector

The climate and topography of Njombe region are suitable for growing a variety of crops. Investment should therefore focus on large scale farming of crops like maize, Irish and sweet potatoes, wheat, tomatoes, avocados, pineapples, water melon, tea and coffee.

Supply of farm inputs at affordable prices such as fertilizers, insecticides, improved seeds and farm implements (i.e. tractors and power tillers) are other areas for investment.

3.2 Livestock

3.2.1 Introduction

Livestock is important for subsistence by providing meat and milk to enrich diet. However, livestock keeping is the second economic activity in Njombe region.

3.2.2 Livestock Population

Livestock is the second important economic activity for the residents of Njombe region. To large extent livestock keeping is predominantly traditional and involves mostly indigenous cattle, other livestock kept are goats, sheep, donkeys, pigs and chicken. Table 3.22 shows the estimated population of livestock kept in Njombe region. Chicken was dominant with population of 1,250,545, (863,209 Indigenous chicken and 387,336 Chicken Broilers) followed by cattle (199,116). Donkey (6,790) was the least kept livestock in the region.

Furthermore the data shows that, cattle were much concentrated in Wanging'ombe district council which accounted for 67,204 cattle in the region. It was followed by Makete (44,447). The smallest number of cattle was found in Njombe district council (20,728). A large number of Goat, sheep and Donkey were kept in Makete and Wanging'ombe district councils while Njombe TC, Makambako TC and Njombe district councils were famous for keeping chickens (Table 3.22).

Table 3. 22 Estimated Livestock Population by Type of livestock and Council, Njombe Region; 2018

Council	Cattle	Goats	Sheep	Donkeys	Pigs	Indigenous chicken	Chicken (Bloiers)
Njombe TC	22,950	13,427	3,959	2,934	19,713	51,862	271,434
Wanging'ombe	67,204	21,806	8,019	604	7,676	261,749	21,054
Makete	44,447	35,080	8,464	2,289	8,086	79,398	-
Njombe DC	20,728	4,164	1,310	160	8,520	215,031	54,719
Ludewa	20,864	15,855	703	589	19,420	143,811	6,390
Makambako TC	22,923	2,038	1,332	214	4,242	111,358	33,739
Total	199,116	92,370	23,787	6,790	67,657	863,209	387,336

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.2.1 Cattle Population.

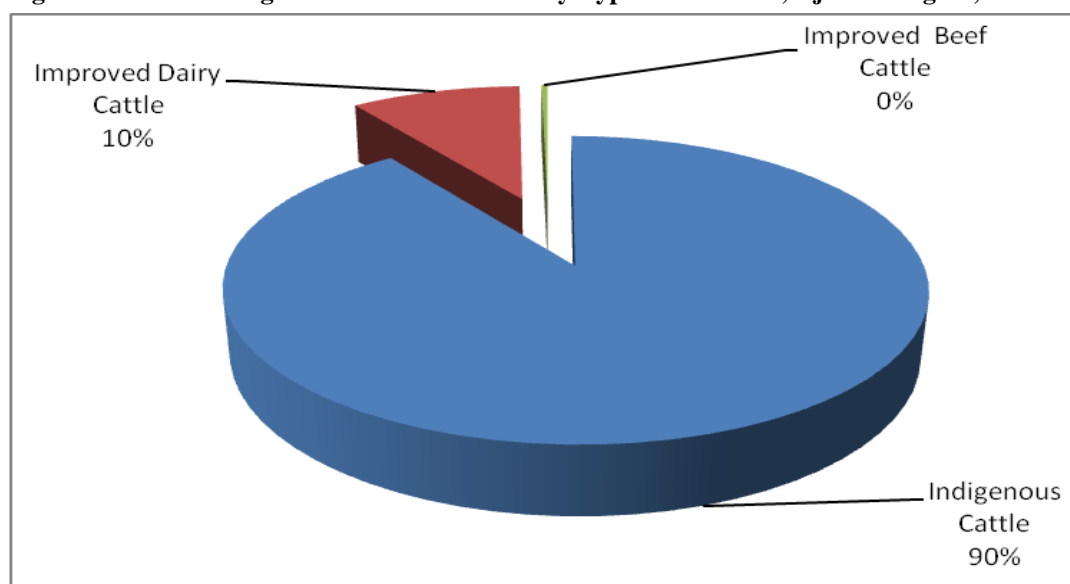
Njombe region had a total of 1,032,289 cattle dominated by indigenous type. Table 3.23 shows that, 90.0 percent are indigenous and 9.6 percent of the cattle found in the region are of improved dairy cattle while 0.4 percent are improved beef cattle. Wanging'ombe district had the largest number of cattle, it accounted for 35.8 percent while the least number of cattle was found in Njombe district council with only 20,748 or 10.8 percent cattle as shown in figure 3.6.

Table 3. 23: Population Distribution of Cattle by Type and by Council, Njombe Region; 2018

District/ Council	Population of Cattle by Type			Total	Percent
	Indigenous Cattle	Improved Dairy Cattle	Improved Beef Cattle		
Njombe TC	16,390	6,560	-	22,950	11.9
Wanging'ombe	67,204	1,537	-	68,741	35.8
Makete	26,362	7,092	666	34,120	17.8
Njombe DC	19,250	1,498	-	20,748	10.8
Ludewa	20,864	322	-	21,186	11.0
Makambako TC	22,923	1,526	-	24,449	12.7
Total	172,993	18,535	666	192,194	100.0
Percent	90.0	9.6	0.4	100.0	

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

Figure 3. 6: Percentage Distribution of Cattle by Type and Council, Njombe Region; 2018



Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.2.2 Goat Production

In 2018, Goat population in Njombe region was of 97,524 most of which were indigenous breed. Makete district council lead in terms of goat population with a total of 35,080

which is equivalent to 36.0 percent of all goat in the region. It was followed by Wanging'ombe 21,806 or 22.4 percent. The least number of goat was found in Njombe district council which kept 4.7 percent of all goat in the region (Table 3.24).

Table 3.24: Population Distribution of Goats by Type and Council, Njombe Region; 2018

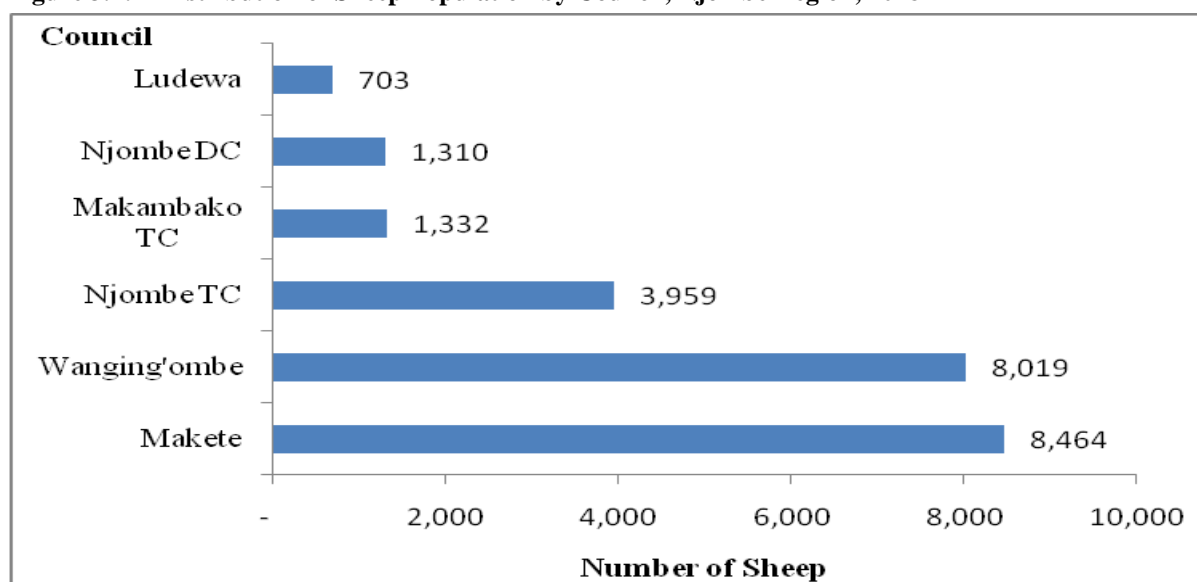
District/ Council	Population of goats by Type			
	Indigenous Goats	Improved Dairy Goats	Total	Percent
Njombe TC	13,419	48	13,467	13.8
Wanging'ombe	21,806	0	21,806	22.4
Makete	32,223	2,857	35,080	36.0
Njombe DC	4,566	13	4,579	4.7
Ludewa	15,855	0	15,855	16.3
Makambako TC	6,725	12	6,737	6.9
Total	94,594	2,930	97,524	100.0

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.2.3 Sheep Population

Figure 3.7 shows that the sheep population in Njombe region in 2018 was 23,787 with most of them being in Makete and Wanging'ombe district councils (8,464 and 8,019 respectively). The smallest number of sheep was in Ludewa district council (703).

Figure 3.7: Distribution of Sheep Population by Council, Njombe Region, 2018



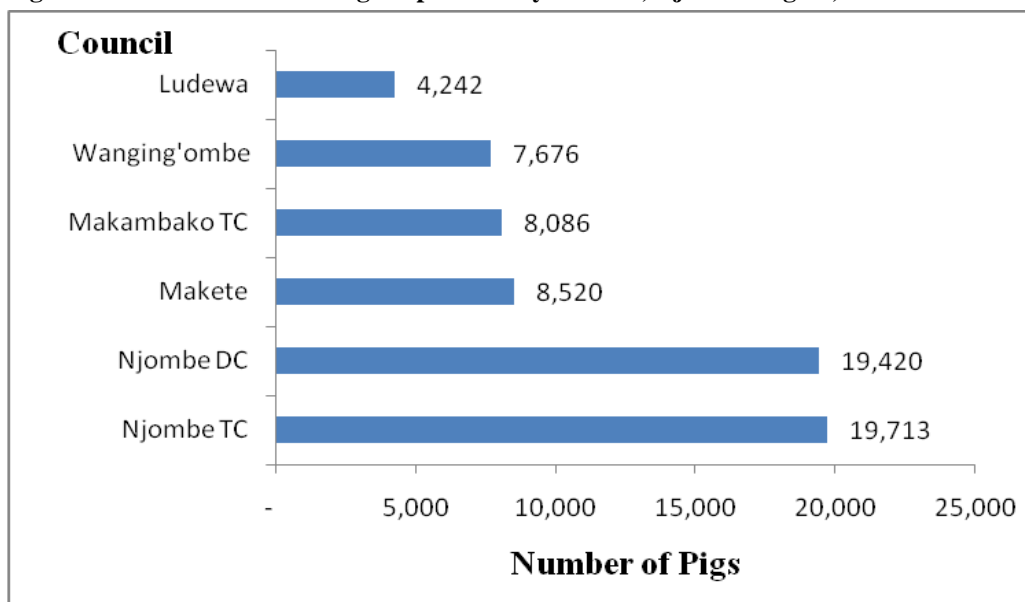
Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.2.4 Pig Population

Pig is another type of livestock raised in Njombe region in 2018. Figure 3.8 shows that, population of pig was 67,657 most being found in Njombe district council (19,713).

Njombe DC was the second in terms of pig population, it accounted for 19,420 of all pig in the region and Ludewa District Council had the smallest number of pig (4,242).

Figure 3.8: Distribution of Pigs Population by Council, Njombe Region, 2018



Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.2.5 Chicken Population

Chicken farming plays a significant role in rural and urban people’s life and contributes significantly to poverty alleviation and improvement of food security with high nutrition. In Njombe region, chicken farming is an emerging industry which can pave way to better income and sustainable development. Moreover, growth of this industry involves a lot of women and thus provides a strong base for women empowerment in this area. Likewise, simple changes in the management of villages, chicken can significantly improve production and the living conditions of many rural families in terms of enhanced nutrition and income generation through the sale of surplus chicken or eggs.

The chicken population in Njombe region was 1,250,545, with Njombe town council having the largest number (323,296 or 25.9percent) followed by Wanging’ombe district council (282,803 or 22.6 percent). Njombe DC and Ludewa district councils recorded a small number of chickens with a share of 21.6percent a12.0 percent respectively. Makete District Council had the smallest number of chicken (6.3 percent). The chicken population was predominantly of the indigenous type (Table 3.25).

Table 3. 25: Estimated Chicken Population by Council, Njombe region, 2018

Council	Indigenous chicken	Chicken (Bloiers)	Total	Percent
Njombe TC	51,862	271,434	323,296	25.9
Wanging'ombe	261,749	21,054	282,803	22.6
Njombe DC	215,031	54,719	269,750	21.6
Ludewa	143,811	6,390	150,201	12.0
Makambako TC	111,358	33,739	145,097	11.6
Makete	79,398	-	79,398	6.3
Total	863,209	387,336	1,250,545	100

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.3 Grazing Land

Grazing land is the land that is available for rearing livestock. It excludes all tsetse fly infected areas, wildlife and forest reserves as well as tree plantations but includes game controlled areas and overlaps arable land. Tanga region, with its respective district councils, has established areas that can be used for keeping animals. Specifying grazing land through land use planning is important as it reduces conflicts among livestock keepers and farmers.

Table 3.19 shows that Njombe region had a total of 198,618 hectares of land fit for grazing, of the total area fit for grazing, 83.6 percent was used for grazing in 2018 and area affected by tsetse fly was 4,729 which is equivalent to 2.4 percent of the area fit for grazing. All hectares planned for grazing in Wanging'ombe district council and Makambako TC was utilized. The smallest land area used for grazing was in Makambako town council with only 30.4 percent of the council land area fit for grazing. However, due to increase in the number of livestock in the region, more grazing land should be established. Awareness campaign to livestock keepers on the use of modern methods of grazing is important to rescue the existing natural forests encroachment.

Table 3. 26: Estimated Area under Grazing by Council, Njombe Region; 2018

District/ Council	Total Land Area (Ha)	Land fit for Grazing (Ha)	Land used for Grazing (Ha)	Percentage of Land used for grazing	Tsetse Fly infected Area (Ha)
Njombe TC	3,212,000	31,268	9,494	30.4	0
Wanging'ombe	3,344,000	117,372	117,372	100.0	0
Makete	4,850,000	27,374	21,781	79.6	3984
Njombe DC	2,706,000	12,133	7,215	59.5	0
Ludewa	6,325,000	6,781	6,457	95.2	0
Makambako TC	862,000	3,690	3,772	102.2	745
Total	21,299,000	198,618	166,091	83.6	4,729

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.4 Livestock Services

Delivery of livestock health services depends on facilities such as veterinary health centres, dips, and water sources. Njombe region as a whole had a total of 98 dips, 15 veterinary centres, 135 crushes, 9 hides/skin sheds, 7 abattoirs, 157 slaughter slabs, 10 livestock market/ auction and 40 charcoal dams.

Table 3.27 shows that Makambako town council is in a better position to provided veterinary services to livestock keepers than any other council because it has a large number of veterinary health centres (8). Dips are also very important for animal health, the region had a total of 98 dips in 2018 where by 87 dips are working and 11 are not working. Due to an increase number of livestock in the region, there is a need of taking an extra effort to increase the number of veterinary centres as well as other livestock infrastructure to reduce livestock diseases.

Table 3. 17: Distribution of Livestock Infrastructure by Council, Njombe Region, 2018

District/ Council	Dips			Veterinary Centres			Crushes	Hides/skin sheds	Abattoirs	Slaughter slab	Livestock market/Auction	Charco dams
	W	NW	Total	W	NW	Total						
Njombe TC	13	3	16	0	0	0	49	2	3	109	0	0
Wanging'ombe	26	1	27	1	1	2	0	0	0	2	1	1
Makete	18	2	20	4	0	4	18	1	0	4	2	0
Njombe DC	8	1	9	0	0	0	51	2	0	2	1	0
Ludewa	17	4	21	0	1	1	17	2	2	22	4	0
Makambako TC	5	0	5	8	0	8	0	2	2	18	2	39
Total	87	11	98	13	2	15	135	9	7	157	10	40

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.4.1 Causes of Livestock Morbidity and Mortality

Diseases, among other reasons, were the main causes of livestock morbidity and mortality in Mwanza region. Data provided by local authorities of Mwanza region shows different types of diseases for big, medium and small animals. The most common diseases in Mwanza region are east coast fever, anaplasmosis, babesiosis, heart water, trypanosomiasis, helminthiasis, and worms, CCPP, Mange, Pneumonia and Foot Mouth Disease. Others are new castle, coccidiosis, fowl coryza, fowl typhoid, fowl pox and gumboro.

(i) Causes of Cattle Morbidity and Mortality

Table 3.28 shows a list of common diseases which caused cattle morbidity in Njombe region between 2016 and 2018. In 2016, Table 3.28 shows that anaplasmosis was the most common diseases caused highest cattle morbidity rate accounted 34.9 percent of reported

7,374 cases in the region. The second and third causes for cattle morbidities were helminthosis (34.4 percent) and black quarter (7.9 percent) diseases and East Coast Fever with 7.6 percent of total cases reported was the fourth disease and the fifth disease was Foot and Mouth Disease (4.7 percent).

Similar observation was also experienced in 2018, of which anaplasmosis and helminthosis remained as the first and second common cattle diseases in the region. One general observation from these data is that there was an increase of cattle morbidity cases caused by helminthosis disease in 2018 than 2016. Regional authority, therefore, should examine these diseases in order to prevent them in the future.

Table 3.28: Twelve Common Cattle Diseases Causes Morbidity, Njombe Region; 2016 and 2018

Disease	2016		Disease	2018	
	No. of Cases	Percent		No. of Cases	Percent
Anaplasmosis	7,374	34.9	Anaplasmosis	6,600	36.6
Babesiosis	862	4.1	Babesiosis	551	3.1
Black Quarter	1,674	7.9	Black Quarter	1,555	8.6
CBPP	133	0.6	CBPP	37	0.2
East Coast Fever	1,611	7.6	East Coast Fever	1,366	7.6
Foot and Mouth Disease	985	4.7	Foot And Mouth Disease	387	2.1
Foot rot	563	2.7	Foot rot	359	2.0
Helminthosis	7,284	34.4	Helminthosis	6,573	36.5
Lumpy Skin Disease	62	0.3	Lumpy Skin Disease	32	0.2
Mange	63	0.3	Mange	62	0.3
Mastitis	418	2.0	Mastitis	398	2.2
Worms	123	0.6	Worms	101	0.6
Total	21,152	100.0	Total	18,021	100.0

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

Table 3.28a shows death toll of cattle caused by different type of diseases in 2016 and 2018. In 2016, out of 934 cattle deaths, 29.9 percent were caused by east coast fever (35.5 percent), Black Quarter (23.1 percent), anaplasmosis (22.8 percent), babesiosis (13.0 percent) and Helminthosis (6.5 percent). Similar observations were experienced in 2018 with east coast fever being the number one killer disease (35.5 percent) followed by anaplasmoasis (24.0 percent). Foot and Mouth Disease which was the least disease in 2018 became also the last killer with less one percent of mortality occurred in 2016. One general observation from these data is that foot and mouth disease which was the most dangerous disease in last three decades has been controlled by regional authority (Table 3.28a).

Table 3.28a: Twelve Common Cattle Diseases Causes Mortality, Njombe Region; 2016 and 2018

Disease	2016		Disease	2018	
	No. of Cases	Percent		No. of Cases	Percent
Anaplasmosis	213	22.8	Anaplasmosis	90	24.0
Babesiosis	121	13.0	Babesiosis	33	8.8
Black Quarter	216	23.1	Black Quarter	73	19.5
CBPP	15	1.6	CBPP	4	1.1
East Coast Fever	279	29.9	East Coast Fever	133	35.5
Foot And Mouth Disease	0	0.0	Foot and Mouth Disease	1	0.3
Foot rot	0	0.0	Foot rot	0	0.0
Helminthosis	61	6.5	Helminthosis	23	6.1
Lumpy Skin Disease	12	1.3	Lumpy Skin Disease	3	0.8
Mange	1	0.1	Mange	2	0.5
Mastitis	9	1.0	Mastitis	13	3.5
Worms	7	0.7	Worms	0	0.0
Total	934	100.0	Total	375	100.0

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

(ii) Causes of Goat Morbidity and Mortality

Table 3.29 shows nine common diseases that contributing to poor health of goats in Njombe region between 2016 and 2018. The diseases were Helminthiasis, Mange, Babesiosis, Salmonellosis, Orf, worms, Foot rot, CCPP, Pneumonia, Anaplasmosis, and Mastitis. Table 3.28 also shows that, among all eleven diseases, Helmenthiasis caused much illness to goats than any other diseases in both years, accounted for 42.4 percent of 12,564 morbidity cases in 2016 and 42.6 percent of 9,577 morbidity cases in 2018. It was followed by Mange 17.9 percent of reported morbidity cases in 2016 and 14.7percent in 2018. However, Anaplasmos has been controlled as result became the least disease that causes morbidity in the region (Table 3.29). One general observation from these data is that councils have managed to control morbidity in the referred years as evidenced by the decline of number of occurrences from 12,564 cases in 2016 to 9,577 cases in 2018.

Table 3.29: Eleven Common Goat Diseases Causes Morbidity, Njombe Region; 2016 and 2018

Disease	2016		Disease	2018	
	No. of Cases	Percent		No. of Cases	Percent
Helmenthiasis	5324	42.4	Helmenthiasis	4083	42.6
Mange	2253	17.9	Mange	1410	14.7
Babesiosis	1449	11.5	Babesiosis	485	5.1
Salmonellosis,	1446	11.5	Salmonellosis,	1,394	14.6
Orf	1292	10.3	Orf	1,243	13.0
Worms	471	3.7	Worms	590	6.2
Foot rot	177	1.4	Foot rot	125	1.3
CCPP	58	0.5	CCPP	97	1.0
Pneumonia	48	0.4	Pneumonia	76	0.8
Anaplasmos	23	0.2	Anaplasmos	9	0.1
Mastitis	23	0.2	Mastitis	65	0.7
Total	12,564	100.0	Total	9,577	100.0

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

Out of six common diseases that causes deaths of goats, 91.2 percent of goat deaths were caused by the first three diseases. In 2016, Table 3.29a shows that 34.1 percent of 724 goat deaths were caused by Helmenthiasis followed by Mange (30.4 percent), Babesiosis (26.7 percent), Orf (3.9 percent), Salmonellosis (3.5 percent) and CCPP (1.5 percent). Out of 137 goat deaths recorded in 2015, about 80 percent of goat deaths were also caused by the first four illnesses; Helmenthiasis had the highest death rate (21.9 percent) followed by Orf (18.2 percent), Mange (16.1 percent), Babesiosis (15.3 percent), Salmonellosis (14.6 percent) and CCPP (13.9 percent). One general observation from these data is that if regional authority can manage to prevent the first four diseases will able to reduce goat deaths by 71.5 percent.

Table 3.29a: Six Common Goat Diseases Causes Mortality, Njombe Region; 2016 and 2018

Disease	2016		Disease	2018	
	No. of Cases	Percent		No. of Cases	Percent
Helmenthiasis	247	34.1	Helmenthiasis	30	21.9
Mange	220	30.4	Mange	22	16.1
Babesiosis	193	26.7	Babesiosis	21	15.3
Orf	28	3.9	Orf	25	18.2
Salmonellosis,	25	3.5	Salmonellosis,	20	14.6
CCPP	11	1.5	CCPP	19	13.9
Total	724	100.0	Total	137	100.0

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

(iii) Causes of Sheep Morbidity and Mortality

With reference to Table 3.30, similar diseases were also observed as contributing factors to poor health of sheep in Njombe region between 2016 and 2018. The diseases were Helminthiasis, Babesiosis, Mange, Foot rot, Babesiosis, worms, Salmonellosis, Nosal discharge, Pneumonia and Anaplasmos. The leading cause of morbidity to sheep in 2016 was Helminthiasis which caused much illness (43.0 percent) than any other diseases, followed by Mange (35.9 percent) and Mange (7.2 percent). Again, Helminthiasis, Mange and Babesiosis were the main causes of sheep morbidity in 2018 accounted for 59.7 percent, 22.9 percent and 5.0 percent respectively (Table 3.30).

Table 3.30: Nine Common Sheep Diseases Causes Morbidity, Njombe Region; 2016 and 2018

Disease	2016		Disease	2018	
	No. of Cases	Percent		No. of Cases	Percent
Helminthiasis	1149	43.0	Helminthiasis	1123	59.7
Mange	957	35.9	Mange	430	22.9
Foot rot	193	7.2	Foot rot	36	1.9
Babesiosis	154	5.8	Babesiosis	94	5.0
Worms	104	3.9	Worms	78	4.1
Salmonellosis,	30	1.1	Salmonellosis,	40	2.1
Nosal discharge	29	1.1	Nosal discharge	33	1.8
Pneumonia	27	1.0	Pneumonia	38	2.0
Anaplasmos	26	1.0	Anaplasmos	8	0.4
Total	2669	100.0	Total	1880	100.0

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

Similar observation was also experienced on causes of sheep deaths in the region, though there was a different in magnitude and ranking of diseases. Helminthiasis disease which was ranked first for goat deaths was number one killer of sheep in both years in 2018. Mange which was second mortality rate of sheep for two year in 2016 and 2018. The third diseases for sheep deaths was babesiosis. Again, regional authority should find means to prevent these diseases in order to rescue sheep from deaths by 100 percent.

Table 3.30a: Seven Common Sheep Diseases Causes Mortality, Njombe Region; 2016 and 2018

Disease	2016		Disease	2018	
	No. of Cases	Percent		No. of Cases	Percent
Helminthiasis	100	37.7	Helminthiasis	8	40.0
Mange	89	33.6	Mange	6	30.0
Babesiosis	76	28.7	Babesiosis	6	30.0
Anaplasmos	0	0.0	Anaplasmos	0	0.0
Foot rot	0	0.0	Foot rot	0	0.0
Nosal discharge	0	0.0	Nosal discharge	0	0.0
Pneumonia	0	0.0	Pneumonia	0	0.0
Salmonellosis,	0	0.0	Salmonellosis,	0	0.0
Worms	0	0.0	Worms	0	0.0
Total	265	100.0	Total	20	100.0

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

(iv) Causes of Poultry Morbidity and Mortality

Apart from big and medium sizes livestock keeping, poultry keeping is another main economic activity done by the residents of Njombe region. Unfortunately, among many factors which affect poultry industry in the region, diseases associated to poultry happened to be the leading factors. The most common poultry diseases include: Fowl Typhoid, new castle, coccidiosis, Helminthiasis, Infectious Coryza, Avitaminosis and Salmonella. Table 3.31 shows that out of 53,110 reported cases of poultry illnesses, Fowl Typhoid was the leading disease for both years accounted for 31.3 percent in 2016 and 31.7 percent in 2018. One general observation from these data is that ranking of diseases has remained the same for both years.

Table 3.31: Six Common Poultry Diseases Causes Morbidity, Njombe Region; 2016 and 2018

Disease	2016		Disease	2018	
	No. of Cases	Percent		No. of Cases	Percent
Fowl Typhoid	16,598	31.3	Fowl Typhoid	16,810	31.7
Newcastle disease	14,514	27.3	Newcastle disease	15,162	28.6
Coccidiosis	13,717	25.8	Coccidiosis	12,517	23.6
Helminthiasis	6,944	13.1	Helminthiasis	5,510	10.4
Infectious Coryza	1,208	2.3	Infectious Coryza	1,989	3.8
Avitaminosis	129	0.2	Avitaminosis	129	0.2
Salmonella	0	0.0	Salmonella	863	1.6
Total	53,110	100.0	Total	52,980	100.0

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

New castle, besides being the second causes of morbidity for poultry in the region, it also the first disease for poultry deaths in both year, lost 47.4 percent of poultry lives in 2016

and 48.0 percent in 2018 (Table 3.31a). Second and third diseases were Fowl Typhoid and Coccidiosis with death rate of 23.4 percent and 13.2 percent respectively in 2016. One general observation from these data is that Infectious Coryza which was one poultry killer disease in the last three decades has been prevented significantly in recent years.

Table 3.31a: Six Common Poultry Diseases Causes Mortality, Njombe Region; 2016 and 2018

Disease	2016		Disease	2018	
	No. of Cases	Percent		No. of Cases	Percent
Newcastle disease	6,626	47.4	Newcastle disease	6,451	48.0
Fowl Typhoid	3,266	23.4	Fowl Typhoid	2,693	20.0
Coccidiosis	1,850	13.2	Coccidiosis	2,152	16.0
Helmithiasis	1,259	9.0	Helmithiasis	1,154	8.6
Infectious Coryza	903	6.5	Infectious Coryza	941	7.0
Salmonella	62	0.4	Salmonella	59	0.4
Avitaminosis	0	0.0	Avitaminosis	0	0.0
Total	13,966	100.0	Total	13,450	100.0

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.5 Marketing Livestock and Their Products

Lack of proper procedure of marketing livestock have created a problem of getting actual number of livestock marketed and the amount of revenue collected from each type of livestock in the region and country at large. However, Table 3.32 shows indicative number and value of livestock marketed in Njombe region between 2016, 2017 and 2018. Indigenous cattle, goat and poultry were the main contributors to the region's total revenue obtained from marketing of livestock in all three years (Table 3.32). One general observation from these data is that contribution of improved cattle was insignificant because of their population in the region.

Table 3.32: Marketing of Major Livestock (Number and Revenue), Njombe Region; 2016, 2017 and 2018

Livestock	2016		2017		2018	
	Number	Amount (000)	Number	Amount (000)	Number	Amount (000)
Indigenous Cattle	10,946	5,564,217	12,625	7,101,563	13,227	8,377,100
Dairy Cattle	74	45,017	87	69,238	152	128,060
Beef Cattle	6	1,400	11	3,300	23	10,350
Goats	5,397	251,860	3,840	195,200	3,915	176,175
Poultry	173,881	1,883,711	119,975	1,379,713	2,439,560	86,604,384
Pig	12,102	1,664,025	12,156	1,590,410	18,193	3,213,418
Sheep	639	25,028	630	26,250	709	32,260

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

(i) Cattle

Table 3.32a shows that in 2018, Indigenous Cattle which was a predominant livestock in the region was sold between Tshs. 375,000 in Ludewa DC and Tshs. 1,000,000 in Njombe town council. The data also shows that Njombe town council had marketed the most herds of indigenous cattle (43.9 percent) and earned 59.2 percent of total earnings obtained in the region, while Makete was the least with 0.7 percent of marketed indigenous cattle and earned 0.5 percent of total revenue from marketed cattle (Table 3.32a).

Table 3.32a: Number of Indigenous Cattle Marketed and Revenue Earned by Council; Njombe Region, 2018

Council	Number	Percent	Total Earnings (Tshs.)	Percent	Average Price
Njombe TC	5,803	43.9	5,803,000,000	59.2	1,000,000
Wanging'ombe	4,874	36.8	3,411,800,000	28.6	700,000
Makete	99	0.7	44,550,000	0.5	450,000
Njombe DC	174	1.3	113,100,000	1.2	650,000
Ludewa	1,871	14.1	701,625,000	7.2	375,000
Makambako TC	406	3.1	345,100,000	3.5	850,000
Total	13,227	100	10,419,175,000	100	670,833

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

(ii) Goat

Table 3.32b shows that selling of goats in Njombe region increased significantly in 2018 than was before. Among other reasons, meat goat have been used mostly to the hotels and bars for roasting and was sold at the average price of between Tshs. 50,000 and Tshs. 65,000 in 2018. Njombe town council was the leading other councils marketed 32.9 percent while Njombe DC had the least marketed goats compared to other council in Njombe region.

Table 3.32b: Number of Goats Marketed and Revenue Earned by Council; Njombe Region, 2018

Council	Number	Percent	Total Earnings (Tshs.)	Percent	Average Price
Njombe TC	1,158	29.6	75,270,000	32.9	65,000
Wanging'ombe	1,035	26.4	56,925,000	24.9	55,000
Makete	129	3.3	6,450,000	2.8	50,000
Njombe DC	2	0.1	130,000	0.1	65,000
Ludewa	1,343	34.3	73,865,000	32.3	55,000
Makambako TC	248	6.3	16,120,000	7.0	65,000
Total	3,915	100	228,760,000	100.0	59,167

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

(iii) Sheep

Number of sheep and estimated earnings received by residents of Njombe region are shown in Table 3.32c. In 2018, the region sold a total of 731 sheep at an average price of TZS. 54,600. At council level, Wanging'ombe with 52.8 percent of all sheep sold in the region followed by Makambako TC with 38.4 as highest percent in relative to other district council on sheep sold in region while Ludewa had lowest number of sheep sold in region with 0.7 percent

Table 3.32c: Number of Sheep Marketed and Revenue Earned by Council; Njombe Region, 2018

Council	Number	Percent	Total Earnings (Tshs.)	Percent	Average Price
Wanging'ombe	386	52.8	15,440,000	36.9	40,000
Makete	37	5.1	1,850,000	4.4	50,000
Njombe DC	22	3.0	990,000	2.4	45,000
Ludewa	5	0.7	275,000	0.7	55,000
Makambako TC	281	38.4	23,323,000	55.7	83,000
Total	731	100.0	41,878,000	100.0	54,600

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

(iv) Pigs

Pig is not a common livestock in Njombe region and mostly found Njombe TC, Ludewa, Wanging'ombe, Makambako TC and Njombe DC. In 2018, Table 3.32d shows that the region managed to sell 22,169 of which Njombe TC council where leading with 39.7 percent of all pigs sold in the region while Makete district council had the lowest number of pigs (4.4 percent) sold in the region.

Table 3.32d: Number of Pigs Marketed and Revenue Earned by Council; Njombe Region, 2018

Council	Number	Percent	Total Earnings (Tshs.)	Percent	Average Price
Njombe TC	8,803	39.7	1,232,420,000	33.8	140,000
Wanging'ombe	2,951	13.3	442,650,000	12.1	150,000
Makete	978	4.4	146,700,000	4.0	150,000
Njombe DC	3,976	17.9	675,920,000	18.5	170,000
Ludewa	4,227	19.1	845,400,000	23.2	200,000
Makambako TC	1,234	5.6	308,500,000	8.4	250,000
Total	22,169	100	3,651,590,000	100.0	176,700

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

(v) Poultry

Table 3.32e shows estimated poultry and amount of revenue earned by Njombe residents in 2018. The region sold poultry amounted to 1,636,879 and contributed more than TZS.

24.284 billion, at an average price of TZS. 13,200 per poultry. Njombe TC district council was leading with 1,522,560 marketed poultry amounted to 94.0 percent of total revenue earned in 2018 followed by Wanging'ombe DC (2.4 percent) and Ludewa DC with 1.6 percent earnings. Absence or lack of official poultry markets causes unreliable and unrealistic data and information from other councils, including, Njombe DC. As a result, no data were provided by this council, although marketing of poultry is taken place in various areas of the council.

Table 3.32e: Number of Poultry Marketed and Revenue Earned by Council; Mwanza Region, 2018

Council	Number	Percent	Total Earnings (Tshs.)	Percent	Average Price
Njombe TC	1,522,560	93.0	22,838,400,000	94.0	15,000
Wanging'ombe	43,123	2.6	582,160,500	2.4	13,500
Makete	1,376	0.1	19,264,000	0.1	14,000
Njombe DC	22,619	1.4	271,428,000	1.1	12,000
Ludewa	33,180	2.0	398,160,000	1.6	12,000
Makambako TC	14,021	0.9	175,262,500	0.7	12,500
Total	1,636,879	100.0	24,284,675,000	100.0	13,200

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

(ii) Milk Production and Marketing

Table 3.32f shows that a total of 8,137,342,100 litres of milk worth TZS. 10,129,738 were marketed in Njombe region in 2018. Most of the milk (42.4 percent) was obtained from Njombe Town Council which also accounted for most of the sales (48.6 percent). Makambako TC sold the smallest quantity of milk (3.4 percent of the regional total). Furthermore, price per litre ranged from TZS 600 in Wanging'ombe to TZS 1,000 in Makete and Ludewa.

Table 3.32f: Number of Litres of Milk Marketed and their Value by Council, Njombe Region, 2018

Council	Total Number of Litres	Percent	Total Revenue in TZS	Percent	Average Price per Litre (TZS)
Njombe TC	3,446,576,700	42.4	4,923,681	48.6	700
Wanging'ombe	574,045,800	7.1	956,743	9.4	600
Makete	2,854,440,000	35.1	2,854,440	28.2	1,000
Njombe DC	470,861,600	5.8	588,577	5.8	800
Ludewa	514,478,000	6.3	514,478	5.1	1,000
Makambako TC	276,940,000	3.4	291,819	2.9	949
Total	8,137,342,100	100.0	10,129,738	100.0	

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.6 Establishment and Personnel

Table 3.33 reflects availability of livestock personnel by Council in Njombe region. Makambako TC had a critical shortage of staff than any other council. The council had only 4 livestock field officers with no veterinary officer and livestock officer in 2018. It was followed by Makete, Njombe TC and Njombe DC with only 16.4 percent each of 61 livestock personnel in the region. Wanging'ombe and Ludewa district councils had enough livestock personnel accounted for 23.0 percent and 21.3 percent respectively.

It is obvious that, poor performance of this sub sector to the large extent have influenced by shortages of livestock personnel such as veterinary officers and livestock officers in all councils of Njombe region. There is a need therefore, to recruit more staff in order to increase productivity of the sector and finally increase its contribution to the council and regional GDP.

Table 3.33: Availability of Livestock Personnel by Council, Njombe Region; 2018

Council	Veterinary Officers	Livestock Officers	Livestock Field Officers	Total	
				Number	Percent
Njombe TC	0	2	8	10	16.4
Wanging'ombe	0	0	14	14	23.0
Makete	0	0	10	10	16.4
Njombe DC	0	2	8	10	16.4
Ludewa	1	3	9	13	21.3
Makambako TC	0	0	4	4	6.6
Total	1	7	53	61	100.0

Source: Njombe Region, Compiled Data from Councils (Livestock Department), 2019

3.2.7 Policy Implication

Njombe region, like other regions in southern highland zones, has few livestock population, including cattle, goats, sheep and poultry and consider the second economic activity that can employed insignificant number of people and contributes share to the GDP of the region and country at large. Main reason for poor performance of this sector has been influenced by poor or traditional practice of livestock keeping with no regular treatment, absence of livestock infrastructure and medicine.

3.2.8 Investment Opportunities in Livestock Subsector

Njombe region has inadequate livestock infrastructure that are working such as dips, veterinary centres, water points, abattoirs etc. Therefore, construction of livestock infrastructures might be a priority area for investing in livestock sub sector. There are very few dairy cattle and goats for milk production. However, the increase in livestock should

be matched with the increase of livestock infrastructure such as dips, crushes and veterinary centers. Moreover, rehabilitation of outdated livestock infrastructure is also recommended for improvement of livestock health.

Other areas which highly need investors are dairy farming and livestock processing industries such as milk processing, leather tanning and meat canning.

3.3. Natural Resources

3.3.1 Introduction

The natural resource sector is comprised of forestry, hunting, beekeeping and tourism. The forestry sub sector plays an important role in maintaining ecological balance, protect soils from erosion and conserves water and wildlife. Forests are sources of domestic energy and provide industrial raw materials. Forests also provide useful non-wood products mainly honey and bee wax.

3.3.2 Forestry

Njombe region like other regions, used to have a wide range of large forest cover. Due to increase in human economic activities caused by population growth, forests depleted at a high rate due to the demand for firewood, timber and other human activities such as human settlements and agricultural expansion. As Table 3.29 shows, Njombe region has a total forest area of 332,086.6 ha which is 13.3 percent of the region's total land area of 2,499,400 ha. Wanging'ombe DC has the largest forest cover of 132,129.5 ha followed by Njombe DC (40,530.6ha) and Makete DC (58,155 ha).

Table 3.34: Status of Forest Cover by Council ,Njombe Region ; 2018

Council	Total Land Area (ha)	Natural forest reserve area (ha)	Forest plantation area (ha)	Game Reserve area (ha)	Total area (Ha) under forest	Percentage of forest cover
Njombe TC	321,200	3021	22725	0	25,746.00	8.0
Wanging'ombe DC	357,000	97324.5	21305	13500	132,129.50	37.0
Makete DC	580,000	18025	30125	9965	58,115.00	10.0
Njombe DC	315,300	801.2	39729.45	0	40,530.65	12.9
Ludewa DC	839,700	38393.14	36870.89	0	75,264.03	9.0
Makambako TC	86,200	99.434	202	0	301.43	0.3
Total	2,499,400	157,664	150,957	23,465	332,086.61	13.3

Source: Njombe Region, Compiled Data from Councils (Natural Resources), 2018

3.3.3 Tree Plantation

Table 3.35 indicates that in the five year period (2014 to 2018) Njombe region raised a total of 195,760,217 tree seedlings at an average of 39,152,043.4 seedlings per annum. The largest number of tree seedlings (50,741,986) were raised in 2015 while the smallest number of tree seedlings (24,899,196) was raised in 2018. At Council level, Njombe TC raised the largest number of tree seedlings (61,732,412) which was equivalent to 31.5 percent of the average annual number of tree seedlings raised in the Council. Kibogora ward raised the smallest number of tree seedlings (5,176,965, 2.6 percent).

Table 3.35: Number of Tree Seedlings Raised by Council, Njombe Region; 2014 – 2018

District /Council	Number of Tree Seedlings Raised					Total	Annual Average	Percent
	2014	2015	2016	2017	2018			
Njombe TC	11,520,946	16,758,284	13,479,147	11,237,800	8,736,235	61,732,412	12,346,482.4	31.5
Wanging'ombe DC	2,585,628	3,704,899	1,842,376	2,064,911	503,132	10,700,946	2,140,189.2	5.5
Makete DC	7,268,534	8,296,231	9,127,460	6,786,520	3,382,923	34,861,668	6,972,333.6	17.8
Njombe DC	9,419,558	12,866,257	8,978,309	12,038,247	8,521,925	51,824,296	10,364,859.2	26.5
Ludewa DC	6,973,655	8,239,718	9,008,174	4,980,654	2,251,649	31,453,850	6,290,770.0	16.1
Makambako TC	1,002,150	874,582	878,546	920,373	1,501,314	5,176,965	1,035,393.0	2.6
Total	38,772,485	50,741,986	43,316,028	38,030,522	24,899,196	195,760,217	39,152,043.4	100
Percent	19.8	25.9	22.1	19.4	12.7	100		

Source:Njombe Region, Compiled Data from Councils (Natural Resources), 2019

Though the region is endowed with adequate forestry resources, but due to increasing human activities such as cutting trees for fire wood, charcoal, timber poles and agriculture activities, the region has taken necessary initiatives of tree planting in order to prevent critical deforestation that might happen in the near future.

Table 3.36 indicates that in five years period from 2014 to 2018 the region raised a total of 19,315,774 tree seedlings. Njombe Town council was number one district by raising a total of 11,424,968 tree seedlings, followed by Makambako Town council (4,325,000 seedlings). Wanging'ombe district council did not involve in tree seedlings raising for the five years 2014 to 2018. A remarkable number of 4,775,421 seedlings, equivalent to 24.7 percent of the total seedlings raised in the region, were raised in the season of 2016 while the smallest number of 3,177,118 (15.3 percent) were raised in the season of 2018.

3.3.2 Environmental Conservation

Environmental conservation is important to assure activities taken by human being do not cause much harm to the environment. Initiatives towards environmental conservation in Ngara DC have been engineered by Non-governmental Organizations (NGOs), registered and operating within Ngara DC which totaled nine (9) at December 2015.

Table 3.36: Number of Tree Seedlings Raised by Institution ,Njombe Region ; 2014 - 2018

Council	Institution	2014	2015	2016	2017	2018	Total
Njombe TC	Njombe Town Council	17460	23568	38130	31679	19131	129,968
	TANWATT	3,000,000	2,550,000	2,580,000	1,335,000	1,830,000	11,295,000
Wanging'ombe DC	-	-	-	-	-	-	-
Makete DC	Lutheran Church	40,000	284,614	5,900	132,700	31,716	494,930
	Roman Catholic Church	23,527	93,567	4,520	4,210	6,023	131,847
	Secondary Schools	151,518	307,845	49,968	74,517	101,627	685,475
	Primary Schools	604,441	38,470	3,722	13,612	142,167	802,412
	SumasesuTandala	0	40,500	7,000	0	0	47,500
	Tandala TTC	0	75,030	0	0	0	75,030
	Bulongwa Health Institute	0	90,000	0	34,000	10,400	134,400
	P.F.P-MVC	0	0	0	92,200	0	92,200
	Eden Valley College	0	30,000	0	0	54	30,054
	Kitulo-TANAPA	80,000	52,000	0	0	0	132,000
	Njombe DC	Sayuni Sisters' Convent	0	0	190,000	60000	
JuPahima		0	0	0	30000	0	30,000
UWAMIMA		0	0	200,000	0	0	200,000
Ludewa DC	MFC	14,020	23,050	93,381	76,000	0	206,451
	MLADEA	10,000	12,000	12,800	15,800	0	50,600
	LUDA	20,000	25,000	20,000	4,320	30,000	99,320
	MOLIDA	25,000	0	0	2,587	0	27,587
	WCS	0	0	70,000	0	6,000	76,000
Makambako TC	TFS	500,000	875,000	1,500,000	450,000	1,000,000	4,325,000
Total		4,485,966	4,520,644	4,775,421	2,356,625	3,177,118	19,315,774

Source: Njombe Region, Compiled Data from Councils (Natural Resources), 2018

3.3.3 Beekeeping

Production of honey and wax is another sector which has not been fully utilised by residents of Njombe region. Besides having conducive environment for modern bee keeping the region had only 92,203 cumulative traditional beehives in the last five years period, 2014 to 2018 (Table 3.37). Table 3.37 also shows that Ludewa district had the highest (65.8 percent) number of traditional beehives followed by Wanging'ombe (20.5 percent) and Njombe DC (10.1 percent). Table 3.37 also shows that from 2014 – 2018, Njombe region had a total of 69,279 modern beehives. Modern beehives increased from 8,946 in 2014 to 19,343 in 2018. At Council level, Ludewa DC had largest average annual number of modern beehives (22,591,32.6percent)

Table 3.37: Number of Traditional and Modern Beehives by Council, Njombe Region; 2014 -2018

Council	Traditional Beehives							Modern beehives						
	2014	2015	2016	2017	2018	Total	Percentage	2014	2015	2016	2017	2018	Total	Percentage
Njombe TC	208	222	261	43	38	772	0.8	1302	1392	1421	670	5109	9894	14.3
Wanging'ombe DC	3,226	3,396	3,574	4,302	4,424	18,922	20.5	1890	2095	2204	2821	3146	12156	17.5
Makete DC	408	309	282	183	119	1,301	1.4	3155	4030	4330	4544	3745	19804	28.6
Njombe DC	1,202	662	3,399	3,361	650	9,274	10.1	97	1911	1385	266	1000	4659	6.7
Ludewa DC	12,513	12,613	12,060	11,843	11,608	60,637	65.8	2475	3765	4823	5200	6328	22591	32.6
Makambako TC	284	406	-	290	317	1,297	1.4	27	54	0	79	15	175	0.3
Total	17,841	17,608	19,576	20,022	17,156	92,203	100	8,946	13,247	14,163	13,580	19,343	69,279	100

Source: Njombe Region, Compiled Data from Councils (Natural Resources), 2018

The fisheries sector is among the important economic sub sectors of the economy in Tanzania. The sector provides substantial employment, income, livelihood, foreign earnings and revenue to the country. In 2018, fishery sub-sector created employment opportunities to fishermen and community who continued to rely on fishing related activities such as fishing business, processing and manufacturing of fishing gears and vessels.

In 2018 the fisheries sector contributed 1.7% to GDP, annual consumption of fishery products per person was 7.2kg compared to 20.3kg recommended by the Food and Agriculture Organization (FAO) (National Economic Survey, 2018).

3.3.4 Fishery

Table 3.38: Fishery Resources and Production by Council ; Njombe Region, 2018

District/ Council	Type of Fishing Resources				Fish Production	
	No. of Fishing licenses	No. of Fishermen	No. of Registered	No. of Un- Registered	Weight (kg)	Value
			Fishing Vessels	Fishing Vessels		(Tshs.)
Njombe TC	0	98	0	0	4,193	29,571,500
Wanging'ombe DC	-	0	-	36	5,259	40,520,000
Makete DC	0	0	0	0	0	0
Njombe DC	0	0	0	0	0	0
Ludewa DC	280	1,236	-	612	32,664	43,577,424
Makambako TC	5	0	0	34	6,067	41,402,000
Total	285	1,334	0	682	48,183	155,070,924

Source:Njombe Region, Compiled Data from Councils (Natural Resources), 2018

From Table 3.38 shows the estimated amount of revenues collected from selling fish products in Njombe region from 2014-2018. The table shows that only two councils of Ludewa DC and Makambako TC are involving in fishing activity. There is improvement of revenue earned by fishermen in the region when comparing 2014 and 2018 seasons. The revenue earned by fishermen increased from TZS 4,948,000 in 2014 to TZS 15,947,754 in 2018.

Table 3.39: Revenue Collection from Fishermen (Tshs) by Council Njombe Region; 2014 – 2018

District/ Council	2014	2015	2016	2017	2018	Total
Njombe TC	0	0	0	0	0	0
Wanging'ombe DC	0	0	0	0	0	0
Makete DC	0	0	0	0	0	0
Njombe DC	0	0	0	0	0	0
Ludewa DC	4,238,000	5,102,000	10,263,500	4,522,000	14,187,754	38,313,254
Makambako TC	710,000	810,000	768,000	880,000	1,760,000	4,928,000
Total	4,948,000	5,912,000	11,031,500	5,402,000	15,947,754	43,241,254

Source: Njombe Region, Compiled Data from Councils (Natural Resources), 2018

3.3.5 Tourism

Eco-tourism

In the recent past, the concept of ecotourism has been promoted in Tanzania as an alternative, low-impact form of tourism that supports conservation of natural resources, preserves local culture, and provides economic benefits to the communities. Existing evidence shows that Tanzania has not utilised most of its ecotourism potential. The actual amount of ecotourism activity in the country is highly localised and relatively minimal due to the following factors: accessibility problems in some protected areas, inadequate infrastructure, and insufficient marketing and promotion.

Availability of good infrastructure such as accommodation facilities, telecommunication services, roads, banking/bureau de change services and tour operators are essential tools in the development of competitive tourism industry. Dar es Saalam to Songea road plays a key role in the eco-tourism development of the region. The road provides easy communication between the region and other big commercial cities in Tanzania like Dar es Salaam and Mbeya which encourage more people to come in search of business opportunities, such as timber production as well as those who come for tourism purposes. The available accommodation facilities, mostly guest houses are to a large extent located in the two town councils of the region (Njombe and Makambako TC). In this regards, construction of new accommodation facilities in other councils becomes a pressing issue. Table 3.40 show accommodation facilities by council in Njombe region for the year 2018. According to Table 3.40, the region had 358 guest houses by the end of 2018. Most of the guest houses (118) were concentrated in Njombe TC which is the headquarters of the region, followed by Makambako which had 109 guest houses.

Table 3.40: Accommodation facilities by Council ,Njombe Region ; 2018

Council	Number of Guest Houses
Njombe TC	118
Wanging'ombe DC	39
Makete DC	33
Njombe DC	21
Ludewa DC	38
Makambako TC	109
Total	358

Source: Njombe Region, Compiled Data from Councils (Trade and Industry Departments), 2018

Historical Site Viewing Tourism

According to the national industry's mission statement that forms the basis of the tourism policy is develop sustainable quality tourism that is ecologically friendly to the conservation and restoration of the environment and its people's culture. Njombe is one of the unique destinations in Tanzania that has yet been discovered by many. It is a land of much wonder holding many historical sites and different natural features. The wonders of natural forests, water falls, hot spring, Livingstone mountain ranges, old missionary buildings and many other including very friendly people makes Njombe an exceptional place for historical site viewing tourism. Table 3.41 shows the historical sites potential for tourism in Njombe region.

Table 3.41: Historical sites which are potential for Tourism in Njombe Region ;2018

Council	Ward	Historical Site
Njombe TC	Njombemjini	Njombe territory chief dom tax collection centres (Njombe,Ludewa&Makete)
	Mjimwema	Human skulls at Nyikamtwe Hagafilo and Nyamuyuya river water falls, Salmon fish at Hagafilo river
	Yakobi	Yakobi church of 100 years old Natural forest of Nundu
	Kifanya	Cave of Maji Maji war warriors grave Welela wetland
	Matola	Hot spring
	Uwemba	Natural forest
	Wanging'ombe	Igima
Imalinyi		Lwivala rock
Wangama		Fulanyingi Mountain

Council	Ward	Historical Site
	Mdandu	Mdandu historical site
	Kidugala	Old Lutheran church
Makete	Lupila	Archaeological Site
	Bulongwa	Old Missionary Buildings
	Mang'oto	Colonial Ruin
Njombe DC	Kidegembye	Caves
	Lupembe	KKKT Old Church building
	Mtwango	Mwandulami pre-built tomb
Ludewa	Manda ,Ruhuhu, Lupingu, Makonde, Lumbila and Kilondo	Lake nyasa beaches
	Lupingu, Makonde, Lumbila and Kilondo	Livingstone mountain ranges
	Milo and madilu	Natural forest
	Mundindi and nkomang'ombe	Mchuchuma coal and liganga iron resources
	Mundindi and luilo	Ketewaka and lupali water falls
	Makonde, lumbila and manda	Pottery activities
	Lupingu ,Mlangali and Manda	Traditional practices (dances) mganda, ngwaya, matuli, maharamis and kihoda.
Makambako	Utengule	Stones culve

Source: Njombe Region, Compiled Data from Councils (Natural Resources and Tourism), 2018

3.4 Industrial Sector

Table 3.42 shows that Njombe region had a total of 1,732 small scale industries in 2018. The table further reveals that there were about 615 small industries that were dealing with maize milling followed by carpentry (473), welding (261) and Service industry-garage with 164 establishments. There were 41 industries dealing with food processing while timber processing industries were 39.

Table 3.42: Number of Small-Scale Establishments by Council and Type of Activity - Njombe Region; 2018

Council	Maize milling	Sunflower oil pressing mill	Food processing	Carpentry	Welding	Service industry - garage	Timber processing	Bakery	Other
Njombe TC	156	6	2	139	33	117	0	6	1
Wanging'ombe DC	122	5	0	70	34	9	16	0	15
Makete DC	96	1	5	39	11	8	3	0	0
Njombe DC	21	0	0	4	2	0	1	0	0
Ludewa DC	244	3	0	128	5	5	9	0	0
Makambako TC	56	20	34	93	176	25	10	0	2
Total	695	35	41	473	261	164	39	6	18

Source: Njombe Region, Compiled Data from Councils (Trade and Industry Departments), 2018

Table 3.43 gives a number of medium scale industries which were available in the region in 2018. The distribution of medium scale industries by council were as follows: Njombe TC (7 industries), Wanging'ombe(2 industries), Makete DC (1 industry). There was no medium scale Industry in three councils of Njombe DC, Ludewa DC and Makete TC.

Table 3.43: Type of Medium Scale Industries by Council; Njombe Region; 2018

Council	Type of Industry	Number of industries
Njombe TC	NJORECU Flour milling	1
	Tenende Flour milling	1
	Tenende Oil milling	1
	Milk processing CEFA	1
	Kitulo drinking water	1
	Chemichemidrinking(Nole)	1
	Coldroom for fruits	1
Wanging'ombe DC	Maize milling	2
Makete DC	Water Processing	1
Njombe DC		0
Ludewa DC		0
Makambako TC		0
Total		10

Source: Njombe Region, Compiled Data from Councils (Trade and Industry Departments), 2018

Table 3.44 gives a number of large-scale industries which were available in the region in 2018. The distribution of large-scale industries by council were as follows: Njombe TC (6 industries), Wanging'ombe DC (1 industry) and Njombe DC (1 industry).

Table 3.44: Number of Large Scale Industries by Council, Njombe Region; 2018

Ward	Type of Industry	Number of industries
Njombe TC	Wattle processing	1
	Timber processing	1
	Poles Processing	1
	Kibena-Tea processing	1
	Uniliver-Tea processing	1
	Luponde-Tea processing	1
Wanging'ombe DC	TANIWAT	1
Makete DC		0
Njombe DC	Matembwe Logs Processing	1
Ludewa DC		0
Makambako TC		0
Total		8

Source: Njombe Region, Compiled Data from Councils (Trade and Industry Departments), 2018

3.3.9 Policy Implication on the Industrial Sector

It has been observed that the agriculture sector is the main economic base and also the source of establishment of many industries in Njombe region. This means that improvement of the agriculture sector through modern farming practices will have a direct impact on the industrial sector development in Njombe region.

3.3.10 Investment in the Industrial Sector

The basis for industrial development in Njombe region has been agricultural products. Maize, timber and tea which are produced in large quantities provides opportunity for establishment of maize milling and flour packaging, timber and tea processing industries. On the other hand, the presence of natural forests creates a conducive environment for beekeeping. Therefore, promotion of commercial honey production is another area for investment.

CHAPTER FOUR

Economic Infrastructure

4.0 Introduction

This chapter explains the existing economic infrastructure in Njombe region. It covers the road network development in terms of road classification, type of road surface and passability. Others include railway, air services and postal services including radio and television facilities. In the energy sector, developments in regards to hydro-electricity, biogas, solar panel, fuel wood and fossil fuels are discussed.

Njombe region has the privilege of having frontier with four regions. These regions include Mbeya, Iringa, Morogoro, and Ruvuma. Landlocked countries of Malawi, Zambia and even the Democratic Republic of Congo (DRC) depend to some extent on the efficiency of Njombe roads. Njombe region has a well-developed transport network system connected to other regions. With the exception of Njombe to Iringa and Morogoro, Njombe to Mbeya and Njombe to Ruvuma roads which are tarmac, the other roads connecting the region to the neighboring country of Malawi through Ludewa are still not in good condition rather water transport is mainly used. The total road network for Njombe region is 6,403.49 kilometers as indicated in Table 4.1.

4.1 Road network

Table 4.1 and 4.2 shows that the trunk roads occupied 6.1 percent of the regional network, regional roads accounted for 12.45 percent of the network while district roads accounts for a total of 81.45 percent (Paved roads 0.52, Gravel 19.93 and Earth 60.8).

Njombe region has a total of 6,403.49 kilometers of roads distributed as follows:- Wanging'ombe (1,305.07 kilometers) Ludewa DC (1,369.35 kilometers), Njombe TC (1,359.19 kilometers), Makete DC (946.9 kilometers), Njombe DC (724.07 kilometers) and Makambako TC (698.91 kilometers).

Table 4. 1: Length of Road Network by Council (in km), Njombe Region, 2018

Councils	Type (km)							Total (Km)
	Trunk Roads		Regional Roads		District Roads (Km)			
	Paved	Unpaved	Paved	Unpaved	Paved	Gravel	Earth	
Njombe TC	95.56	46	2.3	24.25	11.08	245.88	934.12	1359.19
Wanging'ombe DC	51.89	0	71.23	141.34	6.9	192.05	841.66	1305.07
Makete DC	0	0	21.39	245.19	0.67	339.38	340.27	946.9
Njombe DC	14.17	0	0	127.67	0	186.17	396.06	724.07
Ludewa DC	7.82	157.61	0.98	162.57	8.5	226.32	805.55	1369.35
Makambako TC	30.94	0	0	0	6	86.5	575.47	698.91
Total	200.38	203.61	95.9	701.02	33.15	1276.3	3893.13	6403.49
Percent	3.13	3.18	1.50	10.95	0.52	19.93	60.80	100.00

Source: Njombe Regional Manager TARURA and TANROADS Office, 2019

Table 4.2: Road Networks by Type of Road and by Council, Njombe Region, 2018

Council	Type (km)					Total
	Trunk	Regional	Collector	Feeder	Community	
Njombe TC	141.56	26.55	557.21	537.87	96	1359.19
Wanging'ombe DC	51.89	212.57	361.07	275.49	31.41	932.43
Makete DC	0	266.58	315.9	266.33	0	848.81
Njombe DC	14.17	127.67	338.48	267.76	74.08	822.16
Ludewa DC	165.43	163.55	784.63	207.94	47.8	1369.35
Makambako TC	30.94	0	644.72	322.33	73.56	1071.55
Total	403.99	796.915	3002.01	1877.72	322.85	6403.485
Percent	6.31	12.45	46.88	29.32	5.04	100.00

Source: Njombe Regional Manager TARURA and TANROADS Office, 2019

4.1.1 Road Network Classification



Table 4.3 below shows that 329.43 kilometers in Njombe region are tarmac covering 5.14 percent of the total regional road network (Figure 4.1). The gravel roads network is 2,180.93 kilometers equivalent to 34.06 percent and the remaining 3,893.13 kilometers equivalent to 60.8 percent is of Earth Road Network. Tarmac and gravel roads made up 39.20 percent of the network and since there is a close affinity between

road worthiness and tarmac/gravel surface it could generally be said that 39.2 percent of the region’s road network is passable throughout the year including during the rain, season.

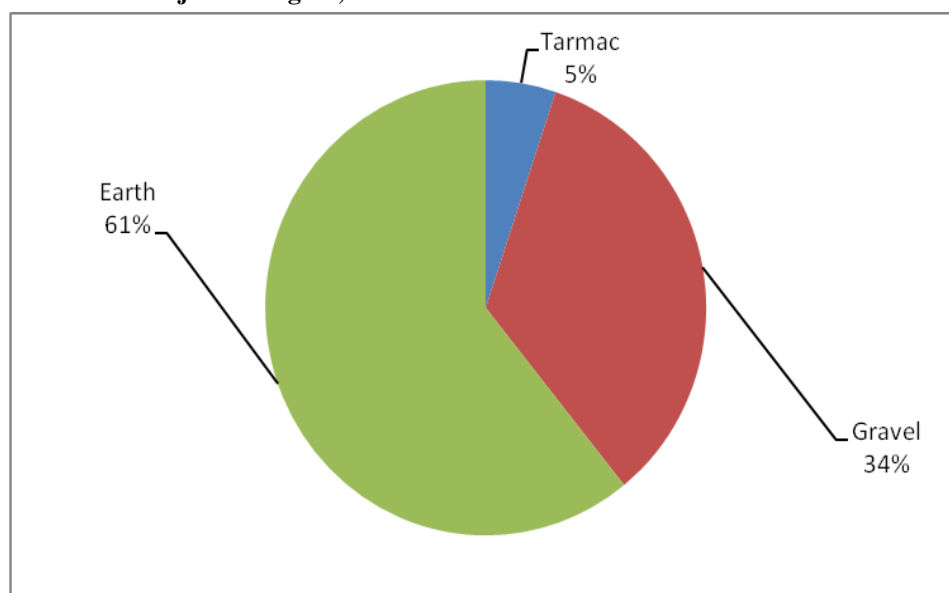
Makete DC has the longest road network of tarmac and gravel roads of 606.63 kilometers followed by Ludewa DC with 563.8 kilometers, Wanging’ombe DC with 463.41 kilometers, Njombe TC with 425.07 kilometers, Njombe DC with 328.01 kilometers and lastly Makambako TC with 123.44 kilometers.

Table 4. 3: Road Network by Type of Road Surface by Councils, Njombe Region, 2018

Councils	Surface Condition (Km)				
	Tarmac	Gravel	Sub Total (Tarmac & Gravel)	Earth	Total
Njombe TC	108.94	316.13	425.07	934.12	1,359.19
Wanging’ombe DC	130.02	333.39	463.41	841.66	1,305.07
Makete DC	22.06	584.57	606.63	340.27	946.9
Njombe DC	14.17	313.84	328.01	396.06	724.07
Ludewa DC	17.3	546.5	563.8	805.55	1,369.35
Makambako TC	36.94	86.5	123.44	575.47	698.91
Total	329.43	2,180.93	2,510.36	3,893.13	6,403.49
Percent	5.14	34.06	39.2	60.8	100

Source: Njombe Regional Manager TARURA and TANROADS Office, 2019

Figure 4. 1: Percentage Proportion of Road Network by Type of Surface Condition; Njombe Region; 2018



Source: Njombe Regional Manager TARURA and TANROADS Office, 2019/20

4.1.2 Road Passability



The measure of effectiveness of the road is its roadworthiness especially during rain season. By having 4,586.6 kilometres (1,854.05 passable throughout and 2,732.55 passable in greater part of the year of its road network equivalent to 71.6 percent passable throughout the year, Njombe region had done quite well in achieving a near satisfactory improvement (Table 4.4). However, improving the condition of road network should focus first on the most disadvantaged councils. Table 4.4 shows that the most disadvantaged council was Njombe DC with only 58.61 percent followed by Makambako TC with only 58.95 percent of its road network passable throughout the year.

Table 4. 4: Passability of Road Network in Kilometers, Njombe Region; 2018

Council	Condition of Network Throughout the Year in km				Percent Passable
	Passable Throughout the Year	Passable a Greater Part of the Year	Not Passable Most of the Year	Total Road Network	
Njombe TC	340.06	733.05	285.08	1358.19	79.01
Wanging'ombe DC	358.02	374.22	200.19	932.43	78.53
Makete DC	306.1	264.48	278.23	848.81	67.22
Njombe DC	184.26	297.63	340.27	822.16	58.61
Ludewa DC	547.33	549.15	272.87	1369.35	80.07
Makambako TC	118.28	514.02	440.25	1072.55	58.95
Total	1854.05	2732.55	1,816.89	6403.49	71.63

Source: Njombe Regional Manager TARURA and TANROADS Office, 2019

4.2 Railway Transport

Njombe region has the opportunity of having the TAZARA railway line to Mbeya and Kapirimposhi and passes through Makambako Station in Makambako Ward and Utiga in Wanging'ombe Ward. These two railway stations serve as a gateway for handling bulky goods and services intended for the region. However, due to the good road network between the region and other areas, very few goods currently pass through the two stations.

4.3 Air Transport Facilities

There are only two Aerodromes which carters for the visitors to the region. The two aerodromes are located in Njombe TC and Wanging'ombe DC but because has no scheduled flights hence there are no data on passengers embarking and disembarking at

that airport (Table 4.5). Their airstrips are earth surfaced and can only handle only small aircrafts or charter flights. Plans are on the way to expand and modernize them.

Table 4. 5: Air Services by Council, Njombe Region, 2018

Council	No. of Airports	No. of Air Strips	No. of Passengers
Njombe TC	0	1	0
Wanging'ombe DC	0	1	0
Makete DC	0	0	0
Njombe DC	0	0	0
Ludewa DC	0	0	0
Makambako TC	0	0	0
Total	0	2	0

Source: Regional Commissioner's Office, Njombe, 2019

4.4 Telecommunication Services

According to the data obtained from the six District Councils, Njombe region has 349 land line telephone services, no TV stations, 8 radio stations, 7 internet cafes, 6 mobile phone providers, four Post offices and three sub-Post offices. Table 4.6 below shows the distribution of telecommunication services in the region.

Table 4. 6: Telecommunications Services by Council, Njombe Region, 2018

Council	No. of Tel. Lines (land lines)	No. of Television Stations	No. of Radio Stations	No. of Internet Centres	Mobile Phone Services Provided		No. of Post Offices	No. of Sub-Post Offices
					No. of Company	Estimated Coverage %		
Njombe TC	348	0	4	1	6	89	1	0
Wanging'ombe DC	0	0	0	0	6	70	0	1
Makete DC	0	0	2	2	6	78	1	1
Njombe DC	0	0	0	0	6	76	0	1
Ludewa DC	1	0	1	2	6	65	1	0
Makambako TC	0	0	1	2	6	87	1	0
Total	349	0	8	7	36	78	4	3

Source: Regional Commissioner's Office, Njombe, 2019

4.5 Energy

Njombe region uses various sources of energy for lighting, cooking as well as for running machines. The different sources of energy include hydro-electricity, gas, paraffin, charcoal, firewood, biogas and solar. These data were obtained after the completion of the analysis of 2012 Population and Housing Census.

For Electricity Connection coverage in the villages/mitaa of the region, a total of 293 villages /mitaas out of 463 equivalents to 63.3 percent had been connected to electricity services through TANESCO. Makambako TC is leading in the Region where about 85.3 percent of its villages/mitaa are connected with electricity the minimal connected council is Makete with only 31.2 percent of its villages connected. Refer table 4.7

Table 4.7: Electricity coverage in Villages/Mitaas of the region by Council, 2018

Councils	Total No.of Villages and Streets	No. of Villages and Streets Connected	% of Villages & Streets Connected
Njombe TC	72	49	68.06
Wanging'ombe DC	108	79	73.15
Makete DC	93	29	31.18
Njombe DC	45	29	64.44
Ludewa DC	77	49	63.64
Makambako TC	68	58	85.29
Total	463	293	63.28

Table 4.8 shows the pace of electricity connection in councils of the region between 2016 and 2018 where a total of 891 institutions, 12,147 Domestic Users and 593 commercial users had been connectd to electricity for that period.

Table 4. 8: Electricity coverage in Villages/Mitaas of the region by Council, 2018

Years/Category/ Council	No. of Customers												Grand Total
	Institution				Domestic				Commercial				
	2016	2017	2018	Total	2016	2017	2018	Total	2016	2017	2018	Total	
Njombe TC	55	67	72	194	138	233	284	655	27	29	27	83	932
Wanging'ombe DC	106	48	54	208	1255	1420	988	3663	109	44	89	242	4,113
Makete DC	18	60	38	116	1181	893	281	2355	20	11	16	47	2,518
Njombe DC	37	49	58	144	123	170	189	482	26	17	30	73	699
Ludewa DC	16	8	7	31	213	158	146	517	13	4	6	23	571
Makambako TC	56	62	80	198	1295	1342	1838	4475	25	13	87	125	4,798
Total	288	294	309	891	4,205	4,216	3726	12,147	220	118	255	593	13,631

Source: TANESCO Regional office, Njombe, 2019

CHAPTER FIVE

Social Services

5.0 An Overview

Chapter Five discusses the status of social services in Njombe Region and covers the health sector, education sector, water and sanitation. In the health sector, the discussion covers improvement of health facilities and staff, morbidity and mortality status and mother and child health. It also covers the prevalence of HIV/AIDS and related diseases as well as its impact to the community.

5.1 Health Sector

The status of public health services can be visualized through the health infrastructure, availability and commitment of health practitioners, implementation of preventive and curative measures and availability of medicine. The Region experiences shortages of health practitioners such as professional doctors, medical officers (MOs), assistant medical officers (AMOs), clinical officers (COs), nursing officers (NOs) and midwives; equipment and medicines. This causes unnecessary loss of peoples' lives due to preventable causes. The major killer diseases in Njombe Region include: Malaria, Anemia, Pneumonia, Clinical AIDS and other communicable diseases.

5.1.1 Health Facilities

Njombe Region is still improving the health sector by constructing new facilities. They increased from 3 health facilities in 1961 to 146 (10 hospitals, 19 health centres and 117 dispensaries) in 2003, 241 facilities (10 hospitals, 22 health centres and 209 dispensaries) in 2012 and reached 273 facilities (10 hospitals, 33 health centres and 230 dispensaries) in 2018.

As Table 5.1 shows, the health facilities were distributed unevenly with Njombe Town Council being leading in number of dispensaries (59). Makambako Town Council had the least number of dispensaries (7). Likewise, Njombe Town Council also led in number of health centres (9) while Makambako Town Council had the least (3). In terms of hospitals, Makete and Ludewa district councils had the biggest number of hospitals (3 each).

Table 5.1 also shows that out of the 109 wards located in the Region, more than half (74 wards, 69.2 percent) had so far failed to implement the policy of one health centre per ward. Similar shortages were reported at Village/Mtaa level of which 233 of them had no dispensaries equivalent to 50.3 percent shortage of dispensaries in the Region.

Makambako Town Council had a significant shortage of health facilities since it had three health centre, seven dispensaries and one hospital facility. The shortage of health centres was 75.0 percent and that of dispensaries was 89.7 percent. However, Njombe Town Council, where the regional headquarters is located, had two hospitals, 9 health centres and 59 dispensaries which caused a shortage of 30.8 percent for health centers and 18.1 percent for dispensaries (Table 5.1).

Table 5.1: Availability of Health Facilities based on the Health Policy by Council, Njombe Region; 2018

Council	No. of Wards	Number of Village/Street	Available Health Facilities			Shortage of Health Facilities					
			Hospitals	Health Centres	Disp.	Shortage of Health Centres	Required Health Centres	Percent Shortage Health centres	Shortage of Disp.	Required Disp.	Percent Shortage of Disp.
Njombe TC	13	72	2	9	59	4	13	30.8	13	72	18.1
Wanging'ombe	21	108	1	5	43	16	21	76.2	65	108	60.2
Makete	23	93	3	6	48	17	23	73.9	45	93	48.4
Njombe DC	12	45	0	4	23	8	12	66.7	22	45	48.9
Ludewa	26	77	3	6	50	20	26	76.9	27	77	35.1
Makambako	12	68	1	3	7	9	12	75.0	61	68	89.7
Regional Total	107	463	10	33	230	74	107	69.2	233	463	50.3

Source: Compiled from District Councils (District Medical Office), Njombe Region, 2019

In regard to ownership, the private sector has contributed significantly the improvement of health infrastructure in the Region due to the well articulated health policy which recognises the contribution of private sector in the provision of health services in the country.

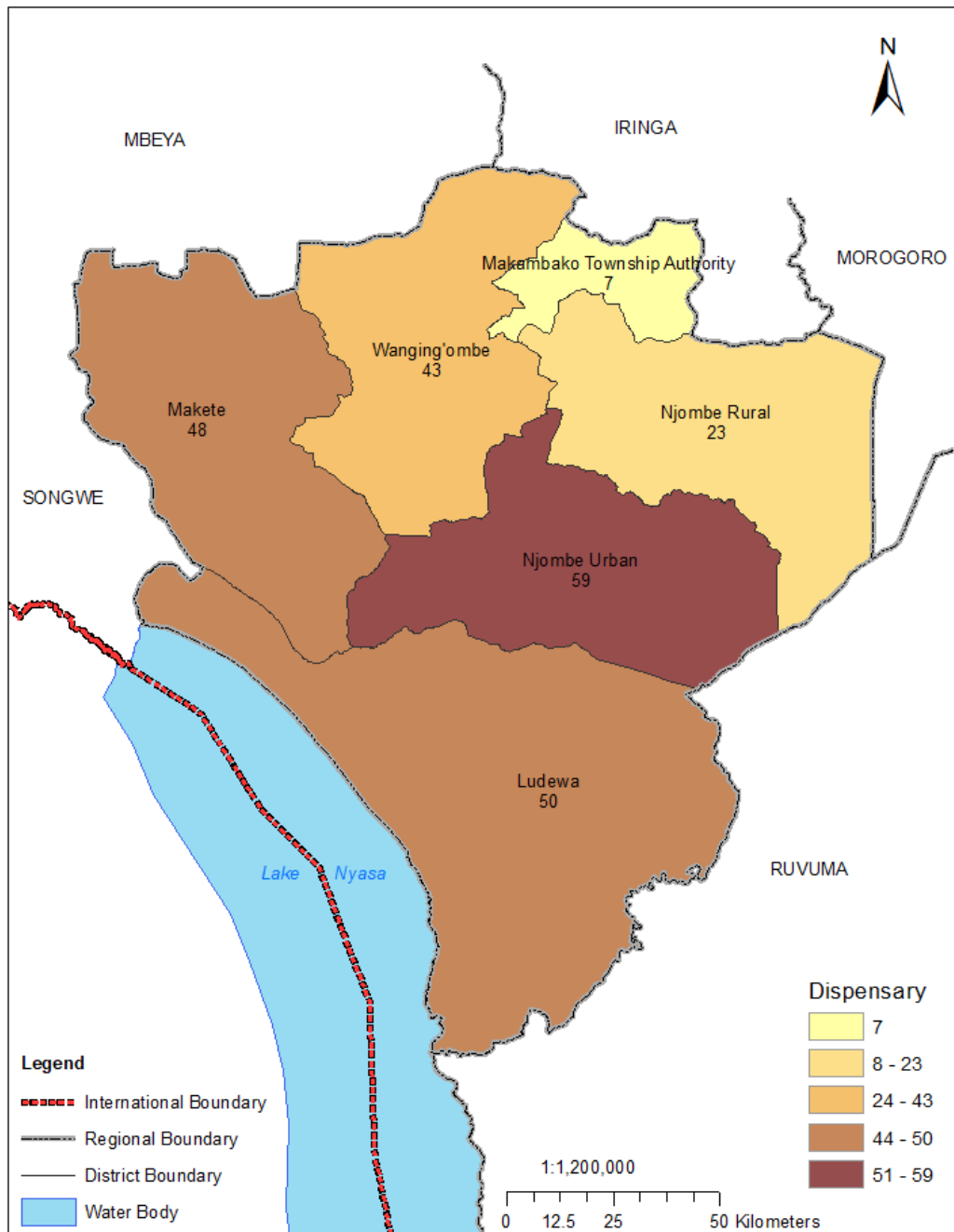
Table 5.2 shows that from 2015 to 2018 health facilities in the Region increased by 36 facilities (69.2 percent) from 237 in 2015 to 273 in 2018. Public owned health facilities increased by 28 facilities(15.3 percent) from 183 in 2015 to 211 in 2018. Makete District Council had the biggest increase in number of public health facilities from 27 of 2015 to 42 in 2018. Unusual trend happened to Ludewa and Makambako Councils which their number of public health facilities decreased by three and four respectively. For privately owned health facilities, their number in the Region increased by eight (14.8 percent) from 54 of 2015 to 62 of 2018. Njombe Town Council had the biggest increase in number of private health facilities(7, 63.6 percent) from 11 of 2015 to 18 of 2018.

Table 5. 2: Availability of Health Facilities by Ownership and Council, Njombe Region; 2018

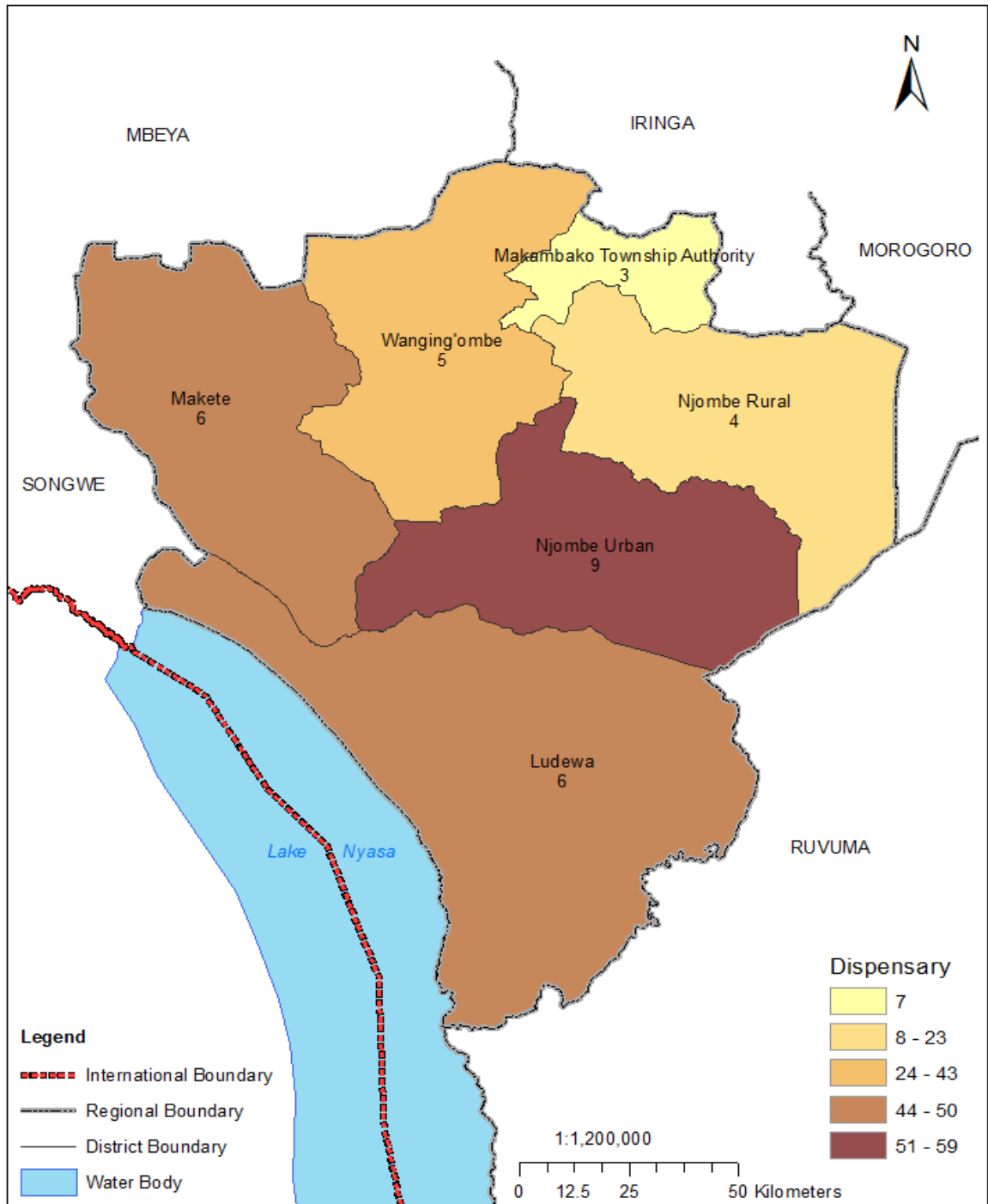
District	Hospitals		Health Centres		Dispensaries		Total Facilities (2018)			Total Facilities (2015)			Change in Facilities (2018 - 2015)	Percent of Change(2018 - 2015)
	Public	Private	Public	Private	Public	Private	Public	Private	Total	Public	Private	Total		
Njombe TC	1	1	2	7	49	10	52	18	70	41	11	52	18	34.6
Wanging'ombe	0	1	2	3	42	1	44	5	49	39	6	45	4	7.7
Makete	1	2	4	2	37	11	42	15	57	27	14	41	16	30.8
Njombe DC	0	0	4	0	18	5	22	5	27	18	6	24	3	5.8
Ludewa	1	2	3	3	46	4	50	9	59	53	9	62	-3	-5.8
Makambako	0	1	1	2	0	7	1	10	11	5	8	13	-2	-3.8
Total	3	7	16	17	192	38	211	62	273	183	54	237	36	69.2
Percent	30	70	48.5	51.5	83.5	16.5	77.3	22.7	100	77.2	22.8	100.0		

Source: Compiled Data from Districts, Health Departments, Njombe Region; 2019

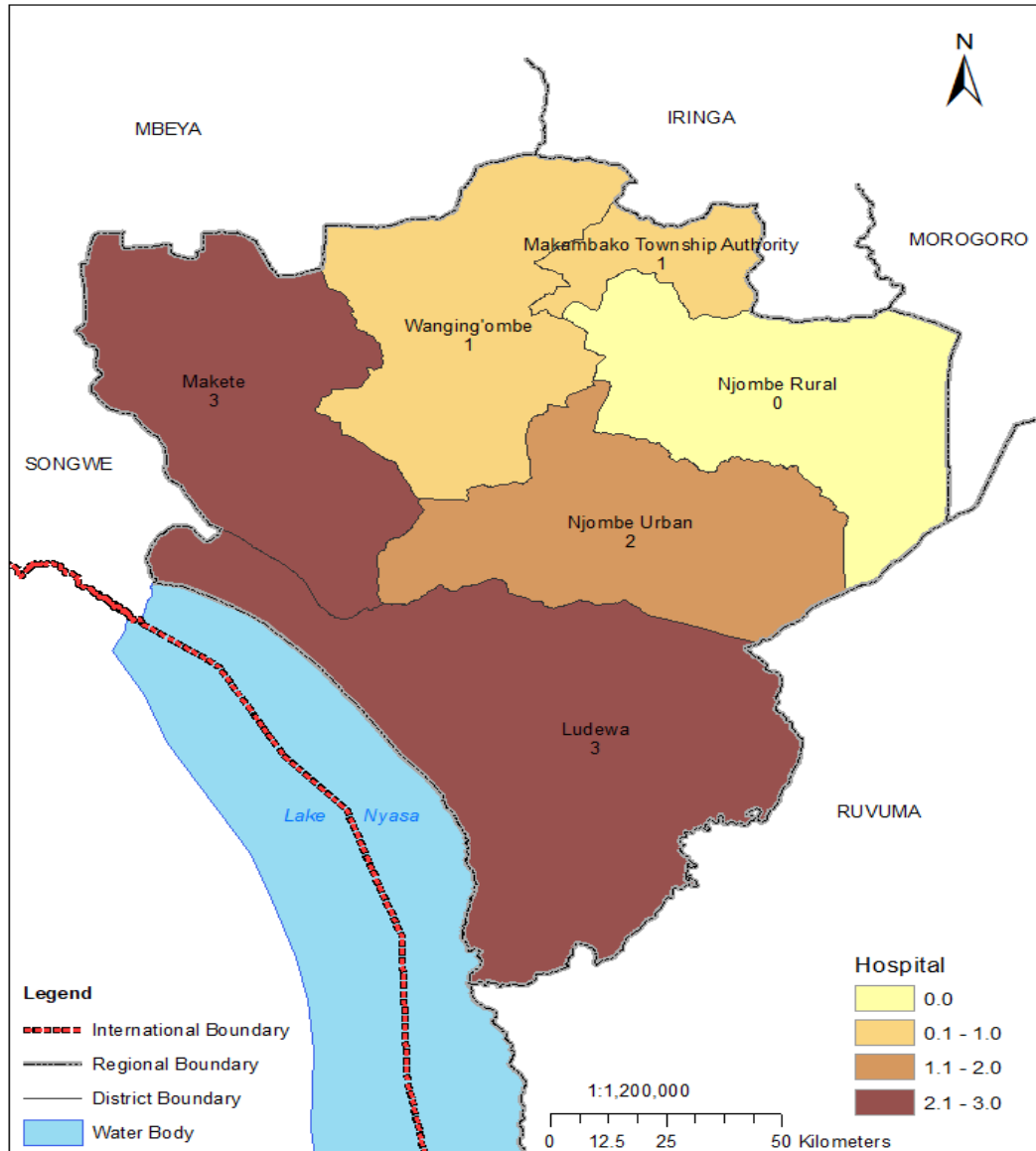
AVAILABILITY OF DISPENSARIES BY COUNCIL, NJOMBE REGION; 2018



AVAILABILITY OF HEALTH FACILITIES BY COUNCIL, NJOMBE REGION; 2018



AVAILABILITY OF HOSPITALS BY COUNCIL, NJOMBE REGION; 2018



5.1.1.1 Health Facility Ratios

The availability of health facilities in Njombe Region falls below WHO standards. The average coverage of the population by health facilities in Njombe Region was 3.3 facilities per 10,000 people in 2010 and 3.4 in 2012 and 2018 respectively. At council level, Table 5.3 shows that the best population coverage in 2010 were in Ludewa and Makete with 5.2 and 3.1 health facilities per 10,000 of the populations respectively. Looking at the coverage in 2012, the best coverage was in Ludewa at 4.7 facilities per 10,000 persons followed by Makete District with 4.2 facilities and Njombe Town Council with 4.0 facilities per 10,000 of the population. Likewise, in 2018, Makete District Council had the best coverage of 5.2 health facilities per 10,000 of the populations followed by Njombe Town Council (4.6).

Table 5. 3: Relating Health Facilities to the Population by Council, Njombe Region; 2010, 2012 and 2018

Council	2010				2012				2018			
	Total Population	h.f.s.	Mean Average Population per h.f	h.f.s. per 10,000 People	Total Population	h.f.s.	Mean Average Population per h.f	h.f.s. per 10,000 People	Total Population	h.f.s.	Mean Average Population per h.f	h.f.s. per 10,000 People
Njombe TC	102,424	44	2,328	2.3	130,223	52	2,504	4	151,065	70	2,158	4.6
Wanging'ombe	176,417	45	3,920	2.5	161,816	45	3,595	2.8	184,246	49	3,760	2.7
Makete	119,452	37	3,228	3.1	97,266	41	2,372	4.2	109,928	57	1,929	5.2
Njombe DC	78,887	18	4,383	2.3	85,747	24	3,573	2.8	96,817	27	3,586	2.8
Ludewa	124,625	65	1,917	5.2	133,218	62	2,149	4.7	153,294	59	2,598	3.8
Makambako	73,899	13	5,685	1.4	93,827	13	7,217	1.4	107,949	11	9,814	1.0
Total	675,704	222	3,044	3.3	702,097	237	2,962	3.4	803,299	273	2,942	3.4

h.f.s. means health facilities

Source: Compiled Data from Districts, Health Departments, Njombe Region; 2019

5.1.1.2 Population per Bed Ratio

Availability of hospital beds is considered as a key aspect to the admission of patients in the referral health facilities to enable practitioners to have close monitoring and follow up professionally. Number of beds in hospitals (public and private) in the Region was significantly increased from 1,431 in 2010 to 1,450 in 2012 and then reached 1,574 in 2018 (Table 5.4). Although number of beds in 2018 was significantly improved, rapid population growth pushed down the Regional population per bed ratio from 488 in 2012 to 510 in 2018.

Table 5.4 further shows average population per hospital bed by council. The Table shows that the population bed ratio increased from 422 in 2010 to 484 in 2012 and then reached 510 in 2018. In all three years shown in the Table, Makete District Council had the best population bed ratio of 178, 142 and 176 respectively. Since Njombe DC had no hospital it had the worst population bed ratio in the Region. Therefore, there is a need to construct a hospital in this council so as improving health services as well as reducing conjection of population per bed ratio to the nearby Kibena hospital which is mostly visited by the residents of Njombe District Council.

Table 5. 4: Distribution of Hospitals Beds (Public and Private) by Council, Njombe Region, 2010 , 2012 and 2018

Council	2010			2012			2018		
	Total Population	No. of Beds	Population per Bed	Total Population	No. of Beds	Population per Bed	Total Population	No. of Beds	Population per Bed
Njombe TC	102,424	342	299	130,223	342	381	151,065	182	830
Wanging'ombe	176,417	326	541	161,816	330	490	184,246	317	581
Makete	119,452	671	178	97,266	683	142	109,928	625	176
Njombe DC	78,887	7	11,270	85,747	8	10,718	96,817	0	0
Ludewa	124,625	20	6,231	133,218	15	8,881	153,294	330	465
Makambako	73,899	65	1,137	93,827	72	1,303	107,949	120	900
Total	675,704	1,431	472	702,097	1,450	484	803,299	1,574	510

Source: Compiled from Districts, Health Departments, Njombe Region; 2019

5.1.1.3 Population per Doctor Ratio

Looking at population against doctors, the Region managed to reduce the mean average population per doctor from 6,690 persons in 2010 to 5,401 persons in 2012 (Table 5.5). However, the Region had a slight higher mean average population per doctor of 5,697 persons in 2018 compared to that of 2012.

Njombe District Council had the highest mean average population per doctor in two consecutive years, 13,148 in 2010 and 17,149 in 2012. Wanging'ombe District Council had the highest mean average population per doctor of 23,031 in 2018. Ludewa District Council had the least mean average population of 2,493 and 2,514 in 2010 and 2012 while Njombe District Council had 3,724 in 2018.

Table 5. 5: Distribution of Doctors Among Population by Council, Njombe Region; 2010, 2012 and 2018

Council	2010			2012			2018		
	Total Population	No. of Doctors	Population per Doctor	Total Population	No. of Doctors	Population per Doctor	Total Population	No. of Doctors	Population per Doctor
Njombe TC	102,424	10	10,242	130,223	18	7,235	151,065	35	4,316
Wanging'ombe	176,417	14	12,601	161,816	15	10,788	184,246	8	23,031
Makete	119,452	12	9,954	97,266	27	3,602	109,928	25	4,397
Njombe DC	78,887	6	13,148	85,747	5	17,149	96,817	26	3,724
Ludewa	124,625	50	2,493	133,218	53	2,514	153,294	24	6,387
Makambako	73,899	9	8,211	93,827	12	7,819	107,949	23	4,693
Total	675,704	101	6,690	702,097	130	5,401	803,299	141	5,697

Note: Doctors include: MO, AMO, ADO, DDS and Specialist

Source: Compiled Data from Districts, Health Departments, Njombe Region; 2019

As the available official health facilities were not enough to serve the ever growing population of Njombe Region, primary rural health centres were established to complement the existing official health infrastructure. These centres are operated by Village Health Workers (VHWs) assisted by Traditional Birth Attendants (TBAs) under supervision of Village Health Committees (VHCs).

Table 5.6 shows that by 2018, the Region had 255 trained Tradition Birth Attendants, 592 Village Health Workers and 278 Village Health Posts. The average numbers of Trained Traditional Birth Attendants (TBAs) per village for the 2018 were less than one (0.6:1) while the Village Health Workers per village was greater than one (1.3:1). At district level, Makete DC had the best TBAs village Ratio of 2.4 TBAs per village. Njombe and Ludewa district councils each had the best VHWs village Ratio of 2.0 VHWs per village. However, Njombe Town Council, where the regional headquarters is located, has worst ratios of TBAs (0.1) and VHWs (1.1) per village/street.

Table 5. 6: Distribution of Complementary Rural Health Facilities by Council, Njombe Region, 2018

Council	Number of Village/Street	No. of TBAs (Trained)	TBAs Village Ratio	No. of VHWs	VHWs Village Ratio	No. of VHP	No. of TMP (Registered)
Njombe TC	72	10	0.1	82	1.1	82	4
Wanging'ombe	108	-	-	193	1.8	58	6
Makete	93	227	2.4	177	1.9	42	14
Njombe DC	45	18	0.4	88	2.0	44	35
Ludewa	77	136	1.8	154	2.0	55	77
Makambako	68	-	-	52	0.8	52	n.a
Total	463	255	0.6	592	1.3	278	59

VHP means Village Health Posts

TMP means Traditional Medical Practitioners

Source: Compiled Data from Districts, Health Departments, Njombe Region; 2019

5.1.1.4 Status of Health Personnel

The provision of quality health service depends on, among others, the availability of qualified practitioners, hospital equipment and medicines. Table 5.7 shows that Njombe Region had a total of 1,306 staff in health sector in 2018. This was an increase of nine staff (0.7 percent) from 1,297 staff whom were available in the Region in 2015.

As it was in 2015, the availability of medical personnel for the 2018 was uneven and in favour of females. Out of 1,306 medical staffs, 69 percent were females with more of them in nursing and medical attendant cadres. Critical shortage of medical personnel were observed on radiologist and radiographer.

At council level, Table 5.7 shows that Makete District Council had the largest number (376) of health personnel followed by Njombe TC (374) and Njombe DC (261). Makambako Town Council had the smallest number of health workers (186).

Table 5.7 also shows the situation of medical personnel in the region by 2012. The table shows that Njombe Region had few health personnel in regard to specialist doctors, medical doctors, dental surgeons, radiologists, dental therapists and pharmacists. Table 5.7 also shows that only 0.2 percent of medical personnel were specialist doctors, 2.3 percent were medical doctors and zero percent were radiologist and radiographers. However, the cadre with largest percentage of personnel was trained nurses (33.8 percent) followed by medical attendants (27.2 percent).

Table 5. 7: Type and Number of Medical Personnel by Council, Njombe Region; 2018

Type of Medical Personnel	Njombe Town Council			Wanging'ombe DC			Makete DC			Njombe DC			Ludewa DC			Makambako DC			Regional Total			
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	T	%
Specialist Doctors	0	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2	0.2
Medical doctors	10	1	11	0	0	0	6	1	7	1	2	3	2	2	4	5	0	5	24	6	30	2.3
Ass. Medical Officers	7	3	10	0	0	0	7	3	10	2	3	5	4	4	8	1	3	4	21	16	37	2.8
Clinical Officers	8	6	14	0	0	0	9	7	16	16	5	21	7	7	14	7	3	10	47	28	75	5.7
Ass. Clinical Officers	2	1	3	0	0	0	9	4	13	21	7	28	2	2	4	0	0	0	34	14	48	3.7
Dental Surgeon	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	2	0.2	
Ass. Dental Officer	0	0	0	0	0	0	2	0	2	1	0	1	2	2	4	0	1	1	5	3	8	0.6
Dental Therapist	0	4	4	0	0	0	1	3	4	3	2	5	1	1	2	2	1	3	7	11	18	1.4
Pharmacists	2	0	2	0	0	0	1	0	1	1	0	1	0	0	1	0	1	5	0	5	0.4	
Pharmaceutical Technicians	0	0	0	0	0	0	0	0	0	1	1	2	0	1	1	1	3	4	2	5	7	0.5
Pharmaceutical Assistant	0	0	0	0	0	0	3	1	4	0	0	0	1	0	1	0	0	0	4	1	5	0.4
Laboratory Technicians	1	0	1	0	0	0	2	5	7	1	1	2	2	1	3	1	3	4	7	10	17	1.3
Laboratory Ass.	3	1	4	0	0	0	4	1	5	8	4	12	1	6	7	2	3	5	18	15	33	2.5
Radiologist	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Radiographer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Radiographic Assistant	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0.1
Nursing Officers	0	0	0	0	0	0	8	34	42	1	2	3	0	0	0	0	1	1	9	37	46	3.5
Trained Nurse/NM/PHN	21	115	136	0	0	0	24	77	101	25	98	123	0	0	0	12	69	81	82	359	441	33.8
MCHA	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.1
Medical Attendants	17	49	66	0	0	0	21	119	140	3	41	44	9	39	48	6	51	57	56	299	355	27.2
Health Officers	0	1	1	0	0	0	0	0	0	0	0	0	1	1	2	1	0	1	2	2	4	0.3
Health Assistants	4	1	5	0	0	0	6	1	7	2	5	7	1	0	1	3	3	6	16	10	26	2.0
Health Secretaries	1	1	2	0	0	0	1	0	1	1	2	3	2	0	2	1	1	2	6	4	10	0.8
Other Medical Carders	43	69	112	0	0	0	7	8	15	0	0	0	4	4	8	0	0	0	54	81	135	10.3
Regional Total	120	254	374	0	0	0	111	265	376	88	173	261	39	70	109	44	142	186	402	904	1306	100
Percent	32	68	100	0	0	0	30	70	100	34	66	100	36	64	100	24	76	100	31	69	100	8

Source: Compiled Data from Districts, Health Departments, Njombe Region; 2019

5.1.2 Morbidity

The health service aims at solving the problems of morbidity or sicknesses as well as mortality. However, in order to take care of morbidity, the government needs an inventory of these health problems. The inventories though not exhaustive shows the ten most common causes of illnesses affecting the health and welfare of Njombe Region inhabitants. These indicative inventories categorized into out-patients and in-patients, morbidity and mortality for years 2016 and 2018 are based hospital records only.

Out-patients

Table 5.8 shows the ten most common diseases that caused of morbidity for out-patients. Out of 1,529,122 out patients recorded in 2016, 84.0 percent were suffering from one or the other of the first five illnesses. In 2016, upper respiratory infections illness ranked the first as a cause of morbidity for outpatients in the Region. Malaria ranked second and the third was urinary track infections. The fourth and fifth diseases were pneumonia and intestinal worms, respectively.

The observations in 2018 were different from those of 2016 except for the first disease, upper respiratory infections which ranked first as it was in 2016. The second disease was urinary track infections followed by pneumonia and malaria. Defined symptoms (no diagnosis) ranked fifth disease in 2018. Furthermore, diarrhea was the last disease in 2018 as caused illness to 5,873 people in the Region.

Table 5. 8: Ten Most Commonly Reported Causes of Morbidity (Out Patients), Njombe Region; 2016 and 2018

2016				2018		
S/NO.	Disease	No. of Occurrence	Percent Share	Disease	No. of Occurrence	Percent Share
1	Upper respiratory infections	467,886	30.6	Upper respiratory infections	108,813	44.7
2	Malaria	329,308	21.5	UTI	31,517	13.0
3	UTI	282,198	18.5	Pneumonia	28,137	11.6
4	Pneumonia	105,730	6.9	Malaria	17,413	7.2
5	Intestinal Worms	98,594	6.4	Defined Symptoms (No Diagnosis)	13,139	5.4
	Sub Total	1,283,716	84.0	Sub Total	199,019	81.8
6	Surgical Condition	54,297	3.6	Hypertension	11,284	4.64
7	Hypertension	54,156	3.5	Peptic Ulcers	9,213	3.79
8	GIT other Non-Infection	50,821	3.3	Surgical condition	9,064	3.72
9	Skin Infection, Non - Fungal	50,034	3.3	Intestinal Worms	8,901	3.66
10	Skin Infection, Fungal	36,098	2.4	Diarrhoea	5,873	2.41
	Total	1,529,122	100.0	Total	243,354	100.00

Source: Compiled from Districts, Health Departments, Njombe Region; 2019

In-patients

Table 5.9 shows the ten most common diseases that caused of morbidity for in-patients. Out of 69,175 in-patients recorded in 2016, 76.2 percent were suffering from one or the other of the first five illnesses. In 2016, malaria was the first cause of illness for inpatients recorded in Njombe Region, followed by pneumonia, urinary tract infections, diarrhoea and hypertension.

Different observations were made for in-patients in 2018. Pneumonia happened to be the first cause of illness for in patients in the Region. The second, third, fourth and fifth diseases were hypertension, peptic ulcers, HIV infection and Typhoid (Table 5.9).

Table 5.9: Ten Most Commonly Reported Causes of Morbidity (In Patients), Njombe Region; 2016 and 2018

S/No	2016			2018		
	Disease	No. of Occurrence	Percent Share	Disease	No. of Occurrence	Percent Share
1	Malaria	25,159	36.4	Pneumonia	3,319	22.2
2	Pneumonia	8,842	12.8	Hypertension	1,558	10.4
3	Urinary Tract Infections	7,061	10.2	Peptic Ulcers	1,516	10.1
4	Diarrhoea	6,754	9.8	HIV infection	1,489	9.9
5	Hypertension	4,867	7.0	Typhoid	1,477	9.9
	Sub Total	52,683	76.2	Sub Total	9,359	62.5
6	Anaemia	4,042	5.8	Urinary Tract Infections	1,420	9.5
7	Upper Respiratory Infection	3,794	5.5	Diarrhoea	1,292	8.6
8	HIV Infection	3,507	5.1	Fracture	1,220	8.1
9	Neonatal septicaemia	2,964	4.3	Eye Diseases, Non-Infectious	1,050	7.0
10	Gastro Infection Symptomatic	2,185	3.2	Anaemia	633	4.2
	Total	69,175	100.0	Total	14,974	100.0

Source: Compiled from Districts, Health Departments, Njombe Region; 2019

5.1.3 Mortality

The available data do not give the true picture of the mortality level in Njombe Region. However, the medical records indicate that a dominant cause of mortality for inpatients of all ages in 2016 was pneumonia (Table 5.10. Table The same table also shows that out of 911 reported deaths in 2016, 198 (21.7 percent) were caused by pneumonia, followed by clinical AIDS (20.5 percent), acute respiratory infections (ARI) (13.8 percent), defined symptoms (13.2 percent) and severe malaria (9.9 percent). Other diseases were diarrhoea, non-infectious diseases, tuberculosis and uncomplicated malaria.

Likewise, among the causes of mortality for inpatients of all ages in 2018 were pneumonia (37.7 percent) followed by severe malaria (29.4 percent), acute respiratory infections (ARI) (12.2 percent), diarrhoea (6.6 percent) and anemia (4.5 percent). Other diseases were fracture, clinical AIDs, burns, poisoning and other diagnosis (Table 5.10).

Table 5.10: Ten Most Commonly Reported Causes of Mortality (In Patients), Njombe Region; 2016 and 2018

S/No	2016			2018		
	Disease	No. of Occurrence	Percent Share	Disease	No. of Occurrence	Percent Share
1	Pneumonia	198	21.7	Pneumonia	1,928	37.7
2	Clinical AIDs	187	20.5	Severe Malaria	1,504	29.4
3	ARI	126	13.8	ARI	624	12.2
4	Define Symptoms	120	13.2	Diarrhoea	337	6.6
5	Severe Malaria	90	9.9	Anemia	232	4.5
	Sub Total	721	79.1	Sub Total	4,625	90.4
6	Diarrhoea	82	9.0	Fracture	174	3.4
7	Anemia	43	4.7	Clinical AIDs	119	2.3
8	Non Infectious Dis.	28	3.1	Burns	75	1.5
9	Tuberculosis	29	3.2	Poisoning	63	1.2
10	Un. Malaria	8	0.9	Other Diagnosis	61	1.2
	Total	911	100.0		5,117	100.0

Source: Compiled from Districts, Health Departments, Njombe Region; 2019

5.1.4 HIV/AIDS Infections

Though there are a number of ways that can be used to measure the extent and trend of the HIV prevalence among the people, the ones used in Njombe Region are testing family blood donors, prevalence among Voluntary Councelling and Testing (VCT) volunteers and expected mothers participating in the (Prevention from Mother to ChildTransmission (PMTCT) service.

Though family blood donation is not a reliable method of measuring extent and the trend of the HIV problem, Table 5.11 shows that out of 2,046 (1,071 males and 971 females) blood donors screened in 2018, 235 (131 males and 104 females) were found to be HIV positive. This number varied from district to district. Njombe Town Council had the highest number of persons with HIV (72) though it had the minimum rate of prevalence of 14.8 percent (13.2 percent for males and 18.2 percent for females) followed by Makete District Council (33 males and 15 females) and prevalence of 22.9 percent. Njombe District Council had the lowest prevalence rate of 11.9 percent respectively.

Table 5. 8: HIV Infections among Family Blood Donors and New AIDS Cases, Njombe Region; 2018

Council	No. of Persons Tested			No. of Persons with HIV+			Percent of HIV+		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Njombe TC	340	148	488	45	27	72	13.2	18.2	14.8
Wanging'ombe	115	85	200	11	8	19	9.6	9.4	9.5
Makete	124	86	210	33	15	48	26.6	17.4	22.9
Njombe DC	71	123	194	5	18	23	7.0	14.6	11.9
Ludewa	146	103	249	14	17	31	9.6	16.5	12.4
Makambako	275	430	705	23	19	42	8.4	4.4	6.0
Total	1,071	975	2046	131	104	235	12.2	10.7	11.5

Source: Compiled from Districts, Health Departments, Njombe Region; 2019

The prevalence of HIV/AIDS could also be assessed from reports from PMTCT service for 2018. The reports from the District Medical Offices of Njombe TC, Makete, Njombe DC, Ludewa and Makambako TC reveal that out of 28,512 expectant mothers who participated in that service and hence screened, 1,290 (5.6 percent) were found to be HIV positive and 81.0 percent of them were given Niverapine. The results also show that Makete DC had the highest rate of infection of 13.9 percent followed by Ludewa DC (7.3 percent) and Njombe DC (6.2 percent) (Table 5.12).

Table 5. 92: Number of Expectant Mothers who were Screened for HIV through PMTCT Service and those who Received ARVs by Council, Njombe Region; 2018

Council	No. of ANC Attendants	No. Screened	No. of HIV+	Percent of HIV+	No. of Given Niverapine	Percent of Given Niverapine
Njombe TC	9,012	5,620	241	4.3	221	91.7
Wanging'ombe	4,751	4,683	131	2.8	64	48.9
Makete	2,301	2,205	306	13.9	259	84.6
Njombe DC	3,127	2,967	185	6.2	112	60.5
Ludewa	4,308	3,084	224	7.3	211	94.2
Makambako	5,013	4,459	203	4.6	178	87.7
Total	28,512	23,018	1,290	5.6	1,045	81.0

Source: Compiled from Districts, Health Departments, Njombe Region; 2019

5.1.4.1 The Impact of HIV/AIDS

The socio-economic assessment of Njombe region is not complete without addressing the extreme challenges caused by the HIV/AIDS and the efforts so far made by various local and International Organisations to combat the epidemic. HIV/AIDS is highlighted in this document, because it has been a major health problem since its advent at the end of 1987. The other reason for addressing the epidemic stems from the role it plays in impoverishing families and generating widows, orphans and vulnerable children due to the loss of breadwinners in the families.

The report from the District Medical Offices (DMOs) qualifies Njombe as among the few regions with ever increasing rates of HIV/AIDS prevalence in the country. Economically, Njombe people are migrant labours and industrialists who migrate to various parts of the country to look for work and businesses, which makes it easy for them to engage in sexual relationships. Other reasons include the traditional practice of prolonged drinking and unsafe sexual practices, polygamy as well as poverty. The poor, especially young girls migrate to urban centres end up being domestic workers for sometime before resorting to prostitution for better survival.

Understanding the status of HIV/AIDS prevalence in Njombe region is very difficult since most of the rural districts do not have health facilities such as health centres and hospitals and as a result, many people die at home. With the exception of 2007, the lack of VCT in remote areas where people could be tested in order to know their health status was a problem. Therefore, there are people who live with the HIV/AIDS virus without knowing that they have it.

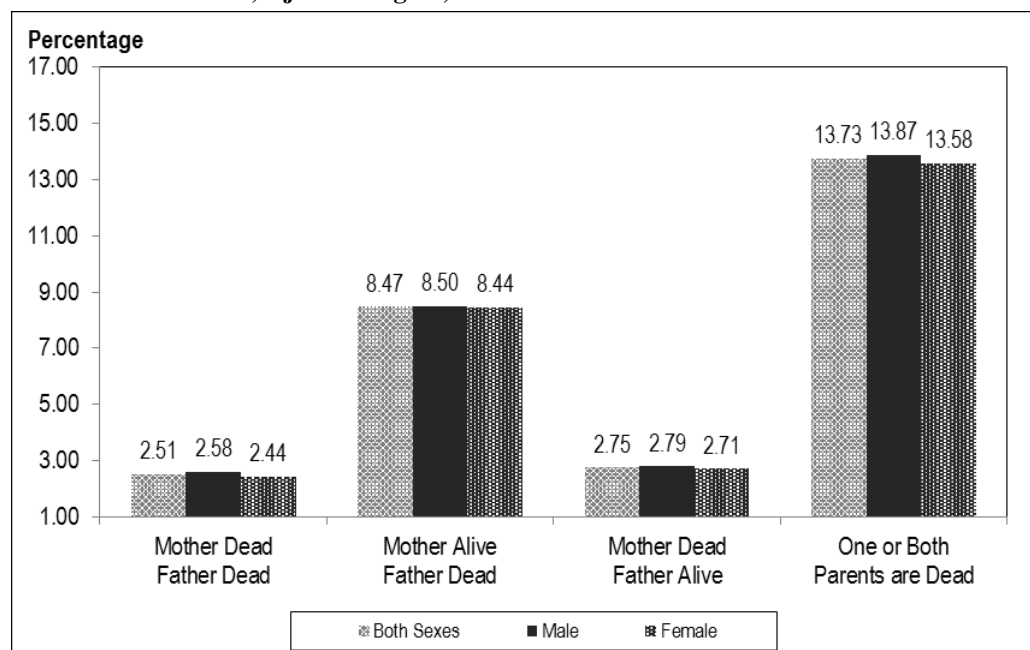
i) The Increase of Widows

One of the indication of the high prevalence rate in the region is the rate of widowhood. The data gathered in the 2002 Population Census show high rate (7.51 percent) of widowhood in Njombe Region. The proportion of the widows was higher for females (9.89 percent) than males (1.79 percent). At council level, Makete was the most affected council with widowhood of 10.24 percent followed by Njombe (6.6 percent) and Ludewa (5.7 percent). Nevertheless, there is a need of conducting a study that will gather information of widowed and their problems in order to come up with appropriate measures and solutions.

ii) The Increase of Orphans

An orphan in Tanzania is a child under the age of 18 years who has lost one or both parents. Figure 7.1 presents the percentage of children 0-17 years old and the survival status of their biological parents. Observation on the Figure 7.1 shows that about three percent (2.51 percent) of persons below 18 years had lost both parents and about fourteen (14) percent of all children below 18 years were orphans due to the loss of one or both parents. The incidence of orphan hood is slightly lower for male children (13.87 percent) compared with that for female children (13.58 percent).

Figure 5.1: Percentage Distribution of Children below Age 18 Years by Survival of Parents; Njombe Region, 2012 Census



Source: Compiled Data from 2002 Population and Housing Census Reports (Vol. IV).

There is a need to conduct a study that will enable the region Administration to identify the number and status of the most vulnerable children as it has been done in other regions in the country. Understanding the status of orphans and most vulnerable children will enable the regional and district authorities to adopt policies and measures that will reduce street children and improve their welfare.

5.1.5 Child Nutrition

Children, from the stage of foetuses to under - five years and their mothers are the most vulnerable group in the society. Therefore, reproductive and child health services are the most vital services. Besides vaccination programme, children are also weighed to reveal how prevalent underweight is among them and hence the extent of child malnutrition. Nutritional food intake is associated with child health and therefore, poor diet can result into severe malnutrition which in turn manifests itself in high infant and child mortality rates.

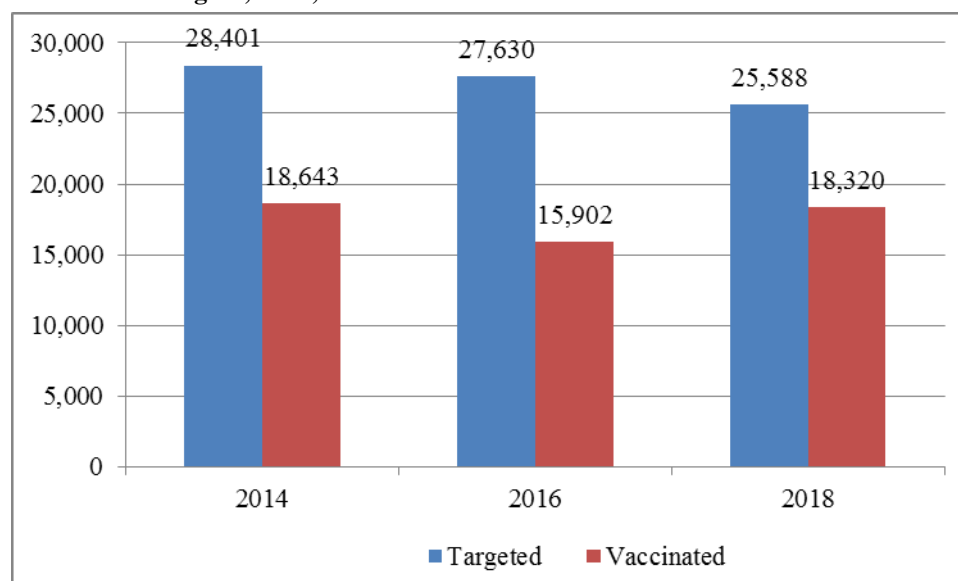
Lack of health facilities particularly MCHA in the region make it difficult to determine the significance of severe malnutrition. However, the Demographic and Health Surveys conducted by the Ministry of Health and Social Welfare in 1999, 2004/05, 2010 and 2015/16 show that severe malnutrition or stunting in the country declined from 48 percent in 1999 to 44 in 2004/05 and reached 42 percent in 2010 and 34 percent in 2015/16.

At regional level, the 2015/16 Demographic and Health Surveys shows that regions with the highest prevalence of stunting for under five children were Rukwa Region (56 percent), Njombe Region (49 percent) and Ruvuma Region (44 percent).

5.1.5.1 Mother and Child Health Care

Protection of expectant/lactating mothers and children from measles, tuberculosis, etc through immunization programme (CSPD) which is supported by development partners has to a large extent reduced the risk of their being infected. This is evidenced by the rise of deaths among children and their mothers in recent years which are attributed to the decline in coverage of immunization campaigns in both numbers and percentages in the Region. Figure 5.2 reveals that only 18,643 of the targeted 28,401 expectant mothers were vaccinated with TT2 in 2014. In 2016, out of 27,630 targeted pregnant women, 15,902 were vaccinated. In 2018, out of the targeted 25,588 pregnant women 18,320 were vaccinated with TT2.

Figure 5. 1: Number of Expectant Mothers Targeted and Vaccinated TT2, Njombe Region; 2014, 2016 and 2018



Source: Compiled Data from Councils, Health Departments, Njombe Region; 2019

As Table 5.13 shows, at council level, in 2014, Makambako led other District Councils with the best coverage of expectant mothers vaccinated with TT2 by 116.1 percent. This was followed by Njombe District Council (71.2 percent) and Ludewa District Council (59.1 percent). In 2016, Njombe District Council had the best coverage (80.8 percent) followed by Makambako District Council (72.1 percent) and Wanging'ombe DC (65.8 percent). Ludewa DC had the smallest coverage of 35.0 percent respectively. The same Table, 5.13, shows that in 2018 Makambo led other District Councils with 115.5 percent of expectant mothers vaccinated with TT2. Ludewa District Council had the smallest coverage of 51.4 percent.

Table 5. 103: Percentage of Expectant Mothers Vaccinated TT2 by Council, Njombe Region; 2014,2016 and 2018

Council	2014			2016			2018		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Njombe TC	5,579	2849	51.0	5,335	2,881	54.0	5,435	3,719	68.4
Wanging'ombe	7,218	4,079	56.5	6579	4332	65.8	5,588	3,167	56.7
Makete	4,050	2,381	58.8	3,541	1583	44.7	2,861	1,667	58.3
Njombe DC	3,881	2,762	71.2	3,552	2,871	80.8	3,124	3,086	98.8
Ludewa	4097	2421	59.1	5347	1873	35.0	5043	2594	51.4
Makambako	3576	4151	116.1	3276	2362	72.1	3537	4087	115.5
Total	28,401	18,643	65.6	27,630	15,902	57.6	25,588	18,320	71.6

Source: Compiled Data from Councils, Health Departments, Njombe Region 2019

The trend of BCG vaccination for children under one year shows an fluctuations in the number of children vaccinated (Table 5.14). At Regional level, the immunization coverage for 2014 and 2018 significantly exceeded the targeted children that indicating either the targeted children were underestimated in all the councils or mothers were highly motivated to vaccinate their children. On the other hand, the immunization coverage of 2016 was not good as was below fifty percent (i.e 44.5 percent).

At council level, Makambako TC had the best coverage of 154.8 and 227.0 percent in 2014 and 2018. In 2016, Njombe TC had the best coverage of 148.8 percent. Makete District Council had the smallest immunization coverage of 85.3 and 8.7 percent in 2014 and 2016 respectively.

Table 5. 114: Percentage of Children under one Year Vaccinated BCG by Council, Njombe Region; 2014, 2016 and 2018

Council	2014			2016			2018		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Njombe TC	5,579	7795	139.7	5,335	7,939	148.8	8,437	5,435	64.4
Wanging'ombe	4,594	5,669	123.4	4471	5360	119.9	5,072	6,978	137.6
Makete	3,876	3,307	85.3	4,166	3637	87.3	1,761	2,931	166.4
Njombe DC	3,876	3,307	85.3	41,665	3,637	8.7	2,931	3,361	114.7
Ludewa	3771	4231	112.2	4449	4765	107.1	4502	5271	117.1
Makambako	3363	5207	154.8	3363	2923	86.9	2922	6634	227.0
Total	25,059	29,516	117.8	63,449	28,261	44.5	25,625	30,610	119.5

n.a= means data not available

Source: Compiled Data from Councils, Health Departments, Njombe Region; 2019

In regard to DPT3, the coverage of immunization in at Regional level was very good only in 2014 and 2018. This is because the Region had the coverage of 95.4 and 100.0 percent respectively. The worst DPT3 immunization coverage of 31.2 percent was observed in 2016 (Table 5.15).

At Council level, Wanging'ombe Diistrict Council had the best immunization coverage of 127.7 percent in 2014 while Ludewa DC and Makambako TC had the best coverage of 97.7 and 131.0 percent in 2016 and 2018 respectively.

Table 5.15: Percentage of Children under one Year Vaccinated DPT3 by Council, Njombe Region; 2014, 2016 and 2018

Council	2014			2016			2018		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Njombe TC	5,298	4,252	80.3	5,068	4,664	92.0	5,027	5,008	100
Wanging'ombe	4,594	5,868	127.7	4,348	3,249	74.7	5,072	5,481	108
Makete	2,884	2,524	87.5	40,237	2,506	6.2	2,625	2,577	98
Njombe DC	3,495	3,219	92.1	3,246	2,856	88.0	3,089	1,008	33
Ludewa	3,232	3,186	98.6	4,080	3,988	97.7	3,701	4,368	118
Makambako	3,363	2758	82.0	3363	1576	46.9	3228	4230	131
Total	22,866	21,807	95.4	60,342	18,839	31.2	22,742	22,672	100

Source: Compiled from Councils, Health Departments, Njombe Region; 2019

Regarding the OPV3 vaccination for the under one year coverage in the Region, was the best at 82.8 and 97.6 percent in 2014 and 2018 (Table 5.16). The worst OPV3 vaccination coverage of 32.7 percent was observed in 2016. At Council level, Ludewa DC (103.3 percent) was the best performer in 2014 while in 2016 was Njombe DC (97.2 percent) as well as Makambako TC (125.1 percent) was in 2018.

Table 5.126: Percentage of Children under one Year Vaccinated OPV3 by Council, Njombe Region; 2014, 2016 and 2018

Council	2014			2016			2018		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Njombe TC	5,298	3,836	72.4	5,068	4,693	92.6	5,027	4,949	98.4
Wanging'ombe	4,596	3,337	72.6	3,691	2,835	76.8	5,072	5,417	106.8
Makete	5,100	4,411	86.5	43,107	4,495	10.4	4,581	4,457	97.3
Njombe DC	3,495	3,236	92.6	3,374	3,280	97.2	2,856	3,082	107.9
Ludewa	3,454	3,568	103.3	4,837	3,865	79.9	5,753	3,891	67.6
Makambako	3363	2562	76.2	3363	1585	47.1	3363	4207	125.1
Total	25,306	20,950	82.8	63,440	20,753	32.7	26,652	26,003	97.6

Source: Compiled from Councils, Health Departments, Njombe Region; 2019

Measles vaccination is performed to protect children against measles. At the Regional level coverage for 2014 was 92.4 percent which dropped to 34.0 percent in 2016. The coverage increased significantly to reach 104 percent in 2018. Table 5.17 also shows that with coverage of 105.9 percent, Wanging'ombe DC was the best Council in 2014. Njombe DC at 93.4 percent in 2016 and 113 percent in 2018 was the best Council in those years. The worst councils measles vaccination were Makete (80.7 percent in 2014 and 6.5 percent in 2016) and Makambako TC (91 percent) in 2018.

Table 5. 137: Percentage of Children under one Year Vaccinated Measles by Council, Njombe Region; 2014, 2016 and 2018

Council	2014			2016			2018		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Njombe TC	5,298	4,434	83.7	5,068	4,530	89.4	5,027	5,315	106
Wanging'ombe	4,594	4,867	105.9	4,268	3,230	75.7	5,072	5,590	110
Makete	2,854	2,304	80.7	36,467	2,366	6.5	2,630	2,763	105
Njombe DC	3,495	2,941	84.1	3,374	3,151	93.4	2,856	3,227	113
Ludewa	3,729	3,665	98.3	4,342	3,665	84.4	3,988	3,859	97
Makambako	2,879	2,912	101.1	2,879	2,218	77.0	2,879	2,609	91
Total	22,849	21,123	92.4	56,398	19,160	34.0	22,452	23,363	104

Source: Compiled Data from Councils, Health Departments, Njombe Region; 2019

5.1.6 Quality and State of Health Facilities

The most common parameters discussed are accessibility of water and electricity in health facilities in Njombe Region. These are important parameters in monitoring the extent which health facilities in the Njombe Region meet the requirement stipulated in Sustainable Development Goals (SDGs) which among all, promotes availability of reliable water and power in health facilities for better provision of health services.

(i) Electricity

Table 5.18 shows number of Government health facilities connected with REA/TANESCO electricity by 2018 in Njombe Region. Out of 248 health facilities available in the Region by 2018, 96 facilities (38.7 percent) were connected to REA/TANESCO electricity. Most of the health facilities connected were dispensaries (216, 76.0 percent of the connected facilities). Moreover, all eight hospitals and 15 health centres in the Region were connected to REA/TANESCO electricity. At Council level, Wanging'ombe (49.0 percent) led other Councils in number of health facilities connected to REA/TANESCO electricity. Makambako TC had the least number of health facilities connected to REA/TANESCO electricity (1 facility, 1.0 percent).

Table 5.18: Number of Government Health Facilities connected with REA/TANESCO Electricity in Njombe Region by 2018

Council	Total Government Health Facilities Available				Total Government Health Facilities Connected to REA/TANESCO Electricity				Percent connected to Electricity	Percent connected to Electricity To Regional Total
	Hospitals	Health centres	Dispensaries	Total	Hospitals	Health centres	Dispensaries	Total		
Njombe TC	1	2	46	49	1	1	3	5	10.2	5.2
Wanging'ombe	1	5	43	49	1	5	41	47	95.9	49
Makete	3	6	46	55	3	3	6	12	21.8	12.5
Njombe DC	0	4	23	27	0	3	11	14	51.9	14.6
Ludewa	3	6	55	64	3	2	12	17	26.6	17.7
Makambako	0	1	3	4	0	1	0	1	25	1
Regional Total	8	24	216	248	8	15	73	96	38.7	100
Percent	3.2	9.7	87.1	100	8.3	15.6	76	100		

Source: Compiled Data from Councils, Health Departments, Njombe Region; 2019

(ii) Water

Table 5.19 shows accessibility of water in Government health facilities in Njombe Region in 2018. Tap water is the dominant water source in all health facilities followed by water reserved in tanks. Out of the eight hospitals available in the Region in 2018 (Table 5.19), seven depended on water from tap. Likewise, out of the 24 health centres which were available in the Region by 2018, 14 of them (58.3 percent) used tap water as their main source. Dispensaries which were 216 by 2018 (Table 5.19), 111 of them (51.3 percent) supplied with tap water as their main water source.

Table 5.19: Accessibility of Water in Government Health Facilities by Type, Njombe Region, 2018

Council	Hospital			Health centres			Dispensaries		
	Water Tanks	Water Wells	Tap Water	Water Tanks	Water Wells	Tap Water	Water Tanks	Water Wells	Tap Water
Njombe TC	1	0	1	1	0	2	2	0	26
Wanging'ombe	0	0	0	0	0	0	0	1	39
Makete	3	0	3	6	0	6	5	0	41
Njombe DC	0	0	0	1	0	2	0	16	3
Ludewa	0	3	3	4	0	3	42	0	0
Makambako	0	0	0	1	1	1	2	2	2
Regional Total	4	3	7	13	1	14	51	19	111

Source: Compiled Data from Councils, Health Departments, Njombe Region; 2019

5.1.6 Policy Implication on Health sector

Provision of health services in Njombe region still below the national and WHO standards. The region still has inadequate number of doctors, health infrastructure and facilities.

Moreover, there are questions of inadequate number of doctors; limited provision of curative and preventive health services such as operations, professional assistance and advices, mother and child health facilities; poor diagnosis of illnesses due to shortage or lack of medical machines and equipment, just to mention a few. This is evidenced by high rates of infant and child mortality as well as maternal mortality as already discussed in in this report. However, health services can be improved through formulating policies which will favour doctors and other health workers working in rural areas. Likewise, the policy of constructing dispensaries in every village and one health centre in every ward by both public and private sectors should be adhered to for increase accessibility of health services to rural population.

5.1.7 Investment Opportunities for Health Sector

This sub-sector faces many problems including prevalence of diseases such as ARI, pneumonia, diarrhea, malaria, clinical Aids, etc; shortage of workers especially nurses and medicines. Investment is needed in regard to the construction of more health facilities e.g. health centers, instruments/medicines and training of health/medical personnel.

5.2 Education Sector

5.2.0 An Overview

Education Sector covers pre-primary, primary, secondary and tertiary education. The sector also includes adult education, vocational education and teacher education. Thus, the development of this sector in Njombe Region involves improving school infrastructure and students access to all the above mentioned areas. This understanding is been evidenced by steps so far taken by the Government and the Private Sector to increase student enrolment from pre-primary to higher learning institutions in recent years.

5.2.1 Pre-Primary Education

One condition set by the Ministry of Education and Vocational Training is that enrolment in primary education should be for those who graduate from pre-primary education and this has led to the expansion of pre- primary schools in Njombe Region.

Table 5.20 shows that the Region increased the number of pre-primary classrooms from 497 in 2016 to 503 in 2018. Most of these classes are annexed to private and government owned primary school compounds. The distribution of pre-primary schools was not even and Ludewa District Council (21.9 percent) had the largest percentage followed by Wanging'ombe (21.7 percent) and Makete (20.5 percent). Makambako TC (40 classrooms, 8.0 percent) had the least number pre-primary school classrooms in Njombe Region in 2018.

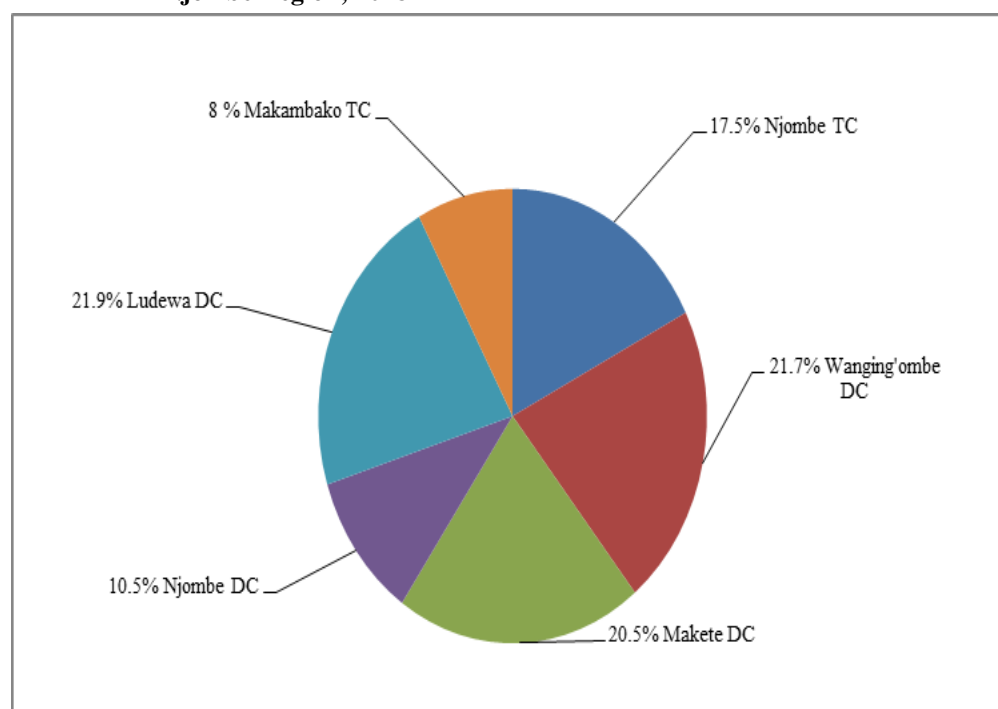
Table 5. 14: Number of Pre-Primary School Classrooms by Ownership and Council, Njombe Region; 2016 and 2018

Council	2016			2018			2018 Council Share (Percent)
	Public	Private	Total	Public	Private	Total	
Njombe TC	73	11	84	76	12	88	17.5
Wanging'ombe	107	1	108	107	2	109	21.7
Makete	102	1	103	102	1	103	20.5
Njombe DC	52	1	53	52	1	53	10.5
Ludewa	108	1	109	108	2	110	21.9
Makambako	38	2	40	38	2	40	8.0
Total	480	17	497	483	20	503	100.0
Percent	96.6	3.4	100	96.0	4.0	100	

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

With reference to Figure 5.3, Ludewa DC had the largest share of pre-primary school classrooms of 21.9 percent in 2018. Wanging'ombe DC was the second (21.7 percent) and Makete DC (20.5 percent) the third. Makambako TC (8.0 percent) had the least share of pre-primary school classrooms in the Region in 2018.

Figure 5. 2: Percentage Distribution of Pre-Primary School Classrooms by Council, Njombe Region; 2018



Source: Compiled Data from Districts, Education Departments, Njombe Region; 2019

5.2.2 Enrolment in Pre-Primary Schools

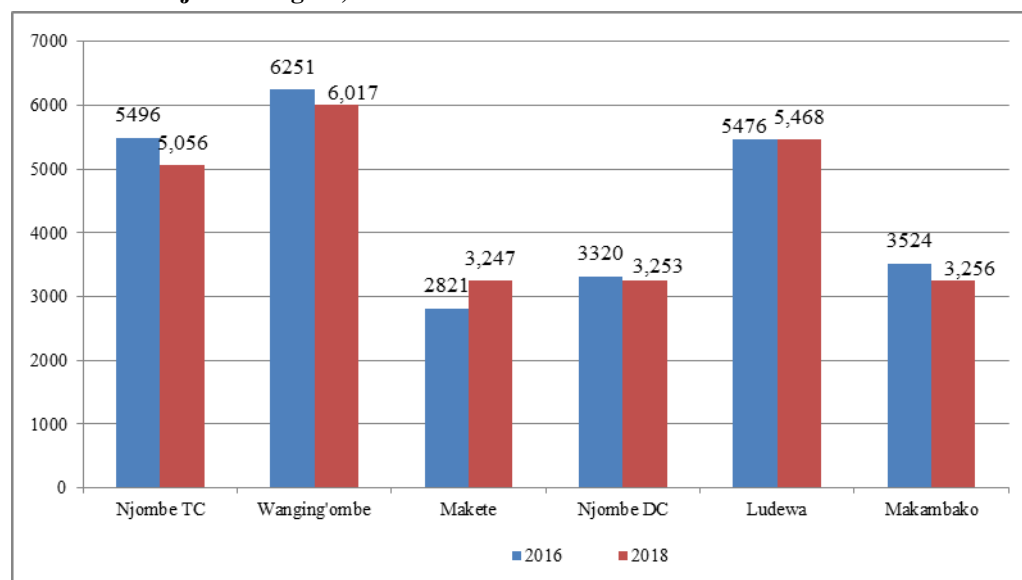
The motive behind introducing pre-primary classes in government and private primary schools all over the country was to increase enrolment of children aged 5 and 6 years in such schools. Enrolment in Njombe Region decreased slightly by 2.2 percent (591 pupils) from 26,888 pupils in 2016 to 26,297 in 2018 (Table 5.21). Nevertheless, there was decrease in enrolment in all councils with exception of Makete District Council where its enrolment increased by 426 pupils (15 percent). However, in terms of the share of each council in 2018 enrolment, Wangingombe District Council had the largest share (6,017 pupils, 22.9 percent) while Makete District Council had the lowest share (3,247 pupils, 12.3 percent).

Table 5. 151: Enrolment of Pupils in Public and Private Pre-Primary Schools by Council, Njombe Region; 2016 and 2018

Council	2016			2018			Change in Total Enrolment 2018-2016	Percentage Change in Enrolment 2018-2016	2018 Council Share (Percent)
	Public	Private	Total	Public	Private	Total			
Njombe TC	5,187	309	5,496	4,699	357	5,056	-440	-8	19.2
Wanging'ombe	6,251	-	6,251	6,004	13	6,017	-234	-4	22.9
Makete	2,803	18	2,821	3,231	16	3,247	426	15	12.3
Njombe DC	3,283	37	3,320	3,253	-	3,253	-67	-2	12.4
Ludewa	5,434	42	5,476	5,448	20	5,468	-8	0	20.8
Makambako	3,469	55	3,524	3,159	97	3,256	-268	-8	12.4
Total	26,427	461	26,888	25,794	503	26,297	-591	-2	100.0
Percent	98.3	1.7	100	98.1	1.9	100	-2.2		

Source: Compiled Data from Districts, Education Departments, Njombe Region; 2019

Figure 5.4 shows that in both years, 2016 and 2018, Wanging'ombe District Council had the highest enrolment of pre-primary school pupils in the Region. It was followed by Njombe TC (5,496 pupils) in 2016 and Ludewa District Council (5,468 pupils) in 2018. The least registration of pre-primary school pupils in both years were observed in Makete District Council at 2,821 and 3,247 pupils respectively.

Figure 5.3: Enrolment in Pre-Primary Schools (Total of Public and Private) by Council, Njombe Region; 2016 and 2018

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.2.3 Primary Education

According to the Universal Declaration of Human Rights of 1948, primary education should be free, fundamental and a basic right. In Tanzania, primary education is free and compulsory to every Tanzanian child of school going age (7-13). To render this possible the Government of Tanzania put in place various policies and programmes including: the Universal Primary Education (UPE) in 1974; the Education Act Number 25 of 1978 with its subsequent amendments; the Education and Training Policy 1995 and the Primary Education Development Programme (PEDP) 2001; all of which make primary education compulsory and set out to make it available to every child. To achieve this goal, the first task was to have a reliable number of primary schools which would make enrolment increase possible.

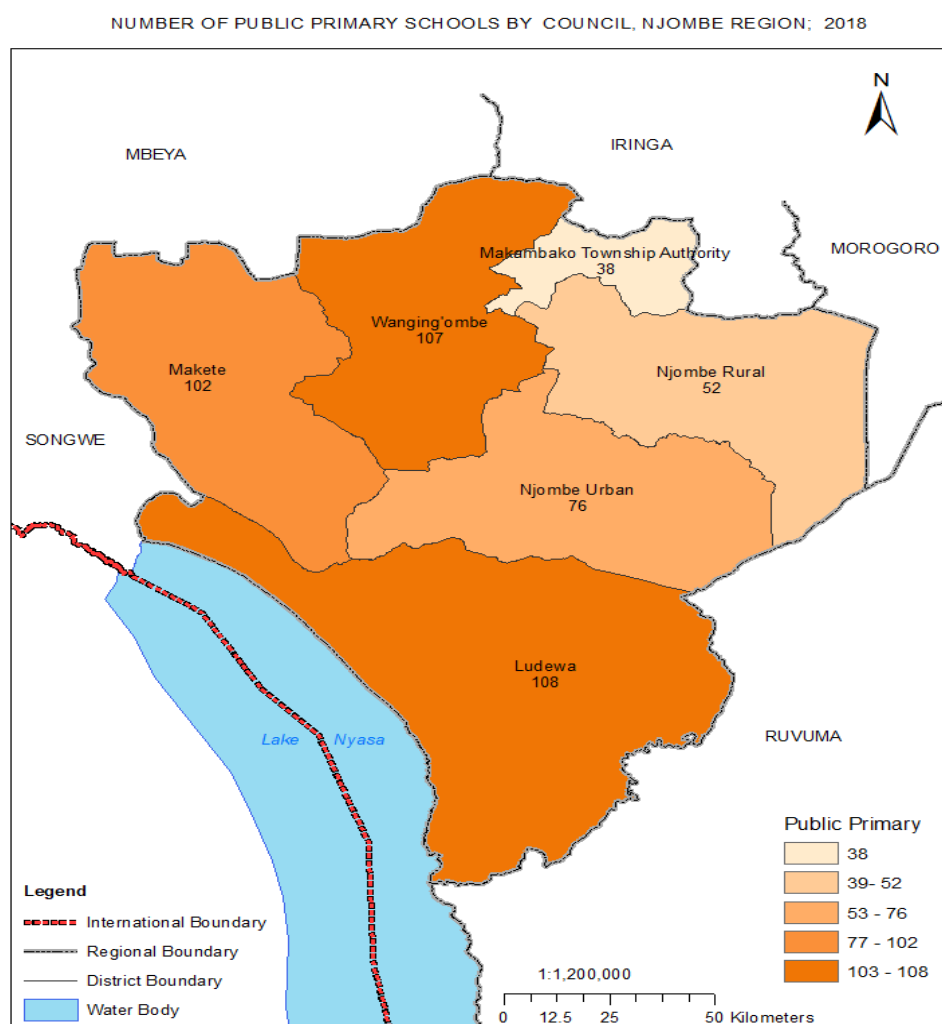
According to Table 5.22, out of 503 primary schools in the Region in 2018, 483 (96.0 percent) were owned by the Government and 20 schools (4.0 percent) owned by private. The number of primary schools in the Region increased by six schools (1.2 percent) from 497 in 2016 to 503 in 2018. Njombe TC and Wanging'ombe DC were the only councils which had increase in number of primary schools. At Council level, Ludewa DC (110 schools, 21.9 percent) led in number of primary schools in the Region in 2018. It was followed by Wanging'ombe DC (109 schools, 21.9 percent) and Makete DC (103 schools, 20.5 percent). The least number of primary schools in 2018 in the Region was observed in Makambako Town Council (40 schools, 8.0 percent).

Table 5. 162: Number of Primary Schools by Ownership and Council, Njombe Region; 2016 and 2018

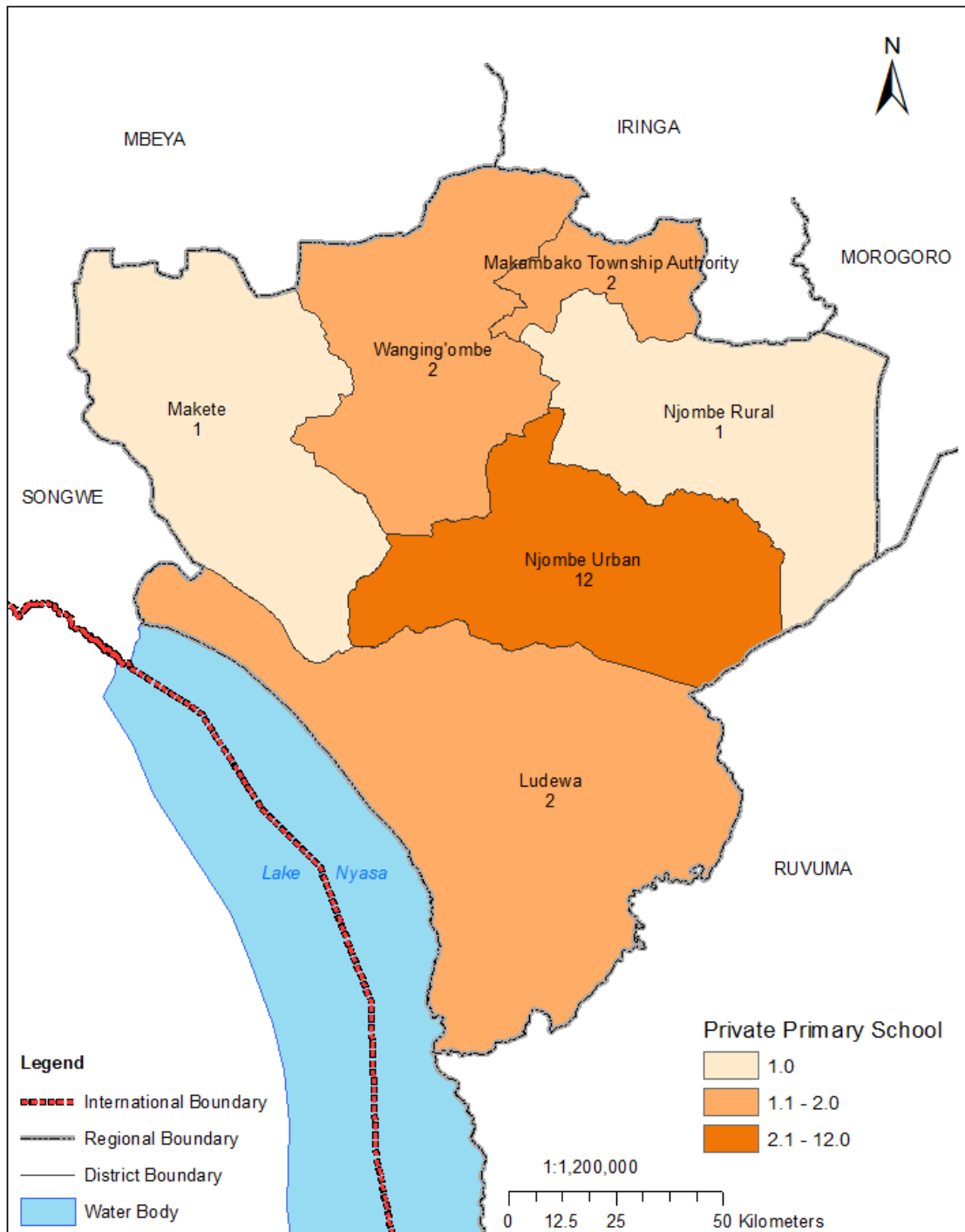
Council	2016			2018			Change in number of schools 2018-2016	Percentage Change in number of schools 2018-2016	2018 Council Share (Percent)
	Public	Private	Total	Public	Private	Total			
Njombe TC	73	11	84	76	12	88	4	4.8	17.5
Wanging'ombe	107	-	107	107	2	109	2	1.9	21.7
Makete	102	1	103	102	1	103	0	0.0	20.5
Njombe DC	52	1	53	52	1	53	0	0.0	10.5
Ludewa	108	2	110	108	2	110	0	0.0	21.9
Makambako	38	2	40	38	2	40	0	0.0	8.0
Regional Total	480	17	497	483	20	503	6	1.2	100.0
Percent	96.6	3.4	100	96.0	4.0	100			

Public Schools=Government Owned Schools

Source: Compiled Data from Districts, Education Departments, Njombe Region; 2019



NUMBER OF PRIVATE PRIMARY SCHOOLS BY COUNCIL, NJOMBE REGION; 2018



5.2.4 Coverage of Primary School Education System

By increasing number of primary schools the region showed the desire of giving every child of school going age a chance of being enrolled into standard one. On average, each village had a primary school as the region had 463 villages and 483 public/government

owned primary schools in 2018. Furthermore, Table 5.23 reveals that Ludewa had the highest average number of primary schools (1.4) per village while Makambako had the least number of primary school per village (0.6).

Table 5. 173: Distribution of Public Primary Schools by Council and Their Accessibility at Ward and Village Level, Njombe Region; 2018

Council	Number of Ward	Number of Village/ Street	Number of Schools	Schools Ward Ratio	Schools Village Ratio
Njombe TC	13	72	76	5.8	1.1
Wanging'ombe	21	108	107	5.1	1.0
Makete	23	93	102	4.4	1.1
Njombe DC	12	45	52	4.3	1.2
Ludewa	26	77	108	4.2	1.4
Makambako	12	68	38	3.2	0.6
Regional Total	107	463	483	4.5	1.0

Source: Compiled Data from Districts, Education Departments, Njombe Region; 2019

5. 2.5 Standard One Enrolment

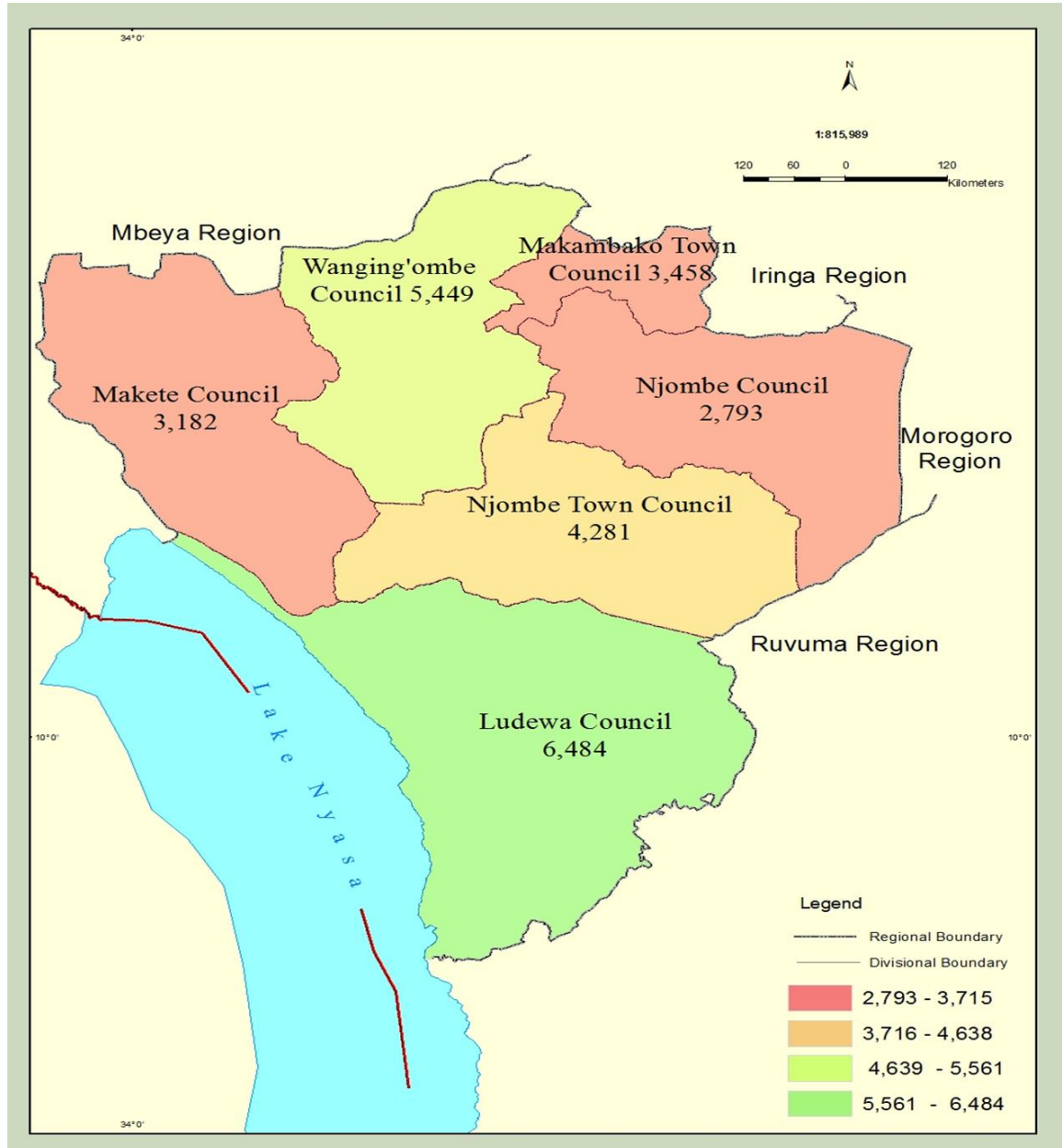
Over the period of two years 2016 and 2018, Njombe Region had a challenge of implementing the call of the government to increase enrolment in primary school. This is justified in Table 5.24 as number of standard I pupils enrolled in government primary schools decreased by 1.4 percent (373 pupils) from 26,045 pupils of 2016 to 25,672 of 2018. Most of the decrease in pupils in 2018 as compared to 2016 was observed in Njombe Town Council (479 pupils decreased, 9.7 percent). On the other hand, Makambako Town Council had the largest increase of pupils enrolled in standard I in government primary schools (243 pupils, 6.7 percent).

Table 5. 184: Standard I Enrolment in Public Primary Schools by Council, Njombe Region; 2016 and 2018

Council	2016		2018		Enrolment Change	
	Number	Percent	Number	Percent	Number	Percent
Njombe TC	4,963	19.1	4,484	17.5	-479	-9.7
Wanging'ombe	5,973	22.9	5,632	21.9	-341	-5.7
Makete	2,803	10.8	2,995	11.7	192	6.8
Njombe DC	3,311	12.7	3,439	13.4	128	3.9
Ludewa	5,347	20.5	5,231	20.4	-116	-2.2
Makambako	3,648	14.0	3,891	15.2	243	6.7
Regional Total	26,045	100.0	25,672	100.0	-373	-1.4

Source: Compiled Data from Districts, Education Departments, Njombe Region; 2019

Standard I Enrolment by Council, Njombe Region; 2012 Census



Source: National Bureau of Statistics, Geographical Information System Unit, 2019

5.2.6 Standard One Enrolment by Age Group

Community participation through PEDP and the Complementary Basic Education in Tanzania (COBET) has managed to motivate parents in the region to enroll their children and thus improve the enrolment rate of Njombe region. This improvement can be seen through changes in net enrolment rates and gross enrolment rates; reduction of drop out of pupils; availability of education facilities and performance of pupils in general.

Though enrolment into standard one, according to the education policy, is for children aged six to seven years, it has been expanded to cover children aged between 6 and 13 years due to culture and norms of the people of Tanzania. Table 5.25 shows that children

enrolled in Standard One at the age of six to seven years in 2018 accounted for 84.8 percent of the total enrolment while children aged eight years and over accounted for 15.2 percent. Best performer was Ludewa District Council where 99.1 percent of Standard I pupils were aged six to seven years. Njombe DC had the worst performance since only 76.7 percent of pupils enrolled in standard one were of age six to seven years. Moreover, almost in all councils equal number of boys and girls were registered to standard one.

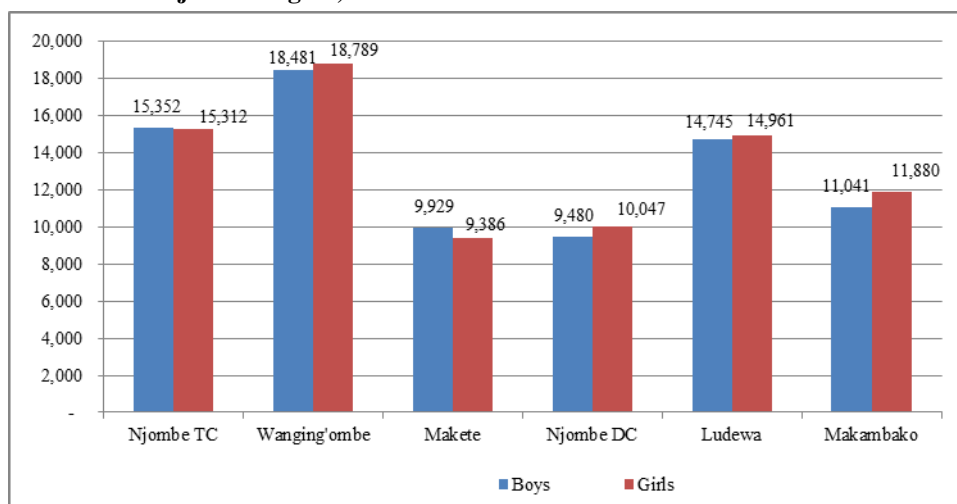
Table 5. 195: Standard I Enrolment by Age Group and Council in Public Primary Schools, Njombe Region; 2018

Council	Sex	Age Six to Seven Years		Eight Year and Above		Total	
		Number	Percent	Number	Percent	Number	Percent of Sexes
Njombe TC	Boys	1,888	86.8	286	13.2	2,174	50.2
	Girls	1,966	91.3	188	8.7	2,154	49.8
	Total	3,854	89.0	474	11.0	4,328	100.0
Wanging'ombe	Boys	2,278	80.3	559	19.7	2,837	49.5
	Girls	2,475	85.7	414	14.3	2,889	50.5
	Total	4,753	83.0	973	17.0	5,726	100.0
Makete	Boys	1,181	78.5	323	21.5	1,504	50.1
	Girls	1,145	76.5	352	23.5	1,497	49.9
	Total	2,326	77.5	675	22.5	3,001	100.0
Njombe –DC	Boys	1,137	73.2	416	26.8	1,553	49.0
	Girls	1,294	80.0	323	20.0	1,617	51.0
	Total	2,431	76.7	739	23.3	3,170	100.0
Ludewa	Boys	2,316	99.1	21	0.9	2,337	50.9
	Girls	2,237	99.1	20	0.9	2,257	49.1
	Total	4,553	99.1	41	0.9	4,594	100.0
Makambako	Boys	1,492	78.9	400	21.1	1,892	48.6
	Girls	1,552	77.6	447	22.4	1,999	51.4
	Total	3,044	78.2	847	21.8	3,891	100.0
Regional Total	Boys	10,292	83.7	2,005	16.3	12,297	49.8
	Girls	10,669	86.0	1,744	14.0	12,413	50.2
	Total	20,961	84.8	3,749	15.2	24,710	100.0

Source: Compiled Data from Districts, Education Departments, Njombe Region; 2019

Though there were variations among councils, in 2018, the best Council in giving equal opportunities to boys and girls was Makambako Town Council where more girls (11,880, 51.8 percent) than boys (11,041, 48.2 percent) were registered in public primary schools. It was followed by Njombe DC with 10,047 girls (51.5 percent) compared to boys 9,480 (48.5 percent). With enrolment for girls of lower than fifty percent, Makete (9,386 girls , 48.6 percent) and Njombe TC (15,312 girls, 49.9 percent), the two councils still struggling in implementing the Government call of equal opportunity to boys and girls in primary school pupils registration. (Figure 5.5).

Figure 5. 4: Standard I Enrolment in Public Primary Schools by Sex and Council, Njombe Region, 2018



Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.2.7 Standard (I-VII) Enrolment

With reference to Table 5.26, the percentage share of girls in total enrolment was slightly higher than that of boys. However, the insignificant difference in the shares of boys and girls is a result of the region’s efforts to implement national objective of ensuring girls get equal opportunity as boys in primary school education. Table 5.26 further shows that primary schools in Makambako Town Council lead in girl’s enrolment in both years; 2010 (52.8 percent). Makete had the lowest share of girls enrolment in all four years. There is therefore a need to find strategies that will improve girl’s enrolment in primary schools located in this District Council.

Table 5. 20: Total (Std I - VII) Enrolment in Public Primary Schools by Sex and Council, Njombe Region; 2015 - 2018

Council	2015				2016				2017				2018			
	Boys	Percent Girls	Girls	Total	Boys	Percent Girls	Girls	Total	Boys	Percent Girls	Girls	Total	Boys	Percent Girls	Girls	Total
Njombe TC	12,766	51.6	13,585	26,351	14,336	50.9	14,839	29,175	14,698	50.4	14,913	29,611	15,352	49.9	15,312	30,664
Wanging'ombe	15,586	51.9	16,829	32,415	16,573	51.4	17,521	34,094	18,094	50.6	18,522	36,616	18,481	50.4	18,789	37,270
Makete	9,153	49.8	9,064	18,217	9,772	49.5	9,568	19,340	9,684	49.2	9,364	19,048	9,929	48.6	9,386	19,315
Njombe DC	8,552	52.0	9,281	17,833	8,746	51.9	9,427	18,173	9,132	51.7	9,793	18,925	9,480	51.5	10,047	19,527
Ludewa	13,534	51.5	14,355	27,889	13,773	50.9	14,267	28,040	14,441	50.0	14,465	28,906	14,745	50.4	14,961	29,706
Makambako	9,553	52.1	10,411	19,964	9,906	51.9	10,710	20,616	10,529	52.0	11,427	21,956	11,041	51.8	11,880	22,921
Total	69,144	51.5	73,525	142,669	73,106	51.1	76,332	149,438	76,578	50.6	78,484	155,062	79,028	50.4	80,375	159,403

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5. 2.8 Primary School Completion Rate

The completion rate is an indicator of the internal efficiency of the school system that shows the extent to which a cohort of pupils admitted in class one, completes the primary education cycle irrespective of whether they sit for the final examination or not. The rate of completion of primary education cycle in Njombe Region, improved slightly due to the improvement of school environment such as provision of meals and parents involvement through school committees.

Table 5.27 shows the extent to which a cohort of pupils that enrolled in primary education in 2011 and completed in 2017. Out of 22,431 pupils enrolled in standard one in 2011, 17,832 pupils (79.5 percent) completed Standard Seven in 2017. More girls (9,509, 53.3 percent) than boys (8,323, 46.7 percent) completed primary education in 2017. Along with the variations observed among councils; Njombe Town Council had the highest completion rate of 87.8 percent while Makambako Town Council had the lowest of 61.2 percent.

Table 5. 21: Number of Pupils Enrolled in Std I in 2011 and Completed Std VII in 2017 by Council, Njombe Region

Council	2011 to 2017								
	Enrolled 2011			Completed 2017			Completion Rate (%) by Sex		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Njombe TC	2,094	2,029	4,123	1,740	1,878	3,618	83.1	92.6	87.8
Wanging'ombe	2,397	2,581	4,978	1,980	2,221	4,201	82.6	86.1	84.4
Makete	1,559	1,493	3,052	1,028	1,184	2,212	65.9	79.3	72.5
Njombe DC	1,081	1,235	2,316	911	1,116	2,027	84.3	90.4	87.5
Ludewa	2,194	2,207	4,401	1,679	1,917	3,596	76.5	86.9	81.7
Makambako	1,781	1,780	3,561	985	1,193	2,178	55.3	67.0	61.2
Regional Total	11,106	11,325	22,431	8,323	9,509	17,832	74.9	84.0	79.5
Percent	49.5	50.5	100	46.7	53.3	100			

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

The performance of primary schools in terms of completion rate was slightly higher in 2018 when the completion rate was 79.7 percent (Table 5.28a) than in 2017 when it was 79.5 percent (Table 5.29). Moreover, in both 2017 (84.0 percent) and 2018 (85.2 percent) the completion rate was higher for girls.

At Council level, Table 5.28a shows that in 2018 Njombe District Council led other councils with completion rate of 83.0 percent while Makambako Town Council had the lowest of 74.9 percent respectively.

Table 5.28 a: Number of Pupils Enrolled in Std I in 2012 and Completed Std VII in 2018 by Council, Njombe Region

Council	2012 to 2018								
	Enrolled 2012			Completed 2018			Completion Rate (%) by Sex		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Njombe TC	2,079	2,056	4,135	1,640	1,786	3,426	78.9	86.9	82.9
Wanging'ombe	2,322	2,538	4,860	1,677	2,098	3,775	72.2	82.7	77.7
Makete	1,693	1,499	3,192	1,195	1,257	2,452	70.6	83.9	76.8
Njombe DC	1,195	1,282	2,477	902	1,155	2,057	75.5	90.1	83.0
Ludewa	2,139	2,239	4,378	1,712	1,902	3,614	80.0	84.9	82.5
Makambako	1,503	1,448	2,951	981	1,230	2,211	65.3	84.9	74.9
Regional Total	10,931	11,062	21,993	8,107	9,428	17,535	74.2	85.2	79.7
Percent	49.7	50.3	100	46.2	53.8	100			

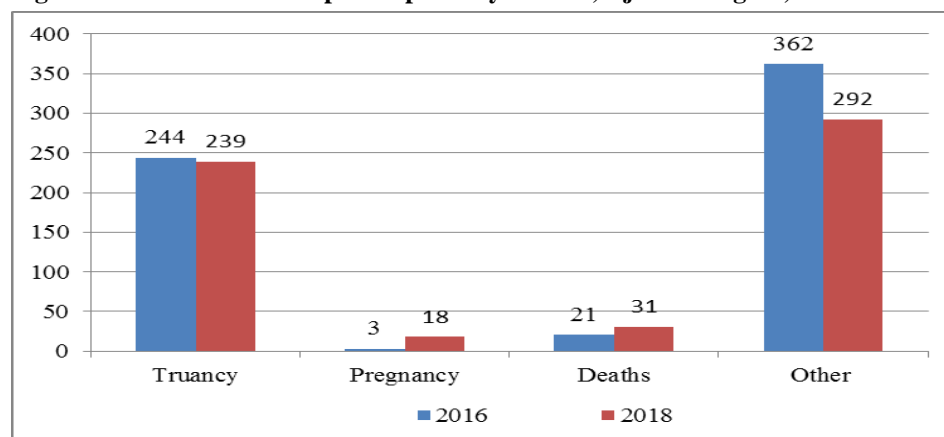
Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.2.9 Primary School Dropout Rate

Figure 5.6 summarizes the situation of primary school dropouts in Njombe Region in 2016 and 2018. Dropouts in primary school education were due to truancy, pregnancy, death or other reasons.

Figure 5.6 shows that in both years, drop outs due to other reasons was the most serious problem for primary school pupils in completing Standard Seven education. Truancies were second source of drop outs in the Region while deaths and pregnancies were insignificant.

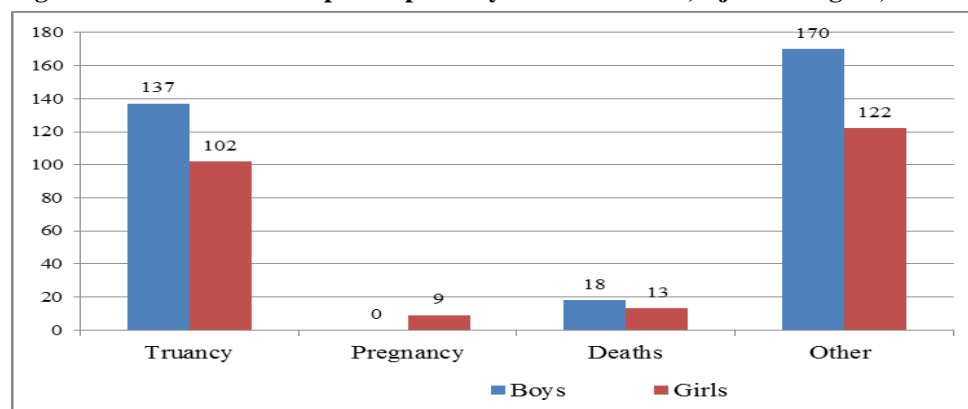
Figure 5. 5: Number of Pupil Dropouts by Reason, Njombe Region; 2016 and 2018



Source: Compiled Data from Districts, Education Departments, Njombe Region; 2019

Sex – wise, Figure 5.7 shows that pupils drop out in 2018 was more significant for boys than girls with exception of pregnancy. Drop out cases caused by truancy was 137 for boys compared to 102 girls’ cases. Similar trend is observed for deaths, of which 18 deaths were registered for boys compared to 13 cases for girls. Likewise, drop outs due to other reasons were more common to boys (170) than girls (122). These data highlight that there is a need to reduce number of drop outs for boys.

Figure 5. 6: Number of Pupil Dropouts by Reason and Sex, Njombe Region; 2018



Source: Compiled from Districts, Education Departments, Njombe Region; 2019

Njombe Region had a total of 630 drop outs in 2016 and 571 in 2018 (Table 5.29). Drop outs caused by other reasons were the leading in both years, 2016 and 2018 at 57.5 and 50.3 percent respectively. Likewise, in both years, truancies and deaths ranked second and third reasons for drop outs in the Region.

At a council level, Table 5.29 shows that in 2016, Makambako Town Council had the highest number of pupils drop outs in of 181 followed by Wanging'ombe DC (144) and Makete DC (127). Ludewa DC had the least number of drop outs (9). Makete DC had the highest number of drop outs (189) in 2018 followed by Wanging'ombe (152) and Makambako (60). Njombe DC had the least number of drop outs (28).

Looking at the causes of pupils drop outs, in both years, 2016 and 2018, Ludewa District Council had highest number of truancies of 94 and 79. Makambako TC was the second(57) and Njombe DC the third(53) in number of truancies in 2016. Likewise, Makambako TC (53 truancies drop outs) and Njombe TC (33 truancies drop outs) were the second and third in 2018 in number of truancies drop outs. In both years given in Table 5.29, drop outs due to pregnancy as well as deaths drop outs were insignificant in number in the Region. Pupils drop outs due to 'other reasons' observed to be very significant in three councils of Wanging'ombe, Makete and Makambako councils.

Table 5. 229: Pupils Dropouts by Reason and Council, Njombe Region; 2016 and 2018

Council	Reason	2016				2018			
		Boys	Girls	Total	Percent	Boys	Girls	Total	Percent
Njombe-TC	Truancy	7	6	13	5.3	24	9	33	13.8
	Pregnancy		0	0	0.0		5	5	55.6
	Death	4	0	4	19.0	10	6	16	51.6
	Other	0	0	0	0.0	0	0	0	0.0
	Total	11	6	17	2.7	34	20	54	9.5
Wanging'ombe	Truancy	18	4	22	9.0	18	9	27	11.3
	Pregnancy		0	0	0.0		0	0	0.0
	Death	0	1	1	4.8	0	0	0	0.0
	Other	77	44	121	33.4	84	41	125	42.8
	Total	95	49	144	22.9	102	50	152	26.6
Makete	Truancy	3	2	5	2.0	14	9	23	9.6
	Pregnancy		0	0	0.0		1	1	11.1

Council	Reason	2016				2018			
		Boys	Girls	Total	Percent	Boys	Girls	Total	Percent
	Death	0	1	1	4.8	0	0	0	0.0
	Other	77	44	121	33.4	84	81	165	56.5
	Total	80	47	127	20.2	98	91	189	33.1
	Truancy	36	17	53	21.7	13	11	24	10.0
	Pregnancy		0	0	0.0		0	0	0.0
Njombe-DC	Death	3	0	3	14.3	2	0	2	6.5
	Other	2	0	2	0.6	2	0	2	0.7
	Total	41	17	58	9.2	17	11	28	4.9
	Truancy	41	53	94	38.5	37	42	79	33.1
	Pregnancy		3	3	100.0		2	2	22.2
Ludewa	Death	2	4	6	28.6	3	4	7	22.6
	Other	0	0	0	0.0	0	0	0	0.0
	Total	2	7	9	1.4	3	6	9	1.6
	Truancy	33	24	57	23.4	31	22	53	22.2
	Pregnancy		0	0	0.0		1	1	11.1
Makambako	Death	3	3	6	28.6	3	3	6	19.4
	Other	53	65	118	32.6	0	0	0	0.0
	Total	89	92	181	74.2	34	26	60	10.5
	Truancy	138	106	244	38.7	137	102	239	41.9
	Pregnancy		3	3	0.5	0	9	9	1.6
Regional Total	Death	12	9	21	3.3	18	13	31	5.4
	Other	209	153	362	57.5	170	122	292	51.1
	Total	359	271	630	100.0	325	246	571	100.0

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.2.10 Pass Rate in Primary Schools

Pass rate refers to the percentage of pupils who passed the Primary School Leaving Examinations (PSLE) out of the total pupils who sat for the examinations. Table 5.30 shows that the pass rate increased from 77.7 percent in 2016 to 80.4 percent in 2018. In 2016, Makambako TC had the highest pass rate (87.6 percent) in the Region followed by

Wanging'ombe DC (83.8 percent) and Njombe DC (83.6 percent) . Ludewa DC had the lowest pass rate (66.6 percent) followed by Makete DC (66.9 percent).

In 2018, Makambako TC again had the highest pass rate (91.0percent) in the Region, followed by Njombe TC (84.7 percent) and Ludewa (81.1 percent) while Njombe DC had the lowest pass rate (72.6 percent).

Table 5.30 also shows that, overall in 2016 the pass rate for girls was lower (77.3 percent) than that of boys (78.2 percent). However, there were variations among councils, with Njombe TC, Wanging'ombe and Makete having higher pass rates for girls than boys. However, all six councils had higher pass rates for girls than boys in 2018.

Table 5. 23: Number of Pupils Who Sat and Passed STD VII Examinations in Public Primary Schools by Council, Njombe Region; 2016 and 2018

Council	Sex	Pupils sat for STD VII Examinations		Pupils Passed STD VII Examinations		Percentage of Pupils Who Passed Examination	
		2016	2018	2016	2018	2016	2018
Njombe TC	Boys	1,417	1546	1,138	1277	80.3	82.6
	Girls	1,671	1701	1,383	1473	82.8	86.6
	Total	3,088	3247	2,521	2750	81.6	84.7
Wanging'ombe	Boys	1,509	2088	1,251	1523	82.9	72.9
	Girls	1,969	2392	1,664	1937	84.5	81.0
	Total	3,478	4480	2,915	3460	83.8	77.2
Makete	Boys	1,366	1,195	865	880	63.3	73.6
	Girls	1,422	1,257	1,000	947	70.3	75.3
	Total	2,788	2,452	1,865	1,827	66.9	74.5
Njombe DC	Boys	861	1,158	777	758	90.2	65.5
	Girls	1,059	1,185	829	942	78.3	79.5
	Total	1,920	2,343	1,606	1,700	83.6	72.6
Ludewa	Boys	1,510	1793	1,038	1413	68.7	78.8
	Girls	1,776	1962	1,151	1633	64.8	83.2
	Total	3,286	3755	2,189	3046	66.6	81.1
Makambako	Boys	981	1311	911	1172	92.9	89.4
	Girls	1,230	1530	1,026	1413	83.4	92.4
	Total	2,211	2841	1,937	2585	87.6	91.0
Region	Boys	7,644	9,091	5,980	7,023	78.2	77.3
	Girls	9,127	10,027	7,053	8,345	77.3	83.2
	Total	16,771	19,118	13,033	15,368	77.7	80.4

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.2.11 Transition to Secondary Education

Transition rate refers to the ability of the Local Government Authorities to absorb all students who pass the PSLE and provide them with secondary education. It also reflects the capacity of secondary education being provided in the region or district. In 2016, a total of 11,882 pupils passed the PSLE and almost all of them (98.9 percent) were selected to join Form One in the region (Table 5.31). The same situation happened in 2018 when all 13,735 pupils who passed PSLE joined form One.

In 2016, more girls (118.2 percent) than boys (79.9 percent) joined form One in the region. The same situation happened in 2018 when more girls (124.3 percent) than boys (78.5 percent) joined form One. At district level, in both years, 2016 and 2018 Wanging'ombe District Council led other councils in the region by having the largest number of pupils who were selected to join form One in the region. The District council had 24.8 percent of the regional pupils who were selected to join form in 2016 as well as 29.4 percent in 2018 respectively. Makete District Council had the least with 15.9 percent in 2016 and 15.5 percent in 2018.

Table 5. 24: Number of Pupils Who were Selected and Joined Form I in Public Secondary Schools, Njombe Region; 2016 and 2018

Council	Sex	Pupils Passed STD VII Examinations		Pupils Selected to Join Form I		Percentage of Pupils Selected to Join Form I	
		2016	2018	2016	2018	2016	2018
Njombe TC	Boys	1,138	1277	1,103	1277	96.9	100.0
	Girls	1,383	1473	1,309	1473	94.6	100.0
	Total	2,521	2750	2,412	2750	95.7	100.0
Wanging'ombe	Boys	1,251	1523	1,251	1523	100.0	100.0
	Girls	1,664	1937	1,664	1937	100.0	100.0
	Total	2,915	3460	2,915	3460	100.0	100.0
Makete	Boys	865	880	865	880	100.0	100.0
	Girls	1,000	947	1000	947	100.0	100.0
	Total	1,865	1,827	1865	1827	100.0	100.0
Njombe DC	Boys	777	758	647	659	83.3	86.9
	Girls	829	942	829	942	100.0	100.0
	Total	1,606	1,700	1476	1601	91.9	94.2
Ludewa	Boys	1,038	1413	1,038	1413	100.0	100.0
	Girls	1,151	1633	1,151	1633	100.0	100.0
	Total	2,189	3046	2,189	3046	100.0	100.0
Makambako	Boys	911	1172	911	1172	100.0	100.0
	Girls	1,026	1413	1026	1413	100.0	100.0
	Total	1,937	2585	1937	2585	100.0	100.0
Region	Boys	5,980	7,023	4,777	5,511	79.9	78.5
	Girls	5,902	6,712	6,979	8,345	118.2	124.3
	Total	11,882	13,735	11,756	13,856	98.9	100.9

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.2.12 Primary School Facilities

It is the duty of the local government authorities and the President Office – Regional Administration Local Government (PO-RALG) to collaborate with beneficiaries (the community) to make sure that teachers and basic education facilities such as classrooms, toilets, staff houses, furniture, libraries and textbooks are in place.

i) Classrooms

In the Tanzania Education System, the use of each classroom in primary schools should follow the national standard of accommodating 45 pupils only. Due to inadequate infrastructure most of schools failed to meet the recommended pupils classroom ratio of one classroom per 45 pupils or CPR = 1:45. Using CPR indicator, Table 5.32 shows Njombe Region had the ratio of 1:45 hence no shortage of classrooms the Region had in 2018. On the other hand, basing on the deference on the number of available and required classrooms, the Region had a shortage of 1,516 classrooms in 2018. This exceded a shortage of 2015 by 1,283 classrooms (551.0 percent). Moreover, at Council level and basing on CPR of 2018, Makambao TC (1:71), Njombe TC (1:52), Wanging'ombe (1:49) and Njombe DC (1:48) all had classrooms deficits. Deficit by Council in absolute numbers shows Makete DC led other councils (408 classrooms deficit).

Table 5. 252: Availability of Classrooms in Public Primary Schools by Council, Njombe Region; 2018

Council	Number of Schools	Total Pupils	Available Classrooms	Average Number of Classrooms per School	Classroom Pupils Ratio (CPR)	Required Classrooms by Using STD Ratio	Deficit/Extra Classrooms (2018)	Deficit/Extra Classrooms (2015)	Change in Deficit/Extra Classrooms(2018 - 2015)	Percent Change (2018 - 2015)
Njombe TC	76	30,664	587	7.7	1:52	952	-365	-140	-225	161
Wanging'ombe	107	37,270	753	7.0	1:49	962	-209	36	-245	(681)
Makete	102	19,315	728	7.1	1:27	1136	-408	138	-546	(396)
Njombe DC	52	19,527	407	7.8	1:48	515	-108	-56	-52	93
Ludewa	108	29,706	764	7.1	1:39	898	-134	-37	-97	262
Makambako	38	22,921	325	8.6	1:71	617	-292	-174	-118	68
Regional Total	483	159,403	3,564	7.4	1:45	5,080	-1516	-233	-1283	551

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

ii) Pit-latrines

All primary schools in the Region had a total of 6,667 stances of pit-latrines in 2018 (Table 5.33). The standard set by the Government of Tanzania is one pit-latrine stance to 20 girls (1:20) or 25 boys (1:25). Njombe Region had a Pitlatrine Pupils Ratio (PPR) of 1:24 in 2018 (Table 5.33). However, basing on the stance ratio, Makambako Town Council had a critical shortage of pit-latrines (1:30) followed by Njombe TC (1:28). With PPR of 1:16, Makete District Council had no shortage of pit-latrines and thus, the Council had excess of pit-latrines (1,197). Likewise, by absolute numbers, Njombe Region had excess of 172 pit-latrines in 2018 as well as the Njombe Town Council had most of the shortages (350).

It is important to note that the information provided in Table 5.33 does not take into account sex differences as instructed by the Government. In order to provide proper environment and hygiene, the recommended ratios for boys and girls should be followed.

Table 5. 263: Availability of Pit Latrines in Public Primary Schools by Council, Njombe Region; 2018

Council	Number of Schools	Total Pupils	Available Pit Latrine Stances	Average number of Pit Latrine per School	Pit Latrine Pupils Ratio (PPR)	Required Pit latrine by Using STD Ratio (1:24)	Deficit/Extra Pit Latrines
Njombe TC	76	30,664	1091	14	1:28	1,441	-350
Wanging'ombe	107	37,270	1,483	14	1:25	1,687	-204
Makete	102	19,315	1197	12	1:16	0	1,197
Njombe DC	52	19,527	900	17	1:21	874	26
Ludewa	108	29,706	1,234	11	1:24	1,447	-213
Makambako	38	22,921	762	20	1:30	1046	-284
Regional Total	483	159,403	6,667	14	1:24	6,495	172

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

iii) Staff Houses

Of the various teaching incentives, the provision of staff quarters is very crucial as it facilitates the retention of teachers and also promotes teaching morale. Table 5.34 reveals that Njombe Region had a total of 2,290 teachers' houses compared to actual requirement of 4,787 houses. If we use the required official House Teacher Ratio (HTR) of 1:1, Njombe Region had a deficit of 2,497 houses.

Table 5.34 also shows that all councils suffered shortages of of teacher houses. Njombe TC with a shortage of 694 teacher houses was the most affected. With its urban nature and being the headquarters of the Region, Njombe TC has better social services compared to other councils. As a result, most of the teachers prefer to work in this Council rather than in other councils. This leads to a large shortage of teacher houses. Makete District Council had the least shortage of teachers houses (104).

Table 5. 274: Availability of Public Primary School Teachers' Houses by Council, Njombe Region; 2018

Council	Number of Schools	Number of Available Teachers	Available Houses	Average number of Houses per School	House Teachers Ratio (HTR)	Required Houses by Using STD Ratio (1:1)	Deficit/Extra Houses
Njombe TC	76	706	336	4	1:2	1030	-694
Wanging'ombe	107	631	554	5	1:1	977	-423
Makete	102	590	486	5	1:1	590	-104
Njombe DC	52	374	289	6	1:1	509	-220
Ludewa	108	620	447	4	1:1	1064	-617
Makambako	38	573	178	5	1:3	617	-439
Regional Total	483	3,494	2,290	5	1:2	4,787	-2497

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

iv) Furniture (Desks)

The average number of pupils per desk is an important indicator for the provision of favourable and conducive learning environment for pupils. With 159,403 pupils enrolled in 2018, Njombe Region needed about 58,844 desks so as to comply with the official Desk Pupils Ratio of 1:3. The Region, therefore, had access of 14,692 desks. Ludewa was the only District Council with shortage of desks (234) in the Region in 2018 (Table 5.35).

Table 5. 285: Availability of Desks in Public Primary Schools by Council, Njombe Region; 2018

Council	Number of Schools	Total Pupils	Available Desks	Desk Pupils Ratio (DPR)	Required Desks by Using STD Ratio (1:3)	Deficit/Extra Desks
Njombe TC	76	30,664	11,195		10,738	457
Wanging'ombe	107	37,270	14,376		13,407	969
Makete	102	19,315	13,019		0	13,019
Njombe DC	52	19,527	10,406		10,039	367
Ludewa	108	29,706	15,313		15,547	-234
Makambako	38	22,921	9,227		9,113	114
Regional Total	483	159,403	73,536		58,844	14,692

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

v) Teachers

The teacher to pupil ratio is an important indicator which shows the quality of education provided in schools. The standard requirement is that one teacher should serve a class of 45 pupils (1:45). Njombe Region has an average of one teacher for every 46 pupils or 1:46 indicating there is a shortage of teachers (Table 5.36). Table At Council level, the recommended ratio was met in three councils in 2018. The Councils were Njombe TC (1:43), Makete DC (1:33), Ludewa and Makambako TC (1:40). Wanging'ombe DC (1:59), Njombe DC (1:52) and Ludewa DC (1:48) fell short of the requirement.

Table 5. 296: Availability of Public Primary School's Teachers by Council, Njombe Region; 2018

Council	Total Pupils	Number of Available Teachers	Required Teachers	Teacher Pupils Ratio (TPR)	Shortage/Extra Teachers
Njombe TC	30,664	706	982	1:43	-276
Wanging'ombe	37,270	631	6294	1:59	-5663
Makete	19,315	590	0	1:33	590
Njombe DC	19,527	374	525	1:52	-151
Ludewa	29,706	620	847	1:48	-227
Makambako	22,921	573	533	1:40	40
Regional Total	159,403	3,494	9,181	1:46	-5687

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

vi) Accessibility of Water

Njombe Region has managed to supply water to some of her primary schools through water tanks, water wells and tap water. To reduce water shortage, rain water harvests done through water tanks were very common. Table 5.37 shows that in 2018 tap water was the major source of water supply in primary school and accounted for 72.7 percent of the schools water sources followed by rain water harvests through water tanks (19.0 percent) and water wells (17.4 percent). 9.6 percent and rain water harvests through water tanks (6.6 percent). However, in 2018, Makete District Council led other councils in the Region with about 95 percent of her primary schools supplied with tap water. It was followed by Wanging'ombe District Council (84.1 percent) and Njombe Town Council (68.4 percent). Only fifty percent of schools in Njombe District Council were supplied with tap water which was the lowest in the Region. Therefore, more effort is needed to improve the situation in this Council to prevent water borne diseases.

Table 5. 307: Accessibility of Water in Public Primary Schools by Council, Njombe Region; 2018

Council	No. of Schools with			Percent of schools with tap water to the Total number of schools	Number of Schools
	Water Tanks	Water Wells	Tap Water		
Njombe TC	24	24	52	68.4	76
Wanging'ombe	19	5	90	84.1	107
Makete	5	0	97	95.1	102
Njombe DC	21	15	26	50.0	52
Ludewa	18	25	65	60.2	108
Makambako	5	15	21	55.3	38
Regional Total	92	84	351	72.7	483
Percent	19.0	17.4	72.7		100.0

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.3 Secondary Education

5.4 Secondary Education

The development of secondary education in Njombe region is very recent given its history and poor infrastructure. During colonial times, some parts of Njombe region were kept as a reserve area for cheap labour to work in cash crop plantations in Kilombero, Mtibwa, Tanga and Kilimanjaro. So, up to the 1970s, the region had only three public secondary schools. But the number of secondary schools had increased to 114. In 2018 the number of secondary schools reached 116.

Table 5.38: Number of Secondary Schools by Ownership and by Council, Njombe Region; 2014 and 2018

Council	2014			2018			Percent Increase /Decrease 2014-2018
	Number of Schools			Number of Schools			
	Public	Private	Total	Public	Private	Total	
Njombe TC	14	13	27	14	9	23	-14.8
Wanging'ombe	15	3	18	15	5	20	11.1
Makete DC	17	2	19	18	2	20	5.3
Njombe DC	10	2	12	11	3	14	16.7
Ludewa DC	17	6	23	17	6	23	0.0
Makambako TC	10	5	15	10	6	16	6.7
Total	83	31	114	85	31	116	1.8
Percent	72.8	27.2		73.3	26.7		

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

Table 5.39 shows that each ward in the region have a secondary school. Njombe TCs had the highest ratio of 2 schools per Ward. The tremendous achievement made by the region was to a large extent due to the government resolve of establishing at least one secondary school in each ward and the community's awareness of the benefits of having enough secondary facilities for their children.

Table 5.39: Distribution of Secondary schools among Wards, by Council, Njombe Region; 2018

Council	Number of Ward	Number of Village/ Street	Number of Schools	Schools Ward Ratio	Villages School Ratio
Njombe TC	13	72	23	1:2	1:3
Wanging'ombe	21	108	20	1:1	1:5
Makete	23	93	20	1:1	1:5
Njombe DC	12	45	14	1:1	1:3
Ludewa	26	77	23	1:1	1:3
Makambako	12	68	16	1:1	1:2
Regional Total	107	463	116	1:1	1:4

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.3.1 Secondary School Enrolment

5.3.2 Form One Enrolment

The enrolment of students into Form One in Njombe region increased with the increase of school infrastructures constructed through the people's efforts and the involvement of the Private Sector in the provision of education. Table 5.40 shows that student's enrolment increased by 1,558 students (13.7 percent) between 2016 and 2018. In 2016, a total of 11,389 pupils were enrolled in Form One in the region. And the total enrolment of girls (54.4 percent) were more than boys (45.6 percent).

Table 5. 310: Total FormOne Enrolment in Public and Private Secondary Schools by Sex and by Council, Njombe Region; 2016 and 2018

Council	2016			2018			Percent Increase /Decrease 2016-2018
	Number of Enrolled students			Number of Enrolled students			
	Boys	Girls	Total	Boys	Girls	Total	
Njombe TC	1103	1309	2412	1246	1599	2845	18.0
Wanging'ombe	1144	1497	2641	1243	1636	2879	9.0
Makete DC	662	702	1364	851	995	1836	34.6
Njombe DC	567	684	1,261	615	847	1,462	15.9
Ludewa DC	874	948	1,824	906	1,080	1,885	3.3
Makambako TC	844	1,055	1,899	907	1,022	1,929	1.6
Total	5,194	6,195	11,389	5,768	7,179	12,947	13.7
Percent	45.6	54.4	100.0	44.6	55.4	100.0	

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.3.3 Form (I-IV) Enrolment

Table 5.41 shows that student's enrolment increased from 30,718 in 2016 to 35,262 in 2018. Ludewa District Council had highest increase of students (1,449) in the region followed by and Makete DC (1,217), Makambako TC(1,215), Wanging'ombe DC 533) Njombe TC (110) and Njombe DC (20).

Comparing enrolment between sexes, Table 5.41 shows that in 2016 the share of enrolment was more for girls (56.7 percent) than boys (43.3 percent) while in 2018 the share of girls (57.8 percent) and of boys (42.2 percent).

Map 5. 1: Enrolment in Public and Private Secondary Schools by Council, Njombe Region; 2018



Source: National Bureau of Statistics, Geographical Information System Unit, 2019

Table 5. 321: Total Form (1-IV) Enrolment in Public and Private Secondary Schools by Sex and Council, Njombe Region; 2016 and 2018

Council	2016				2018				Change	
	Boys	Percent Boys	Girls	Total	Boys	Percent Boys	Girls	Total	No.	Percent
Njombe TC	1,442	47.5	1,595	3,037	1,622	51.5	1,525	3,147	110	3.5
Wanging'ombe	3769	41.5	5302	9,071	3919	40.8	5685	9,604	533	5.5
Makete	2485	50.6	2425	4,910	2730	44.6	3397	6,127	1,217	19.9
Njombe DC	1256	34.8	2357	3,613	1067	29.4	2566	3,633	20	0.6
Ludewa	2,088	47.2	2,333	4,421	2,756	47.0	3,114	5,870	1,449	24.7
Makambako	2259	39.9	3407	5,666	2779	40.4	4102	6,881	1,215	17.7
Total	13,299	43.3	17,419	30,718	14,873	42.2	20,389	35,262	4,544	12.9

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.3.4 Form IV Pass Rate

The pass rate of the Certificate of Secondary Education Examination (CSEE) or Form IV Examinations and the number of students selected to join Form V reflect the quality of secondary education in the region. Pass in the CSEE is divided into divisions with Division I being the highest pass. Table 5.42 shows that Form IV examination performance in 2014 and 2018 in Njombe region was not good. There were only 1.0 percent of students who attained Division I and 7.0 percent who attained Division II in 2014. In 2018, performance improved to 2.0 percent for Division I and 9.1 percent for Division II. Moreover, the proportion of students who got Division Zero dropped from 29.9 percent in 2014 to 16.9 percent in 2018. In terms of sex, in 2014 boys performed better than girls, 73 percent of the boys passed their examinations compared to 67.4 percent for girls while in 2018 both boys and girls passed equally (83 percent).

Table 5. 332: Students Performance in Form IV Examinations in Public Secondary Schools by Sex, Njombe Region; 2014 and 2018

Division	2014					2018				
	Boys	Percent Boys	Girls	Total	Percent	Boys	Percent Boys	Girls	Total	Percent Share
I	24	54.5	20	44	1.0	63	46.0	74	137	2.0
II	177	57.1	133	310	7.1	325	51.1	311	636	9.1
III	423	59.2	292	715	16.3	507	45.0	620	1127	16.2
IV	899	45.0	1100	1999	45.6	1540	39.5	2355	3895	55.9
0	562	42.9	749	1311	29.9	494	41.9	684	1178	16.9
Total	2,085	47.6	2,294	4,379		2929	42.0	4,044	6,973	

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

At district level, the best performer in 2014 was Njombe TC with pass rates of 76.5 percent while in 2018 Wanging'ombe DC was the best performer with 89.3 pass rate. And the worst performer was Ludewa DC with pass rates of 58.4 percent in 2014 and 74.6 percent in 2018.

Table 5. 343: Pass Rate of Students Who Sat for CSEE in Public Secondary Schools by District and by Sex, Njombe Region; 2014 and 2018

Council	2014			2018						Percent Pass
	Total Examinees	Total Pass	Percent Pass	Examinees			Passed			
				Boys	Girls	Total	Boys	Girls	Total	
Njombe TC	922	705	76.5	483	782	1265	415	661	1,076	85.1
Wanging'ombe	1,061	774	73.0	821	1,005	1826	746	884	1630	89.3
Makete	626	464	74.1	482	577	1059	374	435	809	76.4
Njombe DC	525	353	67.2	299	614	913	238	528	766	83.9
Ludewa	688	402	58.4	414	473	887	317	345	662	74.6
Makambako	557	370	66.4	430	608	1038	345	507	852	82.1
Total	4,379	3,068	70.1	2,929	4,059	6,988	2,435	3,360	5,795	82.9

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.3.5 Form (V-VI) Enrolment

Table 5.44 shows that in Njombe region, Form (V – IV) enrolment remained almost at 1,393 students in 2014 and 2,174 students in 2018. Moreover boys enrolment increased significantly from 915 in 2014 to 1,218 in 2018 but girls' enrolment slightly increased from 391 in 2014 to 412 in 2018. At council level, the following were the increase in enrolment between 2014 and 2018 Makambako TC (277.2 percent), Wanging'ombe DC (100 percent), Ludewa DC (40.2 percent), Njombe DC (39.0 percent), Makete DC (31.7 percent) and Njombe TC (-3 percent). Overall, these results indicate improvement in Form V enrolment in the region.

Table 5. 354: Total Form (V and VI) Enrolment in Public Secondary Schools by Sex and Council, Njombe Region; 2014 and 2018

Council	2014				2018				Change	
	Boys	Percent Boys	Girls	Total	Boys	Percent Boys	Girls	Total	No.	Percent
Njombe TC	542	89.0	67	609	535	90.5	56	591	-18	-3.0
Wanging'ombe	0	0.0	0	0	203	53.1	179	382	382	100.0
Makete	218	58.6	154	372	252	51.4	238	490	118	31.7
Njombe DC	0	0.0	136	136	58	30.7	131	189	53	39.0
Ludewa	155	70.8	64	219	170	55.4	137	307	88	40.2
Makambako TC	0	0.0	57	57	0	0.0	215	215	158	277.2
Total	915	65.7	391	1,393	1,218	56.0	412	2,174	781	56.1

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.3.6 Form VI Pass Rate

Table 5.45 shows student's performance in the Advanced Certificate of Secondary Education Examination (ACSEE) or Form VI or 'A' Level Examinations. Pass in ACSEE is divided into divisions with Division I being the highest pass. Unlike Form IV examinations performance, performance in Njombe region for Form VI examinations over the period from 2016 to 2018 is encouraging. More than 98 percent of students passed their Form VI examination in 2016 and 2018. Although almost all student passed their examinations there is a slight decline of proportion of students who attained division I between the two years, most students attained divisions II and II in both years More efforts are required to taken by the Regional authority in order to increase A Level enrolment and improvement of pass rates at higher divisions.

Table 5. 365: Students Performance in ACSEE in Public Secondary Schools by Sex, Njombe Region; 2016 and 2018

Division	2016					2018				
	Boys	Percent Boys	Girls	Total	Percent Share	Boys	Percent Boys	Girls	Total	Percent Share
I	106	59.2	73	179	12.1	145	74.7	49	194	10.5
II	419	58.8	294	713	48.3	452	50.3	447	899	48.5
III	322	66.7	161	483	32.7	280	40.9	404	684	36.9
IV	39	53.4	34	73	4.9	26	48.1	28	54	2.9
0	20	74.1	7	27	1.8	7	31.8	15	22	1.2
Total	906	61.4	569	1,475		910	49.1	943	1,853	

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

At district level, Makete district performed best by attaining 100 percent in both years 2016 and 2018. Overall Form VI performance in Njombe Region was good since for the two years all district councils scored 97 percent or more pass rate. However, the Region authority should encourage people's participation in building more 'A' level schools, dormitories, library and laboratories in order to increase enrolment at 'A' level as it can be seen from the table number of Form VI examinee for each council is very low (Table 5.46).

Table 5.376: Number of Students, Who Completed A- Level Education in Public Secondary Schools by Sex and by Council, Njombe Region; 2016 and 2018

Council	2016			2018						
	Total Examinees	Total Pass	Percent Pass	Examinees			Passed			Percent Pass
				Boys	Girls	Total	Boys	Girls	Total	
Njombe TC	652	633	97.1	509	83	592	502	83	585	98.8
Wanging'ombe	0	0	0.0	38	29	67	38	27	65	97.0
Makete	321	321	100.0	244	409	653	244	409	653	100.0
Njombe DC	136	136	100.0	0	163	163	0	161	161	98.8
Ludewa	190	187	98.4	119	101	220	119	99	218	99.1
Makambako	176	171	97.2	0	158	158	0	149	149	94.3
Total	1,475	1,448	98.2	910	943	1,853	903	928	1,831	98.8

Source: Compiled Data from Districts, Education Departments, Njombe Region; 2019

5.3.7 Quantity and State of Secondary School Facilities

The quantity and quality of facilities for the secondary school system in Njombe region are below the standards set by the educational authorities. The most common facilities are classrooms, toilets, staff quarters, libraries, laboratories, dormitories, desks and teachers.

i) Teachers

Expansion of secondary education should always go hand in hand with the increase in the number of teaching staff. By the end of 2018, Njombe region had a total of 2,284 teachers distributed in 86 public secondary schools. This gives a School Teachers Ratio of 1:27. At council level, only three out of six councils schools had 27 or more teachers per school, the rest had fewer teachers. Generally, the region had surplus of 34 teachers or 1.5 percent. Table 5.47 shows that Ludewa with a 10.5 percent shortage was the most affected council followed by Wanging'ombe DC (2.2 percent) and Njombe TC (1.7 percent).

Table 5. 47: Distribution of Teachers among Public Secondary Schools, by Council, Njombe Region; 2018

Council	No. of Schools	Total Pupils	Available Teachers	School Teachers Ratio (STR)	Teacher Pupils Ratio (TPR)	Required Teachers	Shortage	
							No.	Percent
Njombe TC	14	7,889	466	1:33	1:17	474	8	1.7
Wanging'ombe	16	9,179	408	1:26	1:22	417	9	2.2
Makete	18	6,111	408	1:23	1:15	372	-36	-9.7
Njombe DC	11	4,520	301	1:27	1:15	263	-38	-14.4
Ludewa	17	6,924	377	1:22	1:18	421	44	10.5
Makambako	10	6,157	324	1:32	1:19	303	-21	-6.9
Total	86	40,780	2,284	1:27	1:18	2,250	-34	-1.5

Source: Compiled from Districts, Education Departments, Njombe Region; 2018

Table 5.48 shows that, out of 2,267 public secondary school teachers available in Njombe region by 2018, 960 teachers (42.3 percent) were diploma holders, 1,269 (56.0 percent) were degree holder and 37 (1.6 percent) were masters holders At district level, secondary schools in Wanging'ombe DC were the most privileged as 64.4 percent of the teachers were degree holders, followed by Makambako TC (61.5 percent), Njombe TC (55.7 percent) and Makete (53.9 percent). Ludewawas the most disadvantaged council as it had the smallest percentage (48.3 percent) of degree holders followed by Njombe DC (51.2 percent).

Table 5. 388: Availability of Public Secondary School's Teachers by Qualification and by Council, Njombe Region; 2018

Council	Type of Certificate				Total	Percent of Teacher with Degree
	Diploma	Degree	Masters	Others		
Njombe TC	196	259	10	0	465	55.7
Wanging'ombe	144	260	0	0	404	64.4
Makete	180	220	8	0	408	53.9
Njombe DC	143	154	4	0	301	51.2
Ludewa	180	175	7	0	362	48.3
Makambako	117	201	8	1	327	61.5
Total	960	1,269	37	1	2,267	56.0
Percent	42.3	56.0	1.6	0.04	100	

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

Campaigns for increasing the number of science teachers in Njombe region should be enhanced by the regional authorities, since out of 2,218 available teachers; only 521 (23.5 percent) were science teachers. Wanging'ombe DC (12.6 percent) was the most affected followed by Njombe DC (21.9 percent). The most privileged council was Njombe TC (30.9 percent), followed by Makambako TC (27.5 percent) and Ludewa TC (23.8 percent), (Table 5.49).

Table 5. 49: Number of Science and Arts Teachers in Public Secondary Schools by Council, Njombe Region; 2018

Council	Number of Teachers			Percent of Science Teachers
	Teaching Science	Teaching	Total	
	Subjects	Arts Subjects		
Njombe TC	139	311	450	30.9
Wanging'ombe	49	341	390	12.6
Makete	90	294	384	23.4
Njombe DC	66	235	301	21.9
Ludewa	88	281	369	23.8
Makambako	89	235	324	27.5
Total	521	1,697	2,218	23.5
Percent	23.5	76.5	100	

Source: Compiled Data from Districts, Education Departments, Njombe Region; 2019

ii) Teachers' Houses

Besides the shortage of teachers, the region also experienced a shortage of staff quarters in all councils. Table 5.50 shows that, the region had 627 teachers houses while the requirement was 2,218. Therefore, the region had a shortage of 1,591 houses or 71.7 percent. Table 5.50 also shows that though all councils experienced shortage of staff quarters, Makambako TC with 89.8 percent shortage was the most affected council followed by Njombe DC (76.1 percent) and Njombe TC (72.7 percent).

The Region Authority together with individual district council should take into account the fact that the provision of staff houses is a basic incentive for teacher retention and promotion of effective teaching. Therefore, more effort should be directed towards building staff houses together with other facilities.

Table 5. 390: Availability of Teachers Houses in Public Secondary Schools by Council, Njombe Region, 2018

Council	No. of Schools	No. of Available Teachers	Available Houses	School Houses Ratio (SHR)	House Teachers Ratio (HTR)	Required Houses	Shortage of Houses	Percent Deficit
Njombe TC	14	450	123	1:9	1:4	450	327	72.7
Wanging'ombe	16	390	119	1:7	1:3	390	271	69.5
Makete	18	384	120	1:7	1:3	384	264	68.8
Njombe DC	11	301	72	1:7	1:4	301	229	76.1
Ludewa	17	369	160	1:9	1:2	369	209	56.6
Makambako	10	324	33	1:3	1:10	324	291	89.8
Total	86	2,218	627	1:7	1:4	2,218	1,591	71.7

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

iii) Classrooms

Table 5.51 shows that at regional level there was a 8.7 percent shortage of classrooms. Table 5.51 also shows that, the Region's School Classrooms Ratio was 1:39. At council level, with the exception of Ludewa and Njombe TC, the shortage of classrooms ranged from 6.6 percent to 30.3 percent. Makambako TC (30.3 percent) was the most affected followed by Wanging'ombe (18.0 percent). Ludewa DC had surplus of 9.1 percent of the required number of classrooms in 2018.

Table 5. 401: Availability of Classrooms in Public Secondary Schools by Council, Njombe Region; 2018

Council	No. of Schools	Total Students	Available Classrooms	Average No. of Classroom per School	Classroom Pupils Ratio (CPR)	Required Classrooms	Shortage of Classrooms	Percent Shortage
Njombe TC	14	7,889	218	15.6	1:36	216	-2	-0.9
Wanging'ombe	16	9,179	205	12.8	1:45	250	45	18.0
Makete	18	6,111	184	10.2	1:33	197	13	6.6
Njombe DC	11	4,520	110	10.0	1:41	120	10	8.3
Ludewa	17	6,924	215	12.6	1:32	197	-18	-9.1
Makambako	10	6,157	122	12.2	1:50	175	53	30.3
Regional Total	86	40,780	1,054	12.3	1:39	1,155	101	8.7

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

iv) Toilets

The region requirement was for 1,119 toiletsholes in 2018 but the Council had 1,711 toilet holes available making a surplus of 592 toiletholes (52.9 percent). Table 5.52 shows that

none of the council had shortage of toilets in 2018. Njombe TC was leading by having 179 extra toilet holes, followed by Makete(136) and Ludewa(97).

Table 5. 412: Availability of Toilet Holes in Public Secondary Schools by Council, Njombe Region; 2018

Council	Number of Schools	Total Students	Available Toilet Holes	Average Number of Holes per School	Toilet Holes Students Ratio (HSR)	Required Toilet Holes	Shortage Number	Percent Shortage
Njombe TC	14	7,889	392	28	01:20	213	-179	-84
Wanging'ombe	16	9,179	329	20.6	01:28	238	-91	-38.2
Makete	18	6,111	312	17.3	01:20	176	-136	-77.3
Njombe DC	11	4,520	170	15.5	01:27	141	-29	-20.6
Ludewa	17	6,924	276	16.2	01:25	179	-97	-54.2
Makambako	10	6,157	232	23.2	01:27	172	-60	-34.9
Regional Total	86	40,780	1,711	19.9	01:24	1,119	-592	-52.9

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

v) Dormitories

Provision of dormitories in schools is essential due to the geographical location of wards and the distribution of human settlements in Njombe region. The availability of dormitories help students solve the problem of walking long distances and reduce the rates of drop outs, pregnancies and truancy. Unfortunately, all councils had shortage of dormitories at the end of 2018. This implies that most students were day students or rented premises near to school compound.

In ranking of councils by severity of deficit, Wanging'omberanked first since the shortage of dormitories was the highest (60.5 percent) in the region (Table 5.53). It was followed by Njombe DC (55.6 percent)and Makambako TC (50 percent).

Table 5. 423: Availability of Dormitories/Hostels in Public Secondary Schools by Council; Iringa Region; 2018

Council	Number of Schools	Total Students	Available Dormitories	Average No. of Dormitories per School	Required Dormitories	Shortage Number	Percent Shortage
Njombe TC	11	7,889	61	5.5	80	19	23.8
Wanging'ombe	16	9,179	47	2.9	119	72	60.5
Makete	3	6,111	7	2.3	13	6	46.2
Njombe DC	3	4,520	4	1.3	9	5	55.6
Ludewa	3	6,924	12	4.0	15	3	20.0
Makambako	10	6,157	2	0.2	4	2	50.0
Regional Total	46	40,780	133	2.9	240	107	44.6

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

vi) Libraries

The library facility is considered essential but not crucial for the development of knowledge and skills of a student. According to the standards set by the Ministry of Education and Vocation Training, every secondary school should have a library to enable students to borrow and use supplementary books besides textbooks. Table 5.54 shows that Njombe TC had the required number of libraries and two councils had no libraries at the end of 2018. This implies that no supplementary books were available for renting to students in Makete and Makambako councils of Njombe region and the rest of the councils had significant shortages of libraries.

There is no excuse in this regard since it is a requirement for secondary schools to have libraries. So it is important for the local authorities to include the provision of libraries in their school development plans in the near future (Table 5.54).

Table 5. 434: Availability of Libraries in Public Secondary Schools by Council, Njombe Region; 2018

Council	Number of Schools	Total Students	Available Libraries	Average No. of Libraries per School	Required Libraries	Shortage	Percent Shortage
Njombe TC	14	7,889	42	3.0	42	0	0.0
Wanging'ombe	16	9,179	1	0.1	16	15	93.8
Makete	18	6,111	0	0.0	18	18	100.0
Njombe DC	11	4,520	2	0.2	11	9	81.8
Ludewa	17	6,924	5	0.3	18	13	72.2
Makambako	10	6,157	0	0.0	10	10	100.0
Regional Total	86	40,780	50	0.6	115	65	56.5

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

vii) Tables and Chairs

Table 5.55 shows that at the end of 2018 there was surplus of tables and chairs in Wanging'ombe and Njombe district councils, Njombe TC had the required number of tables and chairs. Table 5.55 also shows that there was a shortage of tables and chairs in the remaining three councils. By the end of 2018, the region had a shortage of 1,371 tables (3.3 percent) and 2,067 chairs (5 percent).

Table 5.55: Availability of Tables and chairs in Public Secondary Schools by Council; Njombe Region, 2018

Council	No. of Schools	Number of Tables and chairs							
		Required		Available		Deficit		Percent Deficit	
		Tables	Chairs	Tables	Chairs	Tables	Chairs	Tables	Chairs
Njombe TC	14	7889	7889	7889	7889	0	0	0.0	0.0
Wanging'ombe	16	9590	9553	9710	9635	-120	-82	-1.3	-0.9
Makete DC	18	6111	6111	6040	5950	71	161	1.2	2.6
Njombe DC	11	4,612	4,612	4,979	4,894	-367	-282	-8.0	-6.1
Ludewa DC	17	7,197	7,234	6,257	6,039	940	1195	13.1	16.5
Makambako TC	10	6,118	6,118	5,271	5,043	847	1075	13.8	17.6
Total	86	41517	41517	40146	39450	1371	2067	3.30	4.98

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

viii) Laboratories

The laboratory is a necessary facility for students taking science subjects. The directive of the government is that each school should have three laboratories for physics, chemistry and biology subjects. Table 5.56 shows that Njombe region had 220 laboratories in its 86 secondary schools at the end of 2018 which resulted in a shortage of 15.7 percent. This implies that Njombe region is almost meeting the government directive of having three laboratories in each school, but it is important for the local authorities to include the provision of laboratories in their school development plans for the future so as to ensure the remaining gap is covered.

Table 5.446: Availability of Laboratories in Public Secondary Schools by Council, Njombe Region; 2018

Council	Number of Schools	Total Students	Available Laboratories	Average Lab per School	Required Lab	Shortage of Lab	Percent Shortage
Njombe TC	14	7,889	42	3.0	42	0	0.0
Wanging'ombe	16	9,179	48	3.0	48	0	0.0
Makete	18	6,111	50	2.8	54	4	7.4
Njombe DC	11	4,520	31	2.8	33	2	6.1
Ludewa	17	6,924	19	1.1	54	35	64.8
Makambako	10	6,157	30	3.0	30	0	0.0
Regional Total	86	40,780	220	2.6	261	41	15.7

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.3.8 Adult Education

Along with the expansion of primary and secondary education, the region has also expanded adult education using primary schools as centres. The head teachers are in charge of adult education campaigns through the Intergrated Community Based Adult Education (ICBAE) commonly known as MUKEJA in Kiswahili; and the Complementary Basic Education in Tanzania (COBET) programs. Table 5.57 shows that in 2016 and 2018 the region had 139 and 147 centres respectively for MUKEJA programme. Enrolment of ICBAE and COBET programs in 2016 was 629 students but it increased to 714 in 2018.. The region should continue to have regular sensitization campaigns for sustainability of the two programs.

Table 5. 457: Number of Adult Centres by Council; Njombe Region; 2018

Council	2016		2018		Increase of		Percent Increase of Enrolment
	No. of Centres	Total Enrolment	Number of Centres	Total Enrolment	Centres	Total Enrolment	
Njombe TC	2	140	3	186	1	46	24.7
Wanging'ombe	6	67	6	69	-	2	2.9
Makete	8	102	10	133	2	31	23.3
Njombe DC	4	138	8	63	4	-75	- 119.0
Ludewa	108	74	108	51	-	-23	- 45.1
Makambako	11	108	12	212	1	104	49.1
Regional Total	139	629	147	714	8	85	11.9

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.3.9 Colleges and Vocation Training Schools

Njombe region is not well endowed with colleges and vocational training schools. In 2018, the region had 26 vocational training centres, located in Makambako TC, Njombe TC, Wanging'ombe DC, Makete DC, Ludewa DC and Njombe DC as shown in Table 5.58. The courses offered include, motor vehicle mechanics, electrical installation and auto electrical, agriculture and animal husbandry, carpentry, tailoring and masonry and driving.

Table 5. 468: List of Public and Private Vocational Training Centres, Njombe Region; 2018

Council	Name of Centers	Skills Taught
Njombe TC	Uwemba - Public	Carpentry, marsondry, tailor
	K.K.T Viziwi - Public	Carpentry, tailor
	Professional Collage of Njombe -Private	Carpentry, marsondry,Livestock and Electricity
	PADECO Youth Trainig Centre -Private	Carpentry, tailor
	Njombe VTC -Private	Driving, Electricity, tailor,Mechanics
	Mpechi VET -Private	Driving, Electricity, Mechanics
	TANGESTE VET - Private	Driving, Electricity, Mechanics
	UshonajiKibena -Private	Tailoring
	TPAB Training College - Privave	Driving, computer
Wanging'ombe DC	Igwachanya VTC	Capentry,Tailoring, Electrical Instalation, Vehicle Maintaines
	Ilembula KKT	Capentry,Tailoring, Electrical Instalation, Welding, Vehicle Maintaines
	Kipengere VTC	Capentry,Tailoring, Electrical Instalation, Welding, Vehicle Maintaines
	Ulembwe Vtc	Capentry,Tailoring, Electrical Instalation, Welding, Masonry
Njombe DC	Mtwango Vocational Center	Carpentry, Masonry, Domestic Science, Electricity
	Matembwe VTC	welding, carpentry, tailoring, and domestic science.
Makete DC	VETA Makete	Masonry, Carpentry, Driving, Mechanics and Tailoring
Ludewa DC	Madunda	Carpentry, masonry,Electrical skill, Entrepreneurship skill
	Ludewa (M)	Entrepreneurship skill, Carpentry, tailoring skills, Electrical skill
	Mlangali	Entrepreneurship skill, Carpentry, tailoring skills, Electrical skill
	Manda	Entrepreneurship skill, Carpentry, tailoring skills, Electrical skill, masonry
	Madilu	Entrepreneurship skill, Carpentry, tailoring skills, Electrical skill, masonry
	Mundindi	Entrepreneurship skill, Carpentry, tailoring skills, Electrical skill
Makambako TC	Betsaida Vocational Training Center	Driving
	Mart Electronic Auto Mechanics Trainng Center	Driving and Electricity
	Lumet VTC	Masonry, Carpentry and tailoring
	Chuo Cha Ufundi Stad Makambako	Driving, Computer, Entrepreneurship and Electricity

VTC: Vocational Training Centre

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

Table 5.59 shows that the number of students who enrolled increased from 1,666 in 2014 to 1,965 in 2016 or an increase of 17.9 percent. Female enrolment increased from 358 in 2014 to 462 in 2016. This supports the Government programme for women empowering.

Table 5. 47: Number of Students Enrolled in Colleges /Vocational Training Centers by Council and Sex, Njombe Region; 2014 and 2016

Council	2014			2016			Change of Students	
	Male	Female	Total	Male	Female	Total	No.	Percent
Njombe TC	193	73	266	203	99	302	36	13.5
Wanging'ombe DC	977	245	1222	1168	309	1469	247	20.2
Makete	57	15	72	68	19	87	15	20.8
Njombe DC	0	0	0	0	0	0	0	0.0
Ludewa	32	9	41	26	23	49	8	19.5
Makambako	49	16	65	46	12	58	-7	-10.8
Total	1,308	358	1,666	1,511	462	1,965	299	17.9
Percent	78.5	21.5	100	56.4	43.6	100		

Source: Compiled from Districts, Education Departments, Njombe Region; 2019

5.3.10 Policy Implication on Education sector

Although there is recognizable development in both primary and secondary education, policy intervention need to take place to alleviate the few challenges observed. The region need to put more effort in the construction of girls' dormitories which will help to prevent or reduce girls' dropouts due to pregnancy and also increasing pass rate for girls pupils/students. In addition to that, for learning improvement in primary schools, the school feeding programme is of paramount important.

Since both primary and secondary schools in the region have a critical shortage of teacher houses; more teacher houses should be constructed as a means of attracting and retaining teachers in the region. Moreover more toilet facilities should be constructed to satisfy the education policy of one toilet stance for 20 girls and one toilet stance for 25 boys. Likewise, the number of desks in some of primary and secondary schools should be increased to meet education policy of one desk per three pupils/students.

Most of primary and secondary schools in Njomberegion have no access to clean and safe water. Therefore, initiatives are needed to supply the schools with clean and safe water through tap water or construction of boreholes. Rain water harvest technology can also

help to alleviate the water shortage problem. Moreover, schools and especially boarding schools should be supplied with electricity to enhance the learning environment.

5.3.11 Investment Opportunities in Education

Investment in the education sector can be done in regard to the establishment of:-

- i) Private schools at all levels in various areas in the region.
- ii) Vocational training centres and polytechnic colleges in different areas of the region; especially in Liganga and Mchuchuma mining complexes.
- iii) Teachers' training colleges, tourism and hotel management training institutions.
- iv) University colleges in mining technology, business and ICT, engineering, environment, forestry, fisheries, beekeeping and agriculture.

Water Supply and Sanitation

5.4.0 An Overview

Water Supply and Sanitation Sector cover rural and urban water supply in terms of water sources, schemes and technology used to supply water.

5.4.1 Water Supply

Availability of adequate supply of clean potable water for the residents of Njombe region is of utmost importance. Water play a major role in social and economic development process touching all sector of the economy, including domestic, agriculture, livestock, fishery, wildlife, tourism, mining, industry and energy.

5.4.2 Rural Water Supply

Njombe region is among the many regions dominated by the rural population. The region uses the following sources to supply water to its rural population: - shallow wells, bore holes, charcoal dams and surface water such as springs, rivers and rain water harvesting. Table 5.60 shows that the main source of water for the rural population in Njombe region was the springs (60.3 percent) followed by shallow well (25.5 percent), piped scheme (6.8 percent), rain water harvesting (3.5 percent), river (2.3 percent), borehole (0.8 percent) Charcoal (0.6 percent) and Dam/Lake (0.2 percent).

Table 5.60: Number and Type of Rural Water Sources by Condition, Njombe Region; 2018

Water Source	Working	Percent Working	Not Working	Percent Not Working	Total	Percent Source
Charcoal	7	64	4	36	11	0.6
Shallow Wells	483	96	22	4	505	25.5
Rain Water Harvesting	65	94	4	6	69	3.5
Bore Holes	15	94	1	6	16	0.8
Piped Scheme	127	94	8	6	135	6.8
Spring	219	18	977	82	1196	60.3
Dam/Lake	4	100	0	0.0	4	0.2
River	46	100.0	0	0.0	46	2.3
Total	966	49	1016	51	1982	100.0

Source: Computed from District Offices, Water Supply and Sanitation Department, Njombe Region, 2019.

At council level, all councils are well endowed with at least one source of water supply in each village of the region. Table 5.61 shows that the most common source of water in all councils was the shallow well with 483 working sources of water followed by spring 219 and piped schemes (127) and with each used by four or five councils. The rest of sources were used by a few councils.

Table 5.61: Number and Type of Rural Water Sources by Condition and Council, Njombe Region; 2018

Water Source	Condition of a Source	Councils						Total
		Njombe TC	Wanging'ombe	Njombe DC	Ludewa	Makambako TC	Makete DC	
Charcoal	Working	0	2	0	4	1	0	7
	Not Working	0	4	0	0	0	0	4
	% Working	0	33	0	100	100	0	78
Shallow Wells	Working	3	443	20	16	1	0	483
	Not Working	2	0	7	6	7	0	22
	% Working	60	100	74	73	13	0	62
Rain Water Harvest	Working	0	12	0	53	0	0	65
	Not Working	0	0	0	4	0	0	4
	% Working	0	100	0	93	0	0	67
Bore Holes	Working	0	12	0	3	0	0	15
	Not Working	0	0	0	1	0	0	1
	% Working	0	100	0	75	0	0	88
Piped Scheme	Working	21	35	15	45	7	4	127
	Not Working	0	1	6	0	0	1	8
	% Working	100	97	71	100	100	80	91
Spring	Working	30	35	12	0	142	0	219
	Not Working	944	1	6	0	26	0	977
	% Working	3	97	67	-	85	-	63

Water Source	Condition of a Source	Councils						Total
		Njombe TC	Wanging'ombe	Njombe DC	Ludewa	Makambako TC	Makete DC	
Dam/Lake water	Permanent	3	1	0	0	0	0	4
	Seasonal	0	0	0	0	0	0	0
	% Permanent	100	100	0	0	0	0	100
River	Permanent	0	0	2	0	2	40	44
	Seasonal	0	0	0	0	2	0	2
	% Permanent	0		100	0	50	100	83.3
Total Source	Working	57	540	49	121	153	44	964
	Not Working	946	6	19	11	35	1	1018
	% Working	6	99	72	92	81	98	49
	Total	1,003	546	68	132	188	45	1,982
Number of Village		44	108	45	77	14	93	381
Sources (Working) per Village Ratio		0.8	05.6	1.09	7.4	10.8	0.5	4.3

Source: Computed from District Offices, Water Supply and Sanitation Department, Njombe Region, 2019

In order to make sure that there is a fairly sufficient supply of water to the residents of Njombe region; different types of water technologies are used. Table 5.62 shows that hand pump is the leading technology used in the region with 488 working sources followed by gravity piped with 167 sources, diesel pump is only used in Njombe DC and Wanging'ombe while wind mill is only used at Njombe DC. Electricity pump technologies were used only in Njombe DC, Ludewa and Wanging'ombe (Table 5.63).

Table 5.62: Number and Type of Technology Used in Rural Water Schemes by Council; Njombe Region; 2018

Council	Wind Mill		Electricity Pump		Diesel Pump		Hand Pump		Gravity Piped		Total Working
	Working	Not Working	Working	Not Working	Working	Not Working	Working	Not Working	Working	Not Working	
Njombe TC	0	0	0	0	0	0	3	60.0	21	100	24
Wanging'ombe DC	0	0	4	100	1	100	448	99	35	97	488
Makete DC	0	0	0	0	0	0	0	0	52	5	52
Njombe DC	6	60	5	100	2	100	20	74	7	87	40
Ludewa DC	0	0	2	66.7	0	0	16	81.0	45	63.4	63
Makambako TC	0	0	0	0	0	0	1	7	7	0	8
Region	6	60	11	266.7	3	200	488	321	167	352.4	675

W:Working

Source: Computed Data from District Offices, Water Supply and Sanitation Department, Njombe Region, 2019.

The existing water supply infrastructure supplies water to 65.34 percent of the rural and urban population of Njombe region (Table 5.63). The percentage of people getting clean water varied from council to council. Wanging'ombe Council, had the highest percent of the people getting clean water (rural population 70.14 percent and urban population 79.1 percent) followed by Makete (rural population 69.1 percent and urban population 71 percent) , Njombe TC (rural population 50.5 percent and urban population 61 percent) reported the lowest percent of the people who got clean water followed by Njombe DC (typical rural population 60 percent).

Table 5. 63: Water Supply Coverage by Council, Njombe Region; 2018

COUNCIL	Total Population	Population	Population Served with Clean Water	Percent of Population Served with Clean Water	Ranking in Performance
Njombe TC rural	151,065	84,112	42,477	50.5	6
Njombe TC urban		66,953	40,842	61	
Wanging'ombe Rural	184,246	89,703	62,918	70.14	1
Wanging'ombe Urban		94,543	74,784	79.1	
Makete DC rural	109,928	94,797	65,505	69.1	2
Makete DC urban		15,131	10,744	71	
Njombe DC	96,817	96,817	58,091	60	5
Ludewa DC rural	153,294	141,387	93,316	66	4
Ludewa DC urban		11,907	5,359	45	
Makambako TC rural	107,949	28,022	16,814	60	3
Makambako TC urban		79,927	54,031	67.6	
Total rural		534,838	339,121	42.22	
Total Urban		268,461	185,760	23.12	
Total Region		803,299	524,881	65.34	

Source: Computed from District Offices, Water Supply and Sanitation Department, Njombe Region, 2019.

5.4.3 Policy Implication on Water sector

Poor accessibility of clean and safe water is a very common problem in Njombe region. Lack of reliable and permanent water sources is believed to be the corner stone of the problem. To alleviate the situation, extensive research is needed to make sure the problem is alleviated.

5.4.4 Investment Opportunities in Water Supply

Njombe region is endowed with various types of water sources. However, the region has very few piped water sources. In this regard, investment is needed in regards to the supply of pipes, drilling, charcoal dams and pumping equipment and to increase the capacity of water storage. Investment is also needed for the supply of electricity to be used in electricity pumps.

CHAPTER SIX

Other Development Issues

6.0 Introduction

Chapter six discusses other development issues including gender empowerment such as day care centers, women's economic groups and women's participation in policy and decision making. Other issues discussed in this chapter include youth development, saving and Credit Cooperative Societies (SACCOS), Community Based Organization (CBOs), Faith Based Organization (FBOs), Cooperatives and Non-Government Organization (NGOs).

6.1 Gender Empowerment

Gender empowerment aims at ensuring that the disadvantaged group particularly women, fully participates in the policy and decision-making process and in all aspects of economic, social-cultural and politics. Various measures have been put in place to minimize time spent by women and girls in attending to home activities and allow them more time to participate in the above mentioned activities. These measures include the use of family planning, opening and operating day care centers, establishment of women's economic groups, participation in SACCOS, CBOs and other cooperative activities.

Traditional customs such as the custom of female genital mutilation (female circumcision) are still being practiced by some tribes while in certain tribes within the region, there is a thin dividing line between rape and consensus sex and these things continue to relegate women to the status of love objects.

The response of the government and enlightened civil society has been to try to mainstream women protection and development in the region's development agenda. This has called for the emancipation and empowerment of women through the legal window and the alternatives of public education and the broaching gender issues in forum at all levels of society. The goal is for the region to catch up with the rest of the country this issue of women equity and equality with men.

6.1.2 Children Care Centers

Children Care Centers have become an important service in various parts of the region. This is due to the fact that, keeping children at day care centers apart from giving women chances to participate fully in economic activities, it also allows children to join pre-primary education which is a prerequisite for joining primary education. Table 6.1 below

shows the number of day care centers and number of children in this center by district for the years 2016 and 2018. Table 6.1 shows that Makambako TC had the largest number of Day care centre compared to the rest of the districts/ Council in 2016 and 2018. However, there is a significant increase in a total number of day care centres in the Region from 217 in 2016 to 273 in 2018 and the number of children has increased by 5.79 percent in 2018 in the Region.

Table 6.1: Distribution of Day Care Centers by Region; 2016 and 2018

District/Council	2016		2018		Difference in Number of children	Percent Difference of children
	Number of Centres	Number of children	Number of Centres	Number of children		
Njombe TC	53	1902	80	2009	107	5.63
Wanging'ombe DC	35	1,694	41	1,911	217	12.81
Makete DC	6	288	7	300	12	4.17
Njombe DC	23	1678	37	1550	-128	(7.63)
Ludewa DC	4	62	5	102	40	64.52
Makambako TC	96	2354	103	2568	214	9.09
Total	217	7,978	273	8,440	462	5.79

Source: Computed from District Offices, Health Department, Njombe Region, 2019.

6.2 Vulnerability

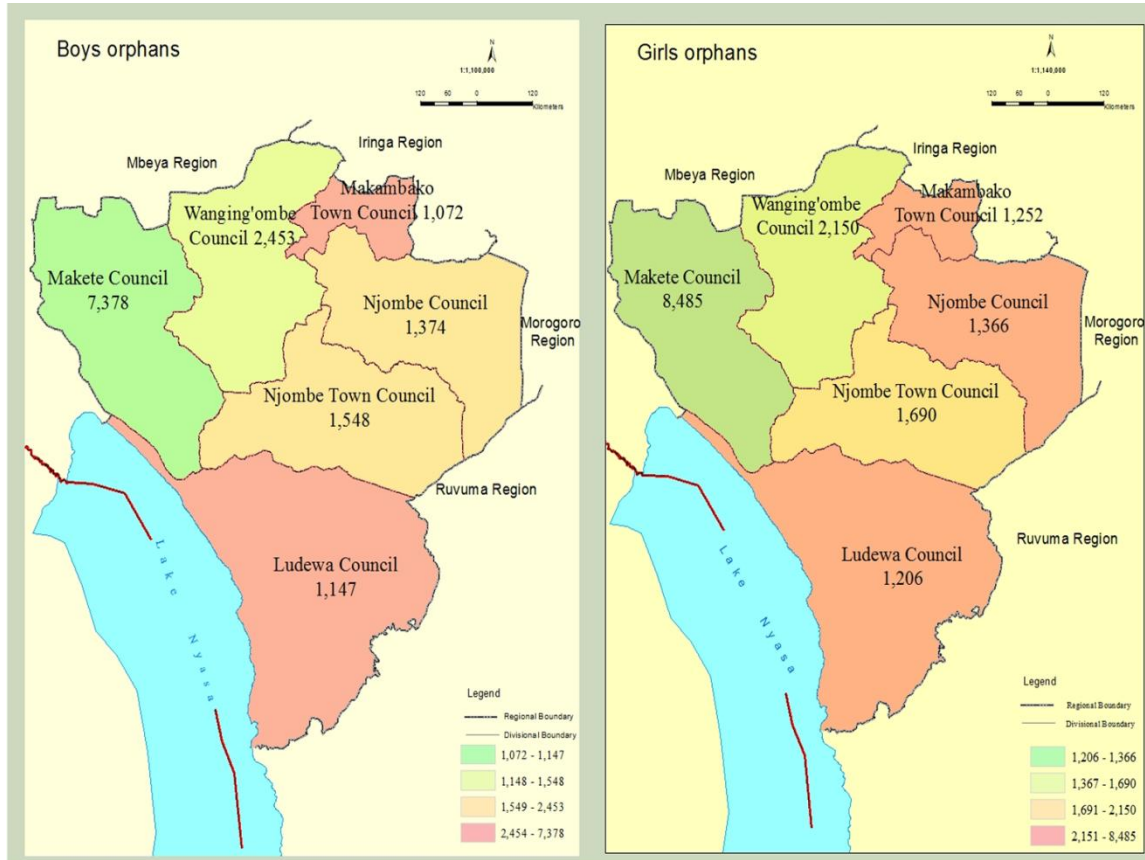
Vulnerability refers to the risk of adverse outcome, such as impoverishment, ill health, social exclusion. It reflects not only the likelihood that an unpleasant event occurs, but also lack of capacity to cope with it. It is therefore the result not only of individual mishap, but also the social conditions which follow from systematic differences in the flows of resources and opportunities which themselves influence capabilities

If vulnerability is a reflection of lack of control, then all children especially young children are vulnerable simply because of their age; they depend on others to provide them with their basic needs. Increasing physical and mental maturity usually leads to growing capability for self-provisioning, but during the period of childhood and adolescence, children and young people continue to need special care and support. While most children in Tanzania are cared for and protected by their families and communities, many are not so fortunate. Aspects of child vulnerability include:

- Child mortality and malnutrition
- Orphan hood and HIV/AIDS
- Children in household headed by children or household with elderly adults only
- Education and child labour and
- Gendered abuse.

Various research results indicate that, orphaned children are poorer than children who are not orphaned. Table 6.2 and Figure 6.1 show the number of the most vulnerable children aged 0 – 17, in Njombe region categorized as orphans and non-orphans. Table 6.2 shows that the region had 12,055 non orphans compared to 10,964 orphans. The table also shows that out of all orphans, 56.8 percent was females and 43.2 percent were boys.

Map 6. 1: Number of Orphans Children by Council and Sex, Njombe Region; 2012

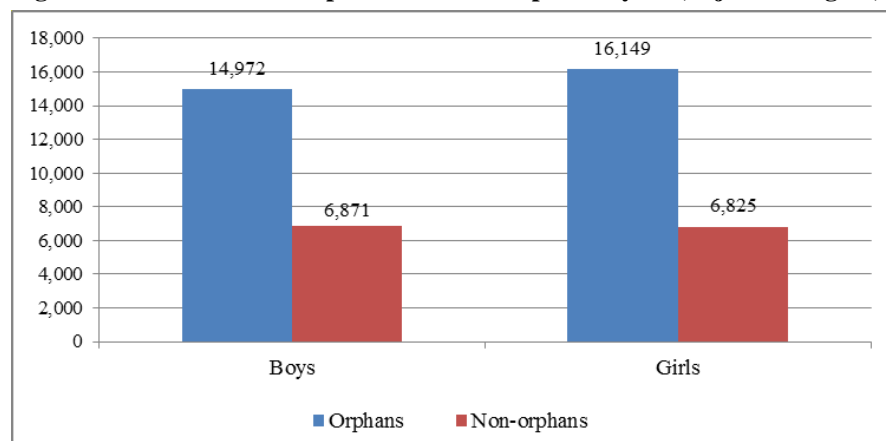


Source: National Bureau of Statistics, Geographical Information System Unit, 2019

Table 6.2: Number of Vulnerable Children by ward, Njombe Town Council, 2018

Council	Number of Children Aged 0-17	Most Vulnerable Children										Total of MVC	Percent of MVC
		Orphans					Non Orphans						
		No. of Girls	Girls Percent	No. of Boys	Boys Percent	Total	No. of Girls	Girls Percent	No. of Boys	Boys Percent	Total		
Njombe TC	64,681	1,095	61.52	685	38.48	1,780	325	60.75	210	39.25	535	2,315	3.58
Wanging'ombe DC	83,868	528	45.99	620	54.01	1,148	928	50.11	924	49.89	1852	3,000	3.58
Makete DC	46,647	450	47.42	499	52.58	949	2285	46.77	2601	53.23	4886	5,835	12.51
Njombe DC	45302	581	51.97	537	48.03	1,118	1827	50.10	1820	49.90	3647	4,765	10.52
Ludewa DC	70,730	2,974	61.01	1,901	38.99	4,875	289	53.13	255	46.88	544	5,419	7.66
Makambako TC	49000	600	54.84	494	45.16	1,094	381	64.47	210	35.53	591	1,685	3.44
Total	360,228	6,228	56.80	4,736	43.20	10,964	6,035	50.06	6,020	49.94	12,055	23,019	6.39

Source: Regional Commissioner's Office – Njombe Region and NBS 2019

Figure 6. 1: Number of Orphans and Non-orphans by Sex; Njombe Region, 2018

Source: Regional Commissioner's Office – Njombe Region, 2018

6.3 Women Groups

The 2012 Population and Housing Census results show that the male population was 329,359 and female population was 372,738 in Njombe region. These results show that the number of females exceeds that of males. In order to respond to the requirements of women emancipation in society, women economic groups have been established to cater women emerging needs. Table 6.3 shows that Njombe region had 5,042 members of women groups in 2016, the number of membership increased to 7,179 in 2018. The table further reveals that there was total loaned TZS **544,075,000** in 2016 which increased to **902, 564,590** in 2018. This means that, all councils/District were responsible of providing loans to the members of the women group.

The main source of loans provided to these groups comes from council's own sources revenue. All councils are required by law to set aside 10% (4% for women, 4% for youth and 2% for economic groups of people with disabilities) of its own source revenue collections to support women, and economic groups of people with disabilities. However, it was reported from the council that, 4% of own sources revenue collection is not allocated to support all women groups and that it is the main reason for low amount of loans given to these groups and failure to access loans for some groups.

However, all council is also responsible to make sure that women groups are provided with entrepreneurial skill and assist in making transformation from women economic groups into real 'Small and Medium Enterprises (SMEs)' as well as financial management skills to avoid misuse of loans. SMEs are often considered to be a key source of productivity, growth, and job creation and, hence, their performance and the environment in which they perform, are seen as an important factor for economic development.

Table 6.3: Number of Women Economic Groups in Njombe Region; 2016 and 2018

Council	2016				2018			
	Total no. of Groups	Total Members	No. of Groups Assisted	Total Loaned Tshs	Total no. of Groups	Total Members	No. of Groups Assisted	Total Loaned Tshs.
Njombe TC	181	905	58	96,925,000	190	950	140	373,717,000
Wanging'ombe DC	27	135	27	30,000,000	174	905	92	143,000,000
Makete DC	109	1411	5	7,400,000	189	2395	30	46,647,590
Njombe DC	64	320	64	63,500,000	36	180	36	95,500,000
Ludewa DC	245	2,136	139	131,250,000	217	2,184	51	102,000,000
Makambako TC	27	135	27	21,500,000	113	565	113	141,700,000
Total	653	5,042	320	544,075,000	919	7,179	462	902,564,590

Source: Regional Commissioner's Office – Njombe Region, 2019

6.4 Women Participation in Decision Making

The Universal Declaration of Human Rights states that everyone has the right to take part in the Government of his/her country. The empowerment and autonomy of women and the improvement of women's social, economic and political status is essential for the achievement of both transparent and accountable government and administration and sustainable development in all areas of life. Achieving the goal of equal participation of women and men in decision-making will provide a balance that more accurately reflects the composition of society and is needed in order to strengthen democracy and promote its proper functioning. Equality in political decision-making performs a leverage function without which it is highly unlikely that a real integration of the equality dimension in government policy-making is feasible.

The situation of participation in Managerial, Political, Professional and Technical Personnel in Njombe Region for both men and women is presented in Table 6.4. Men outnumbered female in all posts highlighted in the Table 6.4.

The table shows that in 2018, 3,132 women held decision making positions as managers, professionals, technicians and politicians in Njombe Region compared to 4,419 positions held by men.

Table 6. 4: Women’s Participation in Managerial, Political, Professional and Technical Personnel Positions by Council, Njombe Region; 2018

District	Managerial		Professionals/ Technicians		Politics (MPs, Councilors)		Total		Percent	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Njombe TC	173	50	1,190	976	13	9	1,376	1,035	31.1	33.0
Wanging'ombe DC	8	13	901	743	17	5	926	761	21.0	24.3
Makete DC	86	7	272	374	24	9	382	390	8.6	12.5
Njombe DC	19	1	698	589	13	5	730	595	16.5	19.0
Ludewa DC	439	84	438	216	50	16	927	316	21.0	10.1
Makambako TC	68	28	0	0	10	7	78	35	1.8	1.1
Region	793	183	3499	2898	127	51	4419	3132	100	100

Source: Regional Commissioner’s Office – Njombe Region, 2019

6.5 Youth Development

Employment of youths in most of rural (the large part of Njombe Region) areas, is mainly in the agricultural sector and other informal sectors, particularly in form of self-employment. However, self-employment even in these sectors needs some preparation and some capital input. Access to entrepreneurship skills as well as credit is therefore absolutely essential facilitator if these youths are to develop their potential and contribute to the district economy and poverty eradication. Availability of training and credit facilities depends on the formation of mutual benefit economic groups basically because many youths have no collaterals. Youths can be provided with entrepreneurial skills and access credits through these groups, which provide supervision and guarantee repayment of the loans.

Based on challenges facing youths especially in employment sector, Njombe Region facilitated youths to formulate economic groups through which they can get loans to support initiation of economic activities. By the end of 2018, Njombe Region managed youths to organize themselves into 261 in 2016 and 189 in 2018 in economic groups with a total membership of 2738 in the year 2016 and 3,370 in the year 2018 (See Table 6.5).

Youth is another group which organizes and form groups for the purpose of social economic development. It is through these groups that provision of credit services become easier. Table 6.5 shows the number of active youth economic groups by council in Njombe region. The table reveals that there were 131 groups in the region in 2016 and 189 groups 2018 were assisted. Total Loan received loans for the Youth of Njombe Region in the year of 2016 was Tshs. **256,150,000** and 2018 was Tshs. **392,605,000**. As for women groups, the main source of loans for youth groups comes from council’s own sources

revenue (4% of own source revenue collection). The 4% of own source revenue collection is reported to be low as compared to demand for loans for youth groups, and that it is the main reason for low amount of loans given to these groups and failure to access loans for some groups.

The responsible authorities should take action and ensure that loan agreements are adhered so as to give other groups a chance to borrow.

Table 6.5: Number of Youth Economic Groups in Njombe Region; 2016 and 2018

Council	2016				2018			
	Total no. of Groups	Total Members	No. of Groups Assisted	Total Loaned Tshs	Total no. of Groups	Total Members	No. of Groups Assisted	Total Loaned Tshs.
Njombe TC	45	225	41	80,500,000	82	410	64	142,405,000
Wanging'ombe DC	28	260	20	29,500,000	22	60	22	55,500,000
Makete DC	78	1067	10	13,400,000	111	1477	17	38,700,000
Njombe DC	27	135	27	32,000,000	22	130	22	67,500,000
Ludewa DC	72	996	22	15,750,000	80	1,013	8	16,000,000
Makambako TC	11	55	11	8,500,000	56	280	56	72,500,000
Total	261	2738	131	256,150,000	373	3,370	189	392,605,000

Source: Regional Commissioner's Office – Njombe Region, 2019

6.6 Savings and Credit Cooperative Societies (SACCOS)

Savings and Credit Cooperative Societies (SACCOS) contribute significantly to social and economic development especially for low income earners. Through SACCOS members have access to financial resources of which prefer to channel loans to small groups and individuals through their SACCOS. In Njombe region, each district has a number of SACCOS. Table 6.6 shows the number of SACCOS in Njombe region by district. The table shows that there were 141 registered SACCOS that the total funds in the SACCOS: accounts as at 31 December, 2018 were TZS 3,595,876,055. The table further shows that the amounts of TZS 22,351,902,964 were loaned to members and TZS 17,539,083,685 were recovered. Looking at total membership, the SACCOS had 2018 members out of whom 12,5093 are males and 8,771 were females. More campaign is needed to encourage women to join SACCOS.

Table 6. 6: Active SACCOS by Council, Njombe Region, 2018

Council	No. of SACCOS (registered)	Total Membership		Total Funds in SACCOS's A/Cs as at 31/12/2018	Total Loaned to Members Jan-Dec 2018 (TZS)	Total recovered Loans by Members Jan-Dec 2018(TZS)
		Male	Female			
Njombe TC	28	4,193	3,213	1,590,672,084	13,007,501,269	10,537,617,663
Wanging'ombe DC	15	1830	1405	127,501,934	7,352,216,963	4,754,244,644
Makete DC	30	1174	798	185,397,886	675,277,787	54,089,600
Njombe DC	14	3221	2208	444,997,993	971,017,135	1,395,833,485
Ludewa DC	41	748	341	1,123,000,000	187,409,759	686,147,800
Makambako TC	13	1,337	806	124,306,158.00	158,480,051.00	111,150,493.00
Total	141	12,503	8,771	3,595,876,055	22,351,902,964	17,539,083,685

Source: Regional Commissioner's Office – Njombe Region, 2019

6.7 Financial Institutions

In 2012 there were two (4) financial institutions in the region which increased to four (5) by the end of 2018 (Table 6.7). This is an indication that the demand for financial services is increasing in the region due to increasing number of formal and informal small scale businesses and increased population after. Other factors include increased timber production in the region which has attracted many timber businessmen/women from other parts of the country as well as from neighboring countries and establishment of irrigation scheme which resulted into increased production of round potatoes throughout the year which has also attracted businesses.

Table 6. 7: List of Banks in Njombe Region, 2008 - 2012

2015	2016	2017	2018
National Microfinance Bank (NMB)	National Microfinance Bank (NMB)	National Microfinance Bank (NMB)	National Microfinance Bank (NMB)
National Bank of Commerce Limited(NBC)	National Bank of Commerce Limited(NBC)	National Bank of Commerce Limited(NBC)	National Bank of Commerce Limited(NBC)
Cooperative Rural Development Bank (CRDB Bank)	Cooperative Rural Development Bank (CRDB Bank).	Cooperative Rural Development Bank (CRDB Bank)	Cooperative Rural Development Bank - Bank (CRDB Bank)
Njombe Community Bank (NJOCOBA)	Njombe Community Bank (NJOCOBA)	Njombe Community Bank (NJOCOBA)	Njombe Community Bank (NJOCOBA)
	Bayport FINCA	Bayport FINCA	Bayport FINCA

Source: Regional Commissioner's Office – Njombe Region 2019

6.8 Crime statistics

6.8.1 Introduction

The growth of towns, population increase, the development of science and technology and the erosion of morals has led to the increase of crime in the country. Njombe region like

other parts of the country has experienced the increase in crime. This section presents crime as well as accidents statistics in Njombe region.

6.8.2 Crime cases reported

A total of 1,096 crime cases were reported in Njombe region in the period of January to December 2018 (Table 6.8). Property crimes cases were leading by having 66.1 percent of all crimes cases out of which 31 people (38.3 percent) were jailed. As many as 33 people (40.7 percent of all people jailed) were jailed due to the reported drug crimes. These police officers are required to deal with the increasing number of crimes associated with rapid population growth of the region.

Table 6.8: Total number of Crimes Reported in Police Station and Number of People Jailed from January to December 2018 Njombe Region

District	Total number of				Total Number of People Jailed due to		
	Violent Crimes Reported	Property Crimes Reported	Drug Crimes Reported	Sub Total	Violent Crimes	Property Crimes	Drug Crimes
Njombe	168	497	34	699	8	17	25
Wanging'ombe	72	70	12	154	0	3	3
Makete	32	27	1	60	6	3	3
Ludewa	50	130	3	183	3	8	2
Total	322	724	50	1096	17	31	33
Percent	29.4	66.1	4.5	100	21.0	38.3	40.7

Source: Officer Commanding District Wangin`ombe Njombe, Ludewa and Makete 2018 and State Attorney Njombe, 2019

6.8.3 Accidents

Table 6.9 gives the number of accidents reported and the number of people died/injured in 2018. The total number of accidents which occurred was 341 out of which 131 people died and 289 were injured. Most accidents were due to motor vehicles only (30.8 percent of the total accidents), followed by motor vehicles versus motorcycles (19.9 percent), motor cycles only (29 percent) and motor vehicles and motor cycles versus pedestrian (20.2 percent).

Table 6.9 also shows that there were more people who injured from accidents (289) than those who were died (131). The total number of people who died from motor vehicle versus motor cycle was 28 (21.4 percent) and those injured were 51 (17.6 percent). In motor vehicle and motor cycle versus pedestrians 24 people (18.3 percent) died and 66 people (22.8 percent) were injured. In motor vehicles only 26 people (19.8 percent) died and 95 (32.9 percent) were injured. In motor cycles only 53 people (40.5percent) died and 77 (26.6 percent) were injured.

Table 6.9: Total number of Accidents Reported in the Police Station and Number of People Injured/died from January to December 2018, Njombe Region

Total number of Accidents involving						Total Number of People Died/Injured from Accidents involving										
District	Motor vehicles only	Motor vehicle Versus Motor Cycles	Motor cycles only	Motor vehicles and Motor cycles versus Pedestrian	Sub Total	Motor vehicles only		Motor vehicle Versus Motor Cycles		Motor cycles only		Motor vehicles and Motor cycles Versus Pedestrian		Sub Total		Grand Total
						D	I	D	I	D	I	D	I	D	I	
Njombe	26	28	7	27	88	14	19	13	23	7	9	11	25	45	76	121
Wanging'ombe	30	17	42	15	104	5	20	9	7	30	34	8	14	52	75	127
Makete	18	11	31	4	64	5	29	3	7	10	18	2	3	20	57	77
Ludewa	31	12	19	23	85	2	27	3	14	6	16	3	24	14	81	95
Total	105	68	99	69	341	26	95	28	51	53	77	24	66	131	289	420
Percent	30.8	19.9	29.0	20.2	100	19.8	32.9	21.4	17.6	40.5	26.6	18.3	22.8	100	100	

Note: **D: Died, I: Injured**

Source: Officer Commanding District Wangin'ombe Njombe, Ludewa and Makete 2019

6.8.4 Theft Cases

As Table 6.10 shows, a total of 201 theft cases were reported in Njombe region in the year 2018. Most of the cases were due to motor cycle stealing which accounted for 131 (65.2 percent) of all the theft cases. It was followed by cattle stealing with 61 cases (30.3 percent) and bicycles stealing with six case (2.8 percent). Most people were jailed due to the stealing of motor cycles (20 cases, 40.8 percent) and stealing of cattle (20 cases, 40.8 percent).

Table 6.10: Total Number of Theft Cases Reported in the Police Station and Number of People Jailed from January to December 2018; Njombe Region

Council	Total number of						Total Number of People Jailed due to stealing of				
	Total no. of Police Posts in the Council	Motor vehicles stolen	Motor cycles stolen	Bicycles stolen	Livestock stolen	Sub Total	Motor vehicles	Motor cycles	Bicycles	Livestock	Sub Total
Njombe	7	2	50	0	2	61	3	7	0	0	10
Wanging'ombe	4	0	10	6	26	40	0	8	6	13	27
Makete	5	0	8	0	4	17	0	4	0	2	6
Ludewa	4	0	8	0	23	35	0	1	0	5	6
Makambako	1	1	55	0	6	63	0	0	0	0	0
Total	21	3	131	0	61	201	3	20	6	20	49
Percent		1.5	65.2	2.8	30.3	100	6.1	40.8	12.2	40.8	100

Source: Officer Commanding District Wanging'ombe Njombe, Ludewa and Makete 2019

6.9 Motorcycle Operators (BodaBoda)

Informal activities such as bodaboda business contribute to the reduction of youth unemployment as well as income poverty. High motor vehicle hiring charges as well as poor road network have led to the increase of bodaboda transportation. Most people opt for bodaboda as they are cheap and can reach places that are difficult to reach with a motor vehicle. Table 6.10 shows the total number of Motorcycle operating in the Region in 2018 is increasing compared to 2012 by 132%.

Table 6. 11: Number of Motorcycle Operators (BodaBoda) by Council, Njombe Region; 2018

District/Council	Number of Bodaboda Operators	Estimated Income Earned per Bodaboda Operator in a Month (TZS)
Njombe TC	420	3,360,000
Wanging'ombe DC	693	6,194,000
Makete DC	536	4,600,000
Njombe DC	130	1,040,000
Ludewa DC	709	2,160,150
Makambako TC	270	2,160,000
Total	2,758	19,514,150

Source: Officer Commanding District Wanging'ombe Njombe, Ludewa and Makete 2019

6.10 Policy Implication on Other Development Issues

Policy formulation on youths and women is important in order to deal with new challenges of unemployment and gender inequalities. Informal sector is now playing a big part in youths and women employment. Therefore, policies should focus on alleviating income poverty among youths and women through encouraging those formulating economic groups. Supporting the groups through provision of soft loans and entrepreneurship skills is important for income poverty alleviation among the people.

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