

MBARALI DISTRICT COUNCIL SOCIO-ECONOMIC PROFILE 2015





The United Republic of Tanzania

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Jointly prepared by
Ministry of Finance and Planning,
National Bureau of Statistics
and

Mbarali District Council





Foreword



Mbarali District Council Socio-Economic Profile has been produced in response to the government's initiative through Prime Minister's Office Regional Administration and Local Government (PMORALG) of implementing the Development by Devolution and Local Economic Development (LED). This approach empowers people to fully participate in their own development processes. To ensure trickle down effects to the local level and households both

from economic growth and service delivery, the plan proposes further decentralization of the Government system in order to respond to local needs in a timely manner. Local Government must be increasingly empowered to make planning decisions.

This is in line with the goals of the Second Five Year Development Plan II (FYDP II), which cover the 2016/17 to 2020/21 period and outlines new interventions to enable Tanzania industrialize in a way that will transform its economy and its society. The Pis built on three pillars of accelerating transformation namely industrialization, human development, and implementation effectiveness. Consequently, the Plan aspires to build a base for transforming Tanzania into a semi-industrialized nation as stipulated in the Tanzania Development Vision (TDV) 2025.

Mbarali, like other District Councils in Tanzania, faces multiple social and economic problems that require sustainable improvement. Among the socio-economic issues that need special attention in this Council includes lack of enough health facilities and health personnel, high infant and mortality rates, high school dropouts rates at primary and secondary level, inefficient land use management programs, limited access of agricultural inputs and implements, poor road network and inadequate telecommunication services such as landlines and post Offices. Quality management of social and economic services needs a sustainable and continuous improvement of essential facilities from time to time.

Generally, the publication of Mbarali District Council Socio-Economic 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. It is believed, such data are vital to many policy makers, planners, researchers, donors and functional managers. Therefore, constructive views and criticisms are invited from stakeholders and various readers to enable this profile become a better tool in the formulation and implementation of the country's policies.

Last but not the least, I would like to acknowledge with thanks, the contribution made by the Office of the Director of Mbarali District Council, National Bureau of Statistics and other staff of the District Council who devoted their time and efforts to ensure the successful completion of this assignment.

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District Executive Director

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Acronyms

ADO Assistant Dental Officers

AIDS Acquired Immune Deficiency Syndrome

AMOs Assistant Medical Officers
ARI Acute Respiratory Infections

ARV Antiretroviral
CO Clinical Officers

CRDB Cooperative Rural Development Bank

DC District Council

DDS Doctor of Dental Surgery

ECF East Coast Fever

GDP Gross Domestic Product

Govt. Government Ha Hectare

HIV Human Immunodeficiency Virus

HTR House Teacher Ratio

ILO International Labor Organization

IMR Infant Mortality RateIMR Infant Mortality Rate

KG Kilogram
KM Kilometre

LSD Lumpy Skin Disease

MDGs Millennium Development Goals

MMR Maternal Mortality Rate

MOs Medical Officers

MPs Member of Parliaments
MVC Most Vulnerable Children
NBC National Bank of Commerce
NBS National Bureau of Statistics

NER Net Enrolment Rate

NGO's Non-Government Organizations NMB National Micro Finance Bank

NON GOVT Non-government

NW Not working

OPV3 Oral Polio Vaccine 3rd Doze
PHC Population and Housing Census

PMTCT Prevention of Mother to Child Transmission

PRI Private
PUB Public

SACCOS Savings and Credit Cooperative Societies

Sq. Km. Square Kilometre
Std VII Standard Seven
TB Tuberculosis

TBAs Traditional Birth Attendants
TMP Traditional Medical Practitioners

TC Town Council

TPR Teacher to Pupils Ratio
TZS Tanzanian Shillings

U5MR Under Five Mortality Rate

VCT Voluntary Counseling and Testing

VHP Village Health Post

VHWs Village Health Workers VWF Village Water Fund

W Working

WHO World Health Organization
WUA Water Users Associations

WUG's Water User Group

Summary of Key Indicators, Mbarali District Council; 2015

Population Crown	Mbarali l	District	Rujewa D	ivision	Ilongo I	Division
Population Group	Number P	Percentage	Number P	ercentage	Number	Percentage
Total Population (2012 PHC Report)	300,517	100.0	170,592	56.8	129,925	43.2
Male	145,867	100.0	83,175	57.0	62,692	43.0
Female	154,650	100.0	87,417	56.4	67,473	43.6
Total land Area (Excluding Area for Natura Resources) in Sq. km	6,400	100.0	3,310	51.7	3,090	48.3
Surveyed Area (Sq. metre)	38,076,500	100.0	17,326,500	45.57	20,750,000	54.5
Residential Surveyed Area	27,925,000	100.0	9,487,500	34.0	18,437,500	66.0
Trade or Industrial Surveyed Area	3,675,000	100.0	3,050,000	83.0	625,000	17.0
Public Services Surveyed Area	6,476,500	100.0	4,789,000	73.9	1,687,500	26.1
Area used for food crops (ha)	125,040	100.0	57,655	46.1	67,385	53.9
Total food production (tons)	351,164	100.0	185,728	52.9	165,436	47.1
Area used for cash crops (ha)	36,650	100.0	25,080	68.4	11,570	31.6
Total cash production (tons)	32,899	100.0	23,250	70.7	9,649	29.3
Total number of livestock	555,917	100.0	321,266	57.8	234,651	42.2
Revenue from fishing activities (million)	63	100.0	58	93.1	4	6.9
Types of road networks (kilometer)						
Regional	181	15.4	123	18.0	58	11.7
District or urban	619	52.5	388	56.6	231	46.8
Feeder	290	24.6	142	20.7	148	30.0
Trunk	89	7.5	32	4.7	57	11.5
Total	1,179	100.0	685	100.0	494	100.0
Road network surface condition (kilometer)						
Tarmac	103	8.7	46	6.7	57	11.5
Gravel	496	42.1	291	42.5	205	41.5
Earth	580	49.2	348	50.8	232	50.8
Total	1,179	100.0	685	100.0	494	100.0
Type of health facility						
Hospital	2	100.0	1	50.0	1	50.0
Health centre	6	100.0	4	66.7	2	33.3
Dispensary	39	100.0	24	61.5	15	38.5
Complementary rural health service providers						
Village health workers (VHW's)	226	100.0	120	53.1	106	46.9

Denulation Crown	Mbarali D	istrict	Rujewa Di	vision	Ilongo Di	vision
Population Group -	Number Percentage		Number Percentage		Number Percentage	
Village health post	113	100.0	60	53.1	53	46.9
Deficit of Pit Latrine	1,488	100.0	913	61.4	575	38.6
Boys	557	100.0	365	65.5	192	34.5
Girls	931	100.0	548	58.9	383	41.1
Availability of public secondary schools teachers						
Required teachers	597	100.0	343	57.5	254	42.5
Available teachers	506	100.0	291	57.5	215	42.5
Teachers deficit	91	100.0	52	57.1	39	42.9
Orphan hood (one or both parent died)						
Child orphan (0-17 year)	1,302	100.0	671	100.0	631	100.0
Male	606	46.5	304	45.3	302	47.9
Female	696	53.5	367	54.7	329	52.1

Source: Mbarali District Council, 2017

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CHAPTER ONE

Land, Climate, Agro-Ecological Zones and Population

1.0 An Overview

Chapter one gives information on Mbarali District Council with respect to Land, Climate, and Agro-ecological Zones. It also gives information on ethnic groups, population distribution and size as well as other demographic characteristics.

1.1. Geographical Location

Mbarali is among the six Districts of Mbeya Region. It shares borders with Chunya District Council in the north, Iringa Rural District Council in the north-east, Wanging'ombe and Mufindi District Councils in the East, Makete District Council in the South and Mbeya Rural District in the west.

GEOGRAPHIC LOCATION OF MBARALI DISTRICT COUNCIL, 2015

Tabora

Meyer

Singida

Iringa

Meyers

Songwe

Njombe

Map 1: Geographical Location of Mbarali District Council; 2015

Source: NBS, Geographical Information System Section, 2019

1.2. Climate

In terms of international identification , Mbarali District Council is located between latitude 7^{0} and 9^{0} South of Equator and between longitude 33.8^{0} and 35^{0} East of Greenwich meridian. The District Council is situated at an altitude of about 1,000 to 1,800 metre above the sea level with temperature ranging between 25^{0} C and 30^{0} C. The District Council has one rainy season which rains from December to April with the annual rainfall of about 450 to 650 millimeter.

1.3. Agro – Ecological Zones

Mbarali District Council is divided into two Agro - Ecological Zones; Usangu flat lands and Usangu flats Boarder.

1.3.1. Usangu flat lands Zone

This zone covers wards of Ruiwa, Ubaruku, Utengule Usangu, north of Mahongole, Igurusi, Chimala, Mapogoro, Rujewa, north of Mawindi, and Madibira. It is characterized by subtropical forest, sub-tropical grasslands and thorn bushes. Main economic activities carried out in this zone is agriculture including growing of maize, paddy, beans, cassava, groundnuts, sorghum, vegetable and fruits. Other activity is livestock keeping including cattle, goats, sheep, chicken and dogs.

1.3.2. Usangu flats Boarder Zone

This zone covers wards of south of Mawindi, Rujewa, Mapogoro, Chimala and Mahongole. The area is characterized by sub-tropical forests, grasslands and thorn bushes. Major crops grown are maize, sorghum, beans, cassava, groundnuts, sweet potatoes, vegetables and fruits. Other activity includes livestock keeping such as cattle, goats, sheep, chicken, dogs and donkey.

1.4. Soil

The common soil types in the District Council are sandy silt clays and alluvial silt clays. Common crops planted in both types of soil include, rice, maize and groundnuts. Pastoralism is another economic activity within the area. Due to adverse weather condition and soil exhaustion, irrigation and fertilization are commonly practiced in the District Council.

1.5. Land Area, Land Use Pattern and Administrative Units

This subsection details the land and water area of Mbarali District Council for the year 2015. It also discusses the land use patterns and administrative units of the District Council.

1.5.1. Land and Water Area

This section discusses land area by division, natural resources and wards in Mbarali District Council.

Table 1.1 shows that Mbarali District Counci has a total land area of about 16,000 square kilometer with more than a half (60.0 percent) of the total land occupied by National parks, wildlife management and game reserve. The remaining 20.7 percent is in Rujewa Division and 19.3 percent in Ilongo Division. At ward level, Luhanga has the highest percentage share of the land area (8.0 percent) followed by Igava (4.1 percent) and Ruiwa (3.8 percent). In addition, Kongolo Ward has the lowest percentage share of the land area with 0.3 percent followed by Mahongole, Ihahi and Chimala with 0.4 percentage share in each ward.

Table 1.1: Land Area in Square Kilometer by Ward, Mbarali District Council, 2015

Division/ Natural resources	Ward	Total land Area (Sq. km)	Percent of Land Area
	Madibira	329	2.1
	Miyombweni	391	2.4
	Igava	652	4.1
	Mawindi	300	1.9
Duiano	Ipwani	451	2.8
Rujewa	Rujewa and Lugelele	296	1.9
	Ubaruku	98	0.6
	Imalilo Mbarali	404	2.5
	Mapogoro	387	2.4
	Sub total	3,310	20.7
	Chimala	70	0.4
	Ihahi	65	0.4
	Itamboleo	357	2.2
	Igurusi	184	1.2
	Kongolo	47	0.3
Ilongo	Utengule Usangu	237	1.5
	Luhanga	1,284	8.0
	Mahongole	68	0.4
	Mwatenga	172	1.1
	Ruiwa	606	3.8
	Sub total	3,090	19.3
National parks,			
wildlife management			
and game reserve	Sub total	9,600	60.0
	Grand Total	16,000	100.0

Source: District Natural Resources and Land Department-Mbarali DC, 2015

Map 2: Showing Distribution of Land Area in Square Kilometre by Ward, Mbarali District Council; 2015

CHUNYA DISTRICT
COUNCIL

Luhanga
4,716

Malibra angule
1,336

IRINGA REGION

Mayombweri
304

Mayombweri
309

M

LAND AREA IN SQUARE KILOMETRES BY WARD, MBARALI DISTRICT COUNCIL, 2015

Source: NBS, Geographical Information System Section, 2019

1.5.2. Land Use Pattern

Table 1.2 shows that Mbarali District Council has been classified into five land use patterns, namely; agriculture, livestock keeping, settlement, forest reserve and national park, wildlife management and game reserve. Further, it shows that, out of total area (16,000 square kilometer) of Mbarali District Council, the largest area of about 9,600 square kilometer (60.0 percent) is for national park, wildlife management and game reserve, followed by area for agriculture activities (3,215 square kilometer, 20.1 percent), livestock keeping (1,540 square kilometer, 9.6 percent), human settlement (1,245 square kilometer, 7.8 percent) and the smallest area is for forest reserve with 400 square kilometer (2.5 percent). On the other hand, the major economic activities in Mbarali District Council are agriculture and livestock. Other economic activities include fishing, beekeeping, tourism, forest products, mining, business and handcraft.

Table 1. 2: Land Use Pattern in Mbarali District Council; 2015

Classification	Area in (sq. km)	Percentage
Agriculture	3,215	20.1
Livestock keeping	1,540	9.6
Settlement	1,245	7.8
Forest reserve	400	2.5
National parks, wildlife management and game reserve	9,600	60.0
Total	16,000	100.0

Source: District Natural Resources and Land Department-Mbarali DC, 2015

1.5.3. Administrative Units

Table 1.3 shows that, administratively, Mbarali District Council is divided into two divisions, Rujewa and Ilongo with a total of 20 wards which are further subdivided into 102 villages and 713 hamlets. Rujewa Division has 10 wards, 48 villages and 373 hamlets while Ilongo Division, has 10 wards, 54 villages and 340 hamlets. On the other hand, Igurusi Ward in Ilongo Division has more villages (9) and hamlets (50) followed by Ubaruku Ward in Rujewa Division with eight (8) villages and 50 hamlets. Rujewa and Lugelele wards together form a township authority and in this regards have no villages.

Table 1. 3: Number of Administrative Units by Division and Ward, Mbarali District Council; 2015

Division	Ward	No. of Villages	No. of Hamlets
	Rujewa	-	59
	Lugelele	-	38
	Ubaruku	8	50
	Imalilo Mbarali	5	37
	Mawindi	5	34
Rujewa	Igava	6	29
	Ipwani	5	28
	Miyombweni	5	19
	Madibira	6	30
	Mapogoro	8	49
	Sub total	48	373
	Chimala	6	34
	Ihahi	4	23
	Itamboleo	4	24
Ilongo	Igurusi	9	50
	Utengule Usangu	5	37
	Luhanga	4	36
	Kongolo	5	26

Division	Ward	No. of Villages	No. of Hamlets
-	Mahonole	6	34
	Mwatenga	5	30
	Ruiwa	6	46
	Sub total	54	340
	Grand Total	102	713

Source: Administration Department-Mbarali DC, 2015

1.6. Population

Population is an important source of labor for production of goods and services as well as consumer of various products. Moreover, the growth and distribution of the population determines the demand for food, water, energy and other natural resources and location of essential social services, such as education, health, water, transport and housing for its survival.

This sub section analyses the population size, ethnic groups and population distribution in Mbarali District Council. According to the 2012 Population and Housing Census, the total population of Mbarali District Council was 300,517 persons. Out of them, 154,650 were females and 145,867 were males.

1.7. Ethnic Groups

Table 1.4 shows distribution of indigenous ethnic groups in Mbarali District Council by wards. It is revealed that there are 10 unique ethnic groups in the District scattered in different wards. Chimala ward observed to have highest number of different ethnic groups (six (6)). Other wards have less than six (6) unique ethnic groups.

The major ethnic group in the District Council which are found in most of wards includes Sangu which is scattered in 16 different wards followed by Sukuma group spread in 15 different wards. However, other ethnic groups including Balibegi and Ndali are in less than three (3) different wards.

Table 1. 4: Ethnicity of Indigenous people by Ward Mbarali District Council; 2015

Ward	Number of Ethnicity Group	List of Five Major Ethnic Groups
Luhanga	4	Sangu, Sukuma, Masai and Balibegi
Madibira	5	Hehe, Bena, Nyakyusa, Sukuma and Masai
Mawindi	4	Hehe, Bena, Sukuma and Masai
Ihahi	3	Wanji, sangu and Nyakyusa
Mapogoro	3	Wanji, Nyakyusa and Bena
Chimala	6	Sangu, Wanji, Nyakyusa, Sukuma, Masai and Bena
Utengule Usangu	4	Sangu, Nyakyusa, Sukuma and Masai
Ruiwa	4	Nyakyusa, Sukuma, Sangu and Masai
Mahongole	5	Nyakyusa, Ndali, Sangu, Bena and Safwa
Ubaruku	5	Bena, Hehe, Sangu, Nyakyusa and Sukuma
Igurusi	5	Nyakyusa, Safwa, Sangu, Ndali and Wanji
Kongolo	5	Nyakyusa, Safwa, Sangu, Bena and Hehe
Mwatenga	5	Safwa, Nyakyusa, Sangu, Bena and Sukuma
Imalilo Songwe	5	Sangu,Bena, Hehe, Sukuma and Masai
Igava	5	Hehe, Bena, Sangu, Sukum and Masai
Ipwani	4	Hehe, Bena, Sukuma and Masai
Itamboleo	5	Wanji, Nyakyusa, Sangu, Masai and Sukuma
Miyombweni	4	Hehe, Bena, Sukuma and Masai
Rujewa	5	Hehe, Bena, Sangu, Nyakyusa and Sukuma
Lugelele	4	Hehe, Bena, Sukuma and Sangu

Source: Mbarali District Council, 2015

1.8. Population Size and Distribution

Table 1.5 shows the distribution of population in Mbarali District Council by division, wards and sex basing on the 2002 and 2012 Population and Housing Censuses. The total population in Mbarali District Council had increased from 234,101 persons in 2002 to 300,517 persons in 2012; this is an increase of 28.4 percent for period of 10 years. This resulted from the increasing number of males from 114,868 persons in 2002 to 145,867 persons in 2012 as well as increasing number of females from 119,233 persons in 2002 to 154,650 persons in 2012.

Division wise, Rujewa has the highest percentage share of the district's total population in both censuses, 58.3 percent (136,472 persons) in 2002 and 56.8 percent (170,592 persons) in 2012. Ilongo Division accounted for 41.7 percent (97,629 persons) of the the district's population in 2002 and 43.2 percent (129,925 persons) in 2012. Furthermore, similar census results show that, in 2012, Rujewa Ward had the highest percentage share of the population (9.8 percent) followed by Ubaruku (9.7 percent). Three wards, Ipwani, Ihahi and Mwatenga had the lowest percentage share of the population (each with 2.8 percent).

Table 1. 5: Population Distribution by Division, Ward and Sex; Mbarali District Council; 2002 and 2012 Censuses

			2002 Popu	lation(cens	us)	2012 Population(census)			
Division	Ward	Male	Female	Total	Percent Share of Populatio	Male	Female	Total	Percent Share of Populatio
	Rujewa	13,568	13,985	27,553	11.8	14,241	15,232	29,473	9.8
	Lugelele	13,300	13,703	21,333	11.0	4,262	4,411	8,673	2.9
	Ubaruku	15,990	15,938	31,928	13.6	14,257	14,940	29,197	9.7
	Imalilo songwe	15,770	15,550	31,720	13.0	5,545	5,723	11,268	3.7
	Mawindi	13,204	13,934	27,138	11.6	4,825	5,092	9,917	3.3
	Igava	15,20	10,50.	27,150	11.0	6,879	7,413	14,292	4.8
Rujewa	Ipwani					4,143	4,360	8,503	2.8
	Miyombweni					4,861	4,912	9,773	3.3
	Madibira and Msangaji	16,969	17,076	34,045	14.5	12,103	12,639	24,742	8.2
	Mapogoro	7,802	8,006	15,808	6.8	12,059	12,695	24,754	8.2
	Sub total	67,533	68,939	136,472	58.3	83,175	87,417	170,592	56.8
	Luhanga					5,612	5,854	11,466	3.8
	Ihahi					4,124	4,350	8,474	2.8
	Chimala	11,543	11,852	23,395	10.0	7,734	8,899	16,633	5.5
	Utengule	12,304	13,564	25,868	11.0	7,239	8,168	15,407	5.1
	Ruiwa	5,203	5,218	10,421	4.5	7,765	8,102	15,867	5.3
Ilongo	Mahongole	7,068	7,409	14,477	6.2	5,676	6,068	11,744	3.9
	Igurusi	11,217	12,251	23,468	10.0	10,734	11,562	22,296	7.4
	Kongolo					5,058	5,251	10,309	3.4
	Mwatenga					4,109	4,307	8,416	2.8
	Itamboleo					4,641	4,912	9,313	3.1
	Sub total	47,335	50,294	97,629	41.7	62,692	67,473	129,925	43.2
	Grand total	114,868	119,233	234,101	100.0	145,867	154,890	300,517	100.0

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

1.9. Population Size, Density and Growth Rate

1.9.1. Population Size and Growth Rate

Population size and growth rate are among key population indicators which shows the rate of increase of population in a specified period. They also act as fundamental indicators for decision makers to review their socio-economic goals and targets so as to take into consideration the expected socio-economic pressures resulting from the population increase.

-

¹ In 2002, the following wards were not yet established; Lugelele, Imalilo songwe, Igava, Ipwani, Miyombweni, Luhanga, Ihahi, Kongolo, Mwatenga and Itamboleo.

As Table 1.6 shows, population of Mbarali District Council increased from 234,101 persons in 2002 to 300,517 persons in 2012(increase of 28.4 percent). At division level, population of Rujewa increased by 25.0 percent from 136,472 in 2002 to 170,592 persons in 2012. Population increase in Ilongo Division was by 33.1 percent from 97,629 in 2002 to 129,925 persons in 2012. In terms of population growth rate, Ilongo Division had the highest (2.8 percent) which was 0.4 percent higher than that of the District Council (2.4 percent).

Table 1. 6: Population Size and Growth Rate by Division; Mbarali District Council; 2002 and 2012 Censuses

	Population Size (number)		Changes 2002-2012 (percent)	Growth Rate (per annum) 2002-2012 (percent)
Division	2002	2012		
Rujewa	136,472	170,592	25.0	2.1
Ilongo	97,629	129,925	33.1	2.8
Mbarali				
District	234,101	300,517	28.4	2.4

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

1.9.2. Population Density

Population density is the measure of the number of people per unit area, commonly represented as people per square kilometer. The study of population density helps the Government in provision of basic needs of the people in a particular area.

Table 1.7 shows population size and density by division and wards in Mbarali District Council during 2002 and 2012 censuses. Population density of the District Council increased from 37 in 2002 to 47 persons per square kilometre in 2012. In both censuses, Rujewa was the most densely populated Division (41 persons per square kilometre in 2002 and 52 in 2012). At ward level, Chimala was the most populated Ward in 2002 (332 persons per square kilometer) while in 2012, Ubaruku Ward was the most populated (297 persons per square kilometer).

Table 1.7: Population Size and Density by Division and Ward; 2002 and 2012 Censuses

	Wards	Land Area 2002 Pop. C		op. Census	Census 2012 Pop. Census		
Division		(sq. kms)	Total Number	Population Density	Total Number	Population Density	
Rujewa	Madibira and Msangaji	329	34,045	103	24,742	75	
	Miyombweni	391			9,773	25	
	Igava	652			14,292	22	
	Mawindi	300	27,138	91	9,917	33	
	Ipwani	451			8,503	19	
	Rujewa and Lugelele	296	27,553	93	38,146	129	
	Ubaruku	98	31,928	325	29,197	297	
	Imalilo Songwe	404			11,268	28	
	Mapogoro	387	15,808	41	24,754	64	
	Sub total	3,310	136,472	41	170,592	52	
Ilongo	Chimala	70	23,395	332	16,633	236	
	Ihahi	65			8,474	129	
	Itamboleo	357			9,313	26	
	Igurusi	184	23,468	127	22,296	121	
	Kongolo	47			10,309	221	
	Utengule Usangu	237	25,868	109	15,407	65	
	Luhanga	1,284			11,466	9	
	Mahongole	68	14,477	214	11,744	173	
	Mwatenga	172			8,416	49	
	Ruiwa	606	10,421	17	15,867	26	
	Sub total	3,090	97,629	32	129,925	42	
	Grand total	6,400	234,101	37	300,517	47	

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

1.9.3. Age and Sex Profile

The distribution of the population by age and sex is one of the most important demographic analysis. The indices of the population's age and sex structure play an important part in both public and private sectors in planning for the development of the economic and cultural life of our society.

1.9.4. Population Distribution by Five Year Age Groups

Table 1.8 represents the distribution of population in Mbarali District Council by five year age groups, sex and sex ratio for the year 2012. Females had slightly higher percentage share (51.5 percent) of the total population compared to males (48.5 percent). The share of a young population (people aged below 15 years) was 44.1 percent of the total population while for population aged 65 years and above was 3.8 percent. Likewise, the proportion of working age population aged 15 - 64 years accounted for 52.1 percent of the total population.

Mbarali District Council had the overall sex ratio of 94 males for every 100 females. The highest sex ratio was observed to the population aged 50-54, 55-59 and 60-64 with sex ratio of 114, 119, and 102 respectively. This justifies an excess number of males over females in those age groups.

Table 1. 8: Distribution of Population by Five Year Age Groups and Sex; Mbarali District Council; 2012 Census

Age	Both Sexes		Male		Female		Sex Ratio
group	Number	Percent	Number	Percent	Number	Percent	Sex Kauo
Total	300,517	100.0	145,867	48.5	154,650	51.5	94
0 - 4	50,107	16.7	24,765	17.0	25,342	16.4	98
5 – 9	44,063	14.7	21,846	15.0	22,217	14.4	98
10 – 14	38,078	12.7	19,017	13.0	19,061	12.3	100
15 – 19	29,538	9.8	14,556	10.0	14,982	9.7	97
20 – 24	25,162	8.4	11,143	7.6	14,019	9.1	79
25 – 29	22,774	7.6	10,598	7.3	12,176	7.9	87
30 – 34	20,181	6.7	9,567	6.6	10,614	6.9	90
35 – 39	16,822	5.6	8,377	5.7	8,445	5.5	99
40 – 44	12,844	4.3	6,394	4.4	6,450	4.2	99
45 – 49	11,273	3.8	4,680	3.2	6,593	4.3	71
50 – 54	7,646	2.5	4,073	2.8	3,573	2.3	114
55 – 59	5,076	1.7	2,759	1.9	2,317	1.5	119
60 – 64	5,284	1.8	2,673	1.8	2,611	1.7	102
65 – 69	3,318	1.1	1,634	1.1	1,684	1.1	97
70 – 74	3,284	1.1	1,527	1.0	1,757	1.1	87
75 – 79	1,913	0.6	905	0.6	1,008	0.7	90
80+	3,154	1.0	1,353	0.9	1,801	1.2	75

Source: National Bureau of Statistics, 2012 Population Census Report

1.9.5. Population Pyramid

Population pyramid shows the clear picture of population by age and sex. This is a useful way to illustrate the age structure of the population. Figures 1.2, 1.3 and 1.4 show a population pyramid of 2012 census which is dominated by a youthful aged structure.

Male Female 80 +70 - 74 60 - 64 50 - 54 40 - 44 30 - 34 20 - 24 10-14 0 - 4 10 8 6 2 0 2 6 8 10 Percent of Total Population

Figure 1. 2: Population Pyramid for Five Year Age Groups, Mbarali District, 2012 Census

Source: National Bureau of Statistics, 2012 Population Census Report

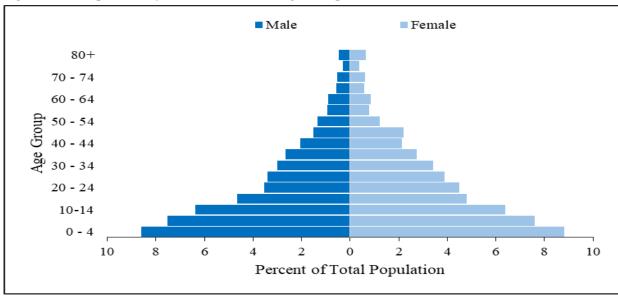


Figure 1. 3: Population Pyramid for Five Year Age Groups, Mbarali Rural; 2012 Census

Source: National Bureau of Statistics, 2012 Population Census Report

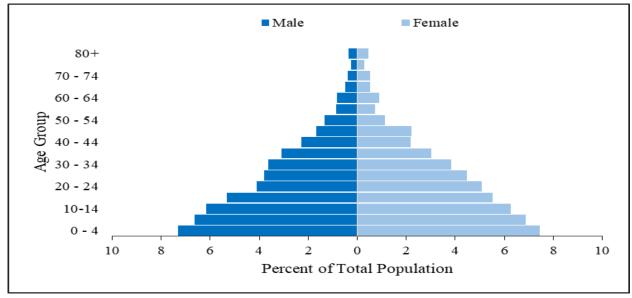


Figure 1. 4: Population Pyramid for Five Year Age Groups, Mbarali Urban; 2012 Census

Source: National Bureau of Statistics, 2012 Population Census Report

1.10. Population Distribution by Selected Age Groups

1.10.1. Young Population (0-14 years)

The proportion of young population (0-14 years) of the total population is an indicator of the "youngness" of the population. Figure 1.5 shows that the percentage share of population below 15 years of age slightly increased from 42.3 percent in 2002 Census to 44.0 percent in 2012 Census. This marginal increase indicates there is growth of fertility rates in the District over the 10 years period.

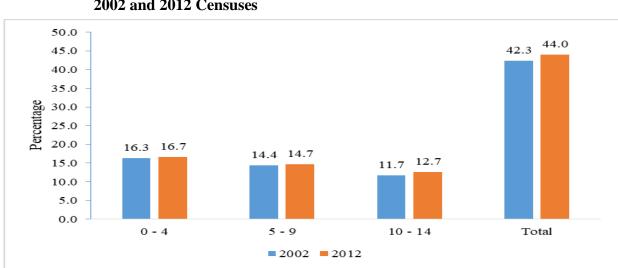


Figure 1. 5: Percentage Distribution of Young Population (0-14 Years), Mbarali District; 2002 and 2012 Censuses

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

1.10.2. Youth Population (15-35 years)

Youth population represents an important stage of the life cycle, both demographically and socially. According to the Tanzania National Youth Policy, Tanzania has her specific definition that is usually used by planners, policy makers and stakeholders and defines a youth as person of age 15 to 35 years.

According to the 2002 and 2012 PHCs, the total proportions of persons aged 15-35 years in Mbarali District slightly decreased from 36.6 percent in 2002 to 34.1 percent in 2012. Sex wise, the proportions for male slightly decreased from 35.7 percent in 2002 to 33.1 percent in 2012 while proportions for female slightly decreased from 37.4 percent in 2002 to 35.0 percent in 2012 (Figure 1.6).

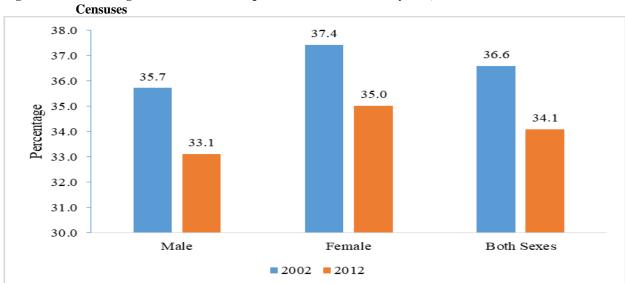


Figure 1. 6: Percentage of the Youth Population (15-35 Years) by Sex, Mbarali DC: 2002 and 2012 Censuses

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

1.10.3. Working Age Population (15-64 years)

The working age population estimates the total number of potential workers within an economy without specifying whether a person is working, unemployed or inactive. Figure 1.7 shows that out of the total population in Mbarali District Council for the years 2002 and 2012, the proportions of working age population (15-64 years) accounted for 53.7 percent in 2002 and 52.1 percent in 2012. This shows there is a marginal decrease of 1.6 percent of working age population over the ten years.

Also, it revealed that female accounted for a higher percentage share of the working age population with 54.3 percent in 2002 and 52.9 percent in 2012 compared to male (53.0 percent in 2002 and 51.3 percent in 2012).

55.0 54.3 54.5 53.7 54.0 53.5 53.0 52.9 53.0 52.5 52.1 52.0 51.3 51.5 51.0 50.5 50.0 49.5 Male Female Both Sexes **■**2002 **■**2012

Figure 1. 7: Percentage of the Working Age Population (15-64 Years) by Sex, Mbarali DC; 2002 and 2012 Censuses

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

1.10.4. Elderly Population (65 years and above)

The percentage of the total population that constitutes the elderly (65+ years) is an indicator of population ageing. Figure 1.8 shows that out of the total population in Mbarali District for the years 2002 and 2012, the total proportions of population aged 65 years and above had slightly decreased from 4.0 percent in 2002 to 3.9 percent in 2012. Further the result revealed that female had higher percentage share (4.1 percent in 2002 and 4.0 percent in 2012) compared to male (3.8 percent in 2002 and 3.7 percent in 2012.

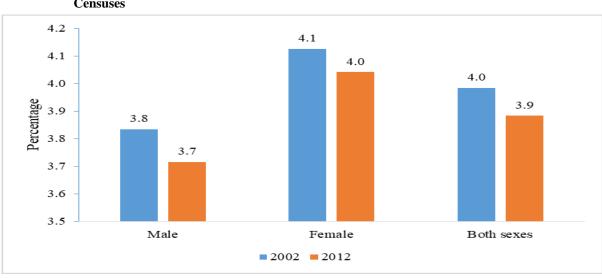


Figure 1. 8: Percentage of the Population Aged 65 Years and Above by Sex, Mbarali DC; 2002 and 2012 Censuses

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

1.10.5. Age Dependency Ratio

The 2012 Census revealed that the age dependency ratio for Mbarali District Council was 92, implying that there were 100 people aged 15–64 supporting 92 persons in age groups 0-14 and 65 years and above. Mbarali Rural had the highest dependency ratio (98) than Urban (79). This means that working age group in rural areas of Mbarali had more burden of supporting 98 dependents than their counterpart in urban areas (79).

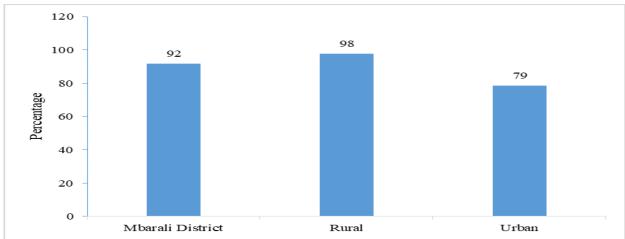


Figure 1. 9: Age Dependency Ratio by Area, Mbarali District; 2012 Censuses

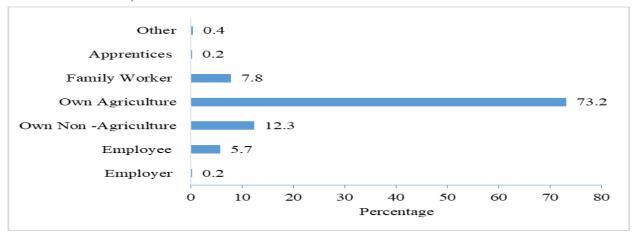
Source: National Bureau of Statistics, 2012 Population Census Report

1.11. Employment Status

The 2012 Population and Housing Census used six categories mutually exclusive to describe the employment status of the population, namely; employer, employee, agriculture worker, non-agriculture worker, contributing family worker and apprentice.

The records revealed that for the year 2012 there were a total of 129,563 persons aged 10 years and above employed in various sectors. Out of that, self-employed persons in agriculture have the highest percentage share (73.2 percent) followed by those employed as self-employed in non-agriculture (12.3 percent) and the family worker (7.8 percent). Moreover, the paid employees accounted for 5.7 percent of the total employed persons and the remaining employment statuses contribute 0.8 percent of total employment. (Figure 1.10)

Figure 1. 10: Employed Population Aged 10 Years and Above by Employment Status, Mbarali District Council; 2012 Census



Source: National Bureau of Statistics, 2012 Population Census Report

CHAPTER TWO

Council Economy

2.0 Introduction

This chapter discusses the economy of Mbarali District Council and her poverty status. The economic indicators used include Gross Domestic Product (GDP), Per Capita Gross Domestic Product and main source of income for the residents of the District Council. The non-income poverty indicators cover demographic characteristics, health, education, access to drinking water and housing characteristics.

2.1 GDP and Per Capita GDP

The Gross Domestic Product (GDP) and Per Capita Income are among the economic indicators used to assess the council's economic performance. Mbarali like other District Council in Mbeya Region has never computed its GDP and Per capita GDP since it was established. However, the District Council economy continues to be dominated by the agriculture sector and livestock keeping. Both cash and food crops are produced.

2.2 Council Contribution to Regional GDP

Mbeya Regional GDP for the year 2015 shows that Mbeya District Council had the highest contribution of TZS. 1,741.8 billion to the Regional GDP while Kyela District Council had the lowest contribution (TZS. 221.2 billion). In the same reference year, 2015, Mbarali District Council ranked second from the bottom in contribution to the Regional GDP.

Table 2.1: Mbeya Region GDP by Council Million	Table	R	2.1: Mbe	Region	GDP	by	Council	Million	TZS
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District	2013	2014	2015
Chunya DC	138,208	273,336	228,538
Mbeya DC	1,490,773	1,612,053	1,741,791
Kyela DC	261,448	262,543	221,226
Rungwe DC	526,397	723,698	905,076
Busokelo DC	362,877	97,402	539,809
Mbarali DC	324,638	385,719	334,118
Mbeya CC	1,499,424	1,564,183	1,591,035

Source: NBS, National Accounts Department, 2019

2.2.1 Per Capita GDP by Council

As Table 2.2 shows, in 2015, Mbeya District Council had the highest per capita of TZS. 5,213,740 while Kyela District Council had the least (TZS. 912,729). Mbarali ranked sixth which was the second District Council from the bottom in per capita GDP in 2015.

Table 2.2: Mbeya per Capita GDP (TZS) by Council; 2013 - 2015

District	2013	2014	2015
Chunya DC	855,123	1,632,976	1,321,395
Mbeya DC	4,769,939	4,988,081	5,213,740
Kyela DC	1,144,152	1,115,462	912,729
Rungwe DC	2,097,432	2,801,924	3,390,713
Busokelo DC	3,677,873	957,621	5,154,585
Mbarali DC	1,047,440	1,204,529	1,008,977
Mbeya CC	3,731,878	3,766,529	3,709,631

Source: NBS, National Accounts Department, 2019

2.2.2 Gross Domestic Product at Current Prices

Table 2.3 shows contributions of the Mbarali and other District Councils to the Mbeya Regional GDP by key sectors of the economy. Mbarali District Council had the overll contribution of TZS 334,118 billion to the Regional GDP in 2015. This contribution of the Council was entirely from agriculture sector whereby crops contributed (84.9 percent) and livestock sector (5.0 percent) respectively. Services (7.7 percent contribution) in Mbarali District Council also contributed significantly to the Regional GDP.

Table 2.3: Mbeya Region, Gross Domestic Product at Current Prices for the Year 2015 (Million TZS)

Economic Activity	Chunya DC	Mbeya DC	Kyela DC	Rungwe DC	Busokelo DC	Mbarali DC	Percent	Mbeya CC
Agriculture	192,024	1,430,078	187,906	590,740		300,364	89.9	928,715
Crops	86,019	1,378,898	156,568	578,559		283,562	84.9	886,369
Livestock	4,211	48,482	25,120	10,830		16,802	5.0	33,346
Forestry and Hunting	100,319	2,698	1,653	1,329		0	0.0	9,000
Fishing	1,474	0	4,565	22		0	0.0	0
Industry and Construction	14,921	280,819	3,808	10,973		8,190	2.5	460,137
Mining and Quarrying	12,214	0	0	2,738		1,554	0.5	55,950
Manufacturing	125	221,153	85	2,983		955	0.3	349,238
Electricity	1,883	58,484	2,777	3,932		4,280	1.3	30,293
Water	465	932	801	1,181		1,201	0.4	4,656

Economic Activity	Chunya DC	Mbeya DC	Kyela DC	Rungwe DC	Busokelo DC	Mbarali DC	Percent	Mbeya CC
Construction	234	250	144	139		201	0.1	20,000
Services	21,593	30,894	29,513	303,364		25,564	7.7	202,183
Wholesale and retail trade; Repairs	1,824	1,492	518	5,861		2,075	0.6	1,340
Transport and storage	0	791	3,815	143,840		0	0.0	47,840
Hotel and Restaurants	810	204	486	18		458	0.1	2,714
Communication	3	211	12	0		0	0.0	98,300
Finance and Insurance	65	17	0	0		0	0.0	1,728
Real Estate	1,500	2,781	2,479	1,621		3,819	1.1	17,366
Business Services	0	0	53	0		0	0.0	57
Public Administration	1,329	1,662	2,685	125,438		2,827	0.8	2,626
Education	13,775	20,496	17,170	21,768		14,015	4.2	25,902
Health	2,270	3,239	2,270	4,818		2,270	0.7	4,166
Other services	18	0	25	0		100	0.0	144
Total GDP	228,538	1,741,791	221,226	905,076		334,118	100.0	1,591,035

Source: NBS, National Accounts Department, 2019

2.3 Employment

Table 2.4 shows the number of Government employees in key sectors of economy in Mbarali District Council from 2011 to 2015. The number of public employees increased by 650 (40.4 percent) from 1,608 employees in 2011 to 2,258 in 2015. More than seventy five percent (78.7) of the employees were from education sector followed by health sector (14.7 percent). Natural resources sector had the least percentage of employees (0.7 percent).

Table 2. 4: Number of Government Employees in Key Sectors of the Economy, Mbarali District Council; 2011-2015

	20)11	20)12	20	013	20)14	20	15	11.
Sector	Number	Percent	share (2011). 2015)								
Education	1,275	79.3	1,478	79.1	1,521	80.2	1,639	78.5	1,722	76.3	78.7
Primary	1,115	69.3	1,228	65.7	1,193	62.9	1,217	58.3	1,216	53.9	62.0
Secondary	160	10.0	250	13.4	328	17.3	422	20.2	506	22.4	16.6
Health	234	14.6	263	14.1	254	13.4	306	14.7	377	16.7	14.7
Agriculture and											
Livestock	84	5.2	113	6.0	108	5.7	129	6.2	147	6.5	5.9
Natural Resource	15	0.9	15	0.8	14	0.7	13	0.6	12	0.5	0.7
Grand Total	1,608	100.0	1,869	100.0	1,897	100.0	2,087	100.0	2,258	100.0	100.0

Source: Administration Department-Mbarali DC, 2015

2.4 Non-Income Indicators (Poverty indicators)

The non-income indicators describe the level of development and poverty status of the District Council and her people in general. The non-income indicators include the main source of cash income, education attainment, adult literacy rate, housing conditions and its amenities. Nevertheless, housing conditions include types of construction materials for roofing, walling and flooring. Meanwhile, amenities include access to safe drinking water, household's assets, toilet facilities and sources of energy for lighting and cooking.

2.4.1 Literacy Rate

Literacy rate is the percentage of a population that can read and write in Swahili, English, both Swahili and English or in any other languages. Figure 2.1 shows the comparison of literacy rate in two censuses, 2002 and 2012. It was revealed that the literacy rate among adults in Mbarali District Council was increased from 63.8 percent in 2002 to 73.4 percent in 2012. Moreover, the literacy rate for males improved from 71.6 percent in 2002 to 79.1 percent in 2012 and for female from 56.4 percent in 2002 to 68.2 percent in 2012.

90 79.1 80 73.4 71.6 68.2 70 63.8 56.4 Literacy Rate 60 50 40 20 10 0 Male Female Both Sexes 2002 Census 2012 Census

Figure 2. 1: Comparison of Literacy Rates for Persons Aged 15 Years and Above by Sex; Mbarali District, 2002 and 2012 Censuses

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

2.4.2 Net Enrolment Rates in Primary Schools

The enrolment rate of the Council is one of the indicators for sustainable development of human capital. In primary education, Net Enrolment Rate (NER) is defined as the number of children aged 7-13 ²years who are attending school divided by the total number of population in that age group.

Figure 2.2 presents the net enrolment rates in primary schools by sex in Mbarali District Council. Basing on 2012 Census, NER for Mbarali District Council was 77.1 percent with higher proportions in urban areas (85.6 percent) than in rural area (74.0 percent). Further it revealed that during the same period, the net enrolment for girls was higher (78.4 percent) in both areas compared to boys (75.9 percent).

 $^{\rm 2}$ The 7-13 year age group is the official primary school age in Tanzania.

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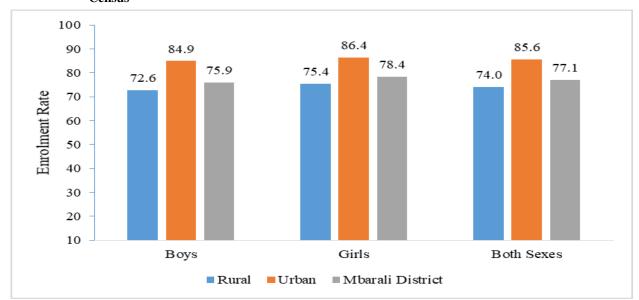


Figure 2. 2: Net Enrolment Rates in Primary Schools by Sex, Rural and Urban; Mbarali District, 2012 Census

Source: National Bureau of Statistics, 2012 Population Census Reports

2.4.3 Housing Conditions

The 2012 Population and Housing Condition collected information on housing conditions which is one of the non-income indicators for measuring poverty of the household. A total of 69,333 households were surveyed. The information was collected by looking for durability and quality of building materials for main dwelling in terms of roofing, flooring and wall. The census also collected information on availability of essential social services including main source of drinking water, main source of energy for cooking and lighting, availability of toilet facilities and ownership of specified assets.

2.4.3.1 Roofing Materials

Figure 2.3 shows that for the year 2012 census, there was about 55.6 percent of private households in Mbarali District Council that used iron sheets as the main roofing material followed by grass or leaves (38.1 percent) and mud and leaves (5.8 percent). The remaining households (0.4 percent) used other material such as asbestos, plastic or box paper and canvass for roofing.

Mud and leaves,
5.8

Other materials,
0.4

Grass or leaves,
38.1

Iron sheet, 55.6

Figure 2. 3: Percentage Distribution of Households by Type of Materials Used for Roofing, Mbarali District Council; 2012 Census

Source: National Bureau of Statistics, 2012 Population Census Reports

2.4.3.2 Flooring Materials

Figure 2.4 presents the percentage distribution of households by type of flooring materials used for the main dwelling. It revealed that, 61.8 percent of the total private households used earth or sand as the main flooring materials in Mbarali District for the year 2012 census. Furthermore, results show that, only 36.6 percent of households used cements as the main flooring materials and the rest of households (1.5 percent) used other materials such as ceramic tiles, wood planks, palm or bamboo planks and animal dung.

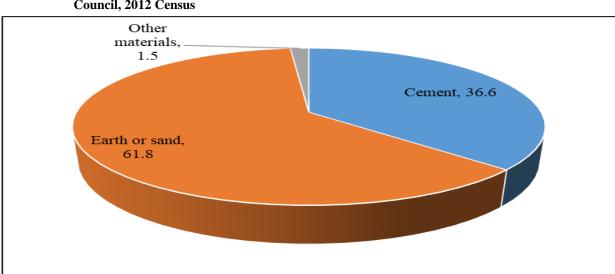


Figure 2. 4: Percentage Distribution of Households by Main Material Used for Flooring; Mbarali District Council, 2012 Census

Source: National Bureau of Statistics, 2012 Population Census Reports

2.4.3.3 Wall Materials

Figure 2.5 shows that, in 2012, 51.2 percent of all private households in Mbarali District built their house walls using baked bricks followed by sundried bricks with 33.1 percentage share. Other materials commonly used for building house walls were poles and muds with 13.1 percentage share and the remaining households (2.6 percent) built their walls with materials such as stones, cement bricks, timber and iron sheets, grass and canvass.

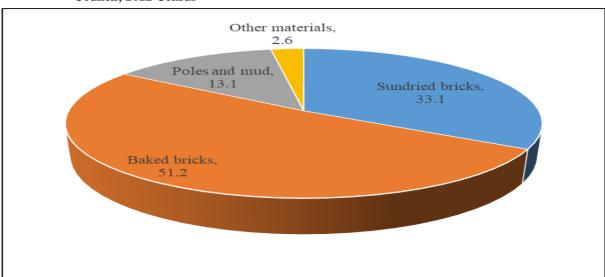


Figure 2. 5: Percentage Distribution of Households by Type of Wall Materials Used; Mbarali District Council; 2012 Census

Source: National Bureau of Statistics, 2012 Population Census Reports

2.4.3.4 Sources of Drinking Water

The 2012 Population and Housing Census shows that 61.3 percent of the households in Mbarali District Council had an access to improved drinking water sources and 38.7 percent use non improved water sources. Improved water sources include piped water into dwelling, public tap or stand pipe, tube well or borehole and protected dug well. On the other hand, non-improved water sources includes unprotected dug well, unprotected spring, rain water collection, tanker truck and surface water such as river, dam and lake (Figure 2.6).

Figure 2. 6: Percentage Distribution of Households by Main Source of Drinking Water; Mbarali District Council; 2012 Census

Source: National Bureau of Statistics, 2012 Population Census Reports

2.5 Land Development

This section discusses land as a factor of production of goods and services that increases her value every day. It contributes much in all aspect of economic life by means of agriculture, trade and industry. Therefore, in order to add value, land must be surveyed for proper land management and administration.

2.6 Land Use Planning

Land use planning has been prepared to suite the current and future demand of land in order to minimize if not finish the land use conflicts within communities. Therefore, Government practices land-use planning to manage the development of both urban and rural areas of any District in the country. In addition, the land needs in urban areas are basically for building plots for residential, commercial, institutional or industrial purposes. In rural areas, land is highly demanded for agriculture and other social economic production activities.

2.6.1 Formal settlements (Surveyed areas)

In Mbarali District Council, the larger part of the land is not surveyed. Table 2.5 shows that in 2015, about 6,400,000,000 square metre of the land is covered by divisions. Out of that, only 0.6 percent of the total land area is surveyed. Nevertheless, the largest proportion of surveyed land area is for residential areas with 73.3 percentage share followed by public services (17.0 percent) and trade or industrial areas (9.7 percent).

On the other hand, Rujewa Division had higher percentage share of surveyed land area for residential (88.9 percent) than Ilongo (54.8 percent). It also revealed that, Ilongo Division

had higher percentage share of surveyed land area in both trade or industrial area and public services with share of 17.6 percent and 27.6 percent respectively. However, Rujewa Division had 3.0 percentage share of surveyed land area for trade or industrial area and 8.1 percentage shares for public services.

Table 2.5: Total Distribution of Surveyed Area by Type of Use and Division, Mbarali District Council; 2011-2015

Division	Total area (Sq.	Total Area	Surveyed	Size of Plots and designate meters)	d for (sq.	Surveye	ed Plots to Total S Area (percent)	urveyed
	metre)	(sq. metre)	Residentia l areas	Trade/Indust rial areas	Public services**		Trade/Industrial areas	Public services*
Rujewa	3,308,983,780	20,750,000	18,437,500	625,000	1,687,500	88.9	3	8.1
Ilongo	3,091,016,220	17,326,500	9,487,500	3,050,000	4,789,000	54.8	17.6	27.6
Grand Total	6,400,000,000	38,076,500	27,925,000	3,675,000	6,476,500	73.3	9.7	17

^{*}Total area includes unused surveyed land

Source: District Natural Resources and Land Department-Mbarali DC, 2015

2.7 Policy Implication on Land sector

Inadequate implementation of the National Land Policy and lack of well-designed Land Use Planning in the district may result into land conflict and disputes among residents. In addition, un-surveyed land limits the residents to use their land as use as a source of getting loans from financial institutions. This situation calls for domestication of National Land Policy at District level to rescue the situation.

2.8 Revenue

Table 2.6 shows total revenue collected from 2011 to 2015 in Mbarali District Council contributors is TZS 1,177,227,136 equivalent to an average of TZS 235,445,427 per year. On the other hand, the largest contributor of revenue from 2011 to 2015 is auction mart fees with a total of TZS 682,767,555 equivalent to 58.0 percent of the total revenue collected. During the same period, it is revealed that the second source of revenue is Market stalls or slabs dues with total revenue of TZS 260,367,200 (22.1 percent) followed by Guest house fees with TZS 104,337,652 (8.9 percent). The least source of income noted is renting of assets with a total revenue of TZS 1,649,000 equivalent to 0.1 percent of the total revenue collected from 2011 to 2015.

^{**}Public service includes, schools, markets, hospitals and open spaces

Table 2. 6: Revenues in TZS Collected From Major Contributors, Mbarali District Council; 2011- 2015

Source of Revenue	2011	2012	2013	2014	2015	Grand Total	Percentage of Total Revenue
Posters permit fee	-	-	-	1,306,900	9,904,200	11,211,100	1.0
Market stalls/slabs dues	57,244,300	58,636,200	46,621,600	29,620,400	68,244,700	260,367,200	22.1
Auction mart fees	90,898,100	120,454,000	145,528,955	156,256,500	169,630,000	682,767,555	58.0
Meat inspection charges	29,880,000	-	-	-	-	29,880,000	2.5
Building materials extraction license fees	5,964,000	2,405,500	3,873,000	1,346,800	143,000	13,732,300	1.2
Forest produce license fees	2,575,000	7,433,450	2,739,200	-	7,122,000	19,869,650	1.7
Fishing vessel license fees	398,000	628,500	-	1,457,000	-	2,483,500	0.2
Guest houses fees	13,584,652	10,030,000	36,983,000	43,740,000	-	104,337,652	8.9
Central bus stand fees	5,550,000	7,667,000	10,356,000	11,810,000	13,920,000	49,303,000	4.2
Renting of houses	1,722,083	2,258,196	1,640,000	4,861,000	2,356,000	12,837,279	1.1
Renting of assets	-	1,300,000	349,000	-	-	1,649,000	0.1
Grand Total	207,816,135	210,812,846	248,090,755	249,091,700	261,415,700	1,177,227,136	100.0

Source: District Finance and Trade Office-Mbarali DC, 2015

CHAPTER THREE

Productive Sectors

3.0 Introduction

This chapter gives the performance of the productive sectors in Mbarali District Council. These sectors include agriculture, livestock, natural resources, tourism and industrial development. It reflects the viable, creditworthy picture of an emerging economy. The chapter also highlights the possible investment opportunities existing in these sectors.

3.1 Agriculture

Agriculture is the back bone of the Mbarali District Council economy and most of its residents (about 83 percent of the people) depend on it as their main source of livelihood. Although agriculture is the leading sub-sector in the Council, its production has been declining due to some factors like using of agricultural local tools such as hand hoe, inadequate knowledge of agricultural products, pests problem and low level of purchasing power of the agricultural implements.

3.2 Distribution of Arable Land

Arable land is the land capable of being ploughed and used to grow crops. It observed that for the year 2015, the total arable land in Mbarali District is about 3,215 square kilometre whereas 1,651 square kilometre equivalent to 51.4 percent is under cultivation and 1,564 square kilometre equivalent to 48.6 percent is not utilized. This, implies that, more than a half of arable land is utilized. Table 3.1 shows that, out of the total arable land area under cultivation (1,651 square kilometre), (861 square kilometre) is from Rujewa Division and the rest (790 square kilometer) is from Ilongo Division.

Table 3.1: Distribution of Arable Land (Sq.km) by Division and Wards, Mbarali District Council; 2015

Division	Ward	Total land Area (sq.km)	Total Arable (sq.km)	Arable land Under Cultivation (sq.km)	% of Arable land under cultivation
Rujewa	Madibira	329	208	129	62.0
	Miyombweni	391	152	63	41.4
	Igava	652	352	54	15.3
	Mawindi	300	203	124	61.1
	Ipwani	451	270	130	48.1
	Rujewa and Lugelele	296	123	83	67.5
	Ubaruku	98	70	70	100.0
	Imalilo Songwe	404	222	93	41.9
	Mapogoro	387	241	115	47.7
	Sub-Total	3,308	1,841	861	46.8
Ilongo	Chimala	70	61	61	100.0
	Ihahi	65	55	55	100.0
	Itamboleo	357	178	158	88.8
	Igurusi	184	126	106	84.1
	Kongolo	47	37	37	100.0
	Utengule Usangu	237	155	65	41.9
	Luhanga	1,284	287	50	17.4
	Mahongole	68	59	59	100.0
	Mwatenga	172	103	83	80.6
	Ruiwa	606	313	116	37.1
	Sub-Total	3,090	1,374	790	57.5
	Grand Total	6,398	3,215	1,651	51.4

Source: District Land and Natural Resources Department-Mbarali DC, 2015

3.3 Cultivated land

3.3.1 Area used for food crop cultivation

Main food crops produced in Mbarali District Council are paddy, maize, sorghum, sweet potatoes and beans. Figure 3.1 shows the area cultivated for food crops by divisions. The trend of the area used to produce food crops for the period 2011 to 2015 increased from 98,192Ha in 2011 to 125,040Ha in 2015. In 2015, the total area cultivated was 125,040Ha whereas (67,385Ha) cultivated at Ilongo Division and (57,655Ha) cultivated at Rujewa Division.

Area in '000' ha 48 51 ■ Ilongo ■ Grand Total ■ Rujewa

Figure 3.1: Estimated Land Area (Ha) Under Major Food Crops by Division, Mbarali District Council; 2011-2015

3.3.2 Crop Production

Figure 3.2 reveals that, the total production of food crops from the year 2011 to 2015 was 1,587,940 tons whereas the largest production (827,371tons) equivalent to 52.1 percent produced from Rujewa Division and 760,569 tons equivalent to 47.1 percent produced from Ilongo Division. It was also observed that, for the year 2015, the total food crop production was 351,164 tons whereas the largest production (185,728 tons) produced at Rujewa Division and 165,436 tons produced at Ilongo Division. Generally, there is an irregular trend of food crop production for the given period due to climatic changes.

Furthermore, it was noted that, the total food crop production for the year 2015 (351,164 tons) did not meet the target set up by the District Council (489,000 tons). This implies that production is below the targeted production. Therefore, the District Council should put more emphasis on the use of modern and improved agricultural implements, crops and chemical fertilizers for better production.

Production in '000' tons 165 150₁₃₄ 140₁₂₄ ■ Ilongo ■ Grand Total ■Rujewa

Figure 3. 2: Estimated Production of Major Food Crops in (Tons) by Division, Mbarali District Council; 2011-2015

3.3.3 Production of Maize in Mbarali District Council

Figure 3.3 indicates the production of maize in the District from 2011 to 2015. The total production of maize from 2011 to 2015 was 288,036 tons whereby the largest production (149,968 tons) produced from Rujewa Division and 138,068 tons produced from Ilongo Division. The total production of maize increased from 52,138 tons in 2011 to 105,044tons in 2014, thereafter decreased enormous to 44,034 tons in 2015. It also reveals that in 2015 the largest production of maize (25,191tons) produced from Rujewa Division and the rest (18,843tons) produced from Ilongo Division.

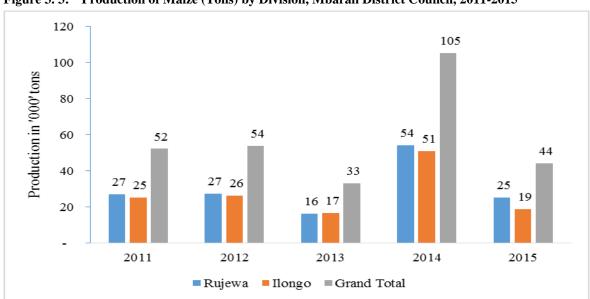


Figure 3. 3: Production of Maize (Tons) by Division, Mbarali District Council, 2011-2015

Source: Agriculture, Irrigation and Cooperative Department-Mbarali DC, 2015

3.3.4 Production of Paddy in Mbarali District Council

Figure 3.4 indicates production of paddy in Mbarali District Council. The total production from the period 2011 to 2015 was 884,237 tons whereas the largest production (515,698 tons) produced from Rujewa Division and the remaining (368,539 tons) produced from Ilongo Division. Yearly, there is an increase in production of paddy from 134,573 tons in 2011 to 223,198 tons in 2015. Also, out of total production produced in 2015, the largest production (127,280 tons) observed at Rujewa Division and the lowest production of 95,918 tons observed at Ilongo Division.

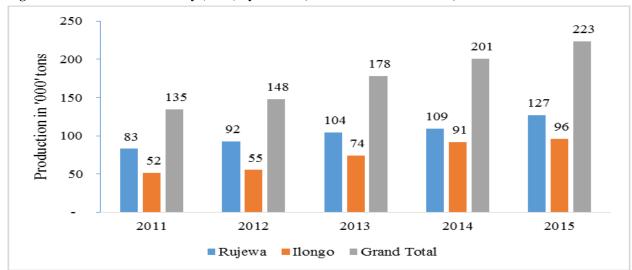


Figure 3. 4: Production of Paddy (Tons) by Division, Mbarali District Council; 2011-2015

Source: Agriculture, Irrigation and Cooperative Department-Mbarali DC, 2015

3.3.5 Production of Sorghum in Mbarali District Council

Figure 3.5 indicates the trend of sorghum production in Mbarali District Council. The total production of sorghum from 2011 to 2015 was 67,907 tons whereby the largest production (34,284 tons) equivalent to 50.5 percent were produced from Rujewa Division and 33,623 tons equivalent to 49.5 percent produced from Ilongo Division. On the other hand, there is no significant increase in production of sorghum from 2011 to 2013. Furthermore, out of 15,124 tons of sorghum produced in 2015, the largest production (8,057 tons) produced from Rujewa Division and the rest 7,067 tons produced from Ilongo Division.

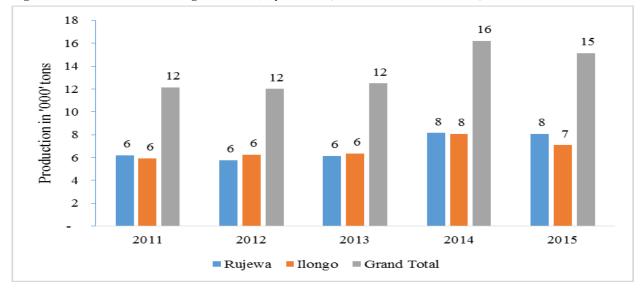


Figure 3. 5: Production of Sorghum (Tons) by Division, Mbarali District Council; 2011-2015

3.3.6 Production of Sweet Potatoes in Mbarali District Council

Figure 3.6 shows the production of sweet potatoes in Mbarali District from the year 2011 to 2015. During the same period, the total production of sweet potatoes was 261,151 tons throughout. Out of the total production, the largest production (152,295 tons, 58.3 percent) produced from Ilongo Division and the remaining (108,856 tons, 41.7 percent) produced from Rujewa Division. It also, reveals that the trend of sweet potatoes production increased from 52,480 tons in 2011 to 70,720 tons in 2014 then decreased to 48,070 ton in 2015.

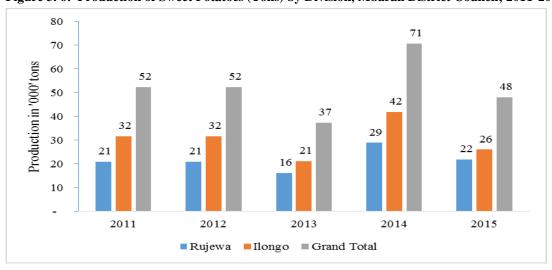


Figure 3. 6: Production of Sweet Potatoes (Tons) by Division, Mbarali District Council; 2011-2015

Source: Agriculture, Irrigation and Cooperative Department-Mbarali DC, 2015

3.3.7 Production of Beans in Mbarali District Council

Figure 3.7 shows the production of beans in Mbarali District Council from the year 2011 to 2015. It observed that the total production during the given period was 86,609 tons whereby the largest production (68,044 tons, 78.6 percent) produced from Ilongo Division and the remaining (18,565 tons, 21.4 percent) produced from Rujewa Division. However, the production trend is irregular depending on the climate of that year. In 2015, the production of beans account for 20,738 tons, whereas the largest production (17,548 tons) noted at Ilongo Division and the remaining (3,190 tons) produced at Rujewa Division.

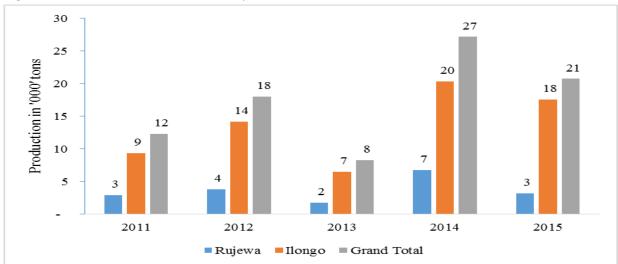


Figure 3. 7: Production of Beans (Tons) by Division, Mbarali District Council; 2011-2015

Source: Agriculture, Irrigation and Cooperative Department-Mbarali DC, 2015

3.4 Land area under Major Cash Crops

Figure 3.8 indicates area under which cash crops is cultivated in Mbarali District Council from the year 2011 to 2015. The main cash crops produced include groundnuts and sunflower. For the given period (2011 to 2015), the trend of area cultivated increased from 23,560 ha in 2011 to 36,650 ha in 2015. Nevertheless, out of 36,650 ha cultivated in 2015, the largest area cultivated 25,080 ha is from Rujewa Division and (11,570 ha) is from Ilongo Division.

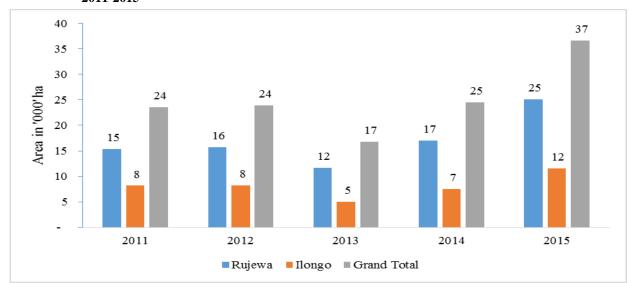


Figure 3. 8: Estimated Land Area (ha) Under Major Cash Crops by Division, Mbarali District Council; 2011-2015

3.4.1 Production of Major Cash Crops

Figure 3.9 shows the production of cash crops in Mbarali District Council for the period 2011 to 2015. The overall production of cash crops from 2011 to 2015 accounted for 132,454 tons whereby the largest production (90,417 tons, 68 percent) produced at Rujewa Division and the remaining (42,038 tons, 32 percent) produced at Ilongo Division.

Further the figure shows that, out of total cash crops production (32,899 tons) in 2015, the largest production (23,250 tons) produced at Rujewa Division and the remaining (9,649 tons) produced at Ilongo Division. On the other hand, it is notable that the total production of cash crops in 2015 did not meet the target set up by the DC office (40,000 tons). This indicates that the total production obtained for this year is below the targeted production.

Production in '000' tons ■ Rujewa ■ Ilongo ■ Grand Total

Figure 3. 9: Estimated Production of Major Cash Crops in (tons) by Division, Mbarali District Council; 2011-2015

3.5 Agricultural Inputs

3.5.1 Introduction

Agriculture Policy has purposely been introduced to improve agriculture production and hence reduce poverty especially in rural areas. Agricultural production can be improved by the usage of modern farming implements and inputs such as chemical fertilizers, fungicides, insecticides and improved seeds. If these inputs are used effectively, can results to better production which can help to alleviate poverty in the community.

3.5.2 Types of Chemical Fertilizers

Chemical fertilizers have been used in Mbarali District Council to improve production due to soil infertility, plant pests and diseases which are the main causes of low agricultural production. The main chemical fertilizers which mostly used are NPK, UREA, CAN, DAP, SA and MINJINGU. Table 3.2 shows that, the total amount of Chemical fertilizers used from 2011 to 2015 accounted for 64,595,000kg in which UREA is the most used fertilizer with 50,824,000kg, followed by DAP with 6,817,000kg, SA with 3,622,000kg and CAN with 2,892,000kg. The other fertilizers that used by small amount includes NPK with 385,000kg and MINJINGU (55,000kg). Additionally, the largest amount of chemical fertilizer used (17,117,000 Kg) was observed in 2011 followed by 13,450,000kg used in 2015.

Table 3. 2: Types and Quantity of Chemical Fertilizers (Kg) Distributed to Farmers, Mbarali District Council; 2011-2015

Type of Fertilizers	2011	2012	2013	2014	2015	Total
CAN	467,000	467,000	689,000	443,000	826,000	2,892,000
DAP	3,649,000	993,000	434,000	820,000	921,000	6,817,000
MINJINGU	0	0	0	0	55,000	55,000
NPK	25,000	37,000	30,000	43,000	250,000	385,000
SA	660,000	760,000	611,000	580,000	1,011,000	3,622,000
UREA	12,316,000	9,616,000	8,886,000	9,619,000	10,387,000	50,824,000
Total	17,117,000	11,873,000	10,650,000	11,505,000	13,450,000	64,595,000

3.5.3 Fungicides

Fungicide increases productivity of the crops planted and lead to good quality of the crops produced as they protect plants from being affected by diseases. A fungicide is a specific type of pesticide that controls fungal diseases by specifically inhibiting or killing the fungus that cause the diseases. Table 3.3 indicates types and amount of fungicides used in Mbarali District for the period 2011 to 2015. The total amount of fungicides used during the same period was 7,258 litres whereby Ridomil (2,680 litres) used by large amount followed by Ivory M72w (1,884 litres) and Bayleton (913 litres). The smallest amount of fungicides used was Agrofos 400 (140 litres). Additionally, the trend of fungicides used increased from 993 litres in 2011 to 1,680 litres in 2015.

Table 3. 3: Types and Quantity of Fungicides (in litres) Distributed to Farmers, Mbarali District Council; 2011-2015

Type of Fungicides	2011	2012	2013	2014	2015	Total
Ivory M 72 w	250	334	410	440	450	1,884
Ridomil	486	541	546	550	557	2,680
Bayleton	122	134	211	212	234	913
Linko Nil 72W	135	137	140	147	150	709
Twiga salonil	-	60	72	78	86	296
Rab 720 sc	-	120	120	120	120	480
Agrofos 400	-	35	35	35	35	140
Xancho	-	24	36	48	48	156
Total	993	1,385	1,570	1,630	1,680	7,258

Source: Agriculture, Irrigation and Cooperative Department-Mbarali DC, 2015

3.5.4 Insecticides

Insecticides are chemicals used to control insects by killing them or preventing them from destruction of crops. Table 3.4 shows the types and quantity of insecticides used in Mbarali District for the period of 2011 to 2015. The total amount of insecticides used from 2011 to 2015 accounted for 19,177 litres whereby the large amount of insecticides used was Quelea Tox (5,000 litres) followed by Ninja Plus (3,764 litres) and KARATE 50% EC (2,480 litres). However, the insecticide used at a smallest amount was Actelic Super Dust (90 litres). Furthermore, the result shows that, there is an increase in the amount of insecticides used from 2,865 litres in 2011 to 4,984 litres in 2015.

Table 3.4: Types and Quantity of Insecticides (litres) Distributed to Farmers, Mbarali District Council; 2011-2015

Type of Insecticides	2011	2012	2013	2014	2015	Total
Aster Extrim	300	380	425	450	450	2,005
Ninja Plus	350	540	760	980	1,134	3,764
Agrocron	350	350	375	450	650	2,175
Actelic Super Dust	15	15	20	20	20	90
Thionex	150	150	153	160	250	863
Selecron	250	300	300	560	750	2,160
Quelea Tox	1,000	1,000	1,000	1,000	1,000	5,000
Malathion 50%	100	120	120	150	150	640
KARATE 50%EC	350	500	520	530	580	2,480
Total	2,865	3,355	3,673	4,300	4,984	19,177

Source: Agriculture, Irrigation and Cooperative Department-Mbarali DC, 2015

3.5.5 Improved Seeds Used

District can get high production by the use of improved seeds in the cultivation. 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. The use of improved seeds is necessary due to climatic change. Table 3.5 shows the type and amount of improved seeds used for the period 2011 to 2015.

The total amount of improved seeds distributed to farmers is 1,234,700kg whereby maize seeds are highly distributed with 939,000kg followed by paddy seeds (271,700kg) and the less distributed amount of seed is sunflower (24,000kg). Also, it revealed that the trend of using improved seeds increased yearly from 86,000kg in 2011 to 489,000kg in 2015 which leads to high quality of food and cash crop production.

Table 3.5: Types and Quantity of Improved Seeds (Kg) Distributed to Farmers, Mbarali District Council; 2011-2015

Type of Improved seed	2011	2012	2013	2014	2015	Total
Maize	33,400	37,300	35,300	412,000	421,000	939,000
Paddy(rice)	48,100	50,000	52,500	59,100	62,000	271,700
Sunflower	4,500	4,100	4,200	5,200	6,000	24,000
Total	86,000	91,400	92,000	476,300	489,000	1,234,700

3.6 **Irrigation**

The records show that there is one rainy season in Mbarali District; it rains from December to April. This implies that irrigation is important for growing agricultural crops during dry seasons. The main crops grown under irrigation include paddy, maize, beans and vegetables. Also, the common method used for water serving is by rain water harvesting during the rainy season which is used for paddy cultivation in dry season.

Figure 3.10 shows the estimated potential area for irrigation in Mbarali District for the year 2015. The area which is potential for irrigation is about 89,835ha where the large area (46,574 ha) is found at Ilongo Division and (43,261ha) is found at Rujewa Division. Also, out of the total potential area for irrigation (89,835ha), the total area cultivated during the same period was about 48,861ha (54.4 percent) while 40,974ha (45.6 percent) is not utilized. The largest area cultivated (25,601ha) is covered by Rujewa Division and the rest (23,260 ha) is covered by Ilongo Division.

100 90 90 80 70 Area in '000' ha 60 49 47 50 43 40 30 26 23 20 10 Rujewa Ilongo Grand Total Estimated Potential Area for irrigation Cultivated Area

Figure 3. 10: Estimated Potential Area (Ha) for Irrigation by Division, Mbarali District Council; 2015

Source: Agriculture, Irrigation and Cooperative Department-Mbarali DC, 2015

3.7 Agriculture Implements

Agricultural implements are necessary for efficient production and reduce labour intensive activities. The use of Agricultural implements depends on the size of the farm owned by household or investors. The main agricultural implements used in Mbarali District are power tillers, tractors and rice Trans-planter.

Table 3.6 shows the amount of agriculture implements demanded and supplied in Mbarali District for the year 2015. The results show that, out of 3,818 agriculture implements demanded, about 6,160 implements were supplied. It also revealed that other implements supplied were not in the list of demanded implements. These include Ox plough, Ox harrow, Ox ridger and Oxcart.

In addition, out of the total demanded implements, tractor is the only item with excess in supply (34tractors) compared to other implements. Accordingly, the District Council and other agricultural beneficiaries should take into consideration the demand of agriculture implements so as to increase the agricultural production.

Table 3. 6: Availability of Agriculture Implements, Mbarali District Council; 2015

No	Imp	plements		— Shortfall/Excess*
No.	Туре	Demand	Supplied	— Shortian/Excess*
1	Ox plough		2,176	
2	Ox harrow		847	
3	Ox ridger		14	
4	Oxcart		250	
5	Tractors	308	342	34*
6	Power tillers	2,719	2,394	325
7	Combine harvesters	178	62	116
8	Rice Trans planter	416	28	388
9	Paddy thresher	197	47	150
	Total	3,818	6,160	945

Source: Agriculture, Irrigation and Cooperative Department-Mbarali DC, 2015

3.8 Livestock Keeping

3.8.1 Introduction

The records show that in Mbarali District, livestock keeping is the second most important economic activity after agriculture. The livestock keeping makes significant contribution to food security and poverty eradication through selling its product. Table 3.7 shows total number of livestock keepers and livestock kept in Mbarali District from the year 2013 to 2015. Results indicate that, the total number of livestock keepers were 18,862 with (11,022 livestock keepers) from Rujewa Division and (7,840 livestock keepers) from Ilongo Division.

Also, it revealed that the total number of livestock kept from 2013 to 2015 were 555,917 livestock where the large number of livestock (321,266) were from Rujewa Division and the remaining (234, 651) were from Ilongo Division.

Table 3.7: Total Number of Livestock Keepers and Livestock Kept by Division; 2013-2015

Division	Number of Livestock keeper	Percentage	Total livestock kept	Percentage
Rujewa	11,022	58	321,266	58
Ilongo	7,840	42	234,651	42
Grand Total	18,862	100	555,917	100

Source: Livestock and Fisheries Department-Mbarali DC, 2015

Table 3.8 shows that, the total number of livestock kept in Mbarali District Council for the year 2015 is 555,917 whereby 321,266 (57.8 percent) of livestock are kept in Rujewa Division and 234,651 (42.2 percent) of livestock are kept in Ilongo Division. Furthermore, the result shows that there is more indigenous chicken (250,239) in the District followed by cattle (171,104) and goats (81,261). Other livestock account to less than 10 percent of livestock kept in the District.

Looking at Ward level, Rujewa found to have the highest number of livestock kept 99,011 (17.8 percentage) compared to other wards. Meanwhile Miyombweni Ward has the lowest number of livestock kept 3,910 (0.7percentage) in the District.

Table 3. 8: Estimated Livestock Population by Division and Ward, Mbarali District Council; 2015

Division	Ward	Cattle	Goats	Sheep	Donkeys	Pigs	Indigenous chicken	Total	Percentage
	Madibira	9,675	5,994	1,705	104	1,586	19,313	38,377	6.9
	Miyombweni	1,000	371	128	17	12	2,382	3,910	0.7
	Igava	15,106	7,531	3,962	255	260	16,500	43,614	7.8
	Mawindi	10,887	3,929	641	357	254	12,323	28,391	5.1
	Ipwani	6,912	2,500	399	-	-	87	9,898	1.8
	Rujewa	12,559	4,033	3,442	495	625	77,857	99,011	17.8
	Lugelele	6,559	2,640	408	37	301	482	10,427	1.9
	Ubaruku	3,283	390	97	4	3,706	6,284	13,764	2.5
	Imalilo Songwe	12,960	6,057	3,805	587	341	9,800	33,550	6.0
	Mapogoro	12,061	9,413	4,235	210	492	13,913	40,324	7.3
Rujewa	Sub-Total	91,002	42,858	18,822	2,066	7,577	158,941	321,266	57.8
	Ihahi	2,609	910	185	140	265	4,457	8,566	1.5
	Chimala	1,411	564	12	-	1,206	5,723	8,916	1.6
	Itamboleo	6,539	2,331	519	62	114	3,668	13,233	2.4
	Igurusi	4,701	705	457	390	48	410	6,711	1.2
	Kongolo	3,597	1,289	285	165	464	8,917	14,717	2.6
	Utengule Usangu	11,247	7,294	4,114	181	319	12,347	35,502	6.4
	Luhanga	33,184	18,691	11,104	961	45	33,084	97,069	17.5
	Ruiwa	6,638	1,048	764	137	1,038	5,745	15,370	2.8
	Mahongole	4,155	1,653	212	72	161	12,934	19,187	3.5
	Mwatenga	6,021	3,918	1,055	185	188	4,013	15,380	2.8
Ilongo	Sub-Total	80,102	38,403	18,707	2,293	3,848	91,298	234,651	42.2
C	Frand Total	171,104	81,261	37,529	4,359	11,425	250,239	555,917	100.0

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.8.2 Grazing Land

Grazing land is the land that is available for rearing livestock. It excludes all tsetsefly infected areas, wildlife and forest reserves as well as tree plantations but it includes game-controlled areas and overlaps arable land. Mbarali District has established areas that can be used for livestock keeping through land use planning which will reduce the conflict between farmers and livestock keepers.

Table 3.9 shows the land available for grazing activities and the area used in 2015. The area which is suitable for grazing in Mbarali District is about 154,000ha whereby the area used for grazing is 97,280ha (63.2 percent) and the remaining (56,719ha, 36.8 percent) is not utilized.

Additionally, all suitable area in Rujewa Division (73,475 ha) is used for grazing activities while in Ilongo Division, the area which is suitable for grazing is about 80,525 ha but only 23,806 ha is used for grazing. The District have to consider formulating special program for sharing resources where livestock keepers can use part of unused suitable land for grazing to increase livestock products.

Table 3. 9: Estimated Area under Grazing by Division and Wards, Mbarali District Council; 2015

Division	Ward	Land fit for Grazing (Ha)	Land used for Grazing (Ha)	Tsetse Fly infected Area (Ha)
	Madibira	2,271	2,271	3,000
	Miyombweni	7,339	7,339	2,000
	Igava	16,065	16,065	5,750
	Mawindi	6,914	6,914	1,200
Rujewa	Ipwani	15,576	15,576	10,814
	Ubaruku	4,000	4,000	
	Imalilo Songwe	13,916	13,916	10,000
	Mapogoro	7,394	7,394	
	Sub-Total	73,475	73,475	32,764
	Ihahi	169	169	
	Itamboleo	12,989	289	
	Igurusi	164	164	
	Kongolo	255	255	
n	Utengule Usangu	148	148	
Ilongo	Luhanga	16,266	16,266	2,050
	Ruiwa	45,825	2,100	40
	Mahongole	1,896	1,896	
	Mwatenga	2,813	2,519	5,300
	Sub-Total	80,525	23,806	7,390
Grand Total		154,000	97,280	40,154

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.8.3 Livestock Infrastructure

Improvement of livestock quality depends much on the available infrastructures which help to control animals from being affected by diseases. Diseases affect animal health and reduce livestock production in terms of quality and quantity. Livestock infrastructures include dips, veterinary health centers, slaughter slab, abattoirs and Charcoal dams.

Table 3.10 shows the available livestock infrastructures which are working and not working in the District for the year 2015. It should be noted that there are 32 dips whereas six (6) of them are not working and the remaining 26 dips are working. Meanwhile all three (3) veterinary centers in the District are not working. This may lead to high animal mortality rate.

Furthermore, it shows that, the District has 50 slaughter slabs, 10 abattoirs and six (6) livestock market where livestock products purchased. Additionally, Mbarali District Council needs to take an extra effort to increase the number of veterinary centers as well as other livestock infrastructures to reduce livestock diseases.

Table 3. 10: Distribution of Livestock Infrastructure by Division; Mbarali District Council, 2015

Division		Dips		Ve	Veterinary Centres		Crushes	Hides /skin	Abattoirs	Slaughter	Livestock market/	Charco	
	W	NW	Total	W	NW	Total		sheds		slab Auction		al dams	
Rujewa	15	5	20	0	1	1	2	1	6	25	5	3	
Ilongo	11	1	12	0	2	2	1	2	4	25	1	2	
Total	26	6	32	0	3	3	3	3	10	50	6	5	

W=Working, NW=Not Working

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.8.4 Livestock Marketing

Table 3.11 shows the marketed livestock by type and value from the year 2013 to 2015. It revealed that, from the year 2013 to 2015, the total number of livestock marketed was 89,139 with the total revenue collection of TZS 54,157 Million. Cattle marketed (72,164) contributed largest share of revenues TZS 52,598 Million followed by goats (11,813) with TZS 933 Million and pigs (2,275) with TZS 429 Million. The least share was contributed by donkeys (379) with TZS. 67.

Table 3. 11: Marketing of Major Livestock Mbarali District Council; 2013, 2014 and 2015

Livestock species	Total n	umber of l	ivestock ma	arketed		Value (Million TZS)				
Livestock species	2013	2014	2015	Total	2013	2014	2015	Total		
Cattle	25,995	21,971	24,198	72,164	14,379	16,501	21,718	52,598		
Goats	4,504	3,066	4,243	11,813	298	249	385	933		
Sheep	617	707	1,184	2,508	27	37	67	131		
Pigs	199	1,309	767	2,275	21	257	151	429		
Donkeys	176	127	76	379	29	26	12	67		
Total	31,491	27,180	30,468	89,139	14,754	17,070	22,333	54,157		

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.8.5 Livestock product and Marketing

Hides and skins have been used for making clothes, vessels, bedding, and possibly structurally in ancient dwelling places. Availability of hides and skins is important in the leather industry. Marketing of hides and skins generate income for livestock keepers. It also contributes to the economy of the District.

Table 3.12 indicates the amount of hides and skins marketed and the value obtained in Mbarali District for the period of 2013 to 2015. The total amount of hides and skins marketed was 37,228 with value of TZS 133 Million. The total number of livestock marketed decreased from 26,469 livestock in 2013 to 2,893 livestock in 2015 with the value obtained TZS 81 Million in 2013 and TZS 29 Million in 2015.

Table 3. 12: Marketing of Livestock Hides and Skins; Mbarali District Council; 2013 - 2015

	Total N	Number of U	J nits Mar l	Total Value in Million TZS.				
Category	2013	2014	2015	Total	2013	2014	2015	Total
Cattle Hides	10,374	3,100	2,893	16,367	52	16	29	96
Goat Skins	12,518	3,723	0	16,241	25	7	0	32
Sheep Skins	3,577	1,043	0	4,620	4	1	0	5
Total	26,469	7,866	2,893	37,228	81	24	29	133

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.8.6 Milk Production and Marketing

Milk is an important livestock product which contributes significantly to the income of the households. Table 3.13 shows the amount of milk produced in litres and the revenue collected from milk for the year 2013 to 2015 in Mbarali District. The total amount of milk produced for the same period was 3,412,722 litres with the value of TZS 74,581 Million. The trend of milk produced was uneven while the trend of value obtained increased from TZS 1,433 Million in 2013 to TZS 70,330 Million in 2015.

Table 3. 13: Production of Milk; Mbarali District Council; 2013 - 2015

		Total Num	ber of Litres		Tota	ıl Value ir	n Million T	TZS.
Milk from	2013	2014	2015	Total	2013	2014	2015	Total
Indigenous Cattle	1,152,284	297,037	934,407	2,383,728	979	2,673	70,081	73,733
Dairy Cattle	534153	159588	311,469	1,005,210	454	144	234	831
Dairy Goats	0	2095	21689	23,784	0	2	15	17
Total	1,686,437	458,720	1,267,565	3,412,722	1,433	2,819	70,330	74,581

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.8.7 Livestock Extension Services

Livestock extension services aim at helping the livestock keepers with necessary knowledge on animal health. Controlling animal diseases is one of the targets of livestock extension services in the District. Livestock extension services include livestock officers, veterinary officers, field officers, auxiliary officers and pests and tsetse field officers.

Table 3.14 indicates the total available livestock personnel in Mbarali District for the year 2015. It revealed that, out of 40 livestock personnel in the District, there are 38 livestock field officers, one (1) livestock officer and one (1) pests and tsetse field officer. Moreover, data show that there were no veterinary officers and livestock auxiliary officers in the District. This may limit production of livestock products because production depends much on the treatment of animals kept.

Table 3. 14: Availability of Livestock Personnel by Division, Mbarali District Council; 2015

Division	Livestock Officers	Livestock Field Officer	Pests and Tsetse Field Officers	Total
Rujewa	1	17	1	19
Ilongo	0	21	0	21
Total	1	38	1	40

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.8.8 Major Livestock Diseases

Livestock diseases are the factors which affect livestock production and productivity in Mbarali District Council. Livestock diseases control help to improve the livelihood not only to livestock keeping community but also in improvement of the District economy.

3.8.8.1 Cattle Diseases

The most common reported cases of cattle diseases in Mbarali District for the year 2013 to 2015 are Tryps, LSD, Anaplasmosis, CBPP, ECF and Pneumonia. Figure 3.11 indicates number of morbidity and mortality cases reported for the same period. The total number of

morbidity cases reported for the period 2013 to 2015 is 14,427 cases whereby (7,513 cases) reported from Rujewa division and (6,914 cases) from Ilongo division. On the other hand, the total number of mortality cases reported is 546 cases whereby (234 cases) were from Rujewa division and (312 cases) from Ilongo division.

16,000 14,427 14,000 12,000 10,000 7.513 8,000 6,914 6,000 4,000 2,000 546 312 234 Rujewa Ilongo Grand Total ■ Mortality Cases Morbidity Cases

Figure 3. 11: Total Number of Morbidity and Mortality Cases of Cattle Reported by Division, Mbarali District Council; 2013- 2015

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.8.8.2 Goat Diseases

The common goat's diseases in Mbarali District for the year 2013 to 2015 were PPR, Pneumonia, Helmianthis, Foot rot, Mange, Worms, Diarrhoea, and Anemia.

Figure 3.12 shows number of morbidity and mortality cases reported due to goat diseases in Mbarali District Council for the year 2013 to 2015. It revealed that the total number of morbidity cases reported were 18,780 cases with large number (13,286 cases) from Rujewa Division and (5,494 cases) from Ilongo Division. Furthermore, the total number of mortality cases reported were 6,269 cases with large number (6,199 cases) from Rujewa Division and (70 cases) from Ilongo Division.

20,000 18,780 18,000 16,000 13,286 14,000 12,000 10,000 8,000 6,269 6,199 5,494 6,000 4,000 2,000 70 Grand Total Rujewa Ilongo Morbidity Cases ■ Mortality Cases

Figure 3. 12: Total Number of Morbidity and Mortality Cases of Goat Reported by Division, Mbarali District Council; 2013- 2015

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.8.8.3 Sheep Diseases

The mainly sheep diseases in Mbarali District which are mostly reported as the cause of morbidity and mortality cases are PPR, Helmianthis and Pneumonia.

Table 3.15 reveal the number of morbidity and mortality cases reported in the District for the period of 2013 to 2015. The total number of morbidity cases reported were 12,142 cases with large number (8,985 cases) reported from Rujewa Division and (3,157 cases) from Ilongo Division. Nevertheless, the total number of mortality cases reported were 6,108 cases with large number (6,067 cases) from Rujewa Division and (41 cases) from Ilongo Division.

Table 3. 15: Total Number of Morbidity and Mortality Cases of Sheep Reported by Division, Mbarali District Council; 2013- 2015

Division	Number of Mo	orbidity cases	reported	Total	Number	Total		
	2013	2014	2015		2013	2014	2015	
Rujewa	3,027	2,980	2,978	8,985	2,016	2,016	2,035	6,067
Ilongo	1,149	919	1,089	3,157	10	13	18	41
Grand Total	4,176	3,899	4,067	12,142	2,026	2,029	2,053	6,108

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.8.8.4 Poultry Diseases

Poultry keeping is another main economic activity done by the residents of Mbarali District Council. The most common poultry diseases that affect poultry industry include; Newcastle Disease, Typhoid, Fowl Pox and Fowl Typhoid. Figure 3.13 shows number of morbidity and mortality cases reported that affect poultry keeping in the District for the year 2013 to 2015.

The total numbers of morbidity cases were 23,504 whereby large number (11,863 cases) was from Ilongo division and the remaining (11,641 cases) reported from Rujewa Division. However, the total number of mortality cases was 11,865 cases with the larger number (6,740 cases) from Ilongo division and the remaining (5,125 cases) from Rujewa division.

Figure 3. 13: Total Number of Morbidity and Mortality Cases of Poultry Reported by Division, Mbarali District Council; 2013- 2015

Source: Livestock and Fisheries Department-Mbarali DC, 2015

3.9 Natural Resources

Natural resources sector is comprised of forestry, beekeeping, fishing, wild life and tourism. This sector plays an important role as it generates income for household and District development. It also protects soils from erosion and conserves water, wild life and provides industrial material and non-wood product such as honey and bee wax.

3.9.1 Forests

Forest sector is very important in contributing to social and economic development of the council. It plays an important role in the maintenance of climate stability, conservation of water sources, controlling land erosion, and providing timber, poles, source of wood fuel and non-wood products such as honey and bee-wax. Efforts have been made to preserve forests from the effect of over deforestation.

Table 3.16 shows the status of forests in Mbarali District in 2015. In 2015, the District has the total land area of about 16,000square kilometre where 9,600square kilometre is covered by national parks, wildlife management and game reserve and 6,400square kilometre covered by wards. Also, the District is covered by natural forest reserve (400square kilometre) and manmade forest of about 0.104square kilometre. It is noted that, out of 9,600square kilometre of natural resources, game reserve area covers 4,256square kilometre and the remaining part is covered by national parks and wildlife management.

Table 3. 16: Status of Forest Cover by Division, Mbarali District Council; 2015

Division/Natural Resource	Total Land Area (sq.km)	Natural forest reserve area (sq.km)	Forest plantation area (sq.km)	Game Reserve Area (sq.km)
Rujewa	3309.6	317.5	0.043	1061
Ilongo	3090.0	82.5	0.061	3195
National parks, wildlife				
management and game	9,600			
reserve				
Grand Total	16,000	400	0.104	4,256

Source: District Land and Natural Resource Department-Mbarali DC, 2015

3.9.2 Number of Tree Seedlings Raised by Division

As deforestation activities increase, various sectors involved in rising tree seedling and afforestation activities increases as well. Table 3.17 shows number of tree seedling raised by division from year 2011 to 2015. The total number of tree seedlings raised for the period of 2011 to 2015 was 4,163,220 tree seedlings. The larger number of tree seedling (2,196,400) was raised in Ilongo Division. Rujewa Division raised 1,966,820 tree seedlings. Furthermore, results indicate that, the largest number of tree seedlings (960,000) raised in 2014 while the lowest number of tree seedling (716,100) raised in 2012.

Table 3. 17: Number of Tree Seedlings Raised by Division; Mbarali District Council; 2011 – 2015

Division	2011	2012	2013	2014	2015	Total	Percentage
Rujewa	340,600	590,050	207,000	458,870	370,300	1,966,820	47
Ilongo	496,520	126,050	643,000	501,130	429,700	2,196,400	53
Total	837,120	716,100	850,000	960,000	800,000	4,163,220	100

Source: District Land and Natural Resource Department-Mbarali DC, 2015

3.9.3 Number of Tree Seedlings Raised by Institution

Table 3.18 shows number of tree seedlings raised by Institution in Mbarali District. The total number of tree seedlings raised for the period of 2011 to 2015 was 62,500. Ujewa Mission

raised the largest number of tree seedlings (26,000) followed by Mahango Primary School (22,900 tree seedlings) and Mbarali prison (10,500 tree seedlings). Moreover, Nyamakuyu Primary School found to have lowest number of tree seedlings raised (4,100 tree seedlings).

In addition, large number of tree seedlings were raised in 2015 (24,000 tree seedlings) followed by 17,000 and 13,600 tree seedlings raised in 2011 and 2012 respectively. However, the smallest number of tree seedlings raised (3,400) were observed in 2014.

Table 3. 18: Number of Tree Seedlings Raised by Institution, Mbarali District Council; 2011 - 2015

Institution	2011	2012	2013	2014	2015	Total
Mbarali Prison	5,000	3,500	2,000	0	0	10,500
Nyamakuyu P/Sc	2,000	2,100	0	0	0	4,100
Mahango P/Sc	0	0	1,000	1,400	20,500	22,900
Ujewa Mission	10,000	8,000	2,500	2,000	3,500	26,000
Total	17,000	13,600	4,500	3,400	24,000	62,500

Source: District Land and Natural Resource Department-Mbarali DC, 2015

3.10 Environment

Environmental conservation has been one of the major issues in the global. This is due to the daily human activities such as deforestation and industrial activities which leads to soil erosion, shifting of wild animals in a specific area and dehydration of water sources conserved by the forest. Hence, the Government has to form public private partnership in order to conserve all natural resources in the community.

It is noted that, in Mbarali District the environmental conservation is mainly done by Non-Governmental Organizations. Also, the records show that, in 2015, there were 34 NGOs working with environment conservation in the District, with the larger number (25 NGOs) from Ilongo Division and (9 NGOs) from Rujewa Division. Further it observed that, during the same period, there is no development partners involved in environmental conservation at District level.

3.11 Forest Product

3.11.1 Charcoal

Government can earn revenue from forest products through taxes and permits. Forests products are charcoal, wood and timber. Figure 3.14 indicates number of charcoal bags and revenue obtained in 2011 to 2015. It revealed that, 12,780 charcoal bags sold from year 2011 to 2015 with total revenue of TZS 38,340,000. Besides, the number of charcoal bags sold decreased from 1,980 charcoal bags in 2011 to 800 charcoal bags in 2013 and then increased

to 6,000 charcoal bags in 2015. Meanwhile, the total revenue collected from charcoal bags sold decreased from TZS 5,940,000 in 2011 to TZS 2,400,000 in 2013 and then increased to TZS 18,000,000 in 2015.

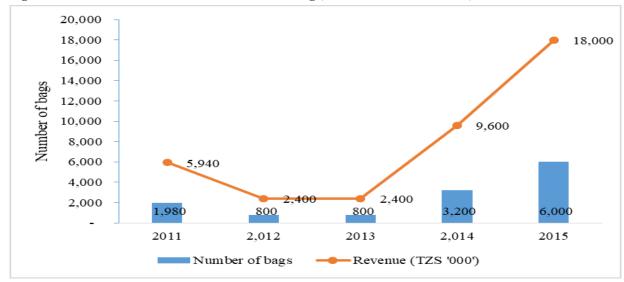


Figure 3. 14: Revenue Collected From Charcoal Bags; Mbarali District Council, 2011-2015

Source: District Land and Natural Resource Department-Mbarali DC, 2015

3.11.2 Beekeeping

Beekeeping is among of the sub sector of economic activities in Mbarali District as it contributes to the income of the Council and social wellbeing of the household. Bee products include honey and bee wax. The results show that, beekeeping activities in the District is undertaken by using of two ways namely; traditional way and modern way. Traditional way is commonly used as it is less expensive compared to modern way.

Table 3.19 indicates the total number of traditional and modern beehives in Mbarali District in year 2011 to 2015. For the period of 2011 to 2015, the total number of beehives in the District were 9,518 beehives with larger number of 8,423 beehives from Rujewa Division and (1,095 beehives) from Ilongo Division. It should also be noted that, out of the total beehives in the District (9,518 beehives), traditional beehives were in larger number 6,434 beehives (67.6percent)) compared to modern beehives 3,084 beehives (32.4percent).

Table 3. 19: Number of Traditional and Modern Beehives by Division, Mbarali District Council; 2011 - 2015

			,	Tradition	ıal					ľ	Modern	1			
Division	2011	2012	2013	2014	2015	Total	Percentage	2011	2012	2013	2014	2015	Total	Percentage	Grand Total
Rujewa	1,448	1,240	1,271	1,063	1,058	6,080	63.9	352	452	463	549	527	2,343	24.6	8,423
Ilongo	69	72	99	57	57	354	3.7	108	108	150	190	185	741	7.8	1,095
Grand Total	1,517	1,312	1,370	1,120	1,115	6,434	67.6	460	560	613	739	712	3,084	32.4	9,518

Source: District Land and Natural Resource Department-Mbarali DC, 2015

3.12 Fishing

Fishing is not a common economic activity in Mbarali District due to the limited number of water bodies. Fishing activities is mainly done through dams and rivers. Through fishing activities people get employment and income for their livelihoods.

Table 3.20 shows the fishery resources and production in Mbarali DC in 2015. The findings show that, in 2015, Mbarali District has 75 fishermen whereby all of them have fishing licenses. Also, the District has two (2) registered fishing vessels and three (3) un-registered fishing vessels.

Furthermore, the results show that, the total amount of fish produced during the same period is 12,810kg with the total revenue worth of TZS 63,170,000. Looking at ward, Madibira produce large quantity of fish (5,600kg) which valued to TZS 27,000,000 followed by Imalilo songwe (3,200 kg, TZS 16,000,000) and Ubaruku (2,800 kg, TZS 14,000,000).

Table 3. 20: Fishery Resources and Production by Wards, 2015; Mbarali DC

	Type of fishi	ng Resources	Fish Prod	uction
Ward	No. of Fishing licesenses	No. of Fishermen	Weight (kg)	Value (TZS)
Madibira	26	26	5,600	27,000,000
Rujewa	4	4	120	720,000
Ubaruku	9	9	2,800	14,000,000
Imalilo Songwe	6	6	3,200	16,000,000
Chimala	8	8	620	3,100,000
Mapogoro	6	6	220	1,100,000
Igurusi	10	10	138	690,000
Kongolo	6	6	112	560,000
Total	75	75	12,810	63,170,000

Source: District Land and Natural Resource Department-Mbarali DC, 2015

3.13 **Tourism**

3.13.1 Introduction

Tourism is an economic sector which generates income for the District and human development through creation of employment opportunities, growth of social service centers, and infrastructure investment. It discovered that, Mbarali District has three major tourism attractions which includes; 'the agreement tree' where Chief Mkwawa and Chief Merere solved their conflicts, wild life management area where animals moved from Ruaha National Park to Mpanga Kipengele game reserve and also there are historical sites around the area.

3.13.2 Historical Sites

Historical sites are the official location where pieces of political, military, cultural or social history have been preserved due to their cultural heritage value. In Mbarali District there are some historical sites which act as a beacon of a certain culture in the particular area. Table 3.21 indicates list of historical sites in the District in 2015.

Table 3. 21: Historical Sites Potential For Tourism; Mbarali Council; 2015

Type of historical site available	Village/Mitaa	Ward
Melele Chiefdom palace	Utengule	Utengule Usangu
Remains of Germans building	Ibelege	Ipwani
Hot spring	Udindilwa	Ruiwa
Ngoni Hill	Chamoto	Igurusi

Source: District Land and Natural Resource Department-Mbarali DC, 2015

3.13.3 Eco-Tourism

Eco-tourism is a form of tourism involving visiting of a natural area. Figure 3.15 shows the number of accommodation facilities available in Mbarali District in 2015. The results show that, there are seven (7) guest houses in the District whereby five (5) of them are in Rujewa Division and the remaining two (2) are in Ilongo Division.

Accommodation Facilities by Division Mbarali Council; 2015 **Figure 3. 15:** 7 Number of Accomodation O Rujewa Total

Source: District Finance and Trade Office-Mbarali DC, 2015

3.14 Mineral Resources

Mining industry contribute much to the economy growth of many developing countries including Tanzania. It discovered that, Mbarali District is rich in different types of minerals namely; marble, quarry and gold. Table 3.22 shows the distribution of existing mineral deposits and scale of mining in Mbarali District in 2015.

In 2015, Mbarali DC collected TZS 776,769,000 revenues from mineral resources equivalent to an average of TZS 64,730,750 per month. It should be noted that, this revenue was collected from mineral activities that took place in Ilongo Division. The data for mineral activities at Rujewa Division is not available; hence this analysis not covered part of mineral activities in Rujewa Division.

Ward wise, quarry minerals are found in Kongolo-Mswiswi and Mahongole while gold and marbale are found in Mapogoro and Lugelele wards respectively. Also, it observed that, the method used for gold extraction is small scale while the method used for extraction of marble and quarry is medium scale.

Table 3. 22: Distribution of Existing Mineral Deposits and Scale of Mining by division and wards, Mbarali District Council; 2015

Division	Ward	Type Of Mineral Deposit	Medium Scale	Quantity (Kg/Tons)	Value (TZS) per Tone	Revenue Collected (TZS)
	Kongolo					
Ilongo	Mswiswi	Quarry	Quarry	9,267	47,000	435,549,000
	Mahongole	Quarry	Quarry	7,260	47,000	341,220,000
Mbarali District				16,527	94,000	776,769,000

Source: District Natural Resources and Land Department-Mbarali DC, 2015

3.15 Industrial Development

Industrial sector plays a great role in economic development of Tanzania. Mbarali District has small scale industries which contribute to employment creation opportunities, income generation and stimulation of growth in both urban and rural areas of the District.

Table 2.23 shows the type of small scale industries and staffs in Mbarali DC for the year 2015. The results show that agriculture activity is the main economic base in the District and source of establishment of many small scale industries. This means that improvement of agriculture sector will have a direct impact on industrial sector development in the District.

The findings show that in 2015, the district has 715 small scale industries with 1,097 staffs. Division wise, out of 715 small scale industries, 367 industries are from Ilongo Division and the remaining 348 are from Rujewa Division. On the other hand, out of 1,097 staffs, 582 staffs are from Rujewa and the remaining 516 staffs are from Ilongo. Moreover, the largest number of small-scale industries is of maize milling (264 industries) followed by carpentry (184 industries) and welding (96 industries).

Table 3. 23: Type of Small-Scale Industries and Staffs by Division, Mbarali District Council; 2015

Division	Type of Industry	Number of industries	Total no. of staff
	Sunflower oil processing mill	20	40
	Service industry – garage	30	35
	Carpentry	58	106
	Food processing	15	30
Rujewa	Maize milling	129	192
	Welding	61	118
	Timber processing	20	40
	Electricity	15	20
	Sub-Total	348	581
	Service industry – garage	25	30
	Carpentry	126	194
Ilongo	Maize milling	135	164
Ilongo	Welding	35	51
	Timber processing	46	77
	Sub-Total	367	516
Mbarali District	Total	715	1,097

Source: District Finance and Trade Office-Mbarali DC, 2015

CHAPTER FOUR

Economic Infrastructure

4.0 Introduction

This chapter explains the existing infrastructures in Mbarali District Council for the year 2015. The infrastructure includes road network developments in terms of road classifications, passability of the road network and types of the roads surface. Moreover, it discusses telecommunication services, air services, energy, and railway transport in Mbarali District Council. Economic infrastructure plays a great role in the economic development of the country and individuals' welfare as well.

4.1 Road Network



Source: Works Department- Mbarali District Council

The road network consists of complex system of interconnected roads which are designed to carry private and public cars, goods vehicles and pedestrian. The quality of the road network is an essential service especially for connecting the remoteness areas because it facilitates more socio-economic activities without difficulties.

Table 4.1 indicates that for the year 2015, road networks of Mbarali District Council has an estimated total roads length of about 1,179 kilometre. Out of which 181 kilometre are regional roads, 619 kilometre are district roads, 89 kilometre are trunk roads and 290 kilometers are feeder roads. Also, results show that, out of 1,179 kilometre of road lengths in Mbarali District Council, Rujewa Division has the longest road (685 kilometre) as compared to that of the Ilongo Division (494 kilometre).

Table 4.1: Road Networks by Division and Type of Road (in Km), Mbarali District Council; 2015

Division		Ty	pe of the road (in km)		
Division	Trunk	Regional	District/Urban	Feeder	Total
Rujewa	32	123	388	142	685
Ilongo	57	58	231	148	494
Total	89	181	619	290	1,179

Source: Work Department-Mbarali DC, 2015

4.2 Passability of the road network

Table 4.2 shows that Mbarali District Council has the estimated total length of the passable road of about 1,179 kilometre, whereby 513 kilometre are passable throughout the year, 326 kilometre are passable greater part of the year and 340 kilometre are not passable most of the year.

Table 4. 2: Passability of Road Network by Division, Mbarali District Council; 2015

5		Type of Surface (in Km)						
Division	Passable throughout the year	Passable greater part of the year	Not passable most of the year	Total				
Rujewa	277	203	205	685				
Ilongo	236	123	135	494				
Total	513	326	340	1,179				

Source: Work Department-Mbarali DC, 2015

4.3 Road network surface condition



Source: Works Department- Mbarali District Council

Table 4.3 shows that the total surface area of the road network in Mbarali District Council for the year 2015 is about 1,179 kilometre. Furthermore, it reveals that earth road has the highest percentage share of the total surface area of the road network (45.9 percent) followed by gravel with 44.8 percent and Tarmac with 9.3 percent. The coverage of Tarmac and gravel road network with more than half of the total surface area indicates that there are no big limitations on transport systems during rainy season in Mbarali District Council.

Table 4. 3: Road Network Surface Condition (in Km) by Division and Type of Surface, Mbarali District Council; 2015

	Type of Surface (in Km)					
Division	Tarmac	Gravel	Earth	Total		
Rujewa	46	291	348	685		
Ilongo	57	205	232	494		
Total	103	496	580	1,179		
Percent	9.3	44.8	45.9	100.0		

Source: Work Department-Mbarali DC, 2015

4.4 Railway Transport



Source: Works Department- Mbarali District Council

Table 4.4 shows that for the year 2015, Mbarali District Council has the total number of six (6) railway stations whereas Rujewa Division has three (3) stations and also, Ilongo Division has three (3) stations. Moreover, it reveals that during the same period, the total number of passengers who used railway service was 250 persons and the number of quantity of the cargo carried was 60 tons. The availability and the use of the railway services in Mbarali District Council increase the rate of the economic development.

Table 4. 4: Railway services by Division, Mbarali District Council; 2015

Division	<u> </u>	Railway Services	
Division	Number of station	Number of passengers	Quantity of cargo (tons)
Rujewa	3	110	31
Ilongo	3	140	29
Total	6	250	60

Source: Work Department-Mbarali DC, 2015

4.5 Air services

The records show that for the year 2015, Mbarali District Council had five (5) airstrips, namely; Mbarali, Madibira, Iwalanje, Kapunga-Igumbilo and Luhanga from wards of Ubaruku, Madibira, Igava, Itamboleo and Luhanga respectively. The findings also illustrate that for the year 2015, 40 persons used the airstrips with the largest number of airstrips users found in Mbarali (16 persons) followed by Madibira and Kapunga with eight (8) persons in each airstrip. Nevertheless, the smallest number of airstrips users found in Iwalanje and Luhanga with four (4) persons in each airstrip. On the other hand, it should be noted that for the year 2015, Mbarali District Council has no airport and also there was no records for cargo transportation by using air services.

4.6 Telecommunication services

Telecommunication is the communication over a distance by using cables, telegraph, telephone or broadcasting. In 2015, Mbarali District Council had an access to the following telecommunications services, namely; mobile phone service providers, radio stations, television stations and post offices. Also, it revealed that, during the same period, Mbarali District Council inhabitants have an access to radio and television stations broadcasted from (ITV, TBC1/TBCFM, Clouds FM/TV, EATV/Radio and KISS FM) and other nearby stations. Furthermore, there is one post office and two sub post office.

4.7 Energy

Energy sources which are available in Mbarali District Council includes electricity power, paraffin, charcoal, solar and firewood. These sources play a big role in the growth of the socio-economic activities in the District Council.

4.7.1 Electricity Energy

Table 4.5 shows number of customers using or connected to electricity in Mbarali District Council from 2011 to 2015. Number of institutions using electricity energy has increased from 12 institutions in 2011 to 68 institutions in 2015 while the number of domestic users has increased from 1,527 persons in 2011 to 2,129 persons in 2015. Further, it shows that, number of commercial company using electricity energy has decreased from 42 in 2011 to 39 users in 2015.

Table 4.5: Number of customers Using/Connected to Electricity; Mbarali District Council; 2011 - 2015

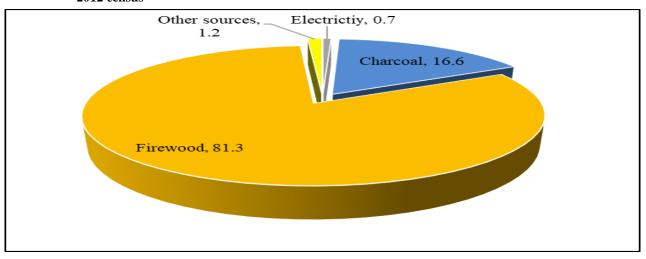
		Number of Customers	
Year	Institution	Domestic	Commercial
2011	12	1,527	42
2012	25	1,683	21
2013	12	1,145	16
2014	38	1,551	17
2015	68	2,129	39

Source: TANESCO

4.7.2 Sources of Energy for Cooking

Figure 4.1 shows sources of energy for cooking in Mbarali District for the year 2012 (census). It is revealed that the main sources of energy for cooking includes electricity, paraffin, gas, firewood, charcoal, solar, coal, wood or farm residuals and animal residuals. The results show that, the source of energy for cooking that dominates in Mbarali District for the year 2012 was firewood with 81.3 percentage share followed by charcoal with 16.6 percentage share. This is followed by other sources like gas, animal residuals, farm residuals, and paraffin with 1.2 percentage share. Further it shows that, only 0.7 percent of the total household used electricity power as the source of energy for cooking.

Figure 4. 1: Percentage Distribution of Households by Main Source of Energy for Cooking, Mbarali DC; 2012 census



Source: Population and Housing Census, 2012

CHAPTER FIVE

Social Services

5.0 Introduction

This chapter discusses the social services that are available in Mbarali District Council. The social services consist of health sector development in terms of preventive and curative measures through morbidity and mortality status, communicable diseases available in the area, mother and child health. It also covers the prevalence of HIV/AIDS and related diseases as well as health facilities and their operators. Furthermore, this chapter discusses education sector in terms of school facilities and performance, water supply and sanitation facilities.

5.1 Health Sector

The Government of Tanzania has been set the great effort towards improvement of the health status and lives of her people. Among the strategies is to increase the availability of health facilities within the societies through establishing at least one dispensary in each ward in the country (Tanzania National Health Policy). However, the Government has an extensive approaches in improving accessibility of health facilities in Mbarali District Council as other councils still has inadequate number of hospitals and health centers across divisions and wards as well as shortage of health staff.

5.2 Distribution of Health Facilities

Health facilities include hospitals, health centers and dispensaries. According to Tanzania National Health Policy, national standards a dispensary is supposed to serve about 10,000 people, health centers is the second medical appointment for cases that cannot be handed by dispensaries and by the national average standards, is supposed to serve 50,000 people. In addition, district hospital forms the top of the district medical appointment. Hence due to health facilities priority the Government ensures health development in terms of accessibility and equity to the society. Table 5.1 shows the availability of health facilities by ownership and divisions in Mbarali District Council for the year 2015. The council has two (2) hospitals, six (6) health centers and 39 dispensaries. The results reveal that in 2015, out of ten wards that found in Rujewa Division, health facilities owned by government includes one (1) hospital, three (3) health centers and 22 dispensaries while health facilities owned by non-government includes one (1) health centers and two (2) dispensaries. Furthermore, the result indicates that out of ten wards in Ilongo Division, the health facilities owned by government includes two (2) health centers and 12 dispensaries while health facilities owned by non-government includes one (1) hospital and three (3) dispensaries.

Table 5. 1: Availability of Health Facilities by Ownership and Division, Mbarali District Council; 2015

				Тур	e of Facility		
Division	Ward	Н	Hospitals		th Centers	Dispensaries	
		Govt	Non Govt	Govt	Non Govt	Govt	Non Govt
Rujewa	10	1	0	3	1	22	2
Ilongo	10	0	1	2	0	12	3
Total	20	1	1	5	1	34	5

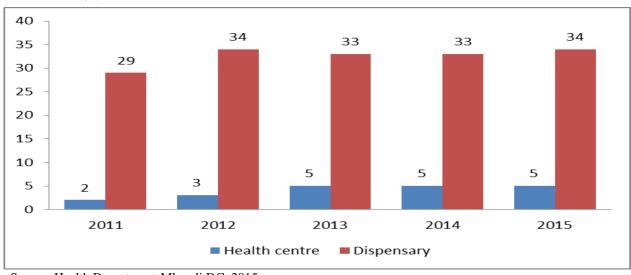
Govt- Government and Non Govt- Non Government

Source: Health Department-Mbarali DC, 2015

5.2.1 Growth Status and Distribution of Government Health Facilities, Mbarali DistrictCouncil; 2011-2015

Figure 5.1 indicates the distribution of health facilities owned by Government in Mbarali District Council from 2011 to 2015. The results show that, at district level there is a slight increase of number of dispensaries from 29 dispensaries in 2011 to 34 dispensaries in 2015. Also, there is the significant increase of number of health centers from two (2) health centers in 2011 to five (5) health centers in 2015. Furthermore, the result indicates that during the same period, there was one (1) government hospital located at Rujewa division.

Figure 5. 1: The growth status and distribution of Government Health Facilities Mbarali District; 2011-2015



Source: Health Department-Mbarali DC, 2015

5.2.2 Growth Status and Distribution of Non-Government Health Facilities by Division, Mbarali District Council; 2011-2015

It was observed that from 2011 to 2015, Mbarali district council has one (1) hospital that owned by Non-Government (Chimala Mission Hospital) that found at Ilongo division. Moreover, during the same period there are five (5) dispensaries and one (1) health center that

owned by Non-Government in the Council. This shows there is need for the Government to encourage private health beneficiaries to invest in health facilities especially in rural areas.

5.2.3 Complementary Service Providers

Due to the insufficiency of health facilities in rural areas the Government form the health service program to supplement accessibility of health services. The program takes into account for establishing the health service centers that are operated by Village Health Workers (VHWs) and assisted by Traditional Birth Attendants (TBAs) under the supervision of Village Health Committees (VHCs).

Table 5.2 shows the distribution of complementary Rural Health Service providers by divisions and wards in Mbarali District Council in 2015. It is revealed that the Council has 226 Village Health Workers (VHWs), 113 Village Health Post (VHP) and only two (2) registered Traditional Medical Practitioners (TMP).

At division level, Rujewa Division leads by having 120 Village Health Workers (VHWs) and 60 Village Health Post (VHP) compared to Ilongo Division which has 106 Village Health Workers (VHWs), 53 Village Health Post (VHP) and only two (2) registered Traditional Medical Practitioners (TMP). In addition, it observed that Rujewa Division has no Traditional Birth Attendants (TBAs) and Traditional Medical Practitioners (TMP) for the year 2015.

Table 5. 2: Distribution of Complementary Rural Health Service Providers by Division and ward, Mbarali District Council; 2015.

Division	Ward	No. of VHWs	No. of VHP
Rujewa	Rujewa	14	7
	Madibira	14	7
	Mapogoro	18	9
	Mawindi	10	5
	Ubaruku	16	8
	Miyombweni	10	5
	Igava	10	5
	Ipwani	10	5
	Lugelele	8	4
	Imalilo Songwe	10	5
	Sub-total	120	60
Ilongo	Igurusi	18	9
	Chimala	12	6
	Ut. Usangu	12	6
	Luhanga	8	4
	Mahongole	12	6

Division	Ward	No. of VHWs	No. of VHP
	Ihahi	6	3
	Ruiwa	12	6
	Mwatenga	8	4
	Kongolo	10	5
	Itamboleo	8	4
	Sub-total	106	53
Total		226	113

Source: Health Department-Mbarali DC, 2015

5.2.4 In-Patients and Out-Patients and Doctors

This section analyses number of in-patients and out patients in hospitals and health centers by wards in Mbarali District Council for the years; 2012, 2013, 2014 and 2015. It also shows the proportion of doctors or doctors to patients including Medical Officers (MOs), Assistant Medical Officers (AMOs), Doctor of Dental Surgery (DDS), Assistant Dental Officers (ADO) and Clinical Officers (CO).

Table 5.3 findings show that from 2012 to 2015, the total number of 118,951 patients attended public health centers and 71,878 patients attended Mbarali District hospital. Moreover, the number of doctors working in public health centers increased from 11 doctors in 2012 to 18 doctors in 2015 equivalent to an average of 15 doctors per year. Also, during the same period there is an average of 1,963 patients treated by one doctor per year in a health center.

Furthermore, the results indicate that number of doctors working in public hospital increased from 20 doctors in 2012 to 26 doctors in 2015. Also, during the same period there is an average of 763 patients treated by one doctor per year in a public hospital.

Table 5. 3: Average number of in and out patients and Doctors in public health facilities Mbarali District Council; 2012-2015

		ber of in and out in Public Health in	Numbe	r of doctor per year in	Average no. of patients per doctor per year	
Years	Health center	Hospital (Mbarali district hosp.)	Health center	Hospital (Mbarali district hosp.)	Health center	Hospital (Mbarali district hosp.)
2012	21,048	15,244	11	20	1,913	762
2013	29,492	16,668	13	23	2,269	725
2014	44,148	18,558	19	25	2,324	742
2015	24,263	21,408	18	26	1,348	823
Total	118,951	71,878	15*	24*	**1,963	**763

^{* =} The average number of doctor per year from 2012 to 2015

^{**=} The average number of patients per doctor per year from 2012 to 2015

Table 5.4 shows that from 2012 to 2015, a total number of 55,645 patients attended in private health center and 151,318 patients attended in private hospital. Further the findings revealed that, from 2012 to 2015 there is an average of two (2) doctors operate private health center per annum and five (5) doctors operate private hospital (Chimala Mission) per annum. Also, it revealed that on average number of patients treated per doctor per year in private health center were 8,618 patients and for private hospital were 7,778 patients.

Table 5.4: Average number of in and out patients and Doctors in private health facilities Mbarali District Council 2012-2015

	Number of in and out patients in Public Health in			r of doctor per year in	Average no. of patients per doctor per year	
Years	Health center	Hospital (Chimala Mission hosp.)	Health center	Hospital (Chimala Mission hosp.)	Health center	Hospital (Chimala Mission hosp.)
2012	13,819	40,011	1	4	13,819	10,003
2013	13,892	39,749	3	5	4,631	7,950
2014	17,866	34,609	3	6	5,955	5,768
2015	10,068	36,949	1	5	10,068	7,390
Total	55,645	151,318	2*	5*	**8,618	**7,778

^{* =} The average number of doctor per year from 2012 to 2015

Source: Health Department-Mbarali DC, 2015

5.2.5 Status of Health Personnel

The availability of health personnel is one of the important factors for attaining good health status to the people around. The Tanzanian health sector continues to improve the quality of health services by distributing health personnel in all villages of Tanzania. The health personnel includes specialist doctors, medical doctors, dental surgeons, assistant dental officers, pharmacists, pharmaceutical assistants, radiographers, radiologists, radiographic assistants, assistant medical officers, specialist dental surgeons and others.

Table 5.5 presents the type and number of medical personnel in Mbarali health facilities in 2015. The findings show that out of 174 medical personnel, female account for a larger number (116 personnel) compared to male (58 personnel). With regard to type of medical personnel, medical attendants have the largest percentage share (35.1 percent) followed by Nurses with 23.6 percent. On the other hand, medical personnel with the lowest percentage share in the district are Assistant Accountant, supplies officer, Assistant social welfare officer, health assistant, environmental health officer, nutrition officer, Technologist Radiology, Assistant dental officer and Clinical Assistant with 0.6 percentage share for each one.

^{**=} The average number of patients per doctor per year from 2012 to 2015

Furthermore, the types of medical personnel that are not available in Mbarali District Council in 2015 consist of Specialist Doctor, Dental Surgeon, Pharmaceutical Assistant, Radiographer and Radiographic Assistant.

Table 5. 5: Type and Number of Medical Personnel by Sex, Mbarali District Council; 2015

Medical Personnel	Male	Female	Total	Percent Total
Medical doctors	6	1	7	4.0
Ass. Medical Officers	5	1	6	3.4
Clinical Officers	4	4	8	4.6
Clinical Assistants	0	1	1	0.6
Ass. Dental Officer	1	0	1	0.6
Dental Therapist	3	0	3	1.7
Pharmacists	2	0	2	1.1
Pharmaceutical Technicians	1	1	2	1.1
Laboratory Technologist	1	2	3	1.7
Ass. Laboratory Technologist	2	3	5	2.9
Technologist Radiology	1	0	1	0.6
Nursing Officers	1	1	2	1.1
Ass. Nursing Officers	1	11	12	6.9
Nurse	5	36	41	23.6
Nutrition Officer	0	1	1	0.6
Medical Attendants	14	47	61	35.1
Environmental Health Officer	1	0	1	0.6
Ass. Environmental Health Officer	6	0	6	3.4
Health Assistants	0	1	1	0.6
Health Secretaries	2	1	3	1.7
Social Welfare Officer	2	2	4	2.3
Ass. Social Welfare Officer	0	1	1	0.6
Supplies Officer	0	1	1	0.6
Assistant Accountant	0	1	1	0.6
Total	58	116	174	100.0

Source: Health Department-Mbarali DC, 2015

5.2.6 Population per Doctor

This section presents the number of population per doctor in the Mbarali District Council as well as the basic health indicators such as infant mortality rate, maternal mortality rate, prenatal and neonatal mortality rate.

Table 5.6 demonstrates the distribution of Doctors in Mbarali District Council by wards. List of doctors includes Medical Officers (MOs), Assistant Medical Officers (AMOs), Doctor of Dental Surgery (DDS), Assistant Dental Officers (ADO), and Clinical Officers (CO). The results show that, the number of doctors has increased from 41 in 2002 to 82 in 2015 whereby

the total population has increased from 234,101 in 2002 to 329,132 (projected population) in 2015.

It is observed that the average number of population per doctor per year in Mbarali District was 5,710 persons in 2002, 4,696 persons in 2012 and 4,014 persons in 2015. These results meet the standards setup by World Health Organization (WHO) for the ratio of one doctor to serve 10,000 people per year.

Table 5. 6: Distribution of Doctors (AMO, MO, DDS, ADO, CO and Specialist) among Population by ward: Mbarali District Council; 2002³, 2012 and 2015

		2002			2012			2015	
Ward	Total Population (Census)	Total Doctors	Average Population Per Doctor	Total Population (Census)	Total Doctors	Average Population Per Doctor	Total Population (Census)	Total Doctors	Average Population Per Doctor
Rujewa	27,553	11	2,505	29,473	23	1,281	32,279	30	1,076
Madibira	34,045	5	6,809	24,742	5	4,948	27,098	5	5,420
Mapogoro	15,808	4	3,952	24,754	6	4,126	27,111	6	4,519
Mawindi	27138	1	27,138	9,917	3	3,306	10,861	3	3,620
Ubaruku	31,928	4	7,982	29,197	6	4,866	31,977	5	6,395
Miyombweni		0	-	9,773	2	4,887	10,704	3	3,568
Igava		1	-	14,292	0	-	15,653	0	
Ipwani		3	-	8,503	2	4,252	9,313	3	3,104
Lugelele Imalilo		0	-	8,673	0	-	9,499	1	9,499
Songwe		0	-	11,268	0	-	12,341	0	
Igurusi	23,468	1	23,468	22,296	2	11,148	24,419	5	4,884
Chimala	23,395	3	7,798	16,633	5	3,327	18,217	4	4,554
Ut. Usangu	25,868	2	12,934	15,407	2	7,704	16,874	6	2,812
Luhanga		0	-	11,466	0	-	12,558	0	
Mahongole	14,477	2	7,239	11,744	2	5,872	12,862	4	3,216
Ihahi		3	-	8,474	4	2,119	9,281	4	2,320
Ruiwa	10,421	0	-	15,867	1	15,867	17,378	1	17,378
Mwatenga		0	-	8,416	0	-	9,217	1	9,217
Kongolo		1	-	10,309	1	10,309	11,291	1	11,291
Itamboleo		0		9,313	0	-	10,200	0	
Total	234,101	41	5,710	300,517	64	4,696	329,132	82	4,014

Source: Health Department-Mbarali DC, 2015

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³ In 2002 Miyombweni, Igava, Ipwani, Lugelele, Imalilo Songwe, Luhanga, Ihahi, Mwatenga, Kongolo and Itamboleo wards are not yet assigned to be in ward level

5.2.7 Mortality

Mortality is a health indicator that shows the number of deaths from a certain cause. Data on mortality is useful for the Government planners and policies makers to have proper measurable strategies for the development and improvement of health facilities in the community. In Mbarali District Council estimates for mortality are based on routine data collection systems from the health facilities centers.

Table 5.7 illustrates estimates of Basic Health Indicators in Mbarali District Council for the year 2011 to 2015. The records shows that from 2011 to 2015 the average estimated Infant Mortality Rate was 8, Under-5 Mortality Rate (3), Maternal Mortality Rate (122), Prenatal Mortality Rate (6) and Neonatal Mortality Rate (4). The records further shows that the estimated infant mortality rate decreased from 20 infants in 2011 to two (2) infant in 2015. The estimated maternal mortality rate decreased from 172 women in 2011 to 99 women in 2015.

Table 5.7: Estimates of Basic Health Indicators, Mbarali District Council; 2011-2015

Year	Estimated IMR per 1,000 population	Estimated U5MR per 1,000 population	Estimated MMR per 100,000 population	Estimated Prenatal Mortality Rate *	Estimated Neonatal Mortality Rate**
2011	20	3	172	9	4
2012	9	7	123	7	6
2013	7	1	112	7	4
2014	4	2	102	4	2
2015	2	2	99	4	2
Average	8	3	122	6	4

Source: Health Department-Mbarali DC, 2015

5.2.8 Mortality (In patient only)

Mortality levels can be traced by observing the death records of In patients at hospitals and those who die at home. The records of mortality In patients only in Mbarali District Council were collected from the data of Health Facilities like hospitals, health centers and dispensaries in all wards.

Tables 5.8 reveal ten major causes of mortality for In-patients in Mbarali District Council for the years 2011 and 2015. In 2011, out of 389 In patients only reported mortality cases, 112 (28.8 percent) deaths were caused by Malaria severe which was the leading cause of mortality. This followed by Malaria uncomplicated with 102 cases (26.2 percent) and Pneumonia with 54 cases (13.9 percent).

In 2015, out of 324 in patients only reported mortality cases, Malaria severe accounted as leading cause with 58 cases (17.9 percent), followed by Diarrhea diseases with 48 cases (14.8 percent) and Pneumonia with 40 cases (12.3 percent). The results also shows apart from decreases number of commonly reported cases of mortality in Mbarali District Council from 2011 to 2015 still Malaria severe reported as the leading causes, so measures must be taken to reduce the occurrence of Malaria severe disease. It should be noted that other diagnosis is accumulation of many diseases that makes high frequency, thus leads to start accounting from Malaria severe.

Table 5. 8: List of the Ten Most Commonly Reported Causes of Mortality (In Patients Only) Mbarali District Council; 2011 and 2015

		2011			2015	
Number	Disease	Number of Occurrences	Percent	Disease	Number of Occurrences	Percent
1	Malaria severe	112	28.8	Other diagnosis	71	21.9
2	Malaria uncomplicated	102	26.2	Malaria severe	58	17.9
3	Pneumonia	54	13.9	Diarrhea Disease	48	14.8
4	Diarrhea Disease	35	9.0	Pneumonia	40	12.3
5	Neonatal sepsis	29	7.5	ARI	34	10.5
6	Clinical Aids	21	5.4	Clinical Aids	23	7.1
7	Anemia	17	4.4	Tuberculosis	21	6.5
8	ARI	9	2.3	Poisoning	14	4.3
9	Fractures	9	2.3	Neonatal sepsis	10	3.1
10	Tuberculosis	1	0.3	Burns	5	1.5
	Total	389	100.0		324	100.0

Source: Health Department-Mbarali DC, 2015

5.2.9 Morbidity (Out-patients)

Morbidity refers to the condition or status of human being characterized by or appearing to an abnormal and unhealthy interest over a period of time. The delivery of health services in Mbarali District focuses on improving the health status of the people as well as reduction in morbidity cases along with mortality levels in all wards.

Table 5.9 shows the ten most commonly reported causes of morbidity for out-patients in Mbarali District Council. Out of 113,708 out patients recorded in 2011, the most reported cases was Malaria with 28,169 (24.8 percent) cases, followed by Acute Respiratory Infection (ARI) 20,918 (18.4 percent) cases and Diarrhea diseases 17,325 (15.2 percent) cases.

The results further shows that, out of 50,654 out-patients recorded in 2015, Malaria cases were 11,785 (23.3 percent), ranking first again as a leading cause of morbidity in the district.

This followed by Pneumonia with 8,710 cases (17.2 percent) and Skin diseases 7,525 cases (14.9 percent).

Table 5. 9: List of Ten Most Commonly Reported Causes of Morbidity (Out Patients Only) Mbarali District Council; 2011 and 2015

		2011		2015			
Number	Disease	Number of Occurrence	Percent	Disease	Number of Occurrence	Percent	
1	Malaria	28,169	24.8	Malaria	11,785	23.3	
2	ARI	20,918	18.4	Pneumonia	8,710	17.2	
3	Diarrhoeal Disease	17,325	15.2	Skin diseases	7,525	14.9	
4	Pneumonia	13,349	11.7	ARI	6,661	13.1	
5	Skin Infections	10,741	9.4	Other diagnosis	5,260	10.4	
6	Eye Infections	7,115	6.3	Emergency surgical condition	2,824	5.6	
7	Intestinal worms	5,883	5.2	Intestinal worms	2,191	4.3	
8	Schistosomiasis	3,805	3.3	Oral conditions	1,956	3.9	
9	UTI	3,236	2.8	PEM	1,927	3.8	
10	Ear Infections	3,167	2.8	PID	1,815	3.6	
	Total	113,708	100.0		50,654	100.0	

Source: Health Department-Mbarali DC, 2015

5.2.10 Morbidity (In Patients Only)

Table 5.10 shows that in 2011 there were 16,841 reported causes of morbidity for in-patients in Mbarali District Council. Normal deliveries were the dominant cause of morbidity accounting for 8,232 cases (48.9 percent) among the in-patients, followed by Malaria severe 2,156 cases (12.8 percent) and Malaria uncomplicated 1,527 cases (9.1 percent).

Furthermore, out of 14,304 In-patients reported cases in Mbarali District Council for the year 2015, Normal deliveries also ranked first in causing morbidity for In patients (4,091 cases, 28.6 percent) followed by Pneumonia with 2,392 cases (16.7 percent) and Malaria severe with 1,843 cases (12.9 percent).

Table 5. 10: List of Ten Most Commonly Reported Causes of Morbidity (In Patients Only) Mbarali District Council, 2011 and 2015

	20)11		2015			
Number	Disease	Number of Occurrence	Percent	Disease	Number of Occurrence	Percent	
1	Normal deliveries	8,232	48.9	Normal deliveries	4,091	28.6	
2	Malaria severe	2,156	12.8	Pneumonia	2,392	16.7	
3	Malaria uncomplicated	1,527	9.1	Malaria severe	1,843	12.9	
4	Diarrhoea Disease	1,500	8.9	ARI	1,622	11.3	
5	Pneumonia	1261	7.5	Diarrhoea Disease	1,622	11.3	

		20	11		2015				
Number	Disease		Number of Occurrence	Percent	Disease	Number of Occurrence	Percent		
6	Clinical Aids		537	3.2	Other injuries	921	6.4		
7	ARI		499	3.0	Other diagnosis	723	5.1		
	Prematurity/Low	Birth							
8	Weight		427	2.5	Anaemia	496	3.5		
9	Fractures		376	2.2	Clinical Aids	402	2.8		
10	Skin infections		326	1.9	Neonatal sepsis	192	1.3		
Total			16,841	100.0		14,304	100.0		

Source: Health Department-Mbarali DC, 2015

5.2.11 Tuberculosis (TB)

Table 5.11 shows the number of tuberculosis (TB) cases reported in health facilities by divisions and sex in Mbarali District Council from 2011 to 2015 consecutively. The results show that in Mbarali District Council the total number of 2,721 TB cases was reported from 2011 to 2015. Furthermore, the number of TB cases reported decreased from 583 persons in 2011 to 486 persons in 2013 and then after increased to 595 persons in 2015.

Division wise, from 2011 to 2015, a total number of 1,414 TB cases were reported from Rujewa with large number of male (806) compared to female (608). In addition, Ilongo division found to have a total of 1,307 TB cases reported with larger number of male (707) compared to female (600).

Table 5. 11: Number of TB Cases reported by Sex and Division; 2011-2015

Division	Sex	2011	2012	2013	2014	2015	Total
	Male	169	188	119	136	194	806
Rujewa	Female	130	122	114	121	121	608
	Sub-total	299	310	233	257	315	1,414
	Male	179	127	120	152	129	707
Ilongo	Female	105	104	133	107	151	600
	Sub-total	284	231	253	259	280	1,307
Total		583	541	486	516	595	2,721

Source: Health Department-Mbarali DC, 2015

5.2.12 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, Mbarali District use similar approaches used in other districts including, testing family blood donors, prevalence among voluntary counseling and

testing (VCT) and expected mothers participating in the Provision of Mother to Child Transmission (PMTCT) service.

Table 5.12 shows expectant mothers by health facilities who participated in the PMTCT Service in Mbarali District Council for 2015. Results indicates that in District a total of 13,274 ante-natal have attended the service, out of whom 10,491 screened and 525 found to be HIV positive equivalent to 5.0 percent. Also, 634 equivalent to 120.8 percent of HIV positive ante-natal are given Niverapine.

Division wise, for the year 2015, Rujewa division has a total of 7,898 ante-natal attended the services, out of whom 6,294 screened and 311 found to be HIV positive equivalent to 4.9 percent. Out of HIV positive ante-natal, 413 (132.8 percent) are given Niverapine. Furthermore, Ilongo division has a total of 5,376 ante-natal attended the services, out of whom 4,197 screened and 214 found to be HIV positive equivalent to 5.1 percent. Out of HIV positive ante-natal, 221 (103.3 percent) are given Niverapine.

Table 5.12: Expectant Mothers who participated in the PMTCT Service by Division and wards, Mbarali District Council; 2015

Division	Wards	No. of ANC Attendants	No. Screened	No. HIV+	Percent of HIV+	No. Of Given Niverapine	Percent of given Niverapine
	Rujewa	1,404	1,298	86	6.6	277	322.1
	Madibira	1,122	948	57	6.0	52	91.2
	Mapogoro	1,752	1,061	52	4.9	39	75.0
	Mawindi	290	267	17	6.4	9	52.9
	Ubaruku	1,452	1,071	50	4.7	14	28.0
Rujewa	Miyombweni	546	467	16	3.4	18	112.5
	Igava	689	626	17	2.7	1	5.9
	Ipwani	284	239	6	2.5	1	16.7
	Lugelele	169	168	4	2.4	2	50.0
	Imalilo Songwe	190	149	6	4.0	0	0.0
	Sub-Total	7,898	6,294	311	4.9	413	132.8
	Igurusi	647	552	14	2.5	8	57.1
	Chimala	1,682	1529	121	7.9	188	155.4
	Ut. Usangu	1,018	587	20	3.4	8	40.0
Ilongo	Mahongole	782	582	29	5.0	11	37.9
Ilongo	Ihahi	448	276	12	4.3	2	16.7
	Ruiwa	529	512	15	2.9	4	26.7
	Mwatenga	270	159	3	1.9	0	0.0
	Sub-Total	5,376	4,197	214	5.1	221	103.3
Grand To	otal	13,274	10,491	525	5.0	634	120.8

Table 5.13 shows number of expectant mothers infected with HIV/AIDS with respective HIV/AIDS status of children born by division and ward in Mbarali District Council for the year 2015. Accordingly, in 2015, Mbarali District has a total of 15,221 expectant mothers, out of whom 682 equivalent to 4.5 percent found to be HIV positive.

Furthermore, during the same period, the number of children born with negative HIV status were 642 children and those born with HIV positive were 40 children. Also, the result shows the highest number of children born with HIV positive statuses are from Ubaruku ward (12 children), Mapogoro ward nine (9) children and Chimala ward (6 children).

Table 5. 23: Number of Expectant Mothers infected with HIV/AIDS with Respective HIV/AIDS status of children born by Division and ward Mbarali District Council; 2015

			Number of	Percent of	Number of c	hildren born
Division	Ward	Total no. of Expectant mothers	Expectant mothers with HIV+	Expectant mothers with HIV+	With Negative HIV status	With Positive HIV status
	Rujewa	1,518	125	8.2	120	5
	Madibira	1,470	97	6.6	94	3
	Mapogoro	1,144	85	7.4	76	9
	Mawindi	483	13	2.7	13	0
	Ubaruku	1,921	89	4.6	77	12
Rujewa	Miyombweni	576	22	3.8	22	0
	Igava	750	15	2.0	14	1
	Ipwani	491	11	2.2	11	0
	Lugelele	219	15	6.8	15	0
	Imalilo Songwe	190	4	2.1	4	0
	Sub-Total	8,762	476	5.4	446	30
	Igurusi	1,278	22	1.7	22	0
	Chimala	1,305	99	7.6	93	6
	Ut. Usangu	1,283	28	2.2	26	2
Ilongo	Mahongole	795	38	4.8	36	2
nongo	Ihahi	834	11	1.3	11	0
	Ruiwa	694	8	1.2	8	0
	Mwatenga	270	0	0.0	0	0
	Sub-Total	6,459	206	3.2	196	10
Grand To	otal	15,221	682	4.5	642	40

Source: Health Department-Mbarali DC, 2015

5.2.13 Voluntary Counseling and Testing (VCT) Volunteers

Establishment of VCT services in both rural and urban areas has greatly enabled the country to establish a reliable source of data for HIV prevalence. This section presents the distribution

of VCT Volunteers who were screened for HIV and those subsequently treated with ARV by Sex in Mbarali District Council for the years 2011, 2013 and 2015.

Table 5.14 results revealed that for the year 2011, 2013 and 2015, out of 42,348 persons (19,701 male; 22,647 female) screened for HIV test, 6,041 persons (2,646 male; 3,395 female) equivalent to 14.3 percent found to be HIV positive. Also, it is observed that 19,151 persons are treated with ARV during the same period. Furthermore, the findings show that the number of people screened for HIV test increased from 4,870 persons in 2011 to 35,166 persons in 2015. However, the rate of people having HIV positive decreased from 23.9 percent in 2011 to 12.9 percent in 2015. It should be noted that number of people treated with ARV in 2011 is not part of the analysis.

Table 5. 143: VCT Volunteers who were screened for HIV and those subsequently treated with ARV by Sex, Mbarali District Council; 2011, 2013 and 2015

Year	No. of Blood Screened			Number of HIV+		Percent of HIV+			No. Treated with ARV			
Icai	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
2011	2,145	2,725	4,870	481	681	1,162	22.4	25.0	23.9			
2013	1,360	952	2,312	170	179	349	12.5	18.8	15.1	2,957	5,356	8,313
2015	16,196	18,970	35,166	1,995	2,535	4,530	12.3	13.4	12.9	3,620	7,218	10,838
Cumulative Total	19,701	22,647	42,348	2,646	3,395	6,041	13.4	15.0	14.3	6,577	12,574	19,151

Source: Health Department-Mbarali DC, 2015

5.2.14 Vaccination of Expectant Mothers

Protection of expectant mother through injection program is important so as to reduce the risk of numerous health problems that related to unborn child. This service is compliance to the health guidelines given by the Ministry of Health.

Table 5.15 shows that, in Mbarali District, the proportion of expectant mothers received the TT2 vaccination did not meet the target with 64.8 percent in 2011, 62.9 percent in 2013 and 56.0 percent in 2015. With respect to Division, Rujewa had a percentage of 70.1 expectant mothers received TT2 vaccination in 2011, 64.4 percent of expectants mothers received TT2 vaccination in 2013 and 49.8 percent received TT2 vaccination in 2015. However, the percentage of expectant mothers received TT2 vaccination increased from 45.6 percent in 2011 to 78.4 percent in 2015.

Table 5. 45: Expectant Mothers Vaccinated TT2 by Division and Wards, Mbarali District Council; 2011, 2013 and 2015

Divisio			2011			2013			2015	
n	Wards	Total	Total	Percent	Total	Total	Percent	Total	Total	Percent
11		Targeted	Vaccinated	Coverage	Targeted	Vaccinated	Coverage	Targeted	Vaccinated	Coverage
	Rujewa	1,283	907	70.7	1,457	987	67.7	1,518	595	39.2
	Madibira	916	929	101.4	986	957	97.1	1,470	1,057	71.9
	Mapogoro	565	621	109.9	565	860	152.2	1,033	805	77.9
	Mawindi	305	133	43.6	399	133	33.3	483	137	28.4
Rujew	Ubaruku	1,418	819	57.8	1,738	865	49.8	1,921	948	49.3
a	Miyombwe									
a	ni	345	106	30.7	456	87	19.1	576	124	21.5
	Igava	268	159	59.3	575	181	31.5	750	249	33.2
	Ipwani	237	129	54.4	302	141	46.7	399	157	39.3
	Lugelele	212	89	42.0	215	102	47.4	219	96	43.8
	Sub-Total	5,549	3,892	70.1	6,693	4,313	64.4	8,369	4,168	49.8
	Igurusi	54	57	105.6	87	68	78.2	112	98	87.5
	Chimala	551	163	29.6	582	210	36.1	699	232	33.2
	Ut. Usangu	577	241	41.8	599	320	53.4	785	534	68.0
Ilongo	Mahongole	184	143	77.7	290	178	61.4	410	541	132.0
	Ihahi	102	70	68.6	111	141	127.0	176	217	123.3
	Ruiwa	88	35	39.8	112	103	92.0	137	197	143.8
	Sub-Total	1,556	709	45.6	1,781	1,020	57.3	2,319	1,819	78.4
Grand 7	Γotal	7,105	4,601	64.8	8,474	5,333	62.9	10,688	5,987	56.0

Source: Health Department-Mbarali DC, 2015

Table 5.16 shows children under one year Vaccinated BCG by Division and Ward in Mbarali District Council for the years 2011, 2013 and 2015. The results reveal that, the proportion of children under one year vaccinated in relation to targeted children decreased from 124.2 percent in 2011 to 37.3 percent in 2013 then increased to 126.3 percent in 2015.

Division wise, in Rujewa, the proportion of children under one year vaccinated with BCG in relation to targeted children, decreased from 104.5 in 2011 to 52.2 percent in 2013 then increased to 106.8 percent in 2015. Additionally, at Ilongo division, the proportion of children under one year vaccinated BCG decreased from 151.4 percent in 2011 to 16.7 percent in 2013 and then increased to 153.3 percent in 2015.

Table 5. 56: Children under One Year Vaccinated BCG by Division and Ward, Mbarali District Council; 2011, 2013 and 2015

			2011			2013			2015	
Division	Wards	Total	Total	Percent	Total	Total	Percent	Total	Total	Percent
		Targeted	Vaccinated	Coverage	Targeted	Vaccinated	Coverage	Targeted	Vaccinated	Coverage
	Rujewa	1,404	1,263	90.0	1,408	981	69.7	1,420	1,287	90.6
	Madibira	1797	2334	129.9	1797	975	54.3	1797	2366	131.7
	Mapogoro	1456	1240	85.2	1456	708	48.6	1456	1288	88.5
	Mawindi	464	550	118.5	464	133	28.7	464	566	122.0
	Ubaruku	1,750	1,979	113.1	1,750	865	49.4	1,750	2,003	114.5
	Miyombweni	150	132	88.0	150	87	58.0	150	140	93.3
	Igava	381	339	89.0	381	181	47.5	381	355	93.2
	Ipwani	394	340	86.3	394	141	35.8	394	364	92.4
	Lugelele	188	164	87.2	188	102	54.3	188	172	91.5
Rujewa	Sub-Total	7,984	8,341	104.5	7,988	4,173	52.2	8,000	8,541	106.8
	Igurusi	1260	1202	95.4	1260	111	8.8	1260	1218	96.7
	Chimala	1140	3244	284.6	1140	199	17.5	1140	3260	286.0
	Ut. Usangu	1062	1250	117.7	1062	291	27.4	1062	1266	119.2
	Mahongole	722	885	122.6	722	126	17.5	722	901	124.8
	Ihahi	1019	1749	171.6	1019	100	9.8	1019	1781	174.8
	Ruiwa	610	468	76.7	610	146	23.9	610	484	79.3
Ilongo	Sub-Total	5,813	8,798	151.4	5,813	973	16.7	5,813	8,910	153.3
Gr	and Total	13,797	17,139	124.2	13,801	5,146	37.3	13,813	17,451	126.3

Table 5.17 shows children under one year vaccinated with DPT3/HB3 by Division and Ward in Mbarali District Council for the years 2011, 2013 and 2015. The records illustrates that the number of children vaccinated with DPT3/HB3 at district level has been above the targets from 17,024 (136.1 percent) children in 2011, 17,339 (131.4 percent) children in 2013 and 17,450 (126.3 percent) children in 2015. Moreover, at division level in 2015, Rujewa Division has a total number of 8,540 (106.8 percent) children vaccinated with DPT3/HB3 while Ilongo Division has a total number of 8,910 (153.3 percent) children under one year vaccinated with DPT3/HB3.

Table 5. 67: Children under One Year Vaccinated DPT3/HB3 by Division and ward, Mbarali District Council; 2011, 2013 and 2015

			2011			2013			2015	
Division	Wards	Total	Total	Percent	Total	Total	Percent	Total	Total	Percent
		Targeted	Vaccinated	Coverage	Targeted	Vaccinated	Coverage	Targeted	Vaccinated	Coverage
	Rujewa	1,306	1,254	96	1,360	1,278	94	1,420	1,284	90.4
	Madibira	1,661	2,324	139.9	1,733	2,356	135.9	1,797	2,368	131.8
	Mapogoro	1,252	1,222	97.6	1,360	1,270	93.4	1,456	1,288	88.5
	Mawindi	396	544	137.4	432	560	129.6	464	566	122
Duiano	Ubaruku	1,648	1,970	119.5	1,702	1,994	117.2	1,750	2,003	114.5
Rujewa	Miyombweni	116	129	111.2	134	137	102.2	150	140	93.3
	Igava	313	333	106.4	349	349	100	381	355	93.2
	Ipwani	292	331	113.4	346	355	102.6	394	364	92.4
	Lugelele	154	161	104.5	172	169	98.3	188	172	91.5
	Sub-Total	7,138	8,268	115.8	7,588	8,468	111.6	8,000	8,540	106.8
	Igurusi	1,192	1,196	100.3	1228	1,212	98.7	1,260	1,218	96.7
	Chimala	1,072	3,238	302.1	1108	3,254	293.7	1,140	3,260	286
	Ut. Usangu	994	1244	125.2	1030	1,260	122.3	1,062	1,266	119.2
Ilongo	Mahongole	688	879	127.8	706	898	127.2	722	901	124.8
. 8	Ihahi	883	1,737	196.7	955	1,769	185.2	1,019	1,781	174.8
	Ruiwa	542	462	85.2	578	478	82.7	610	484	79.3
	Sub-Total	5,371	8,756	163	5,605	8,871	158.3	5,813	8,910	153.3
Gra	and Total	12,509	17,024	136.1	13,193	17,339	131.4	13,813	17,450	126.3

Table 5.18 presents findings for children under one year who Vaccinated OPV3 in the wards of Mbarali District Council for the years 2011, 2013 and 2015. The results revealed that the proportion of children under one year vaccinated by OPV3 at district level decreased yearly from 123.4 percent in 2011 to 89.9 percent in 2015. A similar pattern is observed at Division level.

Table 5. 78: Children under One Year Vaccinated OPV3 by Division and ward, Mbarali District Council; 2011, 2013 and 2015

			2011			2013			2015	
Division	Wards	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Rujewa	Rujewa	1,404	1,254	89.3	1,360	1,268	93.2	1,420	460	32.4
	Madibira	1,797	2,324	129.3	1,733	996	57.5	1,132	1,044	92.2
	Mapogoro	1,456	1,222	83.9	1,360	1,165	85.7	1,456	1,237	85
	Mawindi	464	544	117.2	432	427	98.8	464	451	97.2
	Ubaruku	1,750	1,970	112.6	1,702	1,918	112.7	1,750	1,954	111.7
	Miyombweni	150	129	86	118	111	94.1	150	123	82
	Igava	381	333	87.4	349	338	96.8	381	362	95
	Ipwani	394	331	84	346	370	106.9	394	406	103
	Lugelele	188	161	85.6	172	111	64.5	188	123	65.4
	Sub-Total	7,984	8,268	103.6	7,572	6,704	88.5	7,335	6,160	84
Ilongo	Igurusi	1,260	1,196	94.9	1228	1077	87.7	1,260	1,101	87.4
	Chimala	1,140	3,238	284	1108	944	85.2	1,140	968	84.9
	Ut. Usangu	1,062	1,244	117.1	1030	1109	107.7	1,062	1,133	106.7
	Mahongole	722	879	121.7	690	885	128.3	722	909	125.9
	Ihahi	1,019	1,737	170.5	955	1062	111.2	1,019	1,110	108.9
	Ruiwa	610	462	75.7	578	419	72.5	610	443	72.6
	Sub-Total	5,813	8,756	150.6	5,589	5,496	98.3	5,813	5,664	97.4
Grand Total		13,797	17,024	123.4	13,161	12,200	92.7	13,148	11,824	89.9

5.2.15 Measles Immunization

Measles immunization has been one of the vaccinations that are being used to protect children who are under one year in Mbarali District Council, like in any other districts of Tanzania.

Table 5.19 presents the number of children under one year vaccinated measles by ward in the Mbarali District Council for the years 2011, 2013 and 2015. The results reveal that at district level the coverage of the targeted children was 97.4 percent in 2011, 96.0 percent in 2013 and 98.7 percent in 2015.

Division wise for the year 2015, Ilongo has high proportion of coverage of the targeted children for Measles vaccination (105.7 percent) compared to Rujewa (93.1 percent).

Table 5. 89: Children under one Year Vaccinated Measles by ward, Mbarali District Council; 2011, 2013 and 2015

			2011			2013			2015	
Division	Wards	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
	Rujewa	1,370	1,182	86.3	1,376	1,206	87.6	1,420	1,222	86.1
	Madibira	1,661	934	56.2	1,733	982	56.7	1,132	1,014	89.6
	Mapogoro	1,252	1,340	107	1,360	1,412	103.8	1,456	1,460	100.3
	Mawindi	396	363	91.7	432	387	89.6	464	403	86.9
D:	Ubaruku	1,648	1,693	102.7	1,702	1,729	101.6	1,750	1,753	100.2
Rujewa	Miyombweni	116	100	86.2	134	112	83.6	150	120	80
	Igava	313	324	103.5	349	348	99.7	381	364	95.5
	Ipwani	292	260	89	346	296	85.5	394	320	81.2
	Lugelele	154	153	99.4	172	165	95.9	188	173	92
	Sub-Total	7,202	6,349	88.2	7,604	6,637	87.3	7,335	6,829	93.1
	Igurusi	1,192	1,148	96.3	1,228	1,172	95.4	1,260	1,188	94.3
	Chimala	1,072	1,289	120.2	1,108	1,313	118.5	1,140	1,329	116.6
	Ut. Usangu	994	1,191	119.8	1,030	1,215	118	1,062	1,231	115.9
Ilongo	Mahongole	654	806	123.2	690	830	120.3	722	846	117.2
	Ihahi	883	1,012	114.6	955	1,060	111	1,019	1,092	107.2
	Ruiwa	542	419	77.3	578	443	76.6	610	459	75.2
	Sub-Total	5,337	5,865	109.9	5,589	6,033	107.9	5,813	6,145	105.7
Gra	nd Total	12,539	12,214	97.4	13,193	12,670	96	13,148	12,974	98.7

Source: Health Department-Mbarali DC, 2015

5.2.16 Child Nutrition

Children from the stage of fetuses 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. 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.

Table 5.20 shows severe malnutrition for children under one year by ward in Mbarali District Council for the year 2015. It revealed that a total of 35,377 children under one year weighed for severe malnutrition in 2015. Among them, 10.3 percent found to be moderately underweight and 1.1 percent found to be severely underweight.

Wards wise the results revealed that, the ward with highest percentage share of moderately underweight is Ubaruku with 31.9 percent followed by Mahongole (25.9 percentage share) and Ruiwa (17.5 percentage share). On the other hand, the ward with the highest percentage share of severely underweight is Mahongole with 5.2 percent followed by Ubaruku with 4.6 percentage share and Ipwani with 3.6 percentage share.

Table 5.20: Severe Malnutrition for Children under One Year by Ward, Mbarali District Council; 2015

Ward	Total Weighed	Percent of Moderately Underweight	Percent of Severely Underweight
Rujewa	5,704	7.3	0.6
Madibira	4,468	6.6	0.7
Mapogoro	3,207	6.8	0.2
Mawindi	1,022	3.8	0.1
Ubaruku	2,537	31.9	4.6
Miyombweni	3,144	7.1	0
Igava	1,404	15.8	1.7
Ipwani	1,968	7	3.6
Lugelele	1,182	1.2	0
Imalo Songwe	710	12.8	0
Igurusi	4,023	0.5	0
Chimala	1,514	5.2	0.1
Utengule Usangu	1,185	0.3	0
Mahongole	1,316	25.9	5.2
Ihahi	785	15.1	0
Ruiwa	1,208	17.5	0
Total	35,377	10.3	1.05

Source: Health Department-Mbarali DC, 2015

Table 5.21 shows the number and percentage of reported cases of communicable diseases in Mbarali District Council for the years 2013 and 2015. The reported cases of communicable diseases include ARI, AWD (Acute Watery Diarrhea), Pneumonia, Schistosomiasis, Skin infections, Oral disease, Intestinal worms, Malaria, Eye infections and Tuberculosis. The

results show that, number of reported cases of communicable diseases increases from 81,705 cases in 2013 to 104,946 cases in 2015.

In 2013, the communicable disease with the highest percentage share was ARI with 27.8 percent followed by Malaria with 24.4 percent and Pneumonia (10.7 percent). In 2015, Pneumonia ranked the highest communicable disease with 22.4 percentage share followed by AWD (Acute Watery Diarrhea) with 21.4 percent and Skin infections with 15.5 percent.

Table 5. 91: Number and Percentage of Reported Cases of Communicable Diseases, Mbarali District Council; 2013 and 2015

			Number and	d Percentage of cas	ses
Number	Disease		2013		2015
		Number	Percent	Number	Percent
1	ARI	22,739	27.8	6,661	6.4
2	AWD (Acute Watery				
2	Diarrhoea)	8,393	10.3	22,186	21.1
3	Pneumonia	8,745	10.7	23,514	22.4
4	Schistosomiasis	5,301	6.5	2,401	2.3
5	Skin infections	6,622	8.1	16,276	15.5
6	Oral disease	1,001	1.2	781	0.7
7	Intestinal worms	4,010	4.9	5,498	5.2
8	Malaria	19,946	24.4	15,002	14.3
9	Eye infections	4,622	5.7	12,431	11.9
10	Tuberculosis	326	0.4	196	0.2
	Total	81,705	100.0	104,946	100.00

Source: Health Department-Mbarali DC, 2015

Table 5.22 shows the number of health facilities with working system of water in Mbarali District Council for the years 2013 and 2015. The results show that from 2013 to 2015 there is no significant improvement in the number of health facilities with working water tanks and water wells. There were nine (9) water tanks and seven (7) water wells. However, the number of health facilities with working tape water decreased from 28 health facilities in 2013 to 27 health facilities in 2015.

Table 5.22: Number of Health Facilities with working system of water by Division in Mbarali District Council for the years 2013 and 2015

			2013					
	Total no.	No. of H	ealth Faciliti	es with	Total No.			
Division	of Health		working		of Health	No. of Health Facilities with working		
	facilities	Water	Water	Tape	Facilities		Water	Tape
		Tanks	wells	water		Water Tanks	wells	water

Rujewa	29	7	4	17	29	7	5	17
Ilongo	17	2	3	11	18	2	2	10
Total	46	9	7	28	47	9	7	27

Source: Health Department-Mbarali DC, 2015

5.2.17 Policy Implication on Health sector

The provision of health service in Mbarali District is still insufficient due to inadequate number of infrastructures, health personnel and other related resources. Moreover, inadequate number of health personnel such as specialized doctors and nurses limit provision of quality health services which may result into more unhealthy society to participate actively into production activities and also higher Mortality Rates. There is a need of formulating strategies to improve health sector in the district including, strengthening Private Public Partnership in construction of more health centers and hospitals.

5.3 Education Sector

This section provides a detailed description of the status of education sector performance in Mbarali District Council. Mbarali District like any other Districts follows the education system of Tanzania which covers both formal and informal education. Formal education includes pre-primary, primary and secondary school education while informal education covers tertiary education which includes colleges or vocational education, higher learning institutions and adult education.

5.3.1 Pre- Primary Education

The condition set by the Ministry of Education and Vocational Training that is all children who start standard one must have undergone pre-primary education. According to the Basic Education Statistics Publication, 2016, Pre-Primary Education is a formal school system for children aged 5 years. Pre-primary Education cycle lasts for 1 year with no examinations for promotion purpose.

Table 5.23 shows number of pre- primary school by ownership and division from 2011 to 2015. With respect to ownership, public owned pre-primary school increased from 96 school in 2011 to 116 school in 2015 while private owned pre-primary school decreased from 29 school in 2011 and to 27 school in 2015. Division wise, for the year 2015, Rujewa had larger number of public pre-primary schools (76 school) compared to Ilongo (40 school). In terms of private pre-primary ownership, Ilongo Division had large number of 19 school compared to Rujewa Division (8 school).

Table 5. 23: Number of Pre-Primary School classes by Ownership and Division, Mbarali District Council, 2011-2015

'	2011		2012		2013		2014		2015	
Division	Public	Private								
Rujewa	63	10	64	12	72	13	70	13	76	8
Ilongo	33	19	31	19	31	19	36	19	40	19
Total	96	29	95	31	103	32	106	32	116	27

Source: Primary Education Department-Mbarali DC, 2015

Table 5.24 shows the pre-primary schools total enrolment by division and ownership from 2011 to 2015. The findings revealed that total enrolment in public pre- primary schools in Mbarali District increased from 5,754 pupils in 2011 to 8,103 pupils in 2015 which is equivalent to 40.8 percentage increase. The total enrolment in private pre- primary schools increased from 866 pupils in 2011 to 1,303 pupils in 2015 which is equivalent to 50.5 percentage increase.

However, out of 8,103 pupils enrolled in public pre- primary schools for the year 2015, Rujewa Division enrolled 5,061 pupils and Ilongo Division enrolled 3,042 pupils. Additionally, out of 1,303 pupils enrolled in private pre-primary school, Rujewa Division enrolled 456 pupils and Ilongo Division enrolled 847 pupils in private pre- primary schools.

Table 5. 24:Pre-Primary Schools Total Enrolment by Ownership and by Division,

Mbarali District Council; 2011 – 2015

	2011		2012		2013		2014		2015	
Division	Public	Private								
Rujewa	3,644	292	3,642	380	3,971	387	4,625	393	5,061	456
Ilongo	2,110	574	2,114	675	2,446	716	2,526	788	3,042	847
Total	5,754	866	5,756	1,055	6,417	1,103	7,151	1,181	8,103	1,303

Source: Primary Education Department-Mbarali DC, 2015

5.3.2 Primary Education

According to the Education and Training Policy (ETP), Primary Education is a seven years education cycle after one year of Pre-Primary Education. It is universal, compulsory and free to all children aged 6 to 13 years old to be enrolled in primary education. The presence of feefree primary education policy that started to operate in 2002 resulted into a positive impact by increasing the number of children enrollment in standard one every year.

Table 5.25 shows number of primary schools by ownership and division from the year 2011 to 2015. The results show that, there is marginal increase of number of public primary school

from 108 schools in 2011 to 109 school in 2015. During the same period, the number of private primary schools observed to be three (3) in each year.

Division wise for the year 2015, Rujewa found to have 62 public primary schools and two (2) private primary schools while Ilongo Division has 47 public primary schools and one private primary school.

Table 5. 2510: Number of Primary Schools by Ownership and by Division Mbarali District Council, 2011-2015

	20)11	2012		20	013	2014		2015	
Division	Public	Private								
Rujewa	62	2	62	2	62	2	62	2	62	2
Ilongo	46	1	46	1	47	1	47	1	47	1
Total	108	3	108	3	109	3	109	3	109	3

Source: Primary Education Department-Mbarali DC, 2015

5.3.3 Primary School Enrolment

Table 5.26 shows standard 1 enrolment by school ownership and division from 2011 to 2015. Looking at District level, the number of pupils enrolled standard 1 in public schools decreased from 13,628 pupils in 2011 to 9,918 pupils in 2015. On the other hand, standard 1 enrolment in private primary schools decreased from 161 pupils in 2011 to 141 pupils in 2015.

Looking at divisions, in 2015, Rujewa had the largest number of standard I enrolment in both public primary schools and private primary schools with total enrolment of 5,613 pupils and 99 pupils respectively. Meanwhile, Ilongo Division standard I enrolment are 4,305 pupils in public primary schools and 42 pupils in private primary schools.

Table 5. 116: Standard I Enrolment by School Ownership and Division, Mbarali District Council; 2011- 2015

	20)11	20)12	20)13	20)14	2015		
Division	Public	Private									
Rujewa	7,839	92	8,954	106	7,803	126	8,153	114	5,613	99	
Ilongo	5,789	69	6,274	79	5,988	63	5,939	81	4,305	42	
Total	13,628	161	15,228	185	13,791	189	14,092	195	9,918	141	

Source: Primary Education Department-Mbarali DC, 2015

Basing on Table 5.27, the findings presents the number of pupils enrolled in Standard One in Public primary schools at ages 7 and (8-10) years from 2011 to 2015 in Mbarali District Council. The results reveal that out of 66,657 standard one pupils registered from 2011 to 2015, girls accounted with a larger number of 33,942 pupils compared to boys (32,715).

pupils). During the same period, the total number of standard one registered at age seven were 27,168 pupils and those registered at age (8-10) were 39,489 pupils.

The analysis of standard one enrolment by age shows that, there are more girls (13,776) aged seven (7) enrolled compared to boys (13,392) from 2011 to 2015. On the other hand, more girls (20,166) enrolled at age (8-10) compared to boys (19,323) in the reference period.

Results further show that, the total number of pupils enrolled at age seven (27,168 pupils) from 2011 to 2015 was less than the age seven expected population (37,924) equivalent to 71.6 percent. Also, during the same period the total number of boys (13,392) of the expected population (18,402) were enrolled in standard one at age seven while for girls, 13,776 girls of the expected population (19,522) were enrolled in the same class.

Table 5. 27: Standard I Registered by Age Group in Public Primary Schools, Mbarali District Council; 2011-2015

	Age	Seven exp	ected	Age S	Seven Reg	istered	Age	8-10 Regis	tered			
Year		Population	n		children			children		Tot	al Registe	red
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2011	3,746	3,949	7,695	3,195	3,165	6,360	3,702	3,566	7,268	6,897	6,731	13,628
2012	3,449	3,755	7,204	3,328	3,608	6,936	4,074	4,218	8,292	7,402	7,826	15,228
2013	3,212	3,514	6,726	2,870	2,996	5,866	3,842	4,083	7,925	6,712	7,079	13,791
2014	4,500	4,643	9,143	3,255	3,370	6,625	3,466	4,001	7,467	6,721	7,371	14,092
2015	3,495	3,661	7,156	744	637	1,381	4,239	4,298	8,537	4,983	4,935	9,918
Total	18,402	19,522	37,924	13,392	13,776	27,168	19,323	20,166	39,489	32,715	33,942	66,657

Source: Primary Education Department-Mbarali DC, 2015

Table 5.28 shows the number of pupils enrolled in STD I to VII in Public Primary Schools by division and sex from 2011 to 2015. The findings illustrates that the total number of enrolment for girls in STD I to VII from 2011 to 2015 was higher (141,151 pupils) compared to boys (134,686). This shows the effort of Government towards equal opportunity in provision of education between girls and boys. In addition, it reveals that the total number of boys enrolled for Public primary schools has increased from 25,940 pupils in 2011 to 28,468 pupils in 2015 while the number of girls enrolled increased from 26,409 pupils in 2011 to 30,688 pupils in 2015.

Division wise, the results show that from 2011 to 2015, Rujewa Division enrolled more girls (80,458 pupils) in standard one to seven compared to boys (76,840 pupils), in contrast Ilongo Division enrolled more girls (60,693 pupils) compared to boys (57,846 pupils).

Table 5. 28: Total Standard (I - VII) Enrolment by Sex and Division in Public primary Schools, Mbarali District Council; 2011 – 2015

Year	Ruj	ewa	Ilo	ngo	Grand Total		
Tear	Boys	Girls	Boys	Girls	Boys	Girls	
2011	14,534	14,981	11,406	11,428	25,940	26,409	
2012	16,080	16,658	11,198	11,696	27,278	28,354	
2013	14,992	15,902	11,508	11,998	26,500	27,900	
2014	15,118	15,601	11,382	12,199	26,500	27,800	
2015	16,116	17,316	12,352	13,372	28,468	30,688	
Cumulative Total	76,840	80,458	57,846	60,693	134,686	141,151	

Source: Primary Education Department-Mbarali DC, 2015

5.3.4 Completion of Standard VII in Public Primary Schools

Table 5.29 shows number of pupils by sex, enrolled in STD I in 2007 and completed STD VII in 2013 and those enrolled in 2008 and completed STD VII in 2014. Looking at District level, out of 6,890 pupils enrolled STD I in 2007, there were 5,999 pupils equivalent to 87.1 percent completed STD VII in 2013. Sex wise, the completion rate for girls was higher (91.4 percent) compared to boys (82.7 percent).

The result also shows that, out of 6,813 pupils enrolled STD I in 2008, there were 5,597 pupils equivalent to 82.2 percent completed STD VII in 2014. Sex wise, completion Rate for girls was higher (88.0 percent) compared to boys (76.2 percent).

Table 5. 29: Number of Pupils Enrolled STD I in 2007, 2008 and Completed STD VII in 2013 and 2014 by Division; Mbarali District Council

			2007 to	2013					2008	to 2014			
Dinisian	En	rolled 200	7	Completed 2013			Enrolled 2008			Co	Completed 2014		
Division	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
Rujewa	1,916	1,981	3,897	1,540	1,752	3,292	1,950	2,015	3,965	1,449	1,687	3,136	
Ilongo	1,527	1,466	2,993	1,309	1,398	2,707	1,426	1,422	2,848	1,125	1,336	2,461	
Total	3,443	3,447	6,890	2,849	3,150	5,999	3,376	3,437	6,813	2,574	3,023	5,597	
Completio	n rate	82.7	91.4	87.1				76.2	88.0	82.2			

Source: Primary Education Department-Mbarali DC, 2015

5.3.5 Dropouts in Public Primary Schools by Reason

Table 5.30 shows the magnitude and reasons for the problem of school dropouts in Mbarali District Council from 2012 to 2015. The findings shows that, the number of pupils dropout increased from 358 pupils in 2012 to 662 pupils in 2014 then decreased to 354 pupils in 2015. In 2015, a total of 59,156 pupils were enrolled out of whom 354 pupils equivalent to 0.6 percent dropouts the school. The rate of dropouts was higher for boys (0.7 percent) compared to girls (0.5 percent).

Table 5. 30: Drop Outs by Reasons in Public Primary Schools, Mbarali Council; 2012 - 2015

Daggang		2012		2013			2014			2015		
Reasons	Boys	Girls	Total									
Truancy	107	71	178	135	74	209	152	115	267	94	74	168
Death	9	7	16	2	3	5	3	3	6	5	2	7
Other	100	64	164	128	132	260	210	179	389	102	77	179

Total												
Dropout	216	142	358	265	209	474	365	297	662	201	153	354
Total												
Enrolment	27,278	28,354	55,632	26,500	27,900	54,400	26,500	27,800	54,300	28,468	30,688	59,156
Percent	0.8	0.5	0.6	1.0	0.7	0.9	1.4	1.1	1.2	0.7	0.5	0.6

Source: Primary Education Department-Mbarali DC, 2015

5.3.6 Pass Rate (PR) in Public Primary Schools

Pass rate refers to the percentage of pupils passed standard seven examinations out of the total pupils sat for the examinations. The rate of passing Standard VII examinations and being selected to join Form I reflect the quality of primary education in the area.

Table 5.31 indicates the number and pass rate in public primary schools by sex for the years 2011, 2013 and 2015 in Mbarali District Council. The findings reveal that the overall pass rate decreased from 49.6 percent in 2011 to 44.7 percent in 2013 and then increased to 52.0 percent in 2015.

Further, the results show that for the years 2011, 2013 and 2015, the overall pass rate for boys was higher (51.5 percent) than that of girls (46.3 percent). Additionally, the results show that pass rate for boys decreased from 53.0 percent in 2011 to 45.1 percent in 2013 and then increased to 56.9 percent in 2015. On the other hand, the pass rate for girls slightly decreased from 46.6 percent in 2011 to 44.3 percent in 2013 and later increased to 47.9 percent in 2015.

Table 5. 31: Number and Pass Rate of Pupils Who Sat and Passed STD VII Examinations in Public Primary Schools by Sex, Mbarali District Council; 2011,2013 and 2015

		Boys			Girls			Total	
Year	Pupils sat for	Pupils Passed		Pupils sat for	Pupils Passed		Pupils sat for	Pupils Passed	
1 cai	STD VII	STD VII	Pass	STD VII	STD VII	Pass	STD VII	STD VII	Pass
	Examinations	Examinations	rate	Examinations	Examinations	rate	Examinations	Examinations	rate
2011	3,566	1,889	53.0	3,878	1,806	46.6	7,444	3,695	49.6
2013	3,145	1,419	45.1	3,362	1,491	44.3	6,507	2,910	44.7
2015	2,695	1,534	56.9	3,264	1,564	47.9	5,959	3,098	52.0
Total	9,406	4,842	51.5	10,504	4,861	46.3	19,910	9,703	48.7

Source: Primary Education Department-Mbarali DC, 2015

5.3.7 Facilities in Public Primary Schools

It is the responsibility of the Ministry of Education and Vocational Training to collaborate with beneficiaries of education to make sure that basic education facilities such as classrooms, toilets, staff houses, teachers, furniture, libraries, bookstores and textbooks, meets the prescribed standards of National Education Policy Statements.

5.3.8 Classrooms

In regard to Tanzania education system, a classroom is required to have 45 pupils only (CPR 1:45). Table 5.32 reveals that in 2015 Mbarali District has a total of 762 classrooms which accommodate 59,156 pupils, at an average of 78 pupils per classroom (CPR of 1:78). Also, the District has deficit of 561 classrooms equivalent to 42.4 percent of the required 1,323 classrooms. Division-wise, Ilongo has slightly higher percentage share of classroom deficit (43.4 percent) compared to Rujewa (41.5 percent). Further it observed that CPR across all primary schools in different wards of Mbarali DC fall above the CPR of the national standard of 1:45.

Table 5. 32: Availability of Classrooms in Public Primary Schools by Division and ward, Mbarali District Council; 2015

Division	Ward	Number of	Total	Available	Classroom Pupils	Required	Deficit Classroon	of ns
Division	wara	or Schools	Pupils	Classrooms	Ratio (CPR)	Classrooms	Number	Percent
	Imalilo							
	Songwe	6	1,993	40	1:50	45	5	11.1
	Ubaruku	7	6,095	52	1:117	136	84	61.8
	Rujewa	9	5,320	71	1:75	119	48	40.3
	Lugelele	4	1,723	28	1:62	39	11	28.2
Rujewa	Mapogoro	8	4,419	57	1:78	99	42	42.4
	Mawindi	4	2,415	38	1:64	54	16	29.6
	Ipwani	5	2,198	30	1:73	49	19	38.8
	Igava	6	2,259	30	1:75	51	21	41.2
	Madibira	8	4,749	62	1:77	106	44	41.5
	Sub total	57	31,171	408	1:76	698	290	41.5
	Chimala	5	3,329	38	1:88	74	36	48.6
	Ihahi	2	1,344	14	1:96	30	16	53.3
	Itamboleo	5	1,960	35	1:56	44	9	20.5
	Igurusi	7	4,475	53	1:84	100	47	47.0
	Kongolo	5	2,461	28	1:88	55	27	49.1
	Mahongole	5	2,426	30	1:81	54	24	44.4
Ilongo	Utengule							
	Usangu	6	2,687	44	1:61	60	16	26.7
	Mwatenga	3	1,969	19	1:104	44	25	56.8
	Ruiwa	5	2,835	33	1:86	63	30	47.6
	Miyombweni	5	2,261	35	1:65	51	16	31.4
	Luhanga	4	2,238	25	1:90	50	25	50.0
	Sub total	52	27,985	354	1:79	625	271	43.4
	Grand total	109	59,156	762	1:78	1,323	561	42.4

Source: Primary Education Department-Mbarali DC, 2015

5.3.9 Pit-Latrines

The official Government standard for pupil latrine ratio is 1:20 and 1:25, for girls and boys respectively (National Guideline for Water, Sanitation and Hygiene (SWASH, 2016)). Table 5.33 shows that in 2015, Mbarali District has 1,189 school toilets for 59,156 pupils. Moreover, the District experienced a shortage of 557 pit-latrine for boys and 931 for girls. With respect to sex, pupils pit ratio for boys was 1:49 and for girls was 1:51. These ratios fall above the required national standards (1:25 for boys and 1:20 for girls). Also, it is noted that

there is no primary schools across all wards meet the required national standards of pupil latrine ratio.

Table 5. 33: Availability of Pit Latrine in Public Primary Schools by Ward, Mbarali District Council, 2015

			Availal	ole Pit	Pit La	trine	Requir	ed Pit	Deficit	of Pit
Ward	Total l	Pupils	Latr	rine	Pupils	Ratio	Latr	rine	Latrin	e for
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Imalilo										
Songwe	970	1,023	22	24	1:44	1:43	39	51	17	27
Ubaruku	2,939	3,156	41	42	1:72	1:75	118	158	77	116
Rujewa	2,574	2,746	44	50	1:59	1:55	103	137	59	87
Lugelele	843	880	10	10	1:84	1:88	34	44	24	34
Mapogoro	2,178	2,241	42	45	1:52	1:50	87	112	45	67
Chimala	1,615	1,714	48	40	1:34	1:43	65	86	17	46
Ihahi	650	694	13	17	1:50	1:41	26	35	13	18
Itamboleo	947	1,013	34	33	1:28	1:31	38	51	4	18
Igurusi	2,168	2,307	36	32	1:60	1:72	87	115	51	83
Kongolo	1,165	1,296	26	31	1:45	1:42	47	65	21	34
Madibira	2,309	2,440	42	50	1:55	1:49	92	122	50	72
Mahongole	1,129	1,297	33	25	1:34	1:52	45	65	12	40
Utengule										
Usangu	1,260	1,427	37	33	1:34	1:43	50	71	13	38
Igava	1,046	1,213	20	27	1:52	1:45	42	61	22	34
Mwatenga	975	994	23	17	1:42	1:58	39	50	16	33
Ruiwa	1,368	1,467	23	24	1:59	1:61	55	73	32	49
Mawindi	1,124	1,291	21	25	1:54	1:52	45	65	24	40
Ipwani	1,044	1,154	27	36	1:39	1:32	42	58	15	22
Miyombweni	1,089	1,172	28	30	1:39	1:39	44	59	16	29
Luhanga	1,075	1,163	14	14	1:77	1:83	43	58	29	44
Total	28,468	30,688	584	605	1:49	1:51	1,141	1,536	557	931

Source: Primary Education Department-Mbarali DC, 2015

5.3.10 Staff Quarters

Teacher's house is among the teaching incentives since it facilitates the retention of teachers and promotes teaching practice. Table 5.34 shows that in 2015, Mbarali District has a total of 317 teachers' houses compared to actual requirement of 1,315 houses. This leads to deficit of 998 teacher's houses in Mbarali District for the year 2015. Also, during the same period, Mbarali District has 1,206 primary teachers while the required number was 1,315 teachers indicating there is deficit of 109 primary teachers.

Looking at ward level, the deficit of houses were high at Ubaruku (112 houses), followed by Rujewa (103 houses) and Madibira (91 houses). On the other hand, Ipwani Ward accounted for lowest deficit of teachers houses (22 houses) followed by Ihahi and Mawindi with 24 teachers houses deficit in each ward.

Table 5. 34: Availability of Primary School Teachers' Houses by Ward, Mbarali District Council; 2015

		Number of	Actual		D 6' '4	CII
	Required	Available	Requirement	Available	Deficit	of Houses
Ward	Teachers	Teachers	of Houses	Houses	No.	Percent
Imalilo Songwe	44	50	44	15	29	66
Ubaruku	135	116	135	23	112	83
Rujewa	118	145	118	15	103	87
Lugelele	38	52	38	9	29	76
Mapogoro	98	89	98	39	59	60
Chimala	74	94	74	14	60	81
Ihahi	30	19	30	6	24	80
Itamboleo	44	38	44	10	34	77
Igurusi	99	110	99	9	90	91
Kongolo	55	55	55	8	47	85
Madibira	106	69	106	15	91	86
Mahongole	54	51	54	8	46	85
Utengule Usangu	60	47	60	12	48	80
Igava	50	38	50	12	38	76
Mwatenga	44	37	44	7	37	84
Ruiwa	63	53	63	22	41	65
Mawindi	54	43	54	30	24	44
Ipwani	49	36	49	27	22	45
Miyombweni	50	33	50	24	26	52
Luhanga	50	31	50	12	38	76
Total	1,315	1,206	1,315	317	998	76

Source: Primary Education Department-Mbarali DC, 2015

5.3.11 Furniture (Desks)

Table 5.35 shows that in 2015, Mbarali District has 14,837 desks to accommodate 59,156 pupils. This gives the overall desk pupil ratio of 1:4 in the district which do not meets the Government requirement of a desk for every three (3) pupils. Further it revealed that, for the year 2015, the District has deficit of 4,882 desks. On the other hand, during the same period, the wards that meet the ratio of one desk for every three (3) pupils are Imalilo songwe, Rujewa, Lugelele and Madibira.

Table 5. 35: Availability of Desks in Public Primary Schools Ward, Mbarali District Council; 2015

			Desk		Deficit o	f Desks
	Total	Available	Pupils			
Ward	Pupils	Desks	Ratio	Required Desks	No.	Percent
Imalilo Songwe	1,993	644	1:3	664	20	3
Ubaruku	6,095	1,624	1:4	2,032	408	20
Rujewa	5,320	1,531	1:3	1,773	242	14
Lugelele	1,723	575	1:3	574	*1	0
Mapogoro	4,419	1,171	1:4	1,473	302	21
Chimala	3,329	818	1:4	1,110	292	26
Ihahi	1,344	235	1:6	448	213	48
Itamboleo	1,960	473	1:4	653	180	28
Igurusi	4,475	1,077	1:4	1,492	415	28
Kongolo	2,461	550	1:4	820	270	33
Madibira	4,749	1,424	1:3	1,583	159	10
Mahongole	2,426	649	1:4	809	160	20
Utengule Usangu	2,687	636	1:4	896	260	29
Igava	2,259	601	1:4	753	152	20
Mwatenga	1,969	287	1:7	656	369	56
Ruiwa	2,835	596	1:5	945	349	37
Mawindi	2,415	395	1:6	805	410	51
Ipwani	2,198	531	1:4	733	202	28
Miyombweni	2,261	623	1:4	754	131	17
Luhanga	2,238	397	1:6	746	349	47
Total	59,156	14,837	1:4	19,719	4,882	25

^{*}Stands for surplus

Source: Primary Education Department-Mbarali DC, 2015

5.3.12 Accessibility of Water

Table 5.36 shows the accessibility of water in public primary schools by division in Mbarali District Council for the years 2013 and 2015. It is revealed that, the number of primary schools with working water tanks increased from two (2) primary schools in 2013 to three (3)

primary schools in 2015. Meanwhile, the number of primary schools served with working water wells increased from six (6) primary schools in 2013 to nine (9) primary schools in 2015. Further, the results show that the number of primary school with working tape water increased from 38 schools in 2013 to 46 schools in 2015.

Looking at division, the number of Rujewa schools that access water increased from 23 schools in 2013 to 25 schools in 2015 while for Ilongo Division, they increased from 23 schools in 2013 to 33 schools in 2015.

Table 5. 36: Accessibility of Water in Public Primary Schools by Division, Mbarali District Council; 2013 and 2015

			2013				2015	
Division	Total No. of	No. of I	Primary. Sc	chools with	Total No. of	No. of working	Primary	Schools with
	Schools	Water Tanks	Water wells	Tape water	Schools	Water Tanks	Water wells	Tape water
Rujewa	57	1	2	20	57	1	2	22
Ilongo	52	1	4	18	52	2	7	24
Total	109	2	6	38	109	3	9	46

Source: Primary Education Department-Mbarali DC, 2015

5.3.13 Teachers

Teacher to pupil ratio is an important indicator for measuring the capability of qualified teaching staff in terms of teacher's availability and total number of pupils. The standard requirement is that one teacher should serve a class of 45 pupils. The result shows that for the year 2015, Mbarali District has an average TPR of 1:49.

Furthermore, it observed that, Luhanga Ward has schools with the highest number of teacher pupil ratio (1:72) followed by Ihadi with TPR of 1:71. On the other hand, the schools that meet the national standard of one (1) teacher to 45 pupils are from wards of Imalilo songwe, Rujewa, Lugelele, Chimala, Igurusi and Kongolo (Table 5.37).

Table 5. 37: Availability of Public Primary School's Teachers (Grade IIIB/C, IIIA, Diploma and Degree, Masters) by Ward, Mbarali District Council; 2015

Ward	Total Pupils	Teachers	Available	Deficit	Percent of	Teacher
waru	Total Tupils	Required	Teachers	Denen	Deficit	Pupils Ratio
Imalilo Songwe	1,993	44	50	*6	*14	1:40
Ubaruku	6,095	135	116	19	14	1:53

Total	59,156	1,315	1,206	109	8	1:49
Luhanga	2,238	50	31	19	38	1:72
Miyombweni	2,261	50	33	17	34	1:69
Ipwani	2,198	49	36	13	27	1:61
Mawindi	2,415	54	43	11	20	1:56
Ruiwa	2,835	63	53	10	16	1:53
Mwatenga	1,969	44	37	7	16	1:53
Igava	2,259	50	38	12	24	1:59
Utengule Usangu	2,687	60	47	13	22	1:57
Mahongole	2,426	54	51	3	6	1:48
Madibira	4,749	106	69	37	35	1:69
Kongolo	2,461	55	55	-	-	1:45
Igurusi	4,475	99	110	*11	*11	1:41
Itamboleo	1,960	44	38	6	14	1:52
Ihahi	1,344	30	19	11	37	1:71
Chimala	3,329	74	94	*20	*27	1:35
Mapogoro	4,419	98	89	9	9	1:50
Lugelele	1,723	38	52	*14	*37	1:33
Rujewa	5,320	118	145	*27	*23	1:37

^{*}Stands for Surplus

Source: Primary Education Department-Mbarali DC, 2015

5.3.14 Adult Education

Adult education has been used by the Government of Tanzania as the means of illiteracy eradication since 1970's. For the meantime, Mbarali District like any other District in Tanzania enlarges adult education by using primary schools and secondary schools as centers for schooling.

Looking at adult education centers, the records shows that from 2013 to 2015, Mbarali District had five (5) (MUKEJA) – ICBAE center with 97 persons enrolled in 2013 and 51 persons enrolled in 2015. Also, it observed that the number of people enrolled under MEMKWA (Colbert) decreased from 25 persons in 2013 to 12 persons in 2015.

5.3.15 Special Education

5.3.15.1 Enrolment of Pupils by Type of Impairment

The Government of Tanzania in collaboration with other stakeholders puts great efforts to enable disabled in receiving the formal education as the normal (fit) people. Table 5.38 shows that, the number of impaired pupils enrollment decreased from 13 pupils in 2013 to nine (9) pupils in 2015. Out of 13 disabled pupils in 2013, 10 pupils were girls and three (3) pupils were boys while for the year 2015, there are three (3) boys and six (6) girls. Also, it observed that from 2013 to 2015, the impaired pupils include three (3) pupils with physical disability,

15 pupils with mental retardation, one (1) pupil with albinism and three (3) pupils had deaf problem.

Table 5. 38: Number of Pupils enrolled with their Type of impairment by sex, Mbarali District Council; 2013 and 2015

	Number of pupils enrolled										
Type of Impairment		2013	2015								
	Male	Female	Total	Male	Female	Total					
Physical Disability	1	1	2	1		1					
Mental Retardation	1	6	7	2	6	8					
Albino		1	1								
Deaf	1	2	3								
Total	3	10	13	3	6	9					

Source: Primary Education Department-Mbarali DC, 2015

5.3.16 Secondary Education

According to the President's Office, Regional Administration and Local Government, the formal secondary education consists of two consecutive cycles. The first cycle is a four year programme of Ordinary Level (O-Level) secondary education. The second cycle is a two year programme of Advanced Level (A-Level) secondary education or ordinary diploma in a technical college.

5.3.17 Secondary school ownership

Table 5.39 shows that there is significant improvement in the number of secondary schools in Mbarali District Council for both private and public schools. The total number of public secondary schools increased from 13 schools in 2011 to 16 schools in 2015. Also, the total number of private secondary schools has marginally increased from six (6) schools in 2011 to seven (7) schools in 2015. Furthermore, in 2015, it observed that Rujewa Division has nine (9) public secondary schools and two (2) private secondary schools while Ilongo Division has seven (7) public secondary schools and five (5) private secondary schools.

Table 5. 39: Total number of secondary schools by ownership and division, Mbarali District Council; 2011-2015

Division	20	11	20	12	20	13	20	14	2015		
Division	Public	Private									
Rujewa	7	1	7	1	9	1	9	1	9	2	
Ilongo	6	5	6	5	7	5	7	5	7	5	
Total	13	6	13	6	16	6	16	6	16	7	

Source: Secondary Education Department-Mbarali DC, 2015

5.3.18 Transition for Public secondary schools

Transition for public secondary schools refers to the period at which pupils passed Standard VII examinations are admitted into the secondary education. Table 5.40 shows the total number of Form I enrolment in public secondary schools by sex and wards in Mbarali District for the years 2011, 2013 and 2015. The results indicate that the total number of pupils allocated to join Form I increased from 1,147 pupils in 2011 to 2,768 pupils in 2013 and then decreased to 2,701 pupils in 2015.

On the other hand, the total number of students enrolled increased from 1,147 students in 2011 to 2,847 students in 2013 and then decreased to 1,836 students in 2015. Furthermore, in 2015, a total of 2,701 (1,308 boys and 1,393 girls) pupils selected to join Form I, whereas a total of 1,836 pupils equivalent to 68.0 percent of selected students were enrolled. Among them, boys are 890 and girls are 946

.

Table 5. 40: Number of Pupils Selected and Those Who Joined Form I in Public Secondary Schools by Wards and sex, Mbarali District Council 2011, 2013 and 2015

				No. of	Allocate	d studen	its					Nı	ımber of	f Enrolle	ed studer	ıts		
Ward		2011	=		2013			2015			2011			2013			2015	
	В	G	T	В	G	T	В	G	T	В	G	T	В	G	T	В	G	T
Ruiwa	0	0	0	48	39	107	29	29	58	0	0	0	48	39	107	21	19	40
Mahongole	57	22	79	65	79	144	58	58	116	57	22	79	65	19	144	48	43	91
Kongolo	18	21	39	64	71	135	56	54	110	18	21	39	64	71	135	45	48	93
Igurusi	89	50	139	122	186	308	118	153	271	89	50	139	122	186	308	90	114	204
Utengule	34	14	48	53	54	107	53	62	115	34	14	48	53	54	107	35	40	75
usangu																		
Chimala	101	77	178	82	58	140	116	162	278	101	77	178	82	58	140	71	101	172
Ihahi	0	0	0	44	44	88	46	41	87	0	0	0	44	44	88	20	24	44
Mapogoro	98	60	158	159	133	292	99	113	212	98	60	158	159	133	292	75	96	171
Lugelele	67	16	83	173	170	343	53	49	102	67	16	83	173	170	343	44	37	81
Rujewa	74	61	135	142	146	288	175	192	367	74	61	135	142	146	288	127	137	264
Ubaruku	80	61	141	193	156	349	236	240	476	80	61	141	193	156	349	148	140	288
Imalilo	21	11	32	40	40	71	46	26	72	21	11	32	25	46	71	22	24	46
Songwe																		
Mawindi	32	31	63	71	80	151	40	41	81	32	31	63	71	80	151	22	24	46
Igava	0	0	0	17	18	35	42	30	72	0	0	0	17	18	35	25	16	41
Miyombweni	0	0	0	51	55	106	29	34	73	0	0	0	38	40	78	22	18	40
Madibira	37	15	52	105	106	211	112	109	221	37	15	52	105	106	211	75	65	140
Total	708	439	1,147	1,429	1,435	2,875	1,308	1,393	2,711	708	439	1,147	1,401	1,366	2,847	890	946	1,836

B-Boys, G-Girls and T-Total

Source: Secondary Education Department-Mbarali DC, 2015

5.3.19 Form one secondary school enrolment

Table 5.41 shows Form 1 students enrolment in public secondary schools in Mbarali District Council for the years 2011, 2013 and 2015. The result shows that number of students enrolment increased from 1,147 in 2011 to 2,847 in 2013 and decreased to 1,836 in 2015. Out of 1,836 students enrolled in 2015, boys account for smaller number (890) compared to girls (946).

Division wise, for the year 2015, a total of 719 students equivalent to 39.2 percent of the total students were enrolled at Rujewa Division whereas boys are 330 and girls are 389. Meanwhile, a total of 1,117 students equivalent to 60.8 percent of the total students enrolled at Ilongo division whereas boys are 560 and girls are 557.

Table 5.41: Form I Enrolment in Public Secondary Schools by Division, Wards and Sex, Mbarali District; 2011, 2013 and 2015

	District, 2011, 2			Nı	ımber o	f Enrolle	d studen	ts		
Division	Ward		2011			2013			2015	
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
	Ruiwa	0	0	0	48	39	107	21	19	40
	Mahongole	57	22	79	65	19	144	48	43	91
	Kongolo	18	21	39	64	71	135	45	48	93
Duiono	Igurusi	89	50	139	122	186	308	90	114	204
Rujewa	Utengule usangu	34	14	48	53	54	107	35	40	75
	Chimala	101	77	178	82	58	140	71	101	172
	Ihahi	0	0	0	44	44	88	20	24	44
	Subtotal	299	184	483	478	471	1029	330	389	719
	Mapogoro	98	60	158	159	133	292	75	96	171
	Lugelele	67	16	83	173	170	343	44	37	81
	Rujewa	74	61	135	142	146	288	127	137	264
	Ubaruku	80	61	141	193	156	349	148	140	288
T1	Imalilo Songwe	21	11	32	25	46	71	22	24	46
Ilongo	Mawindi	32	31	63	71	80	151	22	24	46
	Igava	0	0	0	17	18	35	25	16	41
	Miyombweni	0	0	0	38	40	78	22	18	40
	Madibira	37	15	52	105	106	211	75	65	140
	Subtotal	409	255	664	923	895	1,818	560	557	1,117
Grand to	Grand total		439	1,147	1,401	1,366	2,847	890	946	1,836

Source: Secondary Education Department-Mbarali DC, 2015

5.3.20 Completion of Form Four in public secondary schools

The completion rate is an indicator of the efficiency of the school system. It shows the extent to which a cohort of students enrolled in form one complete the secondary education cycle irrespective of whether they sit for the final examination or not.

Table 5.42 shows that the overall completion rate of Form IV students in Mbarali District Council decreased from 106.6 percent in 2011 to 97.0 percent in 2015. It also revealed that the completion rate for boys is higher compared to girls. The completion rate for boys decreased from 110.7 percent in 2011 to 96.8 percent in 2015 while the completion rate for girls decreased from 100.0 percent in 2011 to 97.2 percent in 2015. Higher completion rate does not necessarily equal or less to enrollment rate due to some other factors such as transfers and repeaters.

Table 5. 42: Number of Students Registered and Completed Form IV in Public Secondary Schools by Sex, in Mbarali District Council; 2011, 2013 and 2015

Year	Reg	istered Stu	dent	Student	Completed	Form IV	Completion Rate (in %)			
Tear	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
2011	708	439	1,147	784	439	1,223	110.7	100.0	106.6	
2013	726	497	1,223	726	497	1,223	100.0	100.0	100.0	
2015	848	909	1,757	821	884	1,705	96.8	97.2	97.0	

Source: Secondary Education Department-Mbarali DC, 2015

5.3.21 Dropouts of students in public secondary schools

Table 5.43 shows the magnitude for the problem of school dropouts in Mbarali District Council. The findings show that in 2012, the total number of 2,780 students enrolled in public secondary school with larger number of boys (1,420) compared to girls (1,360). Out of 2,780 students enrolled in 2012, 1,706 students equivalent to 61.4 percent completed school in 2015. Also, the result indicates that for the year 2015, 1,127 students dropout the secondary school with more boys (912 students) compared girls (496 students).

Table 5. 43: Dropouts of students in Public Secondary Schools by Sex, Mbarali District Council; 2015

Division	En	rolled in 2	012	Con	npleted in 2	2015	Not completed/Drop outs in 2015			
Division	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
Rujewa	1,893	1,839	1,828	1,139	1,227	2,367	444	652	1,470	
Ilongo	3,786	3,678	952	2,278	2,454	4,734	165	1,304	2,940	
Total	1,420	1,360	2,780	821	884	1,706	912	496	1,127	

Source: Secondary Education Department-Mbarali DC, 2015

5.3.22 Performance of Form IV Examination in Public Secondary Schools

This section shows the Form IV Examinations performance across public secondary schools in Mbarali District Council from 2011 to 2015 yearly. Accordingly, the Tanzania Form IV pass rate is provided in divisions whereby the highest is division one (I) and the lowest is division zero.

Table 5.44 shows Form IV examinations performances between 2011 and 2015 by sex in public secondary schools in Mbarali District Council. The results reveal that from 2011 to 2015, a total of 7,986 students sat for form IV final examinations, whereas boys were in large number (4,201) compared to girls (3,785). Further, the findings show that during the same period a total of 2,684 boys scored division I, II, III and IV while 2,308 girls scored the same rate. This indicates that out of 7,986 students sat for Form IV final examinations from 2011 to 2015, 62.5 percent of students had a pass score.

Generally, from 2011 to 2015 boys performance was higher compared to girls, however, the proportion of students who attained division zero was higher for boys (1517 students) compared to girls (1477 students).

Table 5. 44: Students Performance in Form IV Examinations in Public Secondary Schools by Sex, Mbarali District Council; 2011-2015

				Boys						Girls			
Year			Div	ision		Total			Div	ision		Total	Grand Total
	Ι	II	III	IV	0	Total	Ι	II	III	IV	0	Total	Total
2011	5	12	64	408	299	788	0	5	14	313	276	608	1,396
2012	1	23	66	376	468	934	2	11	37	262	472	784	1,718
2013	13	75	147	315	280	830	10	62	125	346	182	725	1,555
2014	20	86	150	254	197	707	9	42	101	285	177	614	1,321
2015	11	81	139	438	273	942	11	59	125	489	370	1054	1,996
Cumulative Total	50	277	566	1,791	1,517	4,201	32	179	402	1,695	1,477	3,785	7,986

Source: Secondary Education Department-Mbarali DC, 2015

5.3.23 Form V Enrollment in Public Secondary School

According to Tanzania guidelines, a student who enrolled Form V in public secondary school is required to have a score division I, division II or division III in Form IV final examinations.

The records show that from 2011 to 2015, Mbarali District Council has only one (1) ward (Madibira) that had an Advanced level secondary school. Also, it is found that during the same period, the available high school enrolled only boys. Moreover, the number of allocated students increased from 80 students in 2011 to 186 students in 2015.

Further, the findings revealed that all allocated students were enrolled yearly. On the other hand, the Government and other education stakeholders should put great effort towards establishing high schools for girls in order to reduce the education gaps between boys and girls at District level.

5.3.24 Completion of form six in public secondary schools

Form six final examinations is the final stage of finishing the second cycle of two years program of Advanced Level (A-Level) secondary education. Also, the results of these examinations are used for selection of students for further formal education and training. The records show that, a total number of students who completed at a high school that located at Madibira ward, decreased from 41 students in 2013 to 34 students in 2015.

5.3.25 Form VI pass rate in public secondary schools

This section explains the Form VI student's performance (pass rate) which is an indicator of the quality of advance secondary education in Mbarali District Council. The Pass rate is divided into divisions with Division 1 being the highest pass. Table 5.45 shows that from 2012 to 2015, the performance was good yearly.

During the same period, the total number of students scored division I were 52 students, Division II (54 students), division III (76 students) and division IV (2 students). On the other hand, from 2012 to 2015, there is no students scored division zero. This illustrates the better performance made by students in cooperate with teachers in public secondary school in Mbarali District Council.

Table 5.45: Students Performance in Form VI Examinations in Public Secondary Schools by Sex, Mbarali District Council; 2011- 2015

Year		DI	VISION		
	I	II	III	IV	Total
2012	11	25	15	0	51
2013	0	7	33	1	41
2014	29	6	22	1	58
2015	12	16	6	0	34
Total	52	54	76	2	184

Source: Secondary Education Department-Mbarali DC, 2015

5.3.26 Facilities in Public Secondary schools

The availability of education facilities in terms of quantity and quality is very essential for improving the quality of education services in any Council. The common facilities include classrooms, toilets, staff quarters, libraries, laboratories, dormitories, furniture, teachers, electricity and water service. However, the following discussions only aim at indicating quantitative adequacy of the facilities in the District.

5.3.27 Teachers

Table 5.46 shows the availability of public secondary school teachers in Mbarali District for the year 2015. The findings show that in 2015, the district has 506 secondary school teachers while the required are 597, this leads to demand of 91 teachers to fulfill the gap. During the same period, Rujewa Division observed to have higher shortage number of 51 teachers compared to Ilongo Division (39 teachers). At ward level, the highest demand of teacher is at Ihahi ward with shortage of 19 teachers followed by Chimala and Madibira with shortage of 17 teachers in each ward. On the other hand, the wards with surplus number of public secondary school teachers include Igava, Imalilo songwe, Lugelele, Igurusi and Kongolo.

Table 5.46: Availability of Public Secondary School Teachers by Division and Ward, Mbarali District Council; 2015

Division	Ward	No. of Schools	Requirement of teachers	Available Teachers	Deficit of Teachers
	Ruiwa	1	27	24	3
	Mahongole	1	30	29	1
	Kongolo	1	26	32	*6
Ilongo	Igurusi	1	39	43	*4
	Utengule usangu	1	34	25	9
	Chimala	1	62	45	17
	Ihahi	1	36	17	19
	Sub total	7	254	215	39
	Mapogoro	1	49	37	12
	Lugelele	1	32	36	*4
	Rujewa	1	59	48	11
	Ubaruku	1	56	50	6
Rujewa	Imalilo Songwe	1	24	29	*5
	Mawindi	1	36	26	10
	Igava	1	10	16	*6
	Miyombweni	1	27	16	11
	Madibira	1	50	33	17
	Sub total	9	343	291	52
Grand total		16	597	506	91

^{*}stands for surplus

Source: Secondary Education Department-Mbarali DC, 2015

5.3.28 Public Secondary Teachers by Qualification

Table 5.47 shows that, in 2015, Mbarali District Council has a total of 397 (273 males and 124 females) public secondary school teachers. Out of them, 177 teachers (123 males and 54 females) have a Diploma certificate, 216 teachers (147 males and 69 females) are Degree holders, three (3) teachers (2 males and 1 female) with Masters and only one with unspecified

qualification. These findings shows that male occupies larger number than female in all levels of qualification.

Division wise, Rujewa has a total of 242 teachers (158 males and 84 females) whereas 112 teachers (69 males and 43 females) are Diploma holders, 127 teachers (87 males and 40 females) are Degree holders two (2) teachers (1 male and 1 female) with Masters and one male teacher with unspecified qualification. In addition, Ilongo division has a total of 155 teachers (115 males and 40 females) whereas 65 teachers (54 males and 11 females) are Diploma holders, 89 teachers (60 males and 29 females) are Degree holders and only one male teacher with Masters.

Table 5. 127: Availability of Public Secondary School Teachers by Qualification and Division, Mbarali District Council; 2015

	Number of Teachers with											
Division	Diploma			Degree			Masters			Others		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Rujewa	69	43	112	87	40	127	1	1	2	1	0	1
Ilongo	54	11	65	60	29	89	1	0	1	0	0	
Grand Total	123	54	177	147	69	216	2	1	3	1	0	1

Source: Secondary Education Department-Mbarali DC, 2015

Table 5.48 presents number of science and arts teachers in public secondary school by division and sex in Mbarali District for the year 2015. The results show that there are 66 teachers available for science subject, whereas male have larger proportion (55 teachers) compared to female (11 teachers). Also, there are 333 teachers teaching Arts subject, whereas male still have a significant proportion (220 teachers) compared to female (113 teachers). Further the results reveal that, the District has in need of 129 science teachers however there is a surplus of 11 teachers teaching arts subject.

Division wise, Rujewa required 121 teachers for science subject while the available are 41 teachers, this indicates that there is deficit of 80 science teachers for the year 2015. Moreover, Ilongo has 25 teachers for science subject while the required are 74 teachers, this leads to deficit of 49 science subject teachers.

Table 5.48: Number of Science and Arts Teachers in Public Secondary Schools by Division and Sex, Mbarali District Council; 2015

				N	lumber of T	eachers			
Division	Ward	Available Teachers Teaching Science subjects			Required Science		lable Teaching A		Required Arts
		Male	Female	Total	Teachers	Male	Female	Total	Teachers
	Mapogoro	7	0	7	24	12	12	24	24
	Lugelele	3	0	3	9	20	10	30	16
	Rujewa	4	2	6	23	17	18	35	29
	Ubaruku	6	2	8	23	20	12	32	47
Duiono	Imalilo Songwe	5	1	6	5	11	6	17	6
Rujewa	Mawindi	3	0	3	16	8	8	16	20
	Igava	5	0	5	2	1	2	3	3
	Miyombweni	0	0	0	4	5	0	5	6
	Madibira	1	1	2	3	16	8	24	27
	Ruiwa	1	0	1	12	15	2	17	22
	subtotal	35	6	41	121	125	78	203	200
	Mahongole	2	0	2	15	17	2	19	19
	Kongolo	4	1	5	16	13	8	21	22
	Igurusi	5	0	5	16	25	9	34	20
Ilongo	Utengule Usangu	3	1	4	4	14	2	16	6
	Chimala	5	2	7	14	22	11	33	19
	Ihahi	1	1	2	9	4	3	7	36
	subtotal	20	5	25	74	95	35	130	122
G	rand total	55	11	66	195	220	113	333	322

5.3.29 Staff Houses

The Local Authorities should take into account that the provision of staff houses is a basic incentive for teacher retention and promotion of effective teaching. The findings from Table 5.49 show that, for the year 2015, there are 16 secondary Schools in Mbarali District Council with a total of 56 teacher's houses. Out of that, 44 houses are available in Rujewa Division and 12 houses available in Ilongo Division. However, the results shows that there is high deficit of teachers in both division with 265 houses deficit in Rujewa Division and 192 houses deficit in Ilongo Division this gives a total of 457 houses deficit at District level.

Table 5. 49: Availability of Teachers Houses in Public Secondary Schools by Division, Mbarali District Council; 2015

		No. of		Num	ber of Hou	ses	
Division Rujewa Ilongo	Ward	Schools	Required	Available	Deficit	Percent Deficit	Ranking Deficit
	Mapogoro	1	37	9	28	75.7	14
	Lugelele	1	38	1	37	97.4	2
	Rujewa	1	49	8	41	83.7	13
	Ubaruku	1	54	2	52	96.3	3
	Imalilo Songwe	1	27	2	25	92.6	7
Rujewa	Mawindi	1	24	6	18	75.0	15
	Igava	1	14	2	12	85.7	12
	Miyombweni	1	16	2	14	87.5	11
	Madibira	1	28	11	17	60.7	16
	Ruiwa	1	22	1	21	95.5	4
	subtotal	10	309	44	265	85.8	
	Mahongole	1	33	2	31	93.9	6
	Kongolo	1	34	0	34	100.0	1
	Igurusi	1	43	2	41	95.3	5
Ilongo	Utengule usangu	1	23	2	21	91.3	9
	Chimala	1	53	4	49	92.5	8
	Ihahi	1	18	2	16	88.9	10
	subtotal	6	204	12	192	94.1	
	Grand total	16	513	56	457	89.1	

5.3.30 Classrooms

Table 5.50 shows availability of classrooms in public secondary schools by wards in Mbarali District Council for the year 2015. The findings show that, the District has 215 secondary classrooms out of the required 233 classrooms, this leads to shortage of 18 secondary classrooms at District level. Looking at ward level, the largest proportion of classrooms deficit is at Madibira with eight (8) classrooms demand followed by Mawindi and Mahongole with deficit of four secondary classrooms in each ward.

Table 5.50: Availability of Classrooms in Public Secondary Schools by Ward; Mbarali District Council; 2015

Ward	No. of	Number o	of Classrooms		Percent	Ranking
waru	Schools	Required	Available	Deficit	Deficit	Deficit
Ruiwa	1	8	8	0	0.0	6.5
Mahongole	1	12	8	4	33.3	1.5
Kongolo	1	10	9	1	10.0	4.5
Igurusi	1	22	23	1	4.5	12.5
Utengule usangu	1	9	9	0	0.0	6.5
Chimala	1	18	18	0	0.0	6.5
Ihahi	1	8	7	1	12.5	12.5
Mapogoro	1	23	23	0	0.0	6.5
Lugelele	1	11	12	1	9.1	12.5
Rujewa	1	24	24	0	0.0	6.5
Ubaruku	1	28	27	1	3.6	12.5
Imalilo Songwe	1	8	6	2	25.0	3
Mawindi	1	16	12	4	25.0	1.5
Igava	1	5	6	1	20.0	4.5
Miyombweni	1	6	6	0	0.0	6.5
Madibira	1	25	17	8	32.0	1
Total	16	233	215	18	7.7	

5.3.31 Pit-Latrines

Provision of toilet facilities is considered a privilege rather than a necessity by most school authorities. Inadequate or lack of toilet facilities has its health implications, some of these may be bacterial, viral and parasitic in origin such as typhoid and paratyphoid fever, dysenteries, diarrhoeas and cholera diseases.

Table 5.51 shows that for the year 2015, the public secondary has students pit ratio of 39 for boys and 38 for girls, this ratio diverge from the Government set up of one pit for 25 boys and one pit for 20 girls. Also, the results shows that the District has shortage of 179 pit latrines equivalent to 44.8 percent of the required 400 pit latrines. Out of that, 71 pit latrines are for boys and 110 pit latrines are for girls. Moreover, the wards with highest proportions of pit latrines deficit is Ubaruku with 80.0 percentage share followed by Igurusi (74.4 percent) and Madibira (63.6 percent). Nevertheless, Igava is the only ward with surplus in the number of pit

Table 5. 51: Availability of Pit Latrine in Public Secondary Schools by Sex and Ward, Mbarali District Council; 2015

										N	umbe	r of Pit	Latrin	ie			
Ward	No. of Schools	То	tal stude	nts	Required Available				Defici	t	Per	cent Defi	icit	Ward Ranking			
		В	G	T	В	G	T	В	G	T	В	G	T	В	G	T	by Deficit
Ruiwa	1	133	102	235	5	6	11	4	4	8	1	2	3	20.0	33.3	27.3	10
Mahongole	1	173	179	352	7	9	16	6	6	12	1	3	4	14.3	33.3	25.0	11
Kongolo	1	194	203	397	8	11	19	5	5	10	3	6	9	37.5	54.5	47.4	5
Igurusi	1	411	464	875	16	23	39	5	5	10	11	18	29	68.8	78.3	74.4	2
U/ usangu	1	144	153	297	6	8	14	5	5	10	1	3	4	16.7	37.5	28.6	9
Chimala	1	338	351	689	14	18	32	6	6	12	8	12	20	57.1	66.7	62.5	4
Ihahi	1	125	91	216	6	7	13	6	7	13	0	0	0	0.0	0.0	0.0	13
Mapogoro	1	415	498	913	17	27	42	13	17	30	4	10	12	23.5	37.0	28.6	6
Lugelele	1	199	198	397	10	10	20	6	6	12	4	4	8	40.0	40.0	40.0	8
Rujewa	1	494	504	998	20	25	45	14	14	28	6	11	17	30.0	44.0	37.8	6
Ubaruku	1	532	573	1105	21	29	50	5	5	10	16	24	40	76.2	82.8	80.0	1
Imalilo Songwe	1	114	132	246	6	6	12	6	6	12	0	0	0	0.0	0.0	0.0	14
Mawindi	1	198	207	405	11	14	25	8	8	16	3	6	9	27.3	42.9	36.0	7
Igava	1	101	87	188	4	4	8	8	6	14	4*	2*	6*	100.0*	50.0*	75.0*	0
Miyombweni	1	103	100	203	5	5	10	4	4	8	1	1	2	20.0	20.0	20.0	12
Madibira	1	595	405	1000	24	20	44	8	8	16	16	12	28	66.7	60.0	63.6	3
Total	16	4,269	4,247	8,516	180	222	400	109	112	221	71	110	179	39.4	49.5	44.8	

Note: * represents surplus

Source: Secondary Education Department-Mbarali DC, 2015

5.3.32 Dormitories

The availability of dormitories helps students to solve the problem of walking long distances and reduce the rates of dropouts due to pregnancies and truancy. Unfortunately, most of the public secondary schools in all wards of Mbarali District Council had shortage of dormitories at the end of 2015. This implies that most of students are attending day school or are renting to near school. Table 5.52 results reveal that, out of 16 secondary schools in Mbarali District Council, there are only 11 dormitories across all wards while the required are 50 dormitories. This leads to deficit of 39 dormitories equivalent to 78 percent of the total required dormitories.

Table 5. 132: Availability of dormitories or hostels in Public Secondary Schools by Ward, Mbarali District Council; 2015

	No. of		Number o	f Dormitorie	es/hostels	
Ward	Schools	Required	Available	Deficit	Percent Deficit	Ranking Deficit
Ruiwa	1	2	0	2	100.0	1.5
Mahongole	1	2	0	2	100.0	1.5
Kongolo	1	2	0	2	100.0	1.5
Igurusi	1	4	0	4	100.0	1.5
Utengule usangu	1	2	1	1	50.0	14.5
Chimala	1	4	0	4	100.0	1.5
Ihahi	1	2	0	2	100.0	1.5
Mapogoro	1	8	2	6	75.0	11.5
Lugelele	1	2	0	2	100.0	1.5
Rujewa	1	8	2	6	75.0	11.5
Ubaruku	1	4	0	4	100.0	1.5
Imalilo Songwe	1	2	1	1	50.0	14.5
Mawindi	1	4	3	1	25.0	16
Igava	1	2	0	2	100.0	1.5
Miyombweni	1	2	0	2	100.0	1.5
Madibira	1	6	2	4	66.7	13
Total	16	50	11	39	78.0	

Source: Secondary Education Department-Mbarali DC, 2015

5.3.33 Libraries

Library facility is one of the important facilities for the development of knowledge and skills of pupils, students and the general public. Adhering to the standards set by the Ministry of Education and Vocation Training, every secondary school needs to have a library to enable students to borrow and use supplementary books and textbooks.

Table 5.53 shows that, only four (4) wards had public secondary schools with libraries at the end of the year 2015. These include, Mapogoro, Rujewa, Mawindi and Madibira with one library in each ward. Generally, the District has shortage of 12 libraries in Public secondary schools.

Table 5. 143: Availability of Libraries in Public Secondary Schools by Ward, Mbarali District Council; 2015

Ward	No. of schools		Numb	er of Dorm	itories/ Hostels	
waru	No. 01 Schools	Required	Available	Deficit	Percent Deficit	Ranking Deficit
Ruiwa	1	1	0	1	100	1.5
Mahongole	1	1	0	1	100	1.5
Kongolo	1	1	0	1	100	1.5
Igurusi	1	1	0	1	100	1.5
Utengule						
usangu	1	1	0	1	100	1.5
Chimala	1	1	0	1	100	1.5
Ihahi	1	1	0	1	100	1.5
Mapogoro	1	1	1	0	0	
Lugelele	1	1	0	1	100	1.5
Rujewa	1	1	1	0	0	
Ubaruku	1	1	0	1	100	1.5
Imalilo						
Songwe	1	1	0	1	100	1.5
Mawindi	1	1	1	0	0	
Igava	1	1	0	1	100	1.5
Miyombweni	1	1	0	1	100	1.5
Madibira	1	1	1	0	0	
Total	16	16	4	12	75	

Source: Secondary Education Department-Mbarali DC, 2015

5.3.34 Furniture in Schools

The furniture by means of tables and chairs provide good environment for teaching and learning in schools for both teachers and students. Table 5.54 shows the availability of tables and chairs in all public secondary schools of Mbarali District Council for the year 2015. By the end of 2015, out of the required 8,112 tables and 8,112 chairs, the District had a total of 7,517 tables and 7,382 chairs. This indicates that there is a shortage of 615 tables and 750 chairs at District level for the year 2015.

Ward wise, the highest proportion in demand of tables and chairs observed at Ihahi ward with percentage share of 43.3 in tables and 35.6 in chairs, followed by Madibira ward (21.8 percent in tables; 21.8 percent in chairs).

Table 5. 154: Availability of chairs and tables in Public Secondary Schools by wards, Mbarali District Council; 2015

	NT 6	Number of Tables and chairs									
Ward	No. of Schools	Req	uired	Ava	ilable	De	ficit	Percen	t Deficit		
	Schools	Tables	Chairs	Tables	Chairs	Tables	Chairs	Tables	Chairs		
Ruiwa	1	227	227	200	200	27	27	11.9	11.9		
Mahongole	1	343	343	300	300	43	43	12.5	12.5		
Kongolo	1	321	321	321	321	0	0	0.0	0.0		
Igurusi	1	874	874	874	874	0	0	0.0	0.0		
Utengule usangu	1	274	274	274	274	20	20	7.3	7.3		
Chimala	1	761	761	700	700	61	61	8.0	8.0		
Ihahi	1	194	194	110	125	84	69	43.3	35.6		
Mapogoro	1	958	958	868	750	90	208	9.4	21.7		
Lugelele	1	370	370	370	370	0	0	0.0	0.0		
Rujewa	1	1,013	1,013	937	1,013	76	0	7.5	0.0		
Ubaruku	1	1,042	1,042	1,042	934	0	108	0.0	10.4		
Imalilo Songwe	1	212	212	212	212	0	0	0.0	0.0		
Mawindi	1	428	428	428	428	0	0	0.0	0.0		
Igava	1	127	127	100	100	27	27	21.3	21.3		
Miyombweni	1	111	111	111	111	0	0	0.0	0.0		
Madibira	1	857	857	670	670	187	187	21.8	21.8		
Total	16	8,112	8,112	7,517	7,382	615	750	7.6	9.2		

5.3.35 Laboratories

The laboratory is a necessary facility for students majoring in science subjects. The specifications set by the government are that each school should have at least three laboratories for physics, chemistry and biology subjects. Table 5.55 shows that for the year 2015, the District had an equal number of the required laboratories (48) and available laboratories (48). This indicates that the District meets the Government set up of three laboratories in each public secondary school.

Table 5. 16: Availability of Laboratories in Public Secondary Schools by Ward, Mbarali District Council; 2015

Ward	No. of Schools	Number of Laboratories				
waru	No. of Schools	Required	Available			
Ruiwa	1	3	3			
Mahongole	1	3	3			
Kongolo	1	3	3			
Igurusi	1	3	3			
Utengule usangu	1	3	3			
Chimala	1	3	3			
Ihahi	1	3	3			
Mapogoro	1	3	3			
Lugelele	1	3	3			
Rujewa	1	3	3			
Ubaruku	1	3	3			
Imalilo Songwe	1	3	3			
Mawindi	1	3	3			
Igava	1	3	3			
Miyombweni	1	3	3			
Madibira	1	3	3			
Total	16	48	48			

5.3.36 Electricity

Electric power is essential for public secondary school since it is the main source of energy for lighting as well as for other uses. Sources of electricity that are common in public secondary school of Mbarali District Council for the year 2015 are national grid electricity and solar power. By the end of 2015, the records show that there are five (5) secondary schools that have an access of electricity. Nevertheless, secondary schools connected to national grid electricity are in Chimala, Mapogoro and Ubaruku wards. Moreover, secondary schools using solar power are in Rujewa and Madibira wards.

5.3.37 Water

Water is one of the most important needs of living things. Using the limited resources existing and support from education stakeholders, the District succeeded to supply water to all secondary schools through water tanks, water wells and tap water. The records show that from 2013 to 2015 number of secondary schools in Mbarali District Council that have accessibility of water remain the same yearly.

It is revealed that two (2) public secondary schools from Rujewa and Madibira wards had working water tanks, seven (7) public secondary schools from Mahongole, Igurusi, Ihahi, Imalilo Songwe, Mawindi, Igava and Madibira wards had working water wells. Also, there are nine (9) public secondary schools from Ruiwa, Utengule Usangu, Chimala, Mapogoro, Lugelele, Rujewa, Ubaruku, Miyombweni and Madibira wards with working tape water.

5.4 Water Supply and Sanitation

According to Tanzania Development Vision Goals 2025 'Universal access to safe water' considers this as the one among the main goals. Government of Tanzania is fighting to make sure safe water is supplied in rural and urban areas. Improving supply of clean and safe water will therefore reduce the number of girls dropping out of schools to help fetching water for family use, save time which will be used by women on other economic activities and increase the standard of their lives.

Water supply is done through Water Supply and Sanitation Authorities (WSSAs) which are regulated by Energy and Water Regulatory Authority (EWURA) under Ministry of water. Table 5.56 indicates that for the year 2015, Mbarali District has seven (7) different types of water sources. The available water sources that works include two (2) springs, 24 shallow well, 10 rain water harvest tanks, 73 bore holes, and 16 piped scheme while the sources that are not working include are 20 shallow well and 17 bore holes. Further, there are 11 river and one dam water sources that are permanent and also seven (7) river water sources that are seasonal.

Table 5.56: Number and Type of Rural Water Sources by Ward, Mbarali DC; 2015

Division	Spring	Shallo	ow Well	Rain water Harvest Tanks	Boro	Bore holes		River water		Piped Scheme
	W	W	NW	W	W	NW	P	S	P	w
Rujewa	1	12	10	10	32	10	5	4	0	9
Ilongo	1	12	10	0	41	7	6	3	1	7
Total	2	24	20	10	73	17	11	7	1	16

W= Working, NW= Not Working, P=Permanent, S=Seasonal

Source: Water Department-Mbarali DC, 2015

Table 5.57 shows number and type of water delivery technologies in Mbarali District for the year 2015. The findings reveal that there are five (5) different types of water delivery technology in the District. The water delivery technology that works includes eight (8)

electricity pump, two (2) diesel pump, 96 hand pump, four (4) solar pump and 13 gravity piped. The water delivery technology that do not work by the end of the year 2015 are one (1) electricity pump and 39 hand pump.

Table 5. 57: Number and Type of Water Delivery Technology Used in Rural Water Schemes by Division; Mbarali District Council; 2015

		Type of Technology									
Division	Electrici	ity Pump	Diesel Pump	Hand	d Pump	Solar Pump	Gravity Piped				
	W	NW	W	W	NW	W	W				
Rujewa	7	1	0	43	21	1	7				
Ilongo	1	0	2	53	18	3	6				
Total	8	1	2	96	39	4	13				

W=Working, NW=Not working

Source: Water Department-Mbarali DC, 2015

5.4.1 Population Served with Clean Water

Table 5.58 shows the percentage of rural population served with clean water in Mbarali District for the year 2015. It is revealed that, out of 329,132 total population (projected) in Mbarali District for the year 2015, 205,964 population equivalent to 62.6 percent served with clean water. Looking at divisions, Ilongo has higher percentage share (66.9) of the population served with clean water compared to Rujewa (59.3 percent).

Ward wise, Igurusi has the highest percentage share of population served with clean water with 81.9 percent. This is followed by Mwatenga with 81.8 percentage share and Ubaruku (76.1 percentage share). On the other hand, Mawindi has the lowest percentage share of population served with clean water with 19.3 percent. This is followed by Miyombweni with 40.4 percentage share and Imalilo Songwe (46.0 percentage share).

Table 5. 58: Percentage of Rural Population Served with Clean Water by Division and Ward, Mbarali District Council; 2015

Division	Ward	Total Rural Population	Population Served with Clean Water	Percent Population Served with Clean Water
Rujewa	Madibira	27,098	20,110	74.2
	Miyombweni	10,704	4,320	40.4
	Ipwani	9,313	4,506	48.4
	Mawindi	10,861	2,094	19.3
	Igava	15,653	8,757	55.9
	Rujewa	32,279	17,094	53.0
	Ubaruku	31,977	24,350	76.1

Division	Ward	Total Rural Population	Population Served with Clean Water	Percent Population Served with Clean Water
	Imalilo Songwe	12,341	5,673	46.0
	Lugelele	9,499	5,030	53.0
	Mapogoro	27,111	18,900	69.7
	Sub-Total	186,836	110,834	59.3
Ilongo	Chimala	18,217	10,540	57.9
	Ihahi	9,281	6,500	70.0
	Itamboleo	10,200	6,507	63.8
	Igurusi	24,418	20,000	81.9
	Utengule Usangu	16,874	10,959	64.9
	Luhanga	12,558	8,093	64.4
	Kongolo	11,291	6,258	55.4
	Mahongole	12,862	6,390	49.7
	Mwatenga	9,217	7,543	81.8
	Ruiwa	17,378	12,340	71.0
	Sub-Total	142,296	95,130	66.9
Grand Tota	al	329,132	205,964	62.6

Source: Water Department-Mbarali DC, 2015

Map 3: Distribution of Rural Population served with Clean Water, Mbarali District Council; 2015

PERCENTAGE OF RURAL POPULATION SERVED WITH CLEAN WATER BY WARD, MBARALI DISTRICT COUNCIL, 2015 CHUNYA DISTRICT COUNCIL Madibira 74.2 IRINGAREGION lgava 55.9 Regional Boundary MBEYA RURAL DISTRICT COUNCIL 65.0 - 76.1 NJOMBE REGION 76.2 - 81.9

Source: NBS, Geographical Information System, 2019

5.4.2 Water User Association Group (WUG)

A Water User Association group (WUG) is an organisation for water management made up of a group of small and large-scale water users, such as irrigators, farmers, who pool their financial, technical, material, and human resources for operation and maintenance of a local water system, such as a river or water basin.

Table 5.59 reveal that in Mbarali District for the year 2015, there are 10 water user groups and all of them are active and still operating. By the end of the year 2015, the WUGs collect a total of TZS 9,095,000. Ward wise, Madibira is the larger contributor of the total amount collected from WUGs with TZS 2,535,000 followed by Igurusi (TZS 2,300,000) and Mapogoro (TZS 1,500,000).

Table 5. 179: Number of Water User Groups (WUGs) and Operation and Maintenance Accounts (O&M) by Division, Mbarali District; 2015

Ward	Number of Groups	WUGs Active	O&M Operate	Total Funds (TZS) as per 31/12/2015
Ubaruku	2	2	2	1,100,000
Madibira	1	1	1	2,535,000
Igava	1	1	1	100,000
Chimala	1	1	1	750,000
Igurusi	1	1	1	2,300,000
Mapogoro	1	1	1	1,500,000
Mahongole	1	1	1	240,000
Ruiwa	1	1	1	320,000
Utengule Usangu	1	1	1	250,000
Total	10	10	10	9,095,000

^{*}WUGs= Water user groups

Source: Water Department-Mbarali DC, 2015

5.4.3 Village Water Committees

The main function of a water committee is to manage the community water system by overseeing day-to-day operations and setting policies. Water management committees also promote health and sanitation education in the community.

Table 5.60 shows the number of rural village water committees, village water funds and funds in the VWCs by division and wards for the year 2015. The results show that, the District has 53 village water committee members (34 males and 19 females) in 35 villages. Nevertheless, the Village water committees collect a total amount of TZS 26,000,000 by the end of 2015. Of which, TZS 16,700,000 collected from Rujewa Division and TZS 9,300,000 collected from Ilongo Division.

Table 5.60: Number of Rural Village Water Committees, Village Water Funds by Division and Ward, Mbarali District at 31.12 2015

	Ward	Village	Villa	nge Water Cor		
Division			Members			Total funds(TZS)
			Male	Female	Total members	
	Madibira	2	4	4	8	4,000,000
	Ubaruku	2	4	1	5	9,000,000
	Mapogoro	13	11	2	13	3,700,000
Rujewa	Sub-Total	17	19	7	26	16,700,000
	Chimala	6	5	3	8	4,000,000
	Igurusi	10	4	3	7	5,000,000
	Utengule Usangu	1	3	3	6	200,000
	Ruiwa	1	3	3	6	100,000
Ilongo	Sub-Total	18	15	12	27	9,300,000
Grand Total		35	34	19	53	26,000,000

Source: Water Department-Mbarali DC, 2015

5.4.4 Water Supply Personnel

Water supply personnel are the professional technicians employed in the district to help in how water should be supplied to the community. In 2015, Mbarali District Council has four (4) water supply personnel. They include one (1) engineer and three (3) technicians. The District has a shortage of plumbers, pump attendants and pump mechanics.

5.4.5 Sanitation

Sanitation is the hygienic means of promoting health through prevention of human contact with the hazards of wastes as well as the treatment and proper disposal of sewage or waste water. Table 5.61 shows the availability of toilet facilities in Mbarali District for the year 2015. The results show that out of total estimated number of 75,713 households in Mbarali DC for the year 2015. In this situation, 45,652 household's equivalent to 60.3 percent use toilets. This indicates that 39.7 percent of households do not have toilets.

Looking at ward, Ruiwa has highest percentage share (48.9 percent) of households that do not have toilets. This is followed by Miyombweni with 45.3 percentage share and Imalilo Songwe (43.6 percentage share).

Table 5. 61: Availability of Toilet Facilities by Ward; Mbarali District; 2015

Ward	Estimated Total Number of Households		Percentage of Households with Toilets	Total Number of Households without Toilets	Percentage of Households without toilets
Madibira	7,216	4,708	65.2	2,508	34.8
Ruiwa	3,768	1,927	51.1	1,841	48.9
Chimala	6,230	3,790	60.8	2,440	39.2
Ut/Usangu	3,227	1,992	61.7	1,235	38.3
Igurusi	5,815	3,435	59.1	2,380	40.9
Mwatenga	1,596	971	60.8	625	39.2
Mawindi	3,392	1,974	58.2	1,418	41.8
Lugelele	2,376	1,425	60.0	951	40.0
Ihahi	1,520	884	58.2	636	41.8
Ubaruku	10,188	5,818	57.1	4,370	42.9
Igava	2,353	1,453	61.7	900	38.3
Ipwani	2,301	1,380	60.0	921	40.0
Luhanga	2,686	1,681	62.6	1,005	37.4
Rujewa	7,729	5,316	68.8	2,413	31.2
Kongolo	2,614	1,614	61.7	1,000	38.3
Itamboleo	2,704	1,597	59.1	1,107	40.9
Mapogoro	4,947	2,835	57.3	2,112	42.7
Imalilo Songwe	2,163	1,220	56.4	943	43.6
Mahongole	546	351	64.3	195	35.7
Miyombweni	2,343	1,281	54.7	1,062	45.3
Total	75,713	45,652	60.3	30,061	39.7

Source: Water Department-Mbarali DC, 2015

CHAPTER 6

Other Development Issues

6.0 Introduction

This chapter provides a detailed description on other development issues in Mbarali District Council for the year 2015, such as the presence of Day Care Centres, gender development aspects including number of the most vulnerable children (Orphan hood status and sex), women and youth economic groups, Savings and Cooperatives Societies such as (SACCOS and VICOBA), women's participation in managerial positions, as well as crime statistics with respect to number of motorcycle operators, reported accidents and theft cases.

6.1 Gender Empowerment

Gender empowerment aims at empowering women to participate fully in policy and decision making as well as in all aspects of socio-economic activities, political, professional and technical fields. In African culture it is known that female spend a lot of time in attending unpaid home activities. In that aspect various measures are put in place to minimize the time spent by women and girls in attending home activities. Measures to be taken include the use of family planning, opening and operating day care centres, establishment of women economic groups, participation in SACCOS, VICOBA and other cooperative activities.

6.1.1 Day Care Centers

Day Care Centers are important to keep children aged three (3) to four (4) before they join pre-primary school. Day care centers reduce the burden of mothers in taking care of children and thus, giving them opportunities to participate in income generating activities which can contribute significantly to the their social economic status and the District as well as.

Table 6.1 shows number of day care centers and pupils enrolled in Mbarali DC for the years 2013 and 2015. The findings illustrates that, the number of day care centers in Mbarali District increased from 27 centers in 2013 to 28 centers in 2015. However, the number of pupils enrolled decreased from 493 pupils in 2013 to 444 pupils in 2015.

Table 6. 1: Day care centers in Mbarali District council by division; 2013-2015

D		2	013		2015		
Division	Ward	Number of Centres	Number of pupils	Number of Centres	Number of pupils		
	Rujewa	4	65	4	60		
	Madibira	1	35	1	23		
Rujewa	Lugelele	1	23	1	21		
	Mapogoro	2	12	1	8		
	Subtotal	8	135	7	112		
	Ihahi	1	9	1	11		
	Chimala	4	77	6	86		
	Ubaruku	3	75	3	66		
	Igurusi	5	105	5	93		
Ilongo	Ut/usangu	2	28	2	27		
	Kongolo	2	23	2	14		
	Mahongole	1	13	1	12		
	Ruiwa	1	28	1	23		
	Subtotal	19	358	21	332		
Grand total		27	493	28	444		

Source: Primary Education Department-Mbarali DC, 2015

6.1.2 Vulnerability

Vulnerability is a reflection of self-control; then all children, and especially young children, are vulnerable simply because of their age by means they continue to depend on others for provision of their basic needs.

Table 6.2 shows number of most vulnerable children by divisions, wards and sex in Mbarali DC for the year 2015. Vulnerable children were identified whether they are orphan or non-orphan. It was observed that the District had a total of 2,583 vulnerable Children, of whom 1,302 children were orphans and 1,281 children were non-orphans. The finding also shows that out of 1,302 orphans, girls accounted for a larger number (696) compared to boys (606). Also, out of non-orphans 1,281, girls accounted for a larger number (673) compared to boys (608).

Division wise for the year 2015 Rujewa had a total of 1,438 vulnerable children, from whom orphans were 671 and non-orphans were 767. Meanwhile, Ilongo division had 1,145 vulnerable children, whereas 631 children were orphans and 514 children were non-orphans.

Table 6. 2: Number of most vulnerable children by division, ward and sex, Mbarali District Council; 2015

		Most Vulnerable Children								
Division	• Word	Orphans			Non Orphans			-		
Division Ward		No. of Girls	No. of Boys	Total	No. of Girls	No. of Boys	Total	Grand Total		
	Miyombweni	27	11	38	11	16	27	65		
	Ipwani	26	18	44	35	23	58	102		
	Igava	15	14	29	25	17	42	71		
	Mawindi	22	25	47	23	17	40	87		
	Madibira	16	15	31	11	16	27	58		
Rujewa	Imalilo Songwe	17	13	30	17	31	48	78		
	Lugelele	48	33	81	31	19	50	131		
	Mapogoro	34	44	78	45	65	110	188		
	Ubaruku	69	56	125	74	89	163	288		
	Rujewa	93	75	168	105	97	202	370		
	Subtotal	367	304	671	377	390	767	1,438		
	Mwatenga	56	24	80	34	11	45	125		
	Luhanga	16	23	39	51	19	70	109		
	Kongolo	17	20	37	27	49	76	113		
	Ihahi	18	21	39	19	18	37	76		
	Itamboleo	14	18	32	29	11	40	72		
Ilongo	Utengule Usangu	25	29	54	17	21	38	92		
	Mahongole	27	23	50	29	18	47	97		
	Chimala	57	48	105	36	45	81	186		
	Ruiwa	33	45	78	23	26	49	127		
	Igurusi	66	51	117	31	0	31	148		
	Subtotal	329	302	631	296	218	514	1,145		
Grand	total	696	606	1,302	673	608	1,281	2,583		

Source: Community Development Department-Mbarali DC, 2015

6.1.3 Women and Youth Groups

6.1.3.1 Women Economic group

This subsection highlights women involvement in economic groups in Mbarali DC for the year 2015. The findings reveal that there is a total of 610 economic groups with 15,509 members. Division wise, Rujewa had larger number of economic groups (343) with 8545 members compared to Ilongo (267 economic groups; 6,964 members) (Table 6.3).

Table 6. 3: Number of women economic groups by divisions and wards in Mbarali District for the year; 2015

DivisionWard		Total no. of Groups	Total Members	
Rujewa	Miyombweni	8	209	
	Ipwani	14	312	
	Igava	18	431	
	Mawindi	27	511	
	Madibira	21	751	
	Imalilo Songwe	26	521	
	Rujewa	80	2,424	
	Lugelele	37	624	
	Mapogoro	46	738	
	Ubaruku	66	2,024	
	Subtotal	343	8,545	
Ilongo	Mwatenga	15	314	
	Luhanga	5	160	
	Kongolo	17	516	
	Ihahi	19	472	
	Itamboleo	27	485	
	Utengule Usangu	27	489	
	Ruiwa	27	498	
	Mahongole	27	920	
	Chimala	54	1,821	
	Igurusi	49	1,289	
	Subtotal	267	6,964	
Grand	total	610	15,509	

Source: Community Development Department-Mbarali DC, 2015

6.1.3.2 Women Participation in Decision Making

This section analyses the involvement of men and women in different managerial position, professional or technician and politics and asses the participation by gender in Mbarali District Council for year, 2015. This information is important in monitoring implementation and evaluation of National and International Development initiatives such as Tanzania National Development Vision 2025 and the Sustainable Development Goals, 2030.

The result shows that in all posts, the proportion of females was insignificant in all positions compared to males. Out of 102 persons in managerial positions, 95 positions were held by male and the remaining seven positions held by female. According to professionals and technicians; out of 28 positions, 25 positions were held by males and three (3) positions were

held by female. In addition, for the year 2015, out of 43 politicians in the District, 34 were males and nine (9) were females (Table 6.4).

Table 6. 4: Participation in Managerial, Political, Professional and Technical Personnel by gender and by Ward; Mbarali District Council; 2015

Division	Managerial			Professionals/ Technicians			Politicians (MPs, DC, Councilors)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Rujewa	54	6	60	25	3	28	28	8	36
Ilongo	41	1	42	0	0	0	6	1	7
Mbarali District	95	7	102	25	3	28	34	9	43

Source: Community Development Department-Mbarali DC, 2015

6.1.3.3 Youth economic groups

According to International Labour Organisation (ILO) definition, a youth is defined as a person of age 15-24 years. However, according to the Tanzania National Youth Policy, Tanzania has her own specific definition that is usually used by planners, policy makers and stakeholders and defines a youth as person of age 15 to 35 years. Youth can bring changes within the society if Government (policy makers), planners and other stakeholders consider placing special strategies on socio-economic issues to facilitate youths to fully participate in production activities.

Table 6.5 shows that, in 2015 there were 18 registered youth economic groups with total of 235 members whereas 133 were males and 102 were females. Looking at ward, only five (5) wards out of 20 wards in the District had youth economic groups for the year 2015. They include, Igurusi, Ubaruku, Rujewa, Madibira and Itamboleo. Also, it should be noted that in 2015, there was no youth economic groups that received assistance of loans.

Table 6. 5: Youth Economic Groups by Ward, Mbarali District Council; 2015

Wards	Number of groups	Male	Female	Total
Igurusi	5	27	25	52
Ubaruku	5	39	20	59
Rujewa	2	20	18	38
Madibira	3	15	22	37
Itamboleo	3	32	17	49
Total	18	133	102	235

Source: Community Development Department-Mbarali DC, 2015

6.1.4 Savings and Credit Cooperative Societies (SACCOS)

Government and other stakeholders encourage people to engage themselves into Savings and Credit Cooperative Societies (SACCOS) to alleviate poverty. SACCOS is considered to be appropriate micro financing outlet for rural and poor people because it is simple form of financial institution suitable for simple communities.

Table 6.6 shows the number of active and dormant SACCOS by Ward in Mbarali District Council for the year, 2015. It is revealed that in 2015, the District had a total of 18 active and six (6) dormant registered SACCOS with a total of 6,815 members (4,461 males and 2,354 females). In addition, a total of TZS 15,883,293,000 was lent to members and TZS 8,511,964,720 equivalent to 53.6 percent of loans was recovered by the end of the year 2015. Further, the results show that a total value of shares deposited by member in all wards is TZS 586,031,534.

Table 6. 6: Number of Active and Dormant SACCOS by Ward, Mbarali District Council; 2015

Ward	No. of SACCOS (Registered)		Total Members		Total Value of Shares (TZS) as at 31.12.2015	Total Money loaned to members Jan –Dec 2015 (Tshs)	Total loans recovered from members Jan –Dec
	Active	Dormant	Male	Female		(1313)	2015 (Tshs)
Madibira	1	0	1,578	938	216,654,934	5,282,708,000	4,845,970
Igava	1	0	44	36	5,000,000	47,335,000	33,134,500
Mawindi	1	0	15	5	535,000	4,950,000	3,712,500
Imalilo							
songwe	0	1	23	11	170,000	0	0
Ubaruku	1	0	341	124	22,060,000	1,559,394,000	1,239,517,000
Rujewa	5	0	315	237	18,579,000	286,411,000	158,135,000
Lugelele	0	1	223	107	1,895,000	507,050,000	22,530,000
Mapogoro	1	1	402	246	18,590,000	224,925,000	149,773,000
Ihahi	1	0	33	17	213,000	142,400,000	113,920,000
Chimala	2	0	640	306	135,030,000	7,130,000,000	5,590,278,000
Igurusi	3	1	417	176	32,795,000	110,210,000	758,905,000
Kongolo	1	0	82	20	1,170,600	114,000,000	52,000,000
Mahongole	0	1	145	66	7,520,000	9,033,000	36,225,000
Ruiwa	0	1	40	15	1,429,000	12,000,000	9,331,000
Luhanga	1	0	163	50	124,390,000	452,877,000	339,657,750
Total	18	6	4,461	2,354	586,031,534	15,883,293,000	8,511,964,720

Source: Community Development Department-Mbarali DC, 2015

6.1.5 Village Community Bank (VICOBA)

Village Community Bank (VICOBA) like any other micro-finance is suitable and effective in catalyzing developmental initiatives and that quite often they have proved to be sustainable when introduced into communities towards improving the well-being of low income earners. At community level VICOBA has indicated to attract more women than men.

Table 6.7 indicates that in 2015, Mbarali District had 159 VICOBA groups. The majority of members (17,737, 86.0 percent) were women compared to 2,894 (14.0 percent) men. Looking at division, Rujewa has 78 VICOBA groups with a total of 11,555 members (1,495 males and 10,060 females) while Ilongo Division has 81 VICOBA groups with a total of 9,076 members (1,399 males and 7,677 females).

Table 6.7: Village Community Bank (VICOBA) by Ward, Mbarali District Council; 2015

		Number of		Members		Percentages		
Division Ward		VICOBA	Male	Female	Total	Male	Female	
Rujewa	Rujewa	20	254	1,214	1,468	17.3	82.7	
	Ubaruku	15	268	764	1,032	26.0	74.0	
	Lugelele	7	230	6,073	6,303	3.6	96.4	
	Mapogoro	10	345	899	1,244	27.7	72.3	
	Imalilo songwe	6	50	128	178	28.1	71.9	
	Mawindi	7	176	345	521	33.8	66.2	
	Miyombweni	3	51	121	172	29.7	70.3	
	Madibira	10	121	516	637	19.0	81.0	
	Sub total	78	1,495	10,060	11,555	12.9	87.1	
Ilongo	Chimala	25	453	2,753	3,206	14.1	85.9	
	Ihahi	5	121	202	323	37.5	62.5	
	Itamboleo	7	205	436	641	32.0	68.0	
	Igurusi	17	152	2,037	2,189	6.9	93.1	
	Utengule usangu	9	236	1,431	1,667	14.2	85.8	
	Mahongole	5	121	502	623	19.4	80.6	
	Ruiwa	13	111	316	427	26.0	74.0	
	Sub total	81	1,399	7,677	9,076	15.4	84.6	
	Grand Total	159	2,894	17,737	20,631	14.0	86.0	

Source: Community Development Department-Mbarali DC, 2015

6.1.6 Financial Institution



National Microfinance Bank (NMB) left and CRDB on the right

Source: District Finance and Trade Office-Mbarali DC, 2015

Every council needs financial institutions in order to make easy provision of financial services. In 2015, Mbarali District Council has two financial institutions operating across the district which are; CRDB and NMB Bank. This alerts the financial institutes to invest in this Council to act as a catalyst on the increase in number of formal and informal small scale businesses.

6.2 Crime Statistics

This section deals with crimes that are reported daily at Police Posts Stations in Mbarali District. The reported incidents reveal the extent of crime, accidents and incidents that occur in the community on a daily basis. Crime as a type of offence is usually grouped into three categories namely; crime against person or persons, crime against public tranquillity and crime related to property.

Crime Statistics provide the Government with indicators that help to monitor implementation of various interventions for reduction and control of crimes in the country. This helps to maintain peace and respect to the rule of law which are essential for maintaining peace and order as a pre-condition for social and economic development.

6.2.1 Total number of Crimes Reported in Police Stations

Figure 6.1 shows that, a total of 577 crime cases were reported at police post stations in Mbarali District between January to December 2015. It also indicated that, most of crime cases reported were property crimes with 304 cases followed by violent crimes (258 cases) and drug crimes (15 cases).

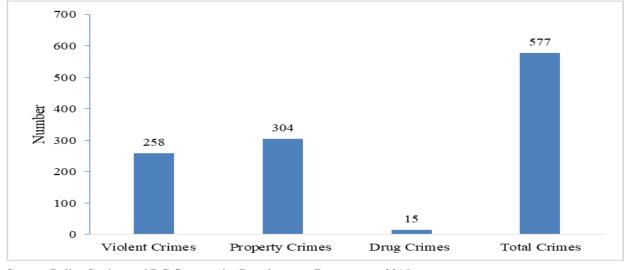


Figure 6. 1: Number of Crimes Reported in Police Station by Type, Mbarali District Council, 2015

Source: Police Station and DC Community Development Department, 2015

The records show that 74 people jailed between January to December 2015. The majority 42 persons (56.8 percent) were jailed due to property crimes, followed by 25 persons (33.8 percent) were jailed due to violent crimes and the remaining seven persons (9.5 percent) jailed due to drug crimes. (Figure 6.2).

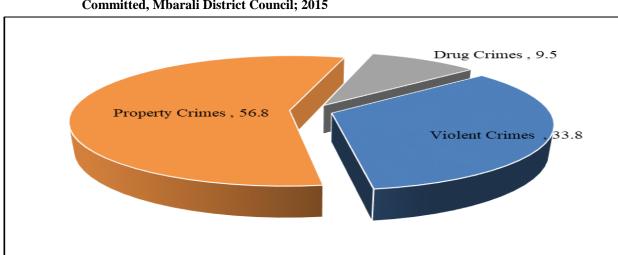


Figure 6. 2: Percentage Distribution of people jailed due to different Crimes by Type of Crime Committed, Mbarali District Council; 2015

Source: Police Station and DC Community Development Department, 2015

Additionally, basing on the 2012 Population and Housing Census, Mbarali District Council has a total of 329,132 projected population by the end of the year 2015. The total population served with only four (4) Police Posts and 184 Police Officers. These figures indicate that, on average one Police Officer is responsible for approximately 1,789 persons in the council. However, the international standard recommends that one (1) Police Officer should serve

about 350 people. Hence more police officers are required to comply with the best recommended standards and also to increase efficiency due to the increasing number of crimes associated with the increase of population in the council.

6.2.2 Motorcycle Operators

Motocycles commonly known as *Bodaboda* has recently became a common means of transport that is operating as a business to many parts in Tanzania. It therefore helps to reduce youth unemployment rate as well as contributes to poverty reduction. This section provides the information on motorcycle operators (Bodaboda) in Mbarali District for year 2015. It covers common or local name of their business centre, number of Bodaboda operators and estimated income earned per month.

According to Police station and District Council Community Development Office report, in 2015, Mbarali District had a total of 595 *Bodaboda* operators. Of whom, the majority (190) reside in Rujewa bus stand followed by Ubaruku (170), Madibira (130), Igurusi (60) and Chimala (45). The total Income earned per *Bodaboda* operator in a month estimated to be TZS 450,000.

6.2.3 Accidents

Figure 6.3 shows the number of reported accident at a police station in Mbarali District for year 2015. It was observed that, the majority of reported accidents (45) were due to motor vehicles only, followed by motor vehicles and motor cycles versus pedestrian (32 accidents) and motor cycles only (14 accidents). However, the reported accidents with lowest cases were motor vehicle versus motorcycles with four (4) accidents.

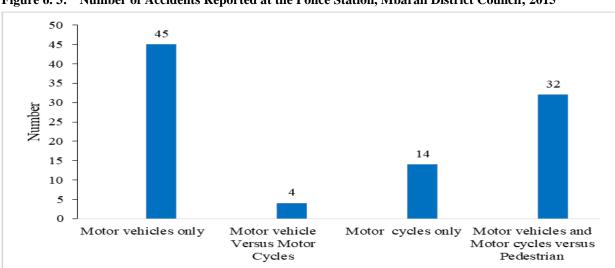


Figure 6. 3: Number of Accidents Reported at the Police Station, Mbarali District Council; 2015

Source: Police Station and DC Community Development Department, 2015

Figure 6.4 shows number of people who died and injured by type and cause at Mbarali District Council for the year 2015. It was observed that, majority of the people (38) died due to motor vehicles only accidents followed by motor vehicles and motor cycles versus pedestrian (29 persons), Motor cycles only (12 persons) and motor vehicles versus motor cycles (4 persons). On the other hand, majority of the people (12) were injured due to motor vehicles only accidents followed by motor cycles only (12 persons). However, the least reported accidents that cause injuries were motor vehicles versus motorcycles and motor vehicles and motor cycles versus pedestrian with four (4) persons in each accident.

38 40 35 29 30 25 20 15 12 12 10 3 3 5 0 Motor vehicles only Motor vehicle Versus Motor cycles only Motor vehicles and Motor Cycles Motor cycles Versus Pedestrian ■Died ■Injured

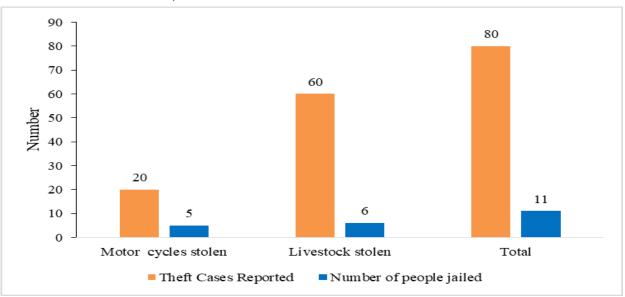
Figure 6. 4: Number of Persons Died or Injured at the Police Station by Type of Accident, Mbarali District Council; 2015

Source: Police Station and DC Community Development Department, 2015

6.2.4 Theft

Theft is one among the criminal act, its unlawful action of stealing things or property of a person(s) or public. Figure 6.5 shows that there are 80 theft cases reported at police stations of Mbarali DC for the year, 2015. Out of reported cases, 60 cases equivalent to 75 percent were due to the stealing of livestock and 20 cases equivalent to 25 percent were due to the stealing of motorcycles. Moreover, the results indicate that 11 persons were jailed due to theft cases. Among them, six (6) persons jailed due to livestock stolen cases and five (5) persons jailed due to motorcycles stolen cases.

Figure 6. 5: Number of Theft Cases Reported at the Police Station and Number of People Jailed; Mbarali District; 2015



Source: Police Station and DC Community Development Department, 2015

Vision

Capable and Efficient Local Government Authority to attain Sustainable Social and Economic Development to its People

Mission

To provide accessible quality socio-economic services to its community through effective and efficient use of resources and good governance in collaboration with stakeholders

